SUBJECT

# INTRODUCTION OF INDUSTRIAL ORGANIZATIONAL PSYCHOLOGY

SESSION 2

**Session 2**

**Brief description of the specialty**

Industrial/Organizational (I/O) psychology is both the study of behavior in organizational and work settings and the application of the methods, facts, and principles of psychology to individuals and groups in organizational and work settings. I/O psychologists are versatile behavioral scientists specializing in human behavior in the workplace. I/O psychologists recognize the interdependence of individuals, organizations, and society, and they recognize the impact of factors such as increasing government influences, growing consumer awareness, skill shortages, and the changing nature of the workforce. I/O psychologists facilitate responses to issues and problems involving people at work by serving as advisors and catalysts for business, industry, labor, public, academic, community, and health organizations. They are:

- Scientists who derive principles of individual, group, and organizational behavior through research;
- Consultants and staff psychologists who develop scientific knowledge and apply it to the solution of problems at work; and
- Teachers who train students in the research and application of Industrial-Organizational Psychology

The following parameters differentiate the I/O specialty from others.

a. **Populations:** 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 individuals in and applicants to business, industry, labor, public (including non-profit), academic, community, and health organizations.

b. **Problems:** I/O psychologists deal with problems or issues that can be classified as both applied and basic in nature. Basic problems are quite variable, following the investigator's interests. Examples include research on methods of behavioral measurement, communication, motivation, social interaction, and leadership. Applied problems and activities are oriented around scientific solutions to human problems at work. These latter problems and activities include but are not limited to:

Recruitment, Selection and Placement: Analyzing jobs and work, developing recruitment procedures, developing selection

procedures, validating tests, optimizing placement of personnel, and identifying management potential

Training and Development: Identifying training and development needs, formulating and implementing training programs, coaching employees, evaluating the effectiveness of training and development programs, and planning careers.

Performance Measurement: Developing criteria, determining the economic utility of performance, and evaluating organizational effectiveness.

Motivation and Reward Systems:  Developing, implementing, and evaluating motivation and reward programs such as goal setting programs or pay-for-performance plans.

Organizational Development: Analyzing organizational structures and climates, maximizing the satisfaction and effectiveness of individuals and work groups, and facilitating organizational change.

Quality of Work Life: Identifying factors associated with job attitudes, designing and implementing programs to reduce work stress and strain, developing programs that promote safe work behavior and the prevention of accidents, illnesses, and injuries, and designing programs that enhance work/family life.

Consumer Behavior: Assessing consumer preferences, evaluating customer satisfaction with products and services, and developing market segmentation strategies.

The Structure of Work and Human Factors: Designing jobs and work, optimizing person-machine effectiveness, and developing systems technologies.

c.   **Procedures and techniques**:  A variety of procedures, tools, techniques and guidance documents have been developed to assist I/O psychologists in effectively addressing the above types of issues and problems.  Notably, I/O psychologists have rigorously developed both standardized and more situationally-specific procedures and techniques for assessing the three primary elements in a work system the worker, the work itself, and the work context.  In regard to the assessment of worker characteristics, these procedures would include tests and other

means for evaluating more stable individual differences such as cognitive abilities, personality characteristics, values, and physical abilities and more transient characteristics or work behaviors. In addition, numerous procedures have been developed for analyzing the content and human requirements of work, collectively referred to as job analysis procedures.  With respect to the evaluation of work context variables, procedures have been developed to assess and effectively manage organizational culture and climate, organizational reward systems, and the design of organizations.

In addition, I/O psychologists have focused on the development of procedures for addressing important statistical/methodological issues and problems such as the extent to which employment test validity coefficients generalize across situations, procedures for aggregating individual-level data to the group- and organization-level, and procedures for translating the effectiveness of behavioral interventions into estimates of economic utility.

