

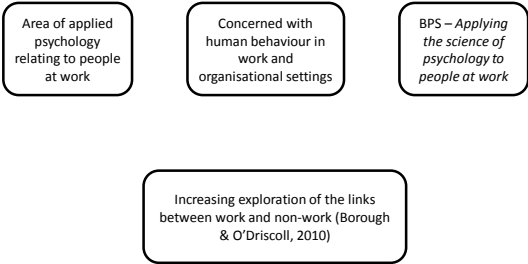
OCCUPATIONAL PSYCHOLOGY

LECTURE ONE
INTRODUCTION
RECRUITMENT AND SELECTION

What is Occupational Psychology?



What is Occupational Psychology?



Overview

- Occupational psychology takes concepts, theories and techniques from many sub-disciplines and APPLIES these to the workplace
 - Social, cognitive, developmental, etc
- Some of the areas we will be covering will be topics you have learned about previously
 - But, don't think that you can ignore these areas because you already know them
 - We will be applying them in a very different way to how you have covered them before

Brief history lesson...

- Occupational psychology was mainly about the study of individual differences
- Emphasis on investigating and explaining attributes that relate to performance at work, such as abilities, skills, traits and personality of a person
 - E.g., productivity, creativity and performance

Issues we will be looking at during this module

- Recruitment and selection processes
 - Strengths and limitations
 - Design and validation processes
- Psychometric testing
 - Personality and intelligence – from a different perspective!
- Leadership and motivation
- Addiction to work
- Attitudes at work
- Stress
- The 21st Century Workplace

OCCUPATIONAL PSYCHOLOGY

ORIGINS

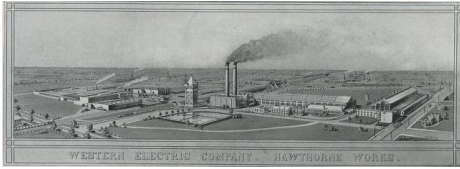
Origins of Occupational Psychology

- At least two distinct roots (Arnold et al., 2010):
 - 1) 'fitting the man to the job (FMJ) and fitting the job to the man (FJM)'
 - FMJ – focuses on the PERSON
 - FJM – focuses on the JOB
 - Both concern the relationship between an individual and their work

Origins of Occupational Psychology

- At least two distinct roots (Arnold et al., 2010):
 - 2) Human relations (HR)
 - Concerned with the complex interplay between individuals, groups, organisations and work
 - Emphasises social factors at work
 - The Hawthorne Studies

The Hawthorne Studies



- Mayo and Roethlisberger (1924)
- Originally designed to assess the effect of lighting conditions on productivity

The Hawthorne Studies

Why did these results occur?



Workers were highly responsive to additional attention from their managers

Although financial motives are important, social factors are equally important in defining the worker productivity

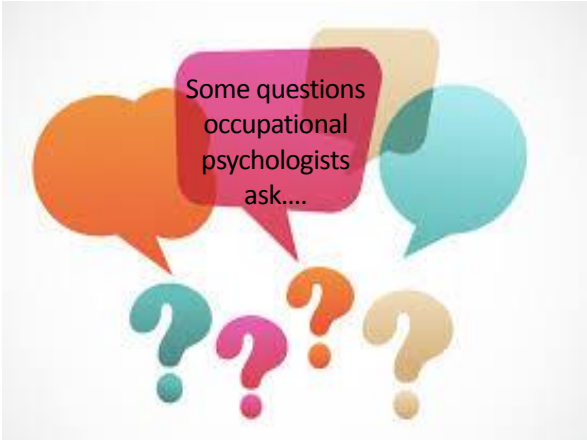
Why Occupational Psychology?

- Kiechel (1993) noted that individuals can expect to change jobs as many as ten times and work for as many as five organisations during their working life.

**OCCUPATIONAL PSYCHOLOGISTS
AS TEACHERS, RESEARCHERS
AND CONSULTANTS**



- 1) **Personnel selection and assessment**
- 2) Training
- 3) Performance appraisal and career development
- 4) **Organisational development and change**
- 5) **Human-machine interaction**
- 6) Counselling and personal development
- 7) **Design of environments and work - Health and safety**
- 8) **Employee relations and motivation**



What is the best way to select people to work in jobs?

How best can people be motivated to work to their highest level?

How does stress arise in individuals in a work environment?

- Why should we be concerned?
- How can this be treated?

Does job satisfaction matter? And, if so, what are the main factors in ensuring good job satisfaction?

