Session 9

Becoming an I/O Psychologist

What is I-O?

Industrial-organizational (I-O) psychology is the scientific study of the workplace. Rigor and methods of psychology are applied to issues of critical relevance to business, including talent management, coaching, assessment, selection, training, organizational development, performance, and work-life balance.

Industrial and Organizational Psychology (I/O Psychology):

A branch of psychology that studies behavior in the workplace and the marketplace. I/O Psychologists are involved in many areas of industry, including how communication throughout companies, ergonomics, personnel test development, and much more. Their main goals are to enhance the workplace, making it a better environment in which to work and to be more productive; and to influence the marketplace by making companies work better to increase productivity and profits.

Many people, including students from all over the world, ask me about the Psychology specialty of Industrial/Organizational (or I/O) Psychology. Here is a post that lays out the field, the employment possibilities, and education and training in preparation for a career in I/O Psychology. Spoiler alert: I/O Psychology is the highest-paying area of psychology with the best employment prospects.

Simply put, I/O Psychology studies human behavior in work settings. Like Clinical Psychology, I/O Psychology has both an “academic,” or research, mission and an “applied” or practice perspective. Some I/O psychologists conduct research to better understand behavior at work, others are practitioners who help select employees, train them, assist organizations to change and innovate, and are involved in a number of programs designed to enhance work performance and the work environment. I/O psychologists can work as consultants to organizations, or can serve in-house in a variety of jobs. A common path is for I/O psychologists to work in Human Resources departments, but I/O psychologists can be found in nearly every large organization in all sorts of roles. Some job titles held by I/O psychologists include: Vice President for Employee
Development, Director or Organizational Development, Quality Performance Manager, Staff Industrial Psychologist, and Testing Specialist.

Training and Careers in I/O Psychology

The usual professional degree is the doctorate (Ph.D., sometimes Psy.D.), but there are a growing number of universities that offer masters degrees, and an MA or MS degree in I/O psychology can qualify as a “professional” degree in many areas. Because many I/O psychologists are employed in the private sector in high-level positions, the salary prospects and employment possibilities are quite good – the best among all areas of Psychology.

For students (or psychologists looking to “retool”), here are some steps to take and some resources for exploring graduate training and careers in this rapidly growing field:

• Take a course in I/O Psychology (or buy a used textbook to study the field yourself)

• Talk to a Psychology advisor at your university

• The professional organization for I/O psychologists in the US is The Society for Industrial and Organizational Psychology, Inc. (SIOP). Go to their website (www.siop.org) to find out more. The European counterpart is EAWOP (European Association for Work and Organizational Psychology)

• Arrange a short “information interview” with an I/O psychologist in your area.

Public Description of Industrial and Organizational Psychology

The specialty of industrial-organizational psychology (also called I/O psychology) is characterized by the scientific study of human behavior in organizations and the work place. The specialty focuses on deriving principles of individual, group and organizational behavior and applying this knowledge to the solution of problems at work.

Specialized Knowledge

Specialized knowledge and training in the science of behavior in the workplace requires in-depth knowledge of organizational development, attitudes, career development, decision theory, human performance and human factors, consumer behavior, small group theory and process, criterion theory and development, job and task analysis and individual assessment. In addition, the specialty of industrial-organizational psychology requires knowledge of ethical
considerations as well as statutory, administrative, and case law and executive orders as related to activities in the workplace.

Problems Addressed

The specialty of Industrial Organizational Psychology addresses issues of recruitment, selection and placement, training and development, performance measurement, workplace motivation and reward systems, quality of work life, structure of work and human factors, organizational development and consumer behavior.

Skills and Procedures Utilized

I/O Psychologists are scientist-practitioners who have expertise in the design, execution and interpretation of research in psychology and who apply their findings to help address human and organizational problems in the context of organized work. I/O psychologists:

- Identify training and development needs;
- Design and optimize job and work and quality of work life;
- Formulate and implement training programs and evaluate their effectiveness;
- Coach employees;
- Develop criteria to evaluate performance of individuals and organizations; and
- Assess consumer preferences, customer satisfaction and market strategies.

Population Served

The distinct focus of I/O psychology is on human behavior in work settings. Therefore, the populations affected by the practice of I/O psychology include

Industrial/ Organizational Psychology

What Is I/O Psychology?