Finally, the Society for Industrial and Organizational Psychology (SIOP) has produced guidelines and white papers, which serve to promote good practice such as the <u>Principles for the Validation and Use of Personnel Selection Procedures</u> (Society for Industrial and Organizational Psychology, 1987), <u>Ethical Practice of Psychology in Organizations</u> (Lowman, 1998), and <u>Affirmative Action: A Review of Psychological and Behavioral Research </u>(Kravitz, Harrison, Turner, Levine, Chaves, Brannick, Denning, Russell, & Conard, 1997).  For instance, the former document specifies the principles of good practice in the choice, development, evaluation, and use of personnel selection procedures.

Theoretical and scientific knowledge required for the specialty

I/O psychologists should acquire knowledge of research and theory on the social bases of behavior, cognitive-affective bases of behavior, and individual differences theory.  Social, cognitive, developmental, learning, and individual difference theories continue to play important roles in theory development and research in I/O psychology.  Although knowledge of research and theory on the biological bases of behavior is important for I/O psychologists dealing with specific practice issues or more specific research issues (e.g., the role of cortical regulatory systems in experienced affect at work), practice and research in I/O

psychology is much less focused than some other specialties on the biological bases of behavior.

I/O psychologists require distinctive knowledge of ethical and legal issues associated with practice in organizations. To this end, SIOP and APA have produced a book to educate I/O psychologists about the unique ethical dilemmas faced in applying psychology in work settings. This volume provides guidance with respect to ethical issues in personnel selection, organizational diagnosis and intervention, managing consulting relationships, research, professional certification and training, and professional behavior. In regard to legal issues, I/O psychologists need to be knowledgeable of statutory (e.g., Title VII of the Civil Rights Act of 1991) and administrative laws (e.g., Equal Employment Opportunity Act of 1972), executive orders (e.g., Executive Order 11246), and court decisions (e.g., Griggs v. Duke Power, Wards Cove Packing Company v. Atonio) as they apply to the practice of psychology in organizations.

**Overview Of The Required Knowledge And Practice Activities For Seven Core Professional Practice Domains**

a. **Assessment:** I/O psychologists must have knowledge and skills to assess jobs and work, performance, and people. For assessing jobs and work, knowledge of alternative methods for describing work and the human attributes necessary to perform the work is needed. For instance, I/O psychologists should be knowledgeable of the numerous inventories used to describe work and worker characteristics (e.g., O*NET, Position Analysis Questionnaire, Occupational Analysis Inventory, Functional Job Analysis). In regard to assessing performance, knowledge of subjective and objective measures of job performance is required. For instance, I/O psychologists should be knowledgeable and skillful in the development of behavior-focused rating forms such Behaviorally Anchored Ratings Scales (BARS) and Behavior Observation Scales (BOS). For assessing individuals, I/O psychologists need to be knowledgeable of a variety of procedures for assessing individuals including psychological tests, biographical information, interviews, work samples, assessment centers, surveys, and the use of computers in assessment.

*Representative practice activities:*

1. Assessing the content of work via job analysis procedures for the purpose of developing performance appraisal procedures.

2. Assessing the human requirements of work via job analysis procedures for the purpose of developing or identifying personnel selection procedures.

3. Assessing individual characteristics via psychological tests, interviews, work samples, and other means for selecting individuals into jobs and career development.

4. Assessing employee knowledge, skill or work performance via a host of evaluation procedures for the purpose of identifying training needs.

5. Assessing employee perceptions of work environment characteristics via survey procedures for the purpose of managing an organizations climate.

b.   **Intervention:**  I/O psychologists design and evaluate the effectiveness of many types of interventions directed at individuals in groups such as goal setting and feedback interventions, personnel training programs, and workplace interventions to prevent stress-related illness. I/O psychologists may or may not be experts in the content of the intervention or training program, but they must possess knowledge of program design and evaluation.  For instance, with respect to personnel training, I/O psychologists need to know how to conduct a needs assessment, how to design a training program taking into account trainee characteristics and other factors that are likely to affect the transfer of training, and how to evaluate a training program including structuring a study that specifies how data are to be collected and choosing or developing measures of the criteria.  In addition, I/O psychologists must be knowledgeable of organizational change techniques and the relative effectiveness of organizational development interventions.