The effect of technology on occupations

- How has this changed work and roles?
- What are the costs and benefits?

PERSONNEL SELECTION METHODS

PROS AND CONS...

RECRUITMENT AND SELECTION

Recruitment: Attempt to attract good people to apply for the job

- Universities, job fairs, conferences, etc

Selection: The process of identifying from the pool of recruited applicants those to whom a job will be offered





WHY DOES SELECTION MATTER?

Personnel psychology is one of the most prominent topic areas in work and occupational psychology, and research findings have had a major impact on recruitment practice.

Most of the world works as a capitalist society (like it or not!)

- Businesses survive or go bust based on their performance

If the best is twice as good as the worst, you want the best!

- But how do you know who that is?

We can't 'clone' our best workers

- Or can we?

This is what the selection process attempts to do

- Examine the data to find the 'ideal' person for the job
- And then see if potential employees meet that ideal (or choose the person who comes closest to it)

Employment legislation and guidelines requiring valid and fair selection procedures

This is the defining role of Occupational Psychologist

- The scientist-practitioner
- Applying scientific principles to the procedure

THE 'SELECTION HEADACHE'

Selection is difficult!

- Predicting future performance over a period of years, and even decades, from limited information
- Time and cost constraints
- Ethics
- Legislation
- Impression management

THE 'SELECTION HEADACHE'

Occupational Psychologists are scientist-practitioners and aim to apply scientific principles to this procedure.

Predicting which of several job candidates is likely to perform the job most effectively is a forecasting problem...

But the guiding principle is: past performance is the best predictor of future performance

HOW DO WE DECIDE WHO TO EMPLOY?

To make a selection scientifically we need a plan!

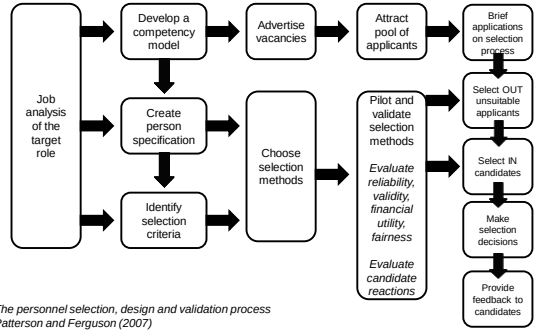
1. Criterion :- definition of good performance

2. Predictor :- anything that relates to the criterion

•Whilst there may be lots of predictors, we need predictors that will be

1. Useful
2. Cost-efficient

DESIGN AND VALIDATION
IN SELECTION



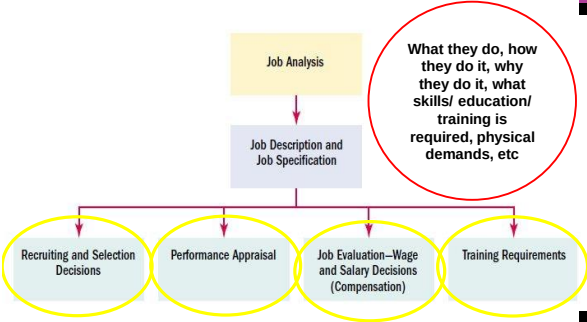
DESIGN AND VALIDATION
IN SELECTION

A thorough job analysis is the foundation of an effective selection process and is used to guide choice of selection methods

Outputs should:

- Detail tasks and responsibilities of target job
- Provide information about behavioural characteristics required of the job holder

Uses of Job Analysis Information



**A REMINDER ABOUT
RELIABILITY AND
VALIDITY**

1 - RELIABILITY

- Consistency or stability of a measure

2 - VALIDITY

- Refers to the accuracy and precision of the measurement

See pages 152-161 in your core text books...



TYPES OF SELECTION METHODS

ARNOLD, CHAPTER 5!



INTERVIEWS

1. INTERVIEWS

Important features:

- Follows a pre-planned structure
- Questions are directly related to the job

Keenan (1995): Interviews have long been the most popular form of personnel selection

Criticised for being subjective, unreliable and vulnerable to bias, but Huffcutt et al. (2001) – criterion-related validities for interviews compared favourably with other forms of selection

Interview questions should be derived from job analysis data

Interviews can be important and valid IF:

- Questions are based on a job analysis
- Questions are consistent across interviewers and interviewees
- The interviewers use a consistent set of criteria to evaluate interviewee responses.

