Lesson 2: Introduction and History of I/O Psychology

Assigned Readings:

Required:

1. **SIOP**

   Go to the SIOP homepage at www.SIOP.org. Click on the tab "About us" and follow the pop up menu item labeled, "What is I-O Psychology?" and open the html version of the brochure "Building Better Organizations: Industrial-Organizational Psychology in the Workplace"

   Then, go back to the "About Us" tab and read the mission statement for SIOP

   Note: Always contact your instructor if the URLs for any readings are not working

   HINT: This reading will help you answer (an) important quiz question(s). It will also help you complete this week's activity.

2. **"Guidelines for Education and Training at the Doctoral Level in Industrial/Organizational Psychology"**

   Follow the menu link on the SIOP home page (www.SIOP.org) for "educators" (on the left hand side of the screen). Then, click on "Ph.D. Guidelines in I-O Psychology."

   The portion of this article that is important to read carefully begins with table 1, Areas of Competence to be Developed." Following this table are brief, 1 paragraph descriptions of the main areas of focus for I-O Psychology, many of which we will cover briefly in the course.

   The direct link for this article is http://www.siop.org/PhDGuidelines98.aspx

   HINT: This reading may help you answer (an) important quiz question(s).

3. **Ryan, A. M. (2003). Defining ourselves: I/O psychology's identity quest. *The Industrial-Organizational Psychologist, 41*(1), 21–33.**

   http://www.siop.org/tip/backissues/July03/pdf/411_021to033.pdf

   This article can also be found by going to the publications tab off the SIOP home page, clicking on the first link for TIP, then clicking on the link for back issues of TIP (find July 2003 then the title of the article "Defining Ourselves: I-O Psychology's Identity Quest"

HINT: This reading will help you be more informed during your discussion session for this week (for which your input is graded).

Supplemental (optional):

1. For information about the American Psychological Association (APA) or American Psychological Society (APS), go to the following sites:
    www.apa.org
    www.psychologicalscience.org

2. For information about fields related to I/O psychology, go to the following sites:
    www.aom.pace.edu   Academy of Management (AOM)
    www.shrm.org   Society for Human Resource Management (SHRM)

3. For more about the history of SIOP, see the following article:

    Katzell, R.A. & Austin, J.T. (1992). From then until now: The development of Industrial and Organizational Psychology in the United States. *Journal of Applied Psychology, 77,* 803–835.

Lesson Overview:

    A. What is I/O psychology?
        1. What do I/O psychologists do?
        2. How are they trained?
        3. The "I" and "O" distinction
        4. The Scientist Practitioner model

    B. History of the Field

    C. The importance of I/O psychology
        1. How does I/O psychology contribute to society?
        2. How is I/O psychology different from other business-related fields?

Lesson Commentary

What is Industrial and Organizational Psychology?

In PSY 002, you learned that psychology was the scientific study of thinking and behavior. **Industrial and Organizational (I/O) Psychology** is the application of psychology to the workplace. In other words, the scientific study of thinking and behavior at work.

What does that mean concretely? What is it that I/O psychologists do?

I/O psychologists study and help implement behavior in organizations, such as selecting employees, training them, appraising their performance as well as programs that help improve the motivation and work attitudes of employees.

Approximately ½ of all I/O psychologists work in academic or research settings and ½ in work settings or full-time practice… More about this below.

How are I/O Psychologists trained?

I/O Psychologists are trained in graduate school at the masters or doctoral level. The Society for Industrial and Organizational Psychology, the professional organization to which most I/O psychologists belong, lists 25 core competencies that should be developed during one's doctoral training.

1. Consulting and Business Skills
2. Ethical, Legal and Professional Contexts of I-O Psychology
3. Fields of Psychology
4. History and System of Psychology
5. Research Methods
6. Statistical Methods/ Data Analysis
7. Attitude Theory, Measurement, and Change
8. Career Development
9. Consumer Behavior
10. Criterion Theory and Development
11. Health and Stress in Organizations
12. Human Performance/ Human Factors
13. Individual Assessment
14. Individual Differences
15. Job Evaluation and Compensation
16. Job/ Task Analysis and Classification
17. Judgment and Decision Making
18. Leadership and Management
19. Organizational Development
20. Organizational Theory
21. Performance Appraisal and Feedback
22. Personnel Recruitment, Selection, and Placement
23. Small Group Theory and Team Processes
24. Training Theory, Program Design, and Evaluation
25. Work Motivation

For explanations of each of these areas, see www.SIOP.org. In the left-hand menu, choose "Education/ Training," and then "Other Education Materials" then "PhD Guidelines."