*Representative practice activities:*

1.   Implementing a form of programmed instruction, ranging from printed booklets to interactive videotapes to computer-assisted instruction programs, designed to develop employees declarative and procedural knowledge.

2.   Conducting simulation training for the development of technical skills in controlled and safe environments.

3.   Conducting frame of reference training for raters who appraise others, where the raters are given a common and consistent frame of reference on which to make judgments.

4.   Implementing process improvements and job enrichment, efforts to expand a workers role in planning, improving, and performing their work.

5.   Implementing team building and organizational development interventions with groups or teams.  These interventions are designed to enhance team member morale, problem-solving skills, and team effectiveness.

c.   **Consultation:** I/O psychologists must be knowledgeable of the roles and functions of others with whom they will interact on a professional

basis.  Given that organizations are open systems in continual interaction with multiple, dynamic environments, the form and level of consultation that an I/O psychologist has will vary from one setting to another and over time within any particular setting.  Although primary consultation is with management personnel, the type of work and work context may necessitate consultation with other organizational stakeholder groups such as union personnel, those involved in our legal system, organizational suppliers, and consumer/client groups.  Broad knowledge of the above content areas as well as knowledge of strategic decision-making and organizational stakeholder groups are helpful in consultation with others.

*Representative practice activities:*

1.   Working with compensation specialists to establish organizational reward systems.

2.   Participating with engineers in the planning, design, and testing of person-machine systems.

3.   Obtaining the advice of legal professionals concerning the implications of court decisions for the validation and use of personnel selection procedures.

4.   Consulting with mental health, public health, and medical personnel on the design and evaluation of workplace interventions intended to reduce work stress and strain.

5.   Interacting with union personnel concerning the protection of union member rights when planning assessments and interventions.

**d.   Supervision:**  Knowledge required for supervision in Industrial/Organizational psychology includes not only knowledge that is generic to all professional supervision, but also knowledge of general standards (e.g., APA, 1992; AERA, APA, & NCME, 1999; Code of Fair Testing Practices, 2000) and knowledge and skills specific to the practice of I/O psychology.

American Eductional Research Association, American Psychological Association, & National Council on Measurement in Education.  (1999). <u>Standards for educational and psychological testing</u>.  Washington, D.C.:  AERA Publications.

American Psychological Association. (1992). <u>Ethical principles of psychologists and code of conduct</u>.  Washington, D.C.:  Author.

<u>Code of Fair Testing Practices in Education</u>. (2000) Washington, D.C.: Joint Committee on Testing Practices. (Mailing Address: Joint Committee on Testing Practices, American Psychological Association, 750 First Street, NE, Washington, DC, 20002-4242.)

*Representative practice activities:*

1.   Supervising the development of psychological tests.

2.   Managing the administration of an employee survey.

3.   Supervising the design of an employee performance appraisal system.

4.   Leading an analysis to determine the solution to an organizational problem.

5.   Managing the implementation of an organizational change effort, such as a new reward system for high performing employees or process improvements.

6.   Supervising student research

e.   **Research and Inquiry:** I/O psychologists must have extensive knowledge of research strategies and research methodology as well as knowledge of psychometrics and statistics.

*Representative practice activities:*

1.   Evaluating the effectiveness of an organizational intervention, such as job redesign intervention or process improvements.

2.   Studying the transfer of training to the job.

3.   Conducting a criterion-related validity study to determine the predictive effectiveness of a personnel selection procedure.

4.   Estimating the economic impact of a personnel selection or training program.

5.    Studying the relation between organizational commitment and turnover.

6.    Conducting laboratory experiments, field experiments, or field studies

f.    **Consumer Protection:**  I/O psychologists should acquire knowledge of ethical principles of psychologists and the ethical practice of psychology in organizations.  In addition, SIOP operates a web site and consultant locator service designed to help those interested in finding an individual or firm with experience and expertise in particular practice areas.

