Society for Industrial and Organizational Psychology

PETITION FOR THE RECOGNITION OF A SPECIALTY IN PROFESSIONAL PSYCHOLOGY
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THIS PETITION gives guidance to the types and amounts of information necessary for a formal decision to be reached. Petitioning organizations may use additional pages where necessary. The petitioning organization is free to provide any additional material deemed relevant.

AMERICAN PSYCHOLOGICAL ASSOCIATION
750 First Street, NE Washington, D.C. 20002-4242
(202) 336-5500

PETITION PACKAGE

Name of Proposed Specialty: Industrial and Organizational Psychology

Definition: A specialty is a defined area of psychological practice which requires advanced knowledge and skills acquired through an organized sequence of education and training. The advanced knowledge and skills specific to a specialty are obtained subsequent to the acquisition of core scientific and professional foundations in psychology.

Although the specific dimensions of specialty programs may vary in their emphases and in available resources, every defined specialty in professional psychology will contain: (a) core scientific foundations in psychology; (b) a basic professional foundation; (c) advanced scientific and theoretical knowledge germane to the specialty; and (d) advanced professional applications of this knowledge to selected problems and populations in particular settings, through use of procedures and techniques validated on the same.

The relationship between a body of knowledge and a set of skills in reference to each of the parameters of practice specified in Criterion VI below represents the most critical aspect of the basic definition of a specialty.

Please check one:

☐ Petition for Initial Recognition Petition for Renewal of Recognition
1. Please provide the following information for the organization or specialty council submitting the petition:

   Name of organization or specialty council: Society for Industrial and Organizational Psychology (Division 14 of APA)

   Address: 440 E Poe Rd, Ste 101

   City/State/Zip: Bowling Green, OH 43402

   Phone: 419-353-0032 FAX: 419-352-2645

   E-mail address: SIOP@siop.org

   Website of organization: http://www.siop.org

2. Please provide the following information for the President, Chair, or representative of the organization or specialty council submitting the petition:

   Name: Talya Bauer, SIOP President APA membership status: Fellow

   Address: Portland State University, Portland, OR 97207-0751

   Phone: 503-708-4470

   E-mail address: t a l y a b a u e r @ p d x . e d u

3. Please provide the following information for the organization or specialty council submitting the petition:

   Year founded? 1982 Incorporated? Yes

   State incorporated: District of Columbia
Describe the purpose and objectives of the administrative organization or specialty council submitting the petition.

The Society for Industrial and Organizational Psychology is a division within APA that is also an organizational affiliate of APS. The Society’s mission is to enhance human well-being and performance in organizational and work settings by promoting the science, practice, and teaching of industrial-organizational psychology.

Towards this end, SIOP:

- Supports SIOP members in their efforts to study, apply, and teach the principles, findings, and methods of industrial-organizational psychology
- Provides forums for industrial-organizational psychologists to exchange research, insights, and information related to the science, practice, and teaching of industrial-organizational psychology
- Identifies opportunities for expanding and developing the science and practice of industrial-organizational psychology
- Monitors and addresses challenges to the understanding and practice of industrial-organizational psychology
- Promotes the education of current and future industrial-organizational psychologists
- Promotes public awareness of the field of industrial-organizational psychology

Please append the bylaws for the petitioning organization or specialty council if bylaws are not provided on the website. – See Appendix A

Outline the structure and functions of the administrative organization or specialty council (frequency of meetings, number of meetings per year, membership size, functions performed, how decisions are made, types of committees, dues structure, publications, etc.). Provide samples of newsletters, journals, and other publications, etc. Present a rationale that describes how your organization or specialty council provides systems and structures which make a significant contribution to the organized development of the specialty.

Administrative Structure: The administrative structure of SIOP, along with a list of current officers and committee chairs, is described in Table 1. SIOP is governed by the elected members of the Executive Board. They meet three times a year: April, September, and January. They are joined at the April meeting by all of the committee chairs, both incoming and outgoing. In September and January they include selected committee chairs in their meetings.

SIOP issues a call for nominations every year in the fall to Fellows and Members (PhD level). Ballots are then distributed in early December to the same voting Members and Fellows. The following officers are elected by the Members and Fellows of SIOP: President, Financial Officer/Secretary, Representatives to APA Council, Communications Officer, Conferences and Programs Officer, External Relations Officer, Instructional and Education Officer, Membership Services Officer, Professional Practice Officer, Publications Officer, and Research and Science Officer.

Membership: The current membership is SIOP is 9,443, which includes 5,148 professional membership (335 Fellows, 3,199 Members, 1,614 Associates, and 270 retired members) and 4,025 Student Affiliates. As indicated in Table 1, there are elective officers, but there is also extensive participation of the membership in committees that carry out many of the functions of the organization.
Table 1: SIOP Administrative Structure

**President**: Talya Bauer  
**President-Elect**: Eden King  
**Past President**: Fred Oswald  
**Financial Officer/Secretary**: Evan Sinar  

**Representatives to APA Council:**
- 01/17-12/19 Stephen Stark
- 01/16-12/18 Georgia Chao
- 01/18-12/20 Jeffrey McHenry
- 01/16-12/18 Gary Latham

**Conferences and Programs Officer**: Alexis Fink  
- **Program-APA**: C. Allen Gorman  
- **Program-APS**: Margaret Beier, Berrin Erdogan (Chair-in-Training)  
- **Program-SIOP**: Tracey Rizzuto, Elizabeth McCune (Chair-in-Training)  
- **SIOP Conference**: Scott Tonidandel  
- **Workshops**: Gavan O’Shea, Rob Michel (Chair-in-Training)  
- **Leading Edge Consortium**: Allan Church, Rob Silzer (Co-Chairs)

**Publications Officer**: Mo Wang  
- **Organizational Frontiers**: Selection Underway, Editor  
- **Org. Science, Translation, & Application Series**: Steve W.J. Kozlowski  
- **Professional Practice Series**: Selection Underway, Editor  
- **IOP Journal**: Ron Landis, Editor  
- **Publications Board**: Mo Wang