Here's a little I/O trivia that can make you proud to be a Penn Stater!!!! According to the special edition of U.S. News and World Report, Pennsylvania State University's Graduate Program in Psychology ranks 3rd in the nation. These rankings were based on the reputation of national programs as rated by the chairs of psychology programs across the country.

"I" versus "O"

The above core competencies can be roughly categorized as either industrial psychology or organizational psychology (hence the name of our field). The table below provides an example of where some of the above categories would be placed. In general, **industrial psychology** focuses on the measurement of job requirements and individuals' knowledge, skills, abilities, and performance so as to match individuals with suitable jobs. **Organizational psychology** is more theoretical and considers psychological processes such as motivation and work attitudes. Organizational psychologists also study phenomenon that occur at a level higher than the individual, such as group and organizational climate as well as organizational change and development. Studying phenomena at these higher levels of analysis or focus is called **macro research** while studying phenomenon that occur at an individual level is called **micro research**.

Traditionally micro level of analysis

Measurement Oriented

INDUSTRIAL PSYCHOLOGY	ORGANIZATIONAL PSYCHOLOGY
Job Analysis	Motivation & Work Attitudes
Selection and Placement	Leadership
Training	Culture and Climate
Performance Appraisal	Organizational Development

Traditionally micro level of analysis

Traditionally macro level of analysis

Scientist/ Practitioner Model

One goal of the field is to blend science and practice, but this is difficult to do because the goals, loyalties, and jargon of those in academic (scientific) positions often differ from those of practitioners (see table below).

	Scientists	**Practitioners**
Loyalties	Publishers Academic Departments	Managers CEOs
Goals	Rigorous Science "Publish or Perish"	Solutions to immediate problems Increase Profits
Jargon/ Language	Scientific	Bottom Line

This table was put together based on a summary of information provided by Dunnette (1990) in the *Handbook of Industrial and Organizational Psychology*, Volume 1.

There are some signs that science and practice are beginning to blend despite the forces above:

1. SIOP publishes a series of books for the field from both a science and practice perspective called the Frontier and Practice Series respectively.
   > [For a list and description of books published in each series, check out www.SIOP.org: Choose "TIP/ Publications" in the left-hand menu, "PubHub/Book Order From" in the pop-up menu, and "SIOP Books by Series" from the list provided on the left-hand menu on thefollowing page.]
2. The annual SIOP conference presents not just research symposia, but also practitioner forums
3. According to some statistics, research based on the collaboration between I/O psychologists in practice and academia has increased from 18.5 percent to 32 percent from 1988 to 1999 (Brice & Waung, 2001, *The Industrial-Organizational Psychologist*)

Brief History of the Field

We will only cover the major landmark events and people in the history of the field. You will not need to know the exact date an event occurred, but you should know roughly when each landmark event took place. Also, pay attention to the *order* in which events occurred.

> Note: For more in-depth information on the history of the field, see the list of supplemental readings at the end of this lesson.

General historical information:

The field is relatively new, compared to the field of psychology in general and other scientific disciplines, like physics. Most of the early researchers were trained as experimental psychologists, who then started to fit their applied interests into their experimental background.

ERA	DATE	EVENT	SIGNIFICANCE TO THE FIELD
WWI –	1917	Group of I/O psychologists	The success of the application of individual testing to selection and placement