*Representative practice activities:*

1.    Communicating to clients the relevant legal and technical aspects of a selection program or some other I/O-psychology related program in terms the organizational representatives can understand.

2.    Indicating to potential client organizations that assessment procedures will be developed only according to professionally acceptable standards.

3.    Establishing clear rules as to how sensitive data (e.g., pre-employment drug test results) will be maintained and how results will be communicated to all parties.

4.    Examining promotional materials for I/O psychology-related products and services and requesting the right of approval prior to distribution to the public.

5.    Obtaining permission from a client organization prior to discussing consulting work in a public forum.

g.    **Professional Development:** I/O psychologists have opportunities to update their knowledge and skills on a regular basis through participation in SIOP sponsored workshops and conferences.  A sampling of workshops held at the most recent Annual Conference is presented below.  In addition, many I/O psychologists belong to other APA Divisions (e.g., Division 5, Evaluation, Measurement and Statistics; Division 19, Military Psychology), professional societies such as the Academy of Management, and local associations (e.g., Personnel

Testing Council of Metropolitan Washington D.C.) that provide further professional development opportunities.

*Representative practice activities:*

1.  Attending conferences to learn about research and practice developments.

2.  Participating in professional development workshops such as those conducted at SIOPs Annual Conference.

3.  Reading APA and SIOP task force reports, journals, and books concerning research and practice developments (such as the books published in SIOPs Frontiers Series and SIOPs Professional Practice Series).

4.  Reading SIOPs quarterly journal TIP (The Industrial/Organizational Psychologist) to update knowledge concerning the latest I/O psychology-relevant information on a variety of topics.

5.  Participating in professional, scientific, and educational organizations whose mission is (in whole or part) to advance the knowledge and practice of industrial and organizational psychology.

**Other Areas of I/O Specific Scientific Knowledge**

There are a variety of other specific specialty areas within I/O psychology that build upon a basic scientific core.  Twenty of these areas are discussed below:

## 1. Research Methods

The domain of research methods includes the methods, procedures, techniques, and  tools useful  in  the conduct  of  empirical research  on phenomena  of interest in  I/O psychology.  At a general  level, the areas  encompassed by research methods include the  scientific method (with attention to issues in the philosophy  of science),  inductive  and  deductive reasoning,  problem statements and research questions, hypotheses, the nature and definition of constructs,  and  study  designs  (experimental,  quasi-experimental,  and non-experimental). At  a more operational level,  research methods includes, but  is  not

limited to, the manipulation of variables (in experimental research), the concepts underlying and methods used for the assessment of the reliability and validity of measures, the administration of various specific types of measures (questionnaires, interviews, observations of behavior, projective measures, etc.), the use of various sampling procedures (probability and non-probability type) especially as applied to survey research, the conduct of research with various specific strategies (field study, laboratory experiments, field experiment, sample survey, simulation, case study, etc.), the use of statistical methods to establish relationships between variables, and the formulation of research-based conclusions. Specific knowledge about relative strengths and weaknesses of different research strategies, an understanding of qualitative research methods, as well as a tolerant appreciation of the benefits of alternative strategies must be developed. Computer literacy has become increasingly important, and programming skills may be particularly useful. Finally, an understanding of the ethical standards that govern the conduct of all research involving human participants is essential.

## 2. Statistical Methods/Data Analysis

This domain has to do with the various statistical techniques that are used in the analysis of data generated by empirical research. The domain includes both descriptive and inferential statistical methods; it spans both parametric and nonparametric statistical methods. Among the specific competencies, issues and techniques encompassed by the domain are: estimates of central tendency; estimates of variability; sampling distributions; point and interval estimates; inferences about differences between means, proportions, and so forth; univariate and multivariate analyses of variance (fixed, random, and mixed effects models); linear and non-linear regression and correlation; path analysis; multiple discriminant function analysis; multiple and canonical regression; factor analysis; components analysis; cluster analysis; pattern analysis; and structural equation modeling. Knowledge of this domain implies a basic understanding of the statistical foundation of such methods, asymptotic sampling variances of different statistics, the assumptions underlying the proper use of the same methods, and the generalizations, inferences, and interpretations that can legitimately be made on the basis of statistical evidence.