**Communications Officer**: Lori Foster  
- **Electronic Communications**: Paul Thoresen  
- **TIP**: Tara Behrend

**External Affairs Officer**: Janet Barnes-Farrell  
- **External Relations**: Liberty Munson  
- **Local I-O Group Relations (ad hoc)**: Virginia Whelan  
- **United Nations**: Julie Olson-Buchanan  
- **Visibility**: Nikki Blacksmith  
- **International Affairs**: Stuart Carr  
  - Alliance Liaison: Mark Poteet & Steven Rogelberg

**Membership Services Officer**: Allan Church  
- **Awards**: Cindy McCauley (Chair), Kristen Shockley (Associate), Jeff Cucina (Chair-in-Training)  
- **Ethnic and Minority Affairs**: Enrica Ruggs  
- **Fellowship**: Derek Avery, Nancy Tippins (Chair-in-Training)  
- **Historian**: Maggie Brooks  
- **LGBT Committee**: Ismael Diaz  
- **Membership**: Jill Bradley-Geist  
- **Placement and JobNet**: Tim McGonigle, Jackie Spencer (Co-Chairs)  
- **Women’s Inclusion Network**: Mindy Bergman

**Professional Practice Officer**: Rob Silzer  
- **Professional Practice**: William Shepherd  
- **Career and Professional Development for Practitioners**: Lynn Collins  
- **Engagement and Communications for Practitioners**: Ben Porr  
- **Learning Resources for Practitioners**: Mark Morris  
- **Licensing, Certification and Credentialing**: Mark Nagy
**Instructional and Educational Officer: Milt Hakel**
- **CE Coordinator**: Judy R. Van Doorn
- **Education & Training**: Marissa Shuffler
- **Consortia**: Wendy Bedwell, Deborah DiazGranados (Chair-in-Training)
- **Committee for the Advancement of Professional Ethics**: Deirdre Knapp

**Research and Science Officer: Steve W. J. Kozlowski**
- **Advocacy Review Committee**: Tammy Allen
- **Government Relations Advocacy Team**: Alexander Alonso
- **Institutional Research**: Amy DuVernet
- **Scientific Affairs**: Bradford Bell

**Non-Portfolio**
- **Election**: Eden King
- **Futures**: Richard Landers
- **Support, Planning and Research (ad hoc)**: Doug Reynolds
Administrative Office: Jeffrey R. Hughes, Executive Director

SIOP Foundation: Milton Hakel, President

Publications: SIOP publishes a quarterly newsletter (The Industrial Psychologist – for an example see http://my.siop.org/TIPdefault) which is available electronically to all members as well as a journal (Industrial and Organizational Psychology: Perspectives on Science and Practice – for an example see http://my.siop.org/journal) that are distributed to all Members, Fellows and Associates in electronic copy.

SIOP publishes three book series, Organizational Frontiers, Professional Practice Series, and Organizational Science, Translation, and Practice Series. These books are written and edited by SIOP members and their royalties benefit the Society. In conjunction with APA, SIOP also published The Ethical Practice of Psychology in Organizations, a casebook written by SIOP members to illustrate the application of the APA Ethical Principles and Code of Conduct in organizational settings.

SIOP also publishes the Principles for the Validation and Use of Personnel Selection Procedures (http://www.siop.org/_Principles/principles.pdf), a document that is frequently cited in evaluating the procedures used by organizations to select and place employees.

Conferences and Workshops: SIOP presents an annual conference at which academics and practitioners present research and discuss professional practice issues. Conference attendance ranges from approximately 4,000 members to a recent high in 2018 of 5,400 attendees (fellows, associates, members, student members and others per year). The annual SIOP conference includes a series of pre-conference Workshops and embeds Continuing Education opportunities throughout the conference. A program for the most recent SIOP conference can be accessed at http://www.siop.org/conferences/18con/ In addition to panels, symposia, debates, master tutorials, and posters, the annual conference provides a number of activities designed to assist members, including:

Placement Center: This is a virtual job board where job seekers can enter their resumé, organizations can post jobs, and both groups can search the database for individuals/organizations that match their desired search criteria. At the conference, Placement Center participants have access to on-site computers, a help desk, and physical space to hold pre-scheduled interviews between job seekers and employers. An Open House is held as an opportunity for job seekers to mingle with employers, and an Internship event (either an Open House or Panel Discussion) is meant to provide guidance and best practices to help students seeking internship opportunities.

Networking: Opportunities abound at the SIOP Conference to meet people, make contacts, form partnerships, and forge friendships in an open yet professional atmosphere. Breakfast, mid-morning, and mid-afternoon snacks are provided by Conference sponsors. There are receptions every evening that bring all participants together. There is a special reception for first-time conference attendees, and we also connect first time attendees with seasoned SIOP members via our Ambassador program. In addition, we conduct specialized speed mentoring events during the conference around particular topics (e.g. grant funding, practitioners, etc.).

In addition to its annual conference, SIOP hosts an annual Leading Edge Consortium at which academics and practitioners meet to discuss cutting-edge research and applications in a particular topical area. The program of the most recent Leading Edge Consortium can be accessed at http://www.siop.org/LEC/2017/default.aspx

SIOP Foundation: The SIOP Foundation is a 501 (c) 3 corporation which accepts tax-deductible contributions. Its mission is to connect donors with I-O psychology professionals to create smarter
workplaces. It receives contributions from about 200 donors each year. Its cumulative distributions now exceed $1 million. Proceeds from the Foundation are used by SIOP to fund its awards program, comprising recognitions of career and publication achievements, grants to stimulate research and practice, and scholarships for students.