I/O psychology, in brief, is concerned with the scientific structuring of organizations and of work to improve the productivity and quality of life of people at work. For most of us, time at work accounts for a very large chunk of our lives. It made a lot of sense to me that somebody in psychology ought to be looking closely at this facet of life and its impact upon other life domains.

The field of I/O psychology is certainly a very applied field, but many I/O psychologists also address relatively basic research questions. In other words, I/O psychologists very much want to produce solutions to problems in the workplace, but they also usually want to develop a fuller understanding of life at work to produce a solid scientific knowledge base. I/O scientist/practitioners like being in an environment that has problems that need to be solved, but they also like to discover and collect scientific facts about work and organizational settings that they can apply to problems yet to
be faced. There is a lot of justification for this kind of activity because, quite frankly, the world of work is such a fast-moving target of study that many issues are hard to anticipate.

Traditionally, I/O psychologists have focused on understanding individual behavior and experience in organizational settings. That is, the worker has received the most attention. This, of course, continues today. Today more than ever, however, I/O psychologists explicitly acknowledge the importance of considering the whole work system. For example, they conduct research at the group and organizational levels of analysis as well as at the individual level. Also, they formally address the impact on work of environmental factors such as labor markets, economic conditions, and governmental regulations. In fact, operating within a systems approach to understanding people at work has allowed I/O psychologists to contribute to cutting-edge issues in the design of work. For example, I/O psychologists have contributed to the design and development of team-based organizations and have developed strategies for designing organizational structures for work that are flexible enough to ride through turbulent environmental times.

**What Do I/O Psychologists Do?**

They might be doing basic or applied research in these areas or actually implementing solutions to problems found across these areas of specialization. Broadly put, I/O psychologists are scientists, consultants, teachers, and often, something of a combination of all three of these. I/O psychologists don various titles depending upon their places of employment, specializations, and interests. I/O psychologists also often work in more than one organizational setting. For example, many professors do consulting work for organizations outside of their employing institution. A number of I/O psychologists employed in research organizations or private industry choose to teach in colleges and universities on an adjunct basis.

**What Is the Right Career Path for You?**

The "right choice" really depends on what you like to do. If you like to travel a lot and live at a fairly fast pace, then life as an external consultant might be for you. If you like to teach and do research, then you might find a career in higher education appealing. Many I/O psychologists have chosen to work in management departments rather than psychology departments. There is usually a financial advantage to this choice. However, many other I/O psychologists see an advantage to working among psychologists who specialize in other areas of psychology in a psychology department. If you primarily like to do research, you'll make a different career choice than if you like to train, evaluate, produce, and sell I/O psychology products.
Of course, you may find that you like to research, teach, and consult. There are jobs out there that require different skill mixes to suit your interests. You need to think about what you like to do, however, to know the kind of job with the kind of mix that might interest you.

**Becoming an I/O Psychologist**

To become an I/O psychologist you are going to have to go to graduate school. How long it takes to become an I/O psychologist after getting your undergraduate degree depends on what degree you are seeking and how steadily you work at completing your graduate education. Generally, it will take about two to three years to obtain a master's degree and then an additional two to three years to earn a doctoral degree. The type of degree you earn plays a significant role in determining what kind of jobs you are qualified to hold. The majority of I/O psychologists have doctoral degrees. You will find them at work in any of the areas of I/O psychology mentioned earlier. I/O psychologists with master's degrees, however, often find themselves in organizational settings that emphasize the more traditional I/O areas of personnel psychology, training, tests, and measurement.

One of the advantages of being an I/O psychologist is that there are so many different sorts of jobs and settings in which you can work. We often divide jobs into academic (university professors) versus nonacademic or practitioner jobs. In a general sense academics conduct research and teach, whereas practitioners apply principles of the field to problems of organizations. However, there is a great deal of overlap, in that academics often practice, and practitioners often teach and do research. Academics work primarily in colleges and universities, whereas practitioners work in a variety of settings, including consulting firms, government agencies, the military, and private corporations. Many operate from their own private offices as consultants, selling their services to organizations.

It is difficult to describe an "I/O job" as they are so varied. However, it is possible to give an overview of typical jobs and tasks that I/O psychologists do. Below I will describe what a university professor's job is like, and what a practitioner job is like. Keep in mind that within each of these categories, there can be a lot of variability.