1920s		lead by Yerkes develop Army Alpha and Army Beta for WWI military	in the military highlighted the value of training in applied aspects of psychology, especially I/O psych. In particular, private organizations took notice of these efforts and interest began bringing I/O Psychology into their organizations to improve productivity increased.
	1919	First consulting company founded: Scott Company	Scott Company was one of the first of many consulting companies to focus in the areas of testing, placement, and training, bringing research in the area of I/O psychology into applied settings in the workplace. One of Scott Company's successors, The Psychological Corporation, still exists today.
	1921	1st Ph.D. in applied psychology awarded to Bruce V. Moore	The field begins to become acknowledged as a separate program or subfield within psychology. Moore later rises from assistant professor to the chair of the Department of Psychology at Pennsylvania State University, where the building housing the Psychology Department is named after him. Moore also goes on to be the first president of what we now call SIOP, a separate division of the APA specifically for industrial and organizational psychology.
1930s – WWII	1935	Hawthorne studies are published	The Hawthorne studies were a series of experiments conducted at an electrical plant in Illinois. While trying to examine the effects of different degrees of illumination on employees' work patterns, the researchers found that the social and psychological effects of monitoring employees had a greater impact on their work than did their physical environment. This highlighted the importance of applying psychological science to the workplace and brought about an emergence in the interest of organizational psychological concepts like motivation and human relations. In this way, "organizational psychology" emerged to join the already "industrial" focus of the field. Today, any change in behavior due to novel stimuli (e.g., being watched, as the subjects in the Hawthorne studies were) followed by a gradual drift back to normal behavior is called the **Hawthorne effect**.
	1939	*Dictionary of Occupational Titles (DOT)* published by the Department of Labor	The *DOT* represents another piece of work completed, at least in part, by members of our field, recognized on a large scale by the federal government. The *DOT* summarizes job analytic work (which you'll learn more about in a couple of lessons) used to classify occupations and jobs. It provides narrative descriptions of about 12,000 jobs, their tasks, duties, and working conditions. It was developed to help match people to jobs.
WWII – mid1960s	1940	Bingham and Yerkes develop tests for military selection to support WWII	I/O psychologists were once again allowed to "strut their stuff" in a big way, helping the military organize selection, placement, and performance appraisal of military personnel. Following the war, centers of research, such as the Army Research Institute (ARI) and Air Force Research Laboratory (AFRL) were set up to allow this work to continue. Many large companies, like AT&T, followed this example, setting up research centers of their own, bringing people training in I/O psychology further into the world of work to apply their knowledge in work settings.
	1946	APA Division 14 founded (SIOP)	With the development of our own professional organization, I/O psychology becomes increasingly recognized as a unique sub-discipline within psychology.
Mid1960s – mid80s	1964	Title VII of the Civil Rights Act passed by Congress	The work of I/O psychologists in the area of selection, placement, and performance appraisal fueled and had to adjust to the social, political, and legal climate of the Civil Rights movement. Issues of discrimination and fairness needed to be addressed by members of our field in both research and practice. Details of Title VII will be discussed in more detail in lessons regarding legal issues of selection and performance appraisal.
	1975	1st Edition of SIOP *Principles* published	*The Principles for Validation and Use of Personnel Selection Procedures* marked a formal recognition by the field's professional society to try to address the quality and legality of the work conducted by its members in applied settings. The impact of work by our field is well established by this point, making such an effort necessary to maintain societal integrity.

Importance of I/O Psychology

I/O psychology considers not only people, but also the context within which those people work. The focus on individuals is a unique perspective in an enviroment where management is primarily concerned with the success of the organization as a whole. Instead, I/O psychologists try to understand people with in the context of the place they work.