4. **Signatures of official representing the organization or specialty council submitting the petition:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Date</th>
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<tbody>
<tr>
<td>Talya Bauer</td>
<td>President</td>
<td>October 2, 2018</td>
</tr>
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**Public Need and Distinctiveness**

<table>
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<tr>
<th><strong>Criterion II. Public Need for Specialty Practice. The services of the specialty are responsive to identifiable public needs and attend to human diversity.</strong></th>
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<tr>
<td><strong>1. Describe the public needs that this specialty fulfills with relevant references. Under each need specify the populations served and relevant references.</strong></td>
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Industrial and Organizational Psychology meets several public needs related to individuals and organizations. Specifically, Industrial and Organizational Psychology focuses on meeting organizations’ needs related to effective people or talent management. Work plays an integral role in people’s lives and in business organizations. For individuals, there are unique affective, behavioral, and cognitive needs that must be met for individuals and groups to perform effectively in organizations. Research and practice provides information on job requirements and the essential knowledge, skills, abilities, and other characteristics that individuals need to be productive at work (see [https://www.onetcenter.org/content.html](https://www.onetcenter.org/content.html)). For business organizations, defining work roles and hiring for them enable the organization to create products and services. A primary purpose of for-profit and non-profit business organizations is to provide products and services through the individual and combined efforts of people. To be effective and obtain competitive advantage in achieving this purpose, it is critical to make use of effective research and practice focused on improving individual, group, and organizational performance is needed. Specifically, organizations need to have knowledge and practices that will enable them to recruit, hire, develop, and engage people so that so that the organization can operative efficiently and effectively. The remainder of this section provides more detailed information about the focus and content of the practice of Industrial and Organizational Psychology.

The unique and defining focus of Industrial and Organizational Psychology is its focus on work and work organizations. This specialty follows the well established scientist-practitioner model, combining basic research and applications to help maximize both human and organizational potential and to help organizations improve the experience of work for their workforce. This specialty examines the relationships between work and work-domains (e.g., work-family conflict and facilitation), with the goal of increasing our understanding of the impact of work and organizations on the human experience.

As a specialty, the mission of industrial/organizational psychology is to enhance human well-being and performance in organizational and work settings (e.g., identifying individual fit for jobs, improving employee engagement and motivation, providing coaching and development to individuals to maximize their effectiveness, creating effective performance management processes) by promoting the science, practice, and teaching of industrial-organizational psychology.
Toward this end, SIOP, in support of the Industrial and Organizational specialty, engages in efforts to:

• Study, apply, and teach the principles, findings, and methods of Industrial and Organizational psychology
• Provide forums for Industrial and Organizational psychologists to exchange research, insights, and information related to the science, practice, and teaching of Industrial and Organizational psychology
• Identify opportunities for expanding and developing the science and practice of Industrial and Organizational psychology
• Monitor and address challenges to the understanding and practice of Industrial and Organizational psychology in organizational and work settings
• Promote the education of current and future Industrial and Organizational psychologists
• Promote public awareness of the field of Industrial and Organizational psychology

Numerous reviews have provided evidence of the effectiveness of Industrial and Organizational Psychology in responding to identified priorities and needs (e.g., Cascio & Aguinis, 2008; Deadrick & Gibson, 2007). Industrial and Organizational Psychology responds to work-related priorities and needs by means of applying psychological theories and constructs (Levy, 2010).

There are a number of areas of needs and related populations that are relevant to the work of Industrial and Organizational Psychology. In the next section we take up some of these general areas of needs. Then, we will offer some examples of recent efforts to meet highly specialized needs. Under the section corresponding to the next criterion, we take up the issue of identifying and responding to the needs of the general public.

Broadly speaking, Industrial and Organizational Psychologists work with Individuals and Organizations in many areas, or areas of need, including:

Assisting Organizations Through Meeting Staffing Needs (Populations Served: Organizations, including Private, Public, and Non Profit; Individuals in Work roles; Arvey & Renz, 1992; Cascio & Aguinis, 2008b; Hausknecht, Day, & Thomas, 2004; Myors, et al., 2008; Ployhart, 2006; Sackett et al., 2001; Schmidt & Hunter, 1998; Schmidt, Hunter, Outerbridge, & Trattner, 1986; Shaffer & Postlethwaite, 2012).

• Testing: test development, including tests of job knowledge, skills, reasoning, personality, and physical abilities; assessment centers; certification testing; multimedia testing (Web-based, video, etc.); interpretation of test results; test fairness; test-taker perceptions.
• Selection and Promotion: recruiting; hiring; structured interviews; succession planning; performance appraisal and management.
• Legal: analysis of issues and expert testimony on EEO/AA, ADA, OSHA, and other issues; discrimination; jury decision processes
• Compensation and Benefits: pay, perks, rewards, and recognition
• Performance Evaluations and Assessments: design of job performance measurement systems for feedback and performance improvement

Increasing the Well Being and Engagement of Individuals in Work Settings by Meeting Their Employment-Related Needs (Populations Served: Organizations, including Private, Public, and Non Profit; Individuals in Work roles; Aguinis & Kraiger, 2009; Bliese, Edwards, & Sonnentag, 2017; Campion, et al., 2011; Die- fendorff, & Chandler, 2010)
• Training and Development: computer-based learning; executive coaching, management development, mentoring, and leadership; competency modeling; team design and training; training effectiveness.

• Employee Attitudes and Satisfaction: involvement and empowerment; retention; job satisfaction; burnout, conflict, and stress management; aging and retirement; gender issues; resignation and voluntary turnover.

• Employee Motivation: factors that motivate employees to perform effectively.

• Workplace Health: ergonomics, human factors, and safety; overcoming stress; workplace violence.

• Employee Behavior: harassment; absenteeism; discipline

• Employee Issues: union and labor relations

• Work-Life Programs: flexible work arrangements, quality of work life, work-life balance, working parents, and telecommuting

Organizational Development – Making Organizations Better Places to Work and Enhancing the Health of Organizations by Meeting Needs for Organizational Redesign and Improvement (Populations Served: Organizations, including Private, Public, and Non Profit; Individuals in Work roles; Grant & Parker, 2009; Morgeson & Humphrey, 2006; Phillips & Gully, 2015; Wang, Waldman, & Zhang, 2014)

• Change Management: mergers and acquisitions; group processes; process reengineering; productivity and quality improvement; strategic planning

• Surveys: climate and culture

• Job Design and Evaluation: designing jobs to maximize factors such as performance and satisfaction, and ensuring competitive compensation.

• Organizational Structure: designing organizations to ensure achievement of overall objectives.