### 3. Attitude Theory, Measurement, and Change

Attitudes, opinions and beliefs are extremely important in organizational settings. They are important in their own right because of humanitarian concerns for the quality of working life of those who are employed in organizations. They are also important for diagnosing problems in organizations. Finally, they are important because they relate to the behavioral intentions and the behaviors of individuals at work. Some of the job attitudes typically studied by I/O psychologists include, but are not limited to, job satisfaction (general and various facets), job involvement, organizational commitment, and perceptions of fairness.

### 4. Career Development

Theory and research regarding career development are concerned with the interplay between individuals and environments and attempt to describe the nature of the patterns of positions held and resultant experiences during an individual's lifespan. Included in this domain are models and explanations of the origin and measurement of individual aptitudes and interests, how individual, social, chance, and environmental factors shape educational and training experiences, specific skill training and development,early work history, occupational choice, organizational/job choice and switching, the sequence of jobs taken after organizational entry, work/family issues, midcareer plateaus, and retirement planning.

### 5. Consumer Behavior

The focus of this area is the systematic study of the relationship between the producers (or distributors) and consumers (actual or potential recipients) of goods and services. Usually this involves many of the following concerns: consumer preferences for product features, consumer attitudes and motivation, buying habits and patterns, brand preferences, media research (including the effectiveness of advertisements and commercials), estimating demand for products or services, and the study of the economic expectations of people. Closely allied to those areas of market research which focus on personal consumption, there is a substantive or content basis to this domain insofar as there is a body of theory and data amassed dealing with the antecedents and correlates of consumer behavior which should be

learned. There is a skill component to be mastered as well, inasmuch as the area is built upon the appropriate application of a variety of social science research methodologies (e.g., sampling theory, questionnaire and survey protocol design and execution, individual and group interviewing, stimulus scaling, and mathematical model building).

## 6. <u>Criterion Theory and Development</u>

Almost all applications of I/O psychology (e.g., selection, human resources planning, leadership, performance appraisal, organization design, organization diagnosis and development, training) involve measure ments against criteria (standards) that indicate effectiveness on the part of individuals, groups, and/or organizations. The selection of criteria is not a simple issue and represents a significant area of concern for I/O psychologists.

The knowledge base of this domain incorporates understanding the theoretical issues such as single versus multiple criteria, criterion dynamics, the characteristics of good and acceptable criteria (relevance, reliability, practicality), and criteria as a basis for understanding human behavior at work and in organizations. Knowledge of past research in this area, which is quite extensive, is also necessary.

Beyond this knowledge, the I/O psychologist should have the skills necessary for developing valid criteria and methods of measuring them. The se necessarily include skills in many of the other domains identified in the document (e.g., job analysis, psychometrics).

## 7. <u>Health and Stress in Organizations</u>

Job performance and effective organizational functioning can be affected by health and safety factors in the work place which result in sub-optimal working conditions and reduced productivity. This competency area requires the study of interactions between human physical capabilities a nd problematic conditions in the work place in an attempt to understand the limits of performance and negative effects on workers. Among the factors considered are hazardous environmental conditions induced by t

oxic substances (e.g., chemical, biological, nuclear), loud noises, blinding
lights, noxious odors. Other factors considered are related to organizational structure and job design such as shift work, or the requirements of particular tasks. Additional
sources of organizational stress that may affect performance, commitment, and attitudinal variables
include downsizing, harassment, work-family pressures,
and outsourcing. There should be some familiarity with government standards relating to the work place (e.g., Occupational Safety and Health Administration guidelines).