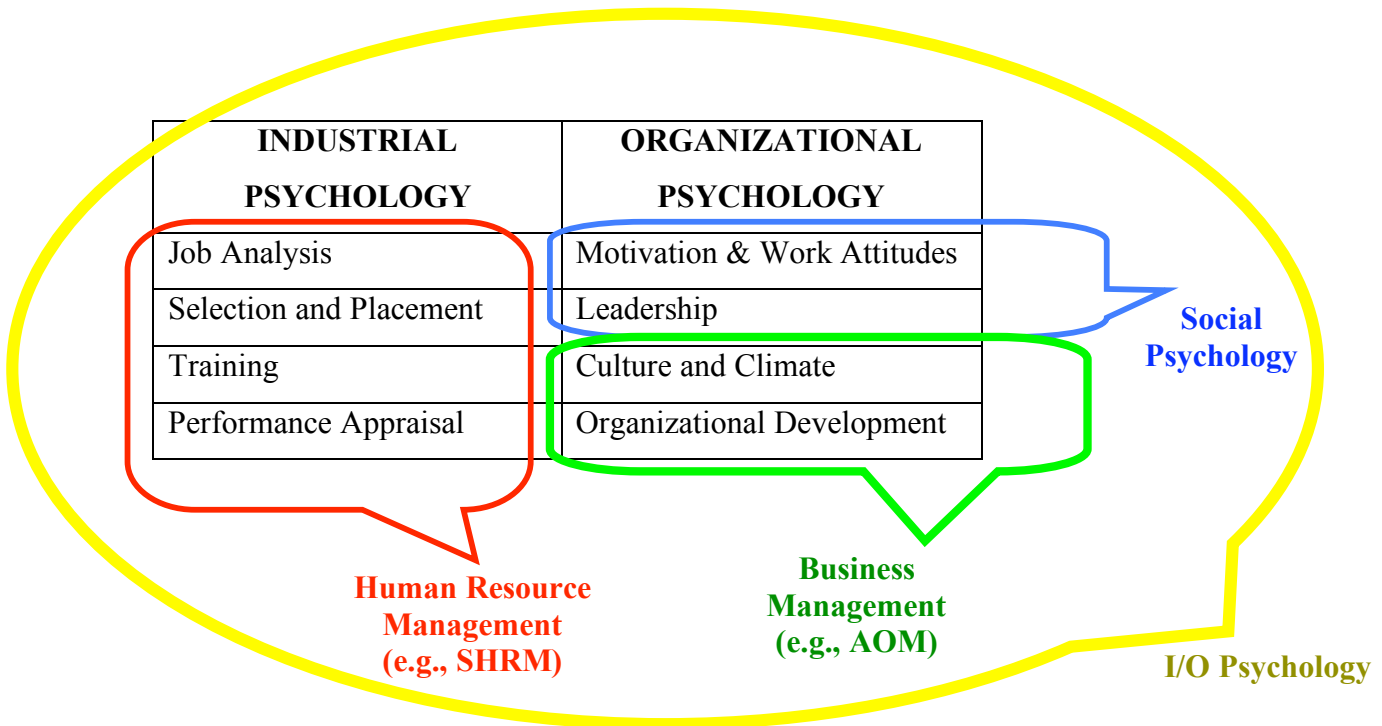Environment

Organization

Department

Team
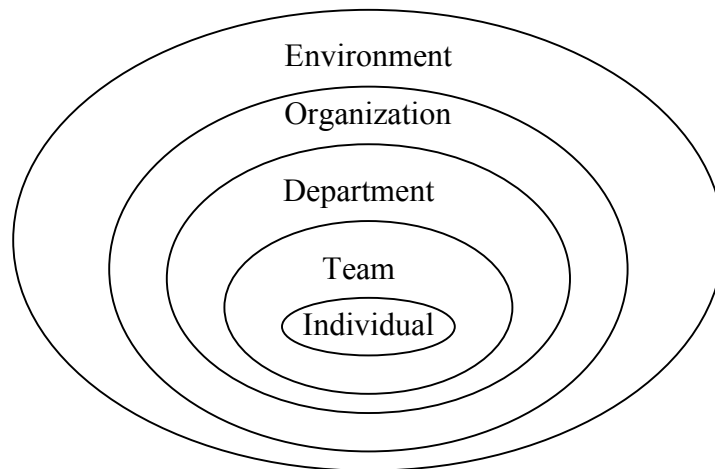
Individual

Again, not all individuals in the field of I/O psychology can address these levels all at the same time in either their research or practice, but it is the goal of the field collectively to be informed about the entire picture above.

Furthermore, I/O Psychology is grounded in SCIENCE, focusing on testing and evaluation with quantitative methods. This is not the same as using simple intuition or trying new things until something works. Our methods are studied with scientific precision and backed by theory and statistics. We'll learn more about some of this in our next lesson.

Finally, there are many reasons for organizations now and in the future to be interested in social and psychological processes in order to better understand how their organizations and the people in them work and to make their organizations a more productive and competitive place. For example, companies are beginning to compete on a global scale more than ever before. Therefore, it's important to know how to motivate workers for ultimate productivity and efficiency. Many companies have an increasingly diverse workforce. Information about how to best manage the social and psychological complexity of working with members from diverse backgrounds is key to the success of these organizations.

Difference between I/O Psychology and Other Related Disciplines

While other disciplines study or are involved in the application of programs and research similar to that studied by and implemented by I/O psychologists, the range of topics studied and actively pursued by I/O psychologists is larger, encompassing issues studied by members of the field of human resource management (HRM) as well as social psychology and business management. If we take a look at the table we saw above once again, you can see the how I/O psychology overlaps with other related disciplines.

INDUSTRIAL PSYCHOLOGY	ORGANIZATIONAL PSYCHOLOGY
Job Analysis	Motivation & Work Attitudes
Selection and Placement	Leadership
Training	Culture and Climate
Performance Appraisal	Organizational Development

Human Resource Management (e.g., SHRM)

Business Management (e.g., AOM)

Social Psychology

I/O Psychology

Although members of HRM, business management, and social psychology may study other topics in addition to those pointed out above, none of them focuses on the entire set of topics we'll be discussing in this course. For more information about these other disciplines, you can check out the Web sites for the major professional organizations in those fields (listed below under supplemental readings).