• Team Building: applying research and principles to increase team effectiveness

• Workforce Planning: aligning workforce growth to business growth, mergers and acquisitions, downsizing and rightsizing)

• Cross-Cultural and Diversity Issues: understanding cross-cultural issues that impact organizational effectiveness, implementing practices and procedures to increase diversity.

• Technology: managing change, designing jobs and organizations around technology.

• Customer Service: Linking customer satisfaction to job satisfaction.

A large and growing research literature documenting the successful application of psychology and psychological research in work organizations (Cascio & Aguinis, 2008; Deadrick & Gibson, 2007). As some specific examples of recent efforts to specifically respond to public needs on a large scale (including examples in Kraiger, 2010):

• Industrial and Organizational Psychologists have been involved in the development of the Occupational Information Network (O*Net), the United States’s primary source of occupational information. Since 1939, the US Department of Labor published the Dictionary of Occupational Titles as the standard inventory of job definitions used for all aspects of job seeking, recruitment and employment. However, in the 1990s the Department of Labor concluded that the Dictionary of Occupational Titles was obsolete and that a replacement was needed. O*NET was created as this replacement. O*NET now contains occupational and salary information on over 900 jobs in the U.S. economy and is a critical tool used by employers, job seekers, and state workforce centers for such applications as selecting employees, providing laid-off workers with guidance on
occupations they may be most qualified for, and mapping the skill, ability, and knowledge requirements for each job in our economy. Hundreds of organizations and thousands of individuals use O*NET every day.

- Industrial and Organizational Psychologists provided expertise and leadership in the startup of the Transportation Security Administration after 9/11. Over the course of 11 months the TSA grew from an agency of 50 employees to an agency of over 50,000 employees. Industrial and Organizational Psychologists contributions included defining the skill standards necessary for screeners, and based on the skill standards developed a 3-stage selection process to screen recruits against the standards. Ensuring fairness in the selection process was critical, thus ensuring a diverse workforce. The workforce is comprised of 38% females, and 44% ethnic minorities. They have also provided leadership for more than 50 years in the development of tools for the assessment of police officers and firefighters, both at the entry level and for promotion (Barrett, Doverspike, & Young, 2010).

- Industrial and Organizational Psychologists have been actively involved in disaster response efforts to provide direct support to both individuals and organizations affected. Through its Katrina Aid and Relief Effort (KARE), the Society for Industrial and Organizational Psychology (SIOP) and The Society for Consulting Psychology (SCP), provided free consulting and seminars to business organizations and individuals affected by Hurricanes Katrina and Rita concurrent with the APA convention. The goal of KARE was to help local organizations and individuals rebuild, renew and refocus their organization and their lives to build an even stronger economic base. KARE contacted the LA/SPCA and offered its professional expertise and service to assist the LA/SPCA in its team building work in the midst of the organization’s catastrophic losses. The staff also suffered deep personal and professional losses. As a result of the hurricane, the physical shelter was destroyed, and animals needed to be evacuated, Additionally, 80% of the staff was displaced and over half were never able to return. The remaining staff of 15 was deployed to deal with the largest animal disaster in U.S. history. A large number of Industrial and Organizational Psychologists were involved in both efforts, led by Vicki Vandaveer and Tracey Rizzuto.

- Researchers and practitioners in the field have established a number of linkages between individual variables and organizational outcomes. For instance, workers with higher job satisfaction have been shown to be more committed to the organizations in which they work, that high performing organizations tend to have workers highly committed to meeting customer needs, and that leaders who can clearly articulate a vision lead higher performing organizations.

- In addition to work on individual and organizational performance, Industrial and Organizational Psychologists have developed and established research-based practices that help ensure potential employees are accurately and fairly assessed during the application process. These techniques included structured interview guides (Levashina, Hartwell, Morgeson, & Campion, 2014), and appropriate application of psychometric tools to ascertain fit between an individual’s ability and the requirements of the job (Kristoff-Brown, Zimmerman, & Johnson, 2005).

- Applied research into goal-setting has shown that specific challenging goals lead to
higher performance than easy goals, ambiguous goals, or no goals at all (Locke & Latham, 1991). Applications of this research have spanned traditional organizational settings where they have been used in performance management processes and team performance (Kleingeld, van Mierlo, & Arends, 2011) to non-traditional areas such as weight-loss and job-seeking activities.

- Researchers in team performance have documented the characteristics and processes associated with high performing teams. Although much of this research originated in military settings, applications have transitioned to:
  - Increased crew performance and passenger safety in the commercial airline industry
  - Reduced human errors and improved coordination among healthcare providers in Emergency Rooms
  - Reduced errors on Explosive Ordinance Disposal teams
  - Being incorporated into astronaut training for Mars 2030. (Salas et al., 2015).

- Government and non-profit (NFP) organizations including the Network for Humanitarian Work Psychology make use of I-O knowledge, as does the United Nations and the World Bank. Industrial and Organizational services are used to help countries around the world address social issues including poverty (Human Work Psychology, 2009). This includes work with the Global Compact (Berry, Reichman, & Schein, 2008).


Petition Form
Page 13

Management Annals, 2, 133-165.


Kraiger, K. (2010, April). The SIOP Conference at 25 years: The world has changed. Presidential address presented at the 2010 SIOP Conference, Atlanta, GA.


2. Describe what procedures this petitioning organization and/or other associations associated with this specialty utilize to assess changes public needs.

There are, of course, disagreements within the specialty about the identity of the public. There are those who would argue the public is practitioners themselves, others who would argue the primary client is organizations, and others who would argue for the general public. We will acknowledge that there can be multiple stakeholders. We will also acknowledge that an argument can be made for a trickle-down theory from the primary client, organizations, to society or the general public. In this section, however, we will consider the public as constituting the broadest definition or the general public as a whole. That is, we will ask: What does industrial and organizational psychology contribute to the public good? We will work within the general view of Cascio (2008) who identified five areas of service to the global public, including recruiting and developing global leaders, global organizational learning, cross-cultural communication, global performance management, and the management of global careers and transitions. Thus, we argue that the public is general and global.