## 8. Human Performance/Human Factors

Human Performance is the study of limitations and capabilities in human skilled behavior. Skill is broadly construed to include perceptual, motor, memory, and cognitive activities, and the integration of these into more complex behavior. Emphasis is on the interaction of human behavior and tools, tasks, and environments, ranging from detection and identification of simple events to problem solving, decision making, human errors, accidents, and control of complex environments. Included among the variables that affect human performance are individual differences, organismic variables,
task variables, environmental variables, and training variables.

Competency in this area assures awareness of issues of experimental design, a grounding in perception, cognition, and physiological psychology, some
knowledge of computer programming, and
quantitative modeling based on techniques from
mathematical psychology, engineering, and computer science. Familiarity in the subject areas of basic experimental psychology should be combined with an awareness of applied research in such areas as work station design, workload measurement, control systems, information display systems, health and safety, and human-computer interactions.

## 9. Individual Assessment

This domain refers to a set of skills that are needed for assessing, interpreting, and communicating distinguishing characteristics of individuals for a variety of work-related purposes. The two primary purposes of individual assessment can be defined broadly as selection

(e.g., hiring, promotion, placement) and development (e.g., career planning, skill and
competency building, rehabilitation, employee counseling). Individual assessment may help attain multiple goals, many of which are aimed at achieving some form of person-environment fit, including assessee fit to a
specific job or career track and assessee fit within a specific organizational context (e.g., department, work group).

Individual assessment incorporates skill in individual testing, interviewing, and appraisal techniques for the purpose of evaluating ability, personality, aptitude, and interest characteristics. Individual assessment also requires identifying, developing, selecting, and/or using the appropriate means for such assessment, and communicating the results and interpretation of assessment accurately in both face-to-face and written form.

A knowledge of the fact that individual assessment focuses on the whole person is required. In addition, a knowledge of the manner in which environmental and contextual factors shape the purpose and use of the
accumulated information of individual assessments is necessary.

## 10. **Job Evaluation and Compensation**

This competency area focuses on determining the appropriate compensation level for skills, tasks, and/or jobs. Job evaluation is a processes by which the relative value of jobs is determined and then linked to commensurate compensation. Job evaluation is closely tied to and usually predicated upon
sound job/task analyses. In general, job evaluation and compensation
involves identifying compensable factors, attending to perceptions of fairness and equity, and considering issues of comparable worth. Proficiency in this competency area is
demonstrated by a theoretical and applied understanding of various job evaluation techniques, compensation strategies (e.g., pay for skills, team-based pay, etc.), and the legal and social issues surrounding compensation.

## 11. **Job/Task Analysis and Classification**

This domain encompasses the theory and techniques used to ge nerate information about what is involved in performing a job or task, the physical and social context of this performance, and the attributes needed by an incumbent for such performance. Tasks are basic units of activity, the elements of which highlight the connection between behavior and result. A job is an arbitrary grouping of tasks designed to achieve an organizational objective. It is common for jobs to be grouped or classified on the basis of a variety of criteria, depending on the purpose and goals of the classification system.

The fundamental concern of job and task analysis is to obtain descriptive information to design training programs, establish performance criteria, develop selection systems, implement job evaluation systems, redes ign machinery or tools, and create career paths for personnel. The specific steps taken and the type of information gathered will vary depending on the purpose of the job and task analyses and the classification system. Relevant information includes, but is not limited to: what worker behaviors are involved; the knowledge, skills, and abilities required; the standards of performance desired; the tools, machines, and work aids used; the sources of information available to the incumbent; the social, environmental, and physical working conditions; and the nature of supervision. Similarly, some of the steps involved in job and task analyses include: identifying the purpose of the analysis; preparing, designing, or selecting a job analysis system; collecting job or task information; summarizing the results; and documenting the steps taken for future reference. The classification of jobs typically entails identifying the purpose and goals of the classification system; designing a classification scheme; categorizing jobs according to the established scheme; and documenting the classification process and outcomes.