PROS AND CONS

- | | |
|---|--|
| ✓ More detailed answers than questionnaires | × Subject to LOTS of biases |
| ✓ Allows for clarification | × Usually time-consuming |
| ✓ Interviews as recruitment devices – build rapport and sell the job to the applicant | × Untrained interviewers may distort data |
| | × Interviewees may try to show only what they think is desirable |

VARIABLES THAT CAN AFFECT INTERVIEWS

- Negative information** has a greater impact (reasons not to hire)
- Primacy effect** – first impressions are crucial
- Recency effect** – Specific details are best remembered when presented near the end of the interview
- Contrast effect** – average applicant rated higher if followed a poor candidate, and lower if followed a good candidate
- Attractiveness effects** – ‘beautiful is good’
- Other effects** - race, age, sex, voice, gestures, accents, agreeableness with interviewer...

TYPES OF STRUCTURED INTERVIEW

Situational interview

- Uses critical incidents to develop questions
- Questions follow the “what would you do in this situation” format
- Every applicant is asked identical questions

Patterned Behaviour Description Interview

- Also uses critical incidents
- Questions follow the “tell me about the last time you were in this situation” format
- Interviewers choose from a fixed pool of questions

MIND

MEASURE

PSYCHOMETRIC TESTS

“A STANDARDISED SAMPLE OF BEHAVIOUR WHICH CAN BE DESCRIBED BY A NUMERICAL SCALE OR CATEGORY SYSTEM”
QUANTITATIVE!!



COGNITIVE ABILITY TESTS (INTELLIGENCE)

COGNITIVE ABILITY TESTS (INTELLIGENCE)

Cognitive ability – Intelligence

- Multi- or single- dimension?

Single dimension: g score – general intelligence

- Successful in predicting performance on many jobs

Multiple dimension: different aspects of intelligence unrelated to one another

- Math scores may predict programming skills better than language scores do

E.G.,

What cognitive abilities would best predict success as a lawyer?

Air traffic controller?

ONES ET AL. (2005): A META-ANALYSIS OF META-ANALYSES

Evidence for the validity of cognitive ability tests in predicting job performance is overwhelming
All jobs require some cognitive ability to learn the job and perform effectively

Ones and Viswesvaran (2003):

- High-complexity jobs 0.58
- Low-complexity jobs 0.23

SUPERIORITY OF GMA

Schmidt and Hunter (1998) – four reasons for the superiority of GMA over other methods

- 1) Versatility, high validity and lowest application costs
- 2) Strongest research evidence
- 3) Best predictor of job-related learning - .56
- 4) Strongest theoretical foundation

PROS AND CONS

- ✓Highly reliable
 - ✓Validity also rises with increasing complexity of the job
 - ✓Combinations of CA tests have higher validities than individual tests alone
 - ✓Can be administered in group settings
 - ✓Low cost
- ×Differences in scores for minority groups
 - × Non-minorities typically score one SD above minorities
 - ×Gender differences may need to be considered
 - × E.g., scores on mathematics
 - ×Candidates reactions to them can be negative



PERSONALITY INVENTORIES

PERSONALITY INVENTORIES

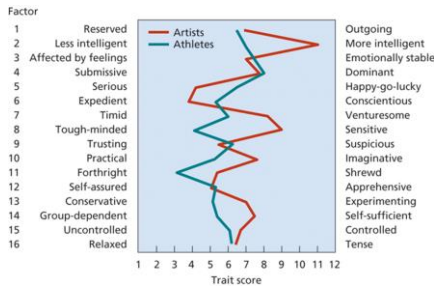
Assess personality traits believed to be necessary for job performance

Examples:

- Cattell's 16 PF
- Five factor model – Extraversion, Neuroticism, Agreeableness, Conscientiousness, Openness to experience
- MMPI – Minnesota Multiphasic Personality Inventory

Particularly useful if tailored specifically for the job in questions

CATTELL'S 16 PERSONALITY FACTORS



PERSONALITY INVENTORIES

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THE FIVE-FACTOR MODEL AND JOB PERFORMANCE: RESEARCH FINDINGS

Barrick, Mount and Judge (2001):

- Conscientiousness (in particular) and neuroticism are the best personality predictors of job performance across all occupations
- Extraversion and agreeableness are important in jobs requiring a high degree of interpersonal work
- Less consistent evidence for Openness to experience

Salgado et al. (2003):

- Conscientiousness is a valid predictor of performance across most jobs and organisational settings; criterion-related validity 0.23

Ones et al. (2007):

- Unlike ability testing, the predictive validity of personality measures for 'overall job performance' is not seen across all occupational settings and areas
- E.g., for managerial roles, the 'achievement' and 'dependability' facets of conscientiousness predict job performance

PROS AND CONS

✓Can reveal more information about applicant's abilities and interests

✓Can identify interpersonal traits that may be needed for certain jobs

×'Faking' to present themselves in a socially acceptable manner

× Are self reports accurate and unbiased?