**Academic Jobs**

About a third of U.S. I/O psychologists are academicians. They work for both colleges and universities. There are three areas of responsibility: research, teaching, and community service. The first two are the most important, and depending upon the institution, greater emphasis will be placed on research.
or teaching. Large universities will normally emphasize research whereas smaller colleges emphasize teaching (which is one reason many students prefer to attend smaller liberal arts colleges where the faculty put most of their efforts into teaching). At many large research oriented universities, faculty do little teaching at all (leaving that to their doctoral students), spending most of their time doing research and writing grant proposals. These are "publish or perish" institutions that place a great deal of pressure on their faculties to conduct research, and see that as their greater (but not only) mission.

The typical university professor is expected to cover all three areas. This makes for a busy and varied job, and requires a lot of juggling of many different projects/tasks. With many demands, it is rare to have long periods of time on which to work on a single project or task. However, there is a great deal of latitude in how professors conduct their work, as they receive no day-to-day supervision. They might have their classes assigned by a department chair, but the rest of their activities they decide themselves. This high level of autonomy is a major reason many I/O psychologists decide to pursue an academic career where they can follow their own interests.

**Practitioner Jobs**

These jobs are more varied than a professor job, and tend to be more specialized. Whereas the scope of practice might be even larger than the scope of academics, most practitioners tend to work in a limited area. For example, one practitioner might do only research while another might only conduct employee surveys. This makes for a wide range of different types of jobs.

Practitioner jobs can be placed into two broad categories--consulting and in-house. Consultants sell specific services to various organizations, much like accounting or law firms sell their services to various clients. These psychologists might be in their own single-person private practices or in large consulting firms that employ hundreds of people (e.g., Development Dimensions International, DDI or Personnel Decisions International, PDI). In-house psychologists work for a single organization as an employee. These include both private companies and government agencies including the military.

**Specific Tasks:** Although it is unlikely one person would do all of these things, this is a sample that represents the variety of I/O activities.

1. Meet with clients or managers to discuss the nature of a problem/project (e.g., the turnover rate among employees is too high)
2. Conduct interviews or send out questionnaires to employees to determine the nature of their job tasks
3. Design a psychological test that assesses a job skill
4. Conduct a study to determine if a test or procedure is effective in achieving its objective (e.g., does a new test predict who can perform their jobs well?)
5. Analyze data (usually done with computer, e.g., SAS or SPSSX)
6. Write a technical report
7. Present results of a project to a group of managers
8. Meet with potential clients to sell services
9. Conduct a study to determine what training is needed.
10. Design a training course for employees
11. Conduct a training session for employees
12. Evaluate the effectiveness of a training course
13. Conduct sessions with groups of employees to help them resolve conflicts
14. Survey employees to determine how they feel about their jobs
15. Conduct structured interviews of potential employees to ascertain their suitability for hiring
16. Testify in court as an expert witness
17. Train others in how to implement new procedures that were developed (e.g., how to use a new test for employee selection)
18. Score results of tests and other selection tools and write reports of candidate suitability
19. Write a proposal for a project
20. Supervise a function (e.g., employee training and development) or people
21. Provide advice and assistance to managers in the organization
22. Help implement a new method or procedure (e.g., a new employee reward system)
23. Figure out a solution to an organization’s problem (e.g., too much employee absence)

In addition practitioners will often do the same tasks as professors, often teaching as adjunct instructors at universities, conducting and publishing research, and performing community service to both the profession (e.g., SIOP) and the general public.

**An I/O Career**

Most I/O psychologists in the U.S. have a Ph.D. (things are different in many other countries). It is possible to have a practice career but not an academic with an M.A. in the field, but opportunities for advancement are fewer and salaries are lower without the Ph.D. Academic careers require a publication record of research articles. Since few practitioners consistently publish results of their work (and most don’t often conduct publishable research), academics and practice tend to be two distinct career paths. A doctoral student must begin to publish to achieve an academic position, and a practitioner must maintain a reasonable publication record to make a transition to academia.
In most cases decisions made early in the career, often in graduate school, determine the career path, and few switch.