The individual competent in this domain should have a knowledge of the different approaches to job/task analysis and classification, as well as skill in applying these techniques to real world situations. This competency area is likely to continue evolve as the nature of work in our society continues to change.

## 12. **Judgment and Decision Making**

Judgment and decision making encompasses an area of research and knowledge that is both prescriptive and normative in its emphases. This area is important because judgment and decision making under conditions of uncertainty probably describes the majority of the decisions managers, psychologists, market forecasters, and budget/policy planners make during the course of their work and research. A knowledge of decision theory, judgment, and problem solving research is important to understanding the critical processes that influence how information is processed and the quality of the decision outcomes.

Many different content areas within the broad area of I/O psychology can be studied explicitly as applications of decision and judgment theory. Such areas as vigilance behavior, employee selection, choice behavior, and human performance in complex environments can be integrated by principles of decision theory that may require fewer concepts than are necessary when each content areas is considered distinct and unique. Applications of decision theory to the policies of decision makers, judges, and clinicians allow greater understanding of inferential procedures used by individuals. Approaches for describing and predicting judgment and decision making include Brunswik's lens model, Bayesian inference, subjective expected utility, prospect theory, and the cognitive information processing paradigm. A knowledge of these approaches and an ability to integrate across the different approaches are indicative of breadth as well as depth of training in judgment and decision theory.

### 13. Leadership and Management

Management and leadership can be approached at different levels. The study of management and leadership at the macro level involves the influences senior level individuals have in the larger organizational context-setting strategy, directing change, influencing values. Theory and research may focus on characteristics of leaders, leader style, leader-member interactions, behaviors of leaders, and related phenomena. At a more micro level, leadership and management involves the day-to-day exchange between leaders and followers. This includes challenges faced by line managers in their relationships with subordinates in the assignment of tasks, evaluation of performance, coaching and counseling for improvement, resource planning,

and related tasks. Related to many other areas, effective leadership and management involves task analysis, motivation, decision making, career planning, selection, performance appraisal, interpersonal communication, listening and related skills in a supervisor-subordinate context. Increasingly, attention is placed on team leadership and self-leadership (especially in relation to empowerment), and horizontal leadership (i.e., peer influence processes).

## 14. Organization Development

This domain encompasses theory and research relevant to changing individuals, groups, and organizations to improve their effectiveness. This body of theory and research draws from such related fields as social psychology, counseling psychology, educational psychology, vocational psychology, engineering psychology, and organizational theory.

More specifically, this domain concerns theory and research related, but not limited to: individual change strategies including training, socialization, attitude change, career planning, counseling, and behavior modification; interpersonal and group change strategies, including team building and group training, survey feedback, and conflict management; role or task oriented change strategies, including job redesign, role analysis, management by objectives, and temporary task forces; and organization system-directed change strategies, including survey feedback, open systems oriented change programs, human resource accounting, flexible working hours, structural changes, control system changes, and quality circles.

## 15. Organization Theory

It is well accepted that the structure, function, processes, and other organizational-level constructs have an impact upon the behavior of individuals in organizations. Therefore, it is necessary that I/O psychologists have a thorough understanding of the nature of complex organizations. This understanding should include, but is not limited to, classical and contemporary theories of organizations, organizational

structure, organizational design, technology, and the process of organizational policy formation and implementation. Much of this theory and research is generated by sociologists and those students of organizational behavior who choose as their unit of analysis constructs not primarily within the individual or within the immediate group environment of the individual. Integration of organizational and individual constructs is an important area of study within I/O psychology. Such an integration obviously requires a knowledge of organizational theory.

## 16. <u>Performance Appraisal and Feedback</u>

Performance appraisal and feedback have both a knowledge and a skill base. This area centers on the methods of measuring and evaluating individuals as they perform organizational tasks and on taking action (administrative and/or developmental) with individuals on the basis of such appraisals.