As an organization, SIOP identifies, monitors, and analyses public needs by delegating to committees of SIOP members the responsibility to assess and monitor emerging public needs and concerns. Key SIOP committees that bear this responsibility include Scientific Affairs;
State Affairs; Professional Practice; Visibility; and the Committee on Ethnic and Minority Affairs. In addition, SIOP occasionally establishes special taskforces to examine public needs and issues.

In addition to monitoring demographic and technological changes, both of which have a major impact on the general public and organizations, which often are the practitioner’s client, some other major trends recently identified and responded to by SIOP include:

- The Gig Economy and Contract Work
- Automation of Jobs and Tasks
- Selecting, Training, Developing, and Retaining workers across the lifespan
- Leadership Development and Improvement
- Algorithmic Selection Systems and People Analytics
- The Changing Nature of How People Work
- Artificial Intelligence and Machine Learning in I-O
- Work-life Balance Interventions & Employee Wellness
- Diversity, Inclusion, and Equity
- Addressing Sexual Harassment in the Workplace

SIOP and individual Industrial-Organizational Psychologists are currently involved in conducting research and revising interventions to respond to these trends. For example, Kenneth Shultz of California State University San Bernardino and colleagues have been active in tracking trends in aging research and practice (Shultz & Adams, 2012; Wang & Shultz, 2010), as well as publicizing recent developments through listservs or advocacy work. Cynthia McCauley at the Center for Creative Leadership is investigating best processes and practice in leader development (Van Velsor, McCauley, & Ruderman, 2010). Leslie Hammer and Colleagues are conducting large scale supervisor training interventions to support work-life balance (Hammer, Kossek, Anger, Bodner, & Zimmerman, 2011), and are now implementing their training among supervisors of veterans returning to civilian life. Eden King of Rice University is pursuing a program of research that seeks to guide the equitable and effective management of diverse organizations (King et al., 2012; King, Gulick, & Avery, 2010). Kevin Murphy of Penn State University put together a team to study terrorism and counterterrorism, which also obtained a large federal grant and established a center at the University, Wayne Cascio of the University of Colorado Denver has written on responsible downsizing and restructuring. University of Michigan’s Lilia Cortina produces research that centers around the victimization of individuals (especially women) in the social context of work, focusing in particular on the process by which sexual harassment unfolds.


Kraiger, K. (2010). The SIOP Conference at 25 Years: The World has Changed. Presidential address presented at the 2010 SIOP Conference, Atlanta, GA.


3. **Describe how practitioners in the specialty attend to public need and through the application of ethical principles address issues of human diversity in training, CE, research, and practice (research reports, needs assessment, market surveys, etc., are examples of some types of appropriate documentation). How does this specialty add to knowledge in the area of human diversity? Provide evidence that the specialty is monitoring developments and has moved to meet identified emergent needs and changing demographics in training, research, and practice.**

Practitioners in I-O psychology identify the needs of individuals within business and other organizations by developing and administering needs assessments, focus groups, and employee surveys.

Issues of human diversity within organizations are of central importance in I-O practice and research as evidenced by practice and research related to, for example: affirmative action, the development of valid, nondiscriminatory selection systems (Newman & Lyon, 2009), training and the aging workforce (Carter & Beier, 2010), demographic diversity in organizations (Jones et al., 2017; King, Gulick, & Avery, 2010), sexual harassment, women in management (Bell, McLaughlin, & Sequeira, 2002), disabled employees, and work-family balance (Greenhaus & Allen, 2011; Kossek, Pichler, Bodner, & Hammer, 2011).

SIOP publishes the Principles for the Validation and Use of Personnel Selection Procedures (2003), which outlines scientific findings and generally accepted professional practice in the choice, development, evaluation, and use of personnel selection procedures designed to measure constructs related to work behavior with a focus on the accuracy of the inferences that underlie employment decisions. Adherence to these principles contributes to increased accuracy in selecting employees, helping ensure people’s skills and abilities align to the jobs in which they are placed.

At times questions around the fairness of these selection tools and the processes used to ad-
minister can result in litigation. For instance, the Supreme Court heard the case Ricci v. DeStefano, a case resulting from a lawsuit brought by 19 New Haven, Connecticut Firefighters who argued the city of New Haven discriminated against them by failing to promote them following a management assessment. Specifically, the city invalidated the test results as they feared a disparate impact lawsuit, resulting in the denial of promotion for the firefighters. In a 5-4 decision the Supreme Court ruled that results of a valid, job-related assessment cannot be thrown out and ignored based on the fear the results may demonstrate adverse impact. As the case was progressing Industrial and Organizational Psychologists were involved on both sides of the issue. Herman Aguinis, Wayne Cascio, Irwin Goldstein, James Outtz, and Sheldon Zedeck filed an amicus curiae brief in support of the City of New Haven. Through the course of this case and others, the SIOP organization actively communicated the status and implications of these decisions on the practice of Industrial and Organizational Psychology to its membership through vehicles such as the society’s newsletter, The Industrial/Organizational Psychologist and the SIOP website.

SIOP also publishes The Ethical Practice of Psychology in Organizations. This book aligns to the APA Ethical Principles and Code of Conduct for Psychologists, with a specific focus on ethical practice within organizations.

An example of an integrated program of research and practice is that of Avery and McKay. They have completed an impressive series of studies looking at variables that impact diversity and the effects of diversity on organizational variables such as absenteeism, performance, and employment discrimination (Avery, McKay, & Wilson, 2008; Avery, McKay, Wilson, & Tonidandel, 2007; McKay, Avery, & Morris, 2008, 2009; Tonidandel, Avery, Bucholtz, & McKay, 2008; Wilson, Moore, McKay, & Avery, 2008).


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**Criterion III. Distinctiveness.** A specialty differs from other existing specialties in its body of specialized scientific knowledge and professional application, and provides evidence of these distinctions within each parameter of practice as described in Criterion VI.

1. **Provide a brief description of the specialty (limit to one page).** This provides the foundation for what will appear on the APA website upon recognition of the specialty. In your response please address the following issues.


1. **Provide a brief (2-3 sentences) definition of the specialty.**

Industrial-organizational psychologists (called I-O psychologists) are versatile behavioral scientists specializing in human behavior in the work place. I-O psychologists 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 in the research and application of I-O psychology.