At the current time, career opportunities are excellent in the field, and there are few unemployed I/O psychologists in the U.S. The field has been getting increasingly popular, as more and more people have been applying to a growing number of graduate programs (as of this writing there are about 100 in the U.S., about 2/3 Ph.D. and 1/3 M.A.) Salaries tend to be higher for practitioner jobs than academic, as professors pay a price for their greater autonomy. However, professors are able to make up the difference with part-time consulting and other activities (e.g., writing books).

**How Can You Tell If An I/O Career Is For You?**

This is always a tough question. Keep in mind that at its core, I/O is a scientific field that is devoted to discovery and application of scientific principles to human problems in the workplace. What makes us a little different from many scientific fields is that we are an applied science. Thus we have both a scientific and a practitioner side (much like engineering). Although some I/O psychologists might do primarily one or the other, we are trained to be both scientists and practitioners. The training and the nature of the work tends to be technical, requiring a strong background in methodology and statistics.

**Industrial and organizational psychology** (also known as I–O psychology, occupational psychology, work psychology, WO psychology, IWO psychology and business psychology) is the scientific study of human behavior in the workplace and applies psychological theories and principles to organizations. I–O psychologists are trained in the scientist–practitioner model. I-O psychologists contribute to an organization’s success by improving the performance, satisfaction, safety, health and well-being of its employees. An I–O psychologist conducts research on employee behaviors and attitudes, and how these can be improved through hiring practices, training programs, feedback, and management systems.[1] I–O psychologists also help organizations and their employees transition among periods of change and organization development.

I–O psychology is one of the 14 recognized specialties and proficiencies in professional psychology in the United States[2] and is represented by Division 14 of the American Psychological Association (APA), known formally as the Society for Industrial and Organizational Psychology (SIOP). In the UK, industrial and organizational psychologists are referred to as occupational psychologists and one of 7 ‘protected titles’ and specializations in psychology regulated by the Health and Care Professions Council.[3] In Australia, the title organizational
psychologist is also protected by law and is regulated by the Australian Health Practitioner Regulation Agency (AHPRA). Organizational psychology is one of nine areas of specialist endorsement for psychology practice in Australia. Graduate programs at both the Masters and Doctorate level are offered worldwide. In the UK graduate degrees are accredited by the British Psychological Society and required as part of the process to become an occupational psychologist. In Europe someone with a specialist EuroPsy Certificate in Work and Organisational Psychology is a fully qualified psychologist and an expert in the work psychology field with further advanced education and training.

Key terms and glossary

waigawa system A management system dedicated to the idea that when the corporation faces a difficult problem, all rank-related concerns are temporarily set aside so that anyone from any level of the organization can have input.

360-degree feedback A method of performance appraisal whereby employee's performance is rated by a variety of individuals, including himself or herself, a peer, a supervisor, a subordinate, and perhaps a customer or client.

affective commitment The employee's emotional attachment to his or her place of work.

biographical inventory A type of job-screening test that involves asking the candidate about life experiences that seem verifiable.

Burnout An extremely distressed psychological state in which a person experiences emotional exhaustion and little motivation for work.

continuance commitment A kind of job commitment that derives from the employee's perception that leaving the organization would be too costly, both economically and socially.

distributional error A common error in performance ratings, so called because it refers to ratings that fail to use the entire rating scale.

Downsizing A dramatic cutting of the workforce that is an increasingly popular business strategy to enhance profitability.
ergonomics (human factors) A field that combines engineering and psychology and that focuses on understanding and enhancing the safety and efficiency of the human–machine interaction.

Flow The optimal experience of a match between our skills and the challenge of a task.

halo effect A common error in performance ratings that occurs when the rater gives the person the same rating on overall items, even though there is actual variability.

Hawthorne effect The tendency of individuals to perform better simply because of being singled out and made to feel important.

human relations approach Emphasizes the psychological characteristics of workers and managers, stressing the importance of such factors as morale, attitudes, values, and humane treatment of workers.

integrity test A type of job-screening examination that is designed to assess whether a candidate will likely be dishonest on the job.

job analysis The process of generating a description of what a job involves, including the knowledge and skills that are necessary to carry out the job's functions.

job crafting The physical and cognitive changes individuals can make within the constraints of a task to make the work their own.

job evaluation Scientific determination of the monetary value of a particular occupation, which relies on experts' decisions as to the standing of an occupation in terms of compensable factors.

job satisfaction The extent to which a person is content in his or her job.

job stress The experience of stress on the job and in the workplace setting.