The knowledge base includes a thorough understanding of rating scale construction and use. Also relevant are the areas of measurement theory, data analysis, criterion theory and development, motivation theory, and the factors which underlie interpersonal perception and judgment. An understanding of the similarities, differences, and inconsistencies among the perceptions of performance and feedback supplied by peers, subordinates, and supervisors is essential. The skill base includes procedures for communicating performance evaluations to job incumbents and counseling them in appropriate means of improving their performance. Also, skill in designing a complete performance appraisal and feedback system which meets organizational needs while maintaining and/or enhancing worker motivation and/or performance is required.

## 17. <u>Personnel Recruitment, Selection, and Placement</u>

This domain consists of the theory and techniques involved in the effective matching of individual needs, preferences, skills, and abilities with the needs and preferences of organizations. An organization's needs are defined by the jobs assigned to positions in the organization.

More specifically, this domain encompasses theory and research in: human abilities; test theory, development, and

use; job analysis; criterion development and measurement; recruitment; classical and decision theory models of selection and placement; alternative selection devices (e.g., interviews, assessment centers); and legal and societal considerations that impact upon recruitment, selection, and placement. In particular, the individual must keep current with the legislation and court decisions related to these issues, as well as with responses of the Society to laws and their interpretations.

## 18. <u>Small Group Theory and Team Processes</u>

Much of human activity in organizations takes place in the presence of other people. This is particularly true of work behavior. The pervasiveness of interpersonal and task interdependence in organizations demands that I/O psychologists have a good understanding of the behavior of people in work groups. Though the labels "group" and "team" are often used interchangeably, it is also critical to have a familiarity with the growing teamwork literature. This requires an understanding that extends beyond familiarity with research and theory related to interpersonal behavior in small groups. The body of theory and research concerning groups and teams draws from social psychology, organizational psychology, sociology, and organizational behavior. A good background in group theory and team processes includes, but is not limited to, an understanding of leadership, motivation, interpersonal influence, group effectiveness, conformity, conflict, role behavior, and group decision making.

## 19. <u>Training: Theory, Program Design, and Evaluation</u>

This domain includes theory and techniques used to design, conduct, and evaluate instructional programs. The instructional process begins with a needs assessment, including organizational, job and task, and person analyses, to determine the goals and constraints of the organization and the characteristics of the job and trainees. Familiarity with basic phenomena of learning (e.g., modern learning theory, conditioning principles), as well as knowledge of the different approaches to training (e.g., computer assisted instruction, simulation, behavior modification) are necessary for designing programs. An ability to develop meaningful and appropriate training objectives is essential. Transfer of training to the desired setting is an important consideration. In order for programs to be conducted

as planned, the instructors must have good instructional skills. Thus, training the trainers is necessary.

Both the process and the outcome of the program may be evaluated to determine if it has been conducted as planned and whether or not it has had any effect. Knowledge of appropriate training evaluation criteria and design issues, such as pre- and post-testing and control groups, as well as organizational constraints is necessary for planning an evaluation strategy.

## 20. <u>Work Motivation</u>

Work motivation refers to the conditions within the individual and his or her environment that influence the direction, strength, and persistence of relevant individual behaviors in organizations when individual abilities and organizational constraints are held constant. Increasingly, work motivation is a concern at the group level as well.

I/O psychologists need to have a sound background in work motivation in at least three respects. First they must have a thorough understanding of the theories of human motivation including, but not limited to, need theories, cognitive theories, and reinforcement theories. In all cases there must be a thorough understanding of the extensive research and theory that exist outside the domain of work in the basic psychological literature. At the second level, there must be an understanding of the research and theory in motivationally relevant domains of I/O psychology that represent general
applications of one or more motivational perspectives. Such general strategies for work motivation as goal setting, job design, incentive systems, and participative decision making are relevant here. Finally, there must be an awareness of and ability to apply very specific, motivationally oriented practices that adapt motivational constructs to specific cases. For example, understanding and implementing management-by-objectives involves an application of goal setting principles and participation