I-O psychologists work with organizations in a variety of areas such as selection and placement, training and development, organizational development and change, performance measurement and evaluation, quality of worklife, consumer psychology, and engineering psychology.

2. **What specialized knowledge is foundational to the specialty?**
In addition to developing knowledge of the Biological Bases of Behavior, Cognitive-Affective Bases of Behavior, Social Bases of Behavior, Individual Differences, History and Systems and Ethical, Legal, and Professional Issues, I-O psychologists are required to develop expertise in Research Methods, Statistical Method/Data Analysis and the Measurement of Individual Differences. Core I-O fields include:

- Work Motivation: Conditions within the individual and his or her environment that influence the direction, strength, and persistence of individual behaviors
- Organizational Theory: An understanding of the complex nature of organizations
- Understanding Jobs and Job Performance: Job analysis, criterion development, and performance appraisal (i.e., methods of measuring and evaluating individuals as they perform organizational tasks)
- Individual Differences in Work Settings: Identification and measurement of job related knowledge, skills, abilities, and other personal characteristics
- Evaluating Psychological Interventions: Conducting personnel selection research, assessing the effectiveness of training, and evaluating other interventions
- Professional ethics: SIOP and APA worked together to produce a volume designed to educate I-O psychologists about the unique ethical dilemmas faced in applying psychology in work settings (Lowman, 1999).
- The Legal Context of I-O Psychology Applications: 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

I-O psychologists are also expected to develop competency in a number of areas, with the level of competency varying according to research and practice emphases. These include:

- Organizational Development
- Attitudes
- Career Development
- Decision Theory
- Human Performance/Human Factors
- Consumer Behavior
- Small Group Theory and Process
- Criterion Theory and Development
- Job and Task Analysis
- Individual Assessment


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1 Although knowledge of research and theory on the biological bases of behavior is important for I-O psychologists dealing with specific practice issues (e.g., pre-employment drug testing; see Normand, Salyards, & Mahoney, 1990) or more specific research issues (e.g., the role of cortical regulatory systems in experienced affect at work; Burke, Brief, George, Roberson, & Webster, 1989), practice and research in I-O psychology is much less focused than some other specialties on the biological bases of behavior.
What problems does this specialty specifically address?

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.

3. What populations does this specialty specifically serve?

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.

4. What are the essential skills and procedures associated with the specialty?

I-O Psychologists are scientist-practitioners who are expected to develop skills in the design, execution and interpretation of research in psychology and to apply that research to help address genuine human and organizational problems in the context of organized work. They must develop specialized knowledge of work organizations and of the unique contexts in which they
work (e.g., the legal context in which organizations make important decisions about individuals) as well as an understanding of the unique professional and ethical challenges involved when working with organizations.

2. **Identify how the following parameters may differentiate the specialty from others. Describe how these parameters define professional practice in the specialty.**


a. **Populations (describe both overlap with other specialties and distinctiveness):**

Unlike other recognized specialties in psychology, we focus on organizations and individuals at work. This focus includes adults in their work roles and years, paying particular attention to individual, team, workgroup, and organizational performance. Work-related issues might be present as part of the context or incidental to the practice of professionals in any of the other specialties, but such issues are seldom their primary focus.

b. **Problems (psychological, biological, and/or social that are specific to this specialty):**

The problems studied by I-O psychologists revolve around maximizing individual and organizational potential in the workplace. The problems studied by I-O psychologists 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.

None of these topics are the focus of any other recognized psychological specialty.

c. Procedures and techniques (that both overlap and differentiate this specialty):

I-O psychologists are required to develop unique and specialized skills in analyzing jobs and work, in assessing organizational functioning, in consulting with organizational clients, and in communicating the methods, theories, and findings of psychological research to organizational audiences. They must be fluent in the language of business and organizations (e.g., skilled in translating findings about psychological interventions into terms such as return on investment) and must be skilled in understanding how individuals approach, perceive and relate to work organizations.

While there is substantial similarity among the 12 specialties in the techniques used for gathering information (e.g., interviews, tests, surveys), there is very little overlap between I-O psychology and other psychological specialties in the declarative knowledge and procedural know-how that is required for effective provision of services.

3. In addition to the professional practice domains described above, describe the theoretical and scientific knowledge required for the specialty and provide references for each domain as described below. For each of the following seven core professional practice domains, provide a brief description of the specialized knowledge that is required and provide published references in each area (e.g., books, chapters, articles in refereed journals, etc. -both current and classic). Add any relevant additional 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, Peterson, Mumford, Borman, Jeanneret, & Fleishman, 1999; Position Analysis Questionnaire, McPhail, Jeanneret, McCormick, & Mecham, 1991; Occupational Analysis Inventory, Cunningham, Boes, Neeb, & Pass, 1983; Functional Job Analysis, Fine & Cronshaw, 1999). 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 as Behaviorally Anchored Ratings Scales (BARS) (Smith & Kendall, 1963) and Behavior Observation Scales (BOS) (Latham & Wesley, 1981). For assessing individuals, I-O psychologists need to be knowledgeable of a variety of procedures for assessing individuals including psychological tests (Ones, Dilchert, Viswesvaran, & Judge, 2007; Rogers, 1995; Raymark & Tafero, 2009), biographical information (Stokes, Mumford, & Owens, 1994), interviews (Dipboye, 1992; Levashina, Hartwell, Morgeson, & Campion, 2014), work samples (Siegel, 1986), situational judgment tests (Christian, Edwards, & Bradley, 2010), assessment centers (Guion, 1998; Kuncel & Sackett, 2014), surveys (Edwards, Thomas, Rosenfeld., & Booth-Kewley, 1997; ), and the use of computers in assessment (Burke, 1993; Landers, Sackett, & Tuzinski, 2011). Within this context, I-O psychologists must also be aware of important issues such as how applicants perceive tests that they are given (McCarthy et al., 2017), group differences on these assessments (Bobko & Roth, 2013) and how to avoid rater errors when assessing performance (DeNisi & Murphy, 2017). As technology rapidly advances, I-O psychologists must continue to adapt and understand these developments, such as the use of social media profiles for assessments (Nikolaou, Bauer, & Truxillo, 2015; Roth, Bobko, Van Iddekinge, & Thatcher, 2016; Van Iddekinge, Lanivich, Roth, & Junco, 2016)