KSAOs (KSAs) Common elements in a person-oriented job analysis; an abbreviation for knowledge, skills, abilities, and other characteristics.

Leisure The pleasant times before or after work when individuals are free to pursue activities and interests of their own choosing, such as hobbies, sports, and reading.
Mentoring  A relationship between an experienced employee and a novice in which the more experienced employee serves as an advisor, a sounding board, and a source of support for the newer employee.

normative commitment  The sense of obligation an employee feels toward the organization because of the investment the organization has made in the person’s personal and professional development.

organizational citizenship behavior (OCB)  Discretionary actions on the part of an employee that promote organizational effectiveness but are not part of the person's formal responsibilities.

organizational culture  An organization's shared values, beliefs, norms, and customs.

organizational identity  Employees' feelings of oneness with the organization and its goals

Orientation  A program by which an organization introduces newly hired employees to the organization's goals, familiarizes them with its rules and regulations, and lets them know how to get things done.

Overlearning  A key goal of training by which trainees practice after they have achieved a level of acceptable skill at some task so that the skill has become automatic.

performance appraisal  The evaluation of a person's success at his or her job.

role conflict  The kind of stress that arises when a person tries to meet the demands of more than one important life role, such as worker and mother.

scientific management  The managerial philosophy that emphasizes the worker as a well-oiled machine and the determination of the most efficient methods for performing any work-related task.

sexual harassment  Unwelcome behavior or conduct of a sexual nature that offends, humiliates, or intimidates another person.

strengths-based management  A management style emphasizing that maximizing an employee’s existing strengths is much easier than trying to build such attributes from the ground up.
structured interview  A kind of interview in which candidates are asked specific questions that methodically seek to get truly useful information for the interviewer.

Theory X managers  Managers who assume that work is innately unpleasant and that people have a strong desire to avoid it; such managers believe that employees need direction, dislike responsibility, and must be "kept in line."

Theory Y managers  Managers who assume that engaging in effortful behavior is natural to human beings, and who recognize that people seek out responsibility and that motivation can come from allowing them to suggest creative and meaningful solutions.

cthinking outside the box  Exploring new ways of approaching tasks and challenges and finding solutions.

Training  Teaching a new employee the essential requirements to do the job well.

transactional leader  An individual in a leadership capacity who emphasizes the exchange relationship between the worker and the leader and who applies the principle that a good job should be rewarded

transformational leader  An individual in a leadership capacity who is concerned not with enforcing the rules but with changing them.

Strategic planning
a set of procedures for making decisions about the organizations long-term goals and strategies

Operational planning
Day-to-day decisions and actions (tactics) to carry out Functional Plan

Mission statement
A concise description of the goals or desired outcomes of a team
Goal
Something you would like to accomplish.

Budget
amount of money that can be spend

Standards
values held by stakeholders that provide the basis on which to assess the merit or worth of the initiative

Policies
written instructions designed to address a commonly occurring problem in an institutionally approved manner

Authority
a government's legitimate use of power

Procedure
a set of steps that explains how to do something

Organization chart
A visual representation of an organization that shows title and responsibility (in a box form)

Responsibility
to accept the consequences of our marketing decisions and strategies

Accountability
Ability to track user activity on a system. This requires positive, unique ID and an effective audit trail

Empowerment
enhancing the capabilities and influence of individuals and groups

Line authority
authority to make decisions and to direct the performance of subordinates in production, sales, or finance-related activities.

Centralized organization
a structure in which authority is concentrated at the top, and very little decision-making authority is delegated to lower levels.

Decentralized organization
An organization in which decision making authority is not confined to a few top executives but rather is spread throughout the organization.

Departmentalization
The basis by which jobs are grouped together

Top level managers
managers responsible for setting goals and planning the future for a company
Middle managers

2nd lowest technical skills, high human skills, 2nd highest conceptual skills, 2nd highest motivation to manage

Operational managers

managers who are responsible for daily operations of a business such as supervision and office managers

Planning

Goals, Interventions, and Individualization

Organizing

the process of arranging personnel and physical resources to carry out plans and accomplish goals and objectives

Implementing

function of management that involves directing and leading people

controlling

the management function that monitors and evaluates tasks.