×Training and experience may have a greater impact on job performance than personality

ASSESSMENT CENTRES

Group approach normally used for evaluating candidates for promotion to upper management

Multiple assessments of individuals using different methods, and involving multiple observers



Can last between ½ to three days

ASSESSMENT CENTRES

Profile the applicants ability across a range of competencies

Appeal of AC's – good levels of criterion-related validity and face validity (Hough & Oswald, 2000)

Criteria for AC's:

- Explicit dimensions from job analysis
- Multiple techniques
- Multiple, trained assessors
- Systematic procedure to record and rate specific behaviours

PROS AND CONS

✓When properly designed, AC's are more reliable than traditional testing methods

✓Highly adaptable to all types of positions/jobs

✓AC's test what a person can do, not what they know

✓Can provide feedback to candidates re: their own strengths and weaknesses

×Costs are high for AC's

×Some candidates feel uncomfortable in AC's – role playing

×Difficult for candidates to prepare for an assessment centre

× Experience, not books, is the best teacher

WORK SAMPLES

Logic: take the content of a job, shrink it down to a manageable time period, and let applicants demonstrate their ability in performing the replica of the job

High face validity

Examples:

- Actors
- Athletes
- Typists

SITUATIONAL EXERCISES

Applicant given a sample problem and assessed on problem solving ability

- **Leaderless group discussion:** present a group of applicants with a problem to see if a leader emerges
- **In-basket Test:** fill applicants ‘in-basket’ with a number of job-related tasks and rate performance

GRAPHOLOGY

Handwriting analysis

Assess the aspects of one’s personality based on the style of their handwriting

Nearly equivalent to phrenology

No evidence of validity!

Validity Coefficients for Selection Techniques

Method	Validity	Method	Validity
Structured Interview	.57	Experience	.27
Work samples	.54	Reference checks	.26
Cognitive ability	.53	Conscientiousness	.24
Job knowledge	.48	Unstructured interviews	.20
Assessment centers	.38	Interest inventories	.10
Biodata	.37	Application blank	.10
Integrity tests	.34	Handwriting analysis	.02
College grades	.32	Projective personality tests	.00

Validity Coefficients for Selection Techniques

Pilbeam and Corbridge (2006)

1.0	Certain prediction
0.9	
0.8	
0.7	Assessment centres for development
0.6	Skilful and structured interviews
0.5	Work sampling
	Ability tests
0.4	Assessment centres for job performance
	Biodata
	Personality assessment
0.3	Unstructured interviews
0.2	
0.1	References
0.0	Graphology
	Astrology

TYPICAL SELECTION SYSTEM

Multiple methods typically applied

One model for the selection process:

- Applicant submits resume and/or completes application form for Human Resources
- HR reps screen application/resume for disqualifying factors (minimum qualifications)
- Applicant is administered one or more tests
- Applicant is interviewed by hiring manager or supervisor of the vacant job
- Applicants are ranked based on results of testing and/or interviews
- Final selection is made by hiring manager/supervisor in conjunction with HR

**ANY
QUESTIONS??**



**AND NOW THE PART
YOU'VE ALL BEEN
WAITING (PATIENTLY)
FOR....**

MODULE ASSESSMENTS!

**MODULE
ASSESSMENTS**

- 1) 2,500 word essay
 - Critically discuss the individual and organisational causes and consequences of 'work addiction'
- 2) 2,000 word research report
 - To what extent to individual differences predict performance on a stress-inducing cognitive task?

1) ESSAY

Standard academic essay: structure of introduction, main body, conclusion

Your essay MUST include empirical literature to support any points you make re: any individual or organisations causes of work addiction, as well as the consequences to the individual and/or the organisation.

2) RESEARCH REPORT

In groups, you are required to design, collect data and report a research study that aims to explore the question set in the proforma.

Full proforma is on Moodle

You will be conducting a multiple regression analysis – this has been covered in RDA so will not be covered here.

SEMINAR TODAY...

Research, theory and practice

- Exploring types of research methods and tests use in Occ Psych.
- Begin to consider the design and measures you will be using for the research report assessment.

NEXT WEEK...

Next week's lecture will focus on psychometric testing and individual differences

Your seminar next week will be focused around the evaluation of personality measures.