Petition Form
Page


**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 (Latham, Stajkovic, Locke, 2010; Locke & Latham, 2002), personnel training programs (Aguinis & Kraiger, 2009; Goldstein & Ford, 2002), and workplace interventions to prevent stress-related illness (Ganster & Murphy, 2000; Perry, Witt, Penney, & Atwater, 2010; Quick & Tetrick, 2003; Sonnentag & Frese, 2003; Spector & Bruck-Lee, 2008). I-O psychologists have even evaluated trainings aimed at saving lives in medicine (Hughes et al., 2016) and contributed to trainings for NASA astronauts (Salas et al., 2015). 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 (Bell, Tannenbaum, Ford, Noe, & Kraiger, 2017; Goldstein & Ford, 2002; Noe, 2005). For instance, with respect to personnel training, I-O psychologists need to know how to conduct a needs assessment (Dierdorff & Surface, 2008), how to design a training program taking into account trainee characteristics (Fleenor, 2007; Judge, Bono, Erez, & Locke, 2005; Salas, Tannenbaum, Kraiger, & Smith-Jentsch, 2012) 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 (Salas & Koslowski, 2009). In addition, I-O psychologists must be knowledgeable of organizational climate (Colquitt, Noe, & Jackson, 2002) and change techniques (Cascio & Wynn, 2004; Waclawski & Church, 2001) and the relative effectiveness of organizational development interventions (Derouin, Fritzsche, & Salas, 2005; Neuman, Edwards, & Raju, 1989).


c. **Consultation:**

I-O psychologists must be knowledgeable of the roles and functions of those with whom they will interact on a professional basis (Burke, Stagl, Salas, Pierce, & Kendall, 2006). Given that organizations are open systems in continual interaction with multiple, dynamic environments (Sue, 2008), 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 (Levinson, 2002; Smith, 2003), 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 (Bromiley & Rau, 2010) and organizational stakeholder groups (Kelly et al., 2008) are helpful in consultation with others.


their members (pp. 152-160). Mahwah, New Jersey: Erlbaum.


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.


e. Research and inquiry:

I-O psychologists must have extensive knowledge of research strategies (Cascio & Aguinis, 2008; Judge, Bono, & Erez, 2002) and research methodology (Aguinis, Pierce, Bosco, & Muslin, 2009; Bamberger & Pratt, 2010; Hunter & Schmidt, 2004; Spector, 2006) as well as knowledge of psychometrics (Johnson, 2007), statistics (Bobko, Roth, & Bobko, 2001; Hunter, Schmidt, & Lee, 2006), survey methodology (Rogelberg, Church, Waclawski, & Stanton, 2001), and methodology appropriate for cross-cultural research (Schaffer & Riordan, 2003).


f. **Consumer protection:**

I-O psychologists should acquire knowledge of ethical principles of psychologists (APA, 1992 cited above) and the ethical practice of psychology in organizations (Lowman, 1998 cited above). 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. [http://www.siop.org/consultantlocator/search.aspx](http://www.siop.org/consultantlocator/search.aspx)

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 (see list below of some workshops from a recent annual SIOP conference). 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. Some historical sessions offered include:

a. **Communicating Organizational Strategy to Employees: Building Buy-In and Fostering Involvement.** Heidi Keller-Glaze, ICF International; Courtney Partlow, ICF International; Suzanne Masterson, Sun Microsystems. Coordinator: Margaret Barton, U.S. Office of Personnel Management.

b. **Reliability, Ratings, and Reality: Oh My!** Dan Putka, HumRRO; James LeBreton, Purdue University. Coordinator: Mindy Bergman, Texas A&M.
c. **Development in Place: Leveraging the Other 90% of Your Organization’s Talent.** Cynthia McCauley, Center for Creative Leadership; Paul Yost, Seattle Pacific University. Coordinator: Wanda Campbell, Edison Electric Institute.


e. **Analyzing Survey Data: Choosing the Method and Message That Best Answers the Question.** William H. Macey, Valtera Corporation; David A. Futrell, Eli Lilly and Company; Scott A. Young, Valtera Corporation. Coordinator: Robert Gibby, Procter and Gamble.

f. **O*NET Products and Tools: What’s New and What’s Useful for Your Research and Practice.** Dave Rivkin, National Center for O*NET Development; Phil Lewis, National Center for O*NET Development; Ken Pearlman, Independent Consultant. Coordinator: Tom Giberson, Oakland University.


h. **Diversity, Complexity, Uncertainty…Managing Them as Both Leadership and Change Challenges.** Steve Krugg, Oliver Wyman; Órla NicDomhnaill, Oliver Wyman. Coordinator: John Howes, Nike.


l. **Evidence-Based Approaches to Training Teams.** David Baker, Carilion Clinic; Eduardo Salas, University of Central Florida; Becky Beard, The Group for Organizational Effectiveness. Coordinator: Dwayne Norris, American Institutes for Research.

m. **Financial and Accounting Concepts for I-O Psychologists.** David A. Lesmond, Tulane University. Coordinator: Bill Strickland, HumRRO.

n. **Managing I and O Work in a Union Environment: Lessons of Experience.** Jerry Kehoe, Selection and Assessment Consulting; Lee Sanborn, Ford Motor Co (retired); Joseph Gafa, United Auto Workers (retired). Coordinator: Deborah Whetzel, HumRRO.

p. **Successfully Transitioning High-Potential Employees to First-Time Managers.** William A. Gentry, High Point University; Cindy McCauley, Center for Creative Leadership.

q. **Putting Strategy Back into Strategic Talent Management—Not a Random Act of HR.** Sarah Evans, ServiceMaster; Erica Desrosiers, Johnson & Johnson; Ken Oehler, Aon.

r. **How to Use Advanced Technologies for Employee Selection (and Feel Good About It!).** Charles Handler, Rocket-Hire; Shawn Bergman, Appalachian State University Ben Taylor, HireVue.

s. **The Changing Landscape of Employee Surveys: Emerging Solutions to Recurring Challenges.** Bill Macey, CultureFactors, Inc.; Will Shepherd, The Wendy’s Company

t. **Could You Pass Comps in 2018? What Research Practitioners Need to Know.** Ann Marie Ryan, Michigan State University; Charlotte Powers, Johnson & Johnson

u. **Beyond Evaluation Levels: Building Value Using Learning and Development Data.** Kurt Kraiger, Colorado State University; Eric Surface, ALPS Solutions, Inc. and ALPS Insights, Inc.

v. **Modern Analytics for Data Big and Small.** Dan J. Putka, Human Resources Research Organization (HumRRO); Richard N. Landers, Old Dominion University.


x. **Storytelling With Impact: Mastering the Practical Science of Influential Communication.** Evan Sinar, DDI; Amy D. Grubb, Federal Bureau of Investigation (FBI)

y. **Leadership Development Programs: Current State and State of the Art.** Jeffrey J. McHenry, Rainier Leadership Solutions; Allan H. Church, PepsiCo.

5. **Define up to a maximum of ten professional practice activities associated with the specialty area in each of the seven core professional practice domains listed below.** Each activity should be operationally defined in as concrete and succinct a fashion as possible. Note whether the activity is shared with professional psychology in general or is distinctive to this specialty.

The activities listed below under each domain are only intended as representative examples of the types of activities that I-O psychologists engage in. These activities do not exhaust the many activities that I-O psychologists engage in within a particular domain, nor do they necessarily represent the most frequently engaged in activities within each domain.

a. **Assessment:**

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 organization’s climate.

b. Intervention:

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:

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.

In addition, related to working in a consulting context, the typical approach of consulting I-O Psychologists is to: (a) diagnose the situation, usually on the premises of the organization, which may include a redefinition of the problem, (b) estimate the time the project will take on their part and on the part of the organization's staff, after which they will present an estimate of the cost, (c) discuss the steps they plan to take, what organizational resources they may have to use, and the outline of methods and procedures to be employed, and (d) check over the results of their program and plan the organization's follow-up procedures as well. This approach is highly consistent with well-recognized approaches to consultation advocated by Block (1999) and Gordon and Lippitt (1986).

Block, P. (1999). Flawless consulting: A guide to getting your expertise used (2nd
d. Supervision:

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:

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:

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:

1. Attending conferences to learn about research and practice developments.
2. Participating in professional development workshops such as those conducted at SIOP’s Annual Conference.
3. Reading APA and SIOP task force reports, journals, and books concerning research and practice developments (such as the books published in SIOP’s Frontiers Series and SIOP’s Professional Practice Series).
4. Reading SIOP’s quarterly journal TIP (The Industrial/Organizational
Petition Form

Page

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.

6. Define up to a maximum of ten professional practice activities associated with the specialty area in each of the seven core professional practice domains listed below. Each activity should be operationally defined in as concrete and succinct a fashion as possible. Note whether the activity is shared with professional psychology in general or is distinctive to this specialty.

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

b. Intervention:

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.
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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.
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2. Indicating to potential client organizations that assessment procedures will be developed only according to professionally acceptable standards.
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4. Reading SIOP’s 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.

Criterion IV. Diversity. The specialty demonstrates recognition of the importance of cultural and individual differences and diversity.

1. Describe how education and training of cultural and individual differences and diversity are integrated into the curriculum. Include information on coursework and training experiences.

The primary focus of I-O Psychology is on improving organizational performance through the effective selection and development of employees. Outside the specialty, diversity is most often viewed as the extent to which various demographic groups (e.g., age, race, gender, etc.) are represented or are treated differently based on their demographic group membership. Within the field of I-O psychology, effects of demographic diversity are studied extensively (Jones, Peddie, Gilrane, King, & Gray, 2016; Thatcher & Patel, 2011). This research has also gone beyond age, race, and gender, to investigate pregnancy discrimination (Hebl, King, Glick, Singletary, & Kazama, 2007; Morgan, Walker, Hebl, & King, 2013), discrimination based on sexual orientation (King & Cortina, 2010), and the influence of perceived discrimination on individual health (Pascoe & Smart Richman, 2009). Although the field investigates diversity through this demographic lens, I-O psychology, traditionally views diversity more from a fairness perspective rather than from a demographic perspective. Pyburn, Ployhart, and Kravitz (2008) discussed the balance that the specialty strives to achieve between diversity and fair and valid selection procedures and tools in the article, The diversity-validity dilemma: Overview-and legal context. Ployhart and Holtz (2008) further discussed this issue in their article, The
diversity-validity dilemma: Strategies for reducing racioethnic and sex subgroup differences and adverse impact in selection. In addition, beyond the context of selection, a considerable amount of research has been conducted on perceptions of fairness in terms of the distribution of company resources (e.g., promotions, raises), procedures used to allocated resources (e.g., performance evaluations), and fair interpersonal treatment (Colquitt et al., 2013; Colquitt & Zapay, 2015).

Federal law (e.g., Civil Rights Act of 1991, Americans with Disabilities Act, other Equal Employment Opportunity laws) requires organizations to make employment decisions (e.g., hiring, promotion, etc.) only on job-related information. These laws were enacted with the intent of eliminating discrimination in the workplace. In the legislation, discrimination is defined as the differential treatment of individuals based on non-job related qualities such as age, gender, and race. The Principles for the Validation and Use of Personnel Selection Procedures (2003), approved by the American Psychological Association’s Council of Representatives, serves as a foundational element of the training that students in the specialty receive in developing, administering, interpreting, and applying the results of personnel selection procedures in a fair manner. Students also receive education in the federal laws that govern employee selection decisions. Because practitioners in the specialty focus on helping organizations make sound employment decisions, students in the specialty are trained, in their coursework, research, and other educational experiences, to create, administer, and implement programs and processes that are job-related and, by definition, free from bias towards any age, race, gender or other demographic group. In this way, the concept of diversity is infused throughout most, if not all, student coursework, research, and other education-related experiences.

Making sure that diverse groups of people are represented in the workplace is an important goal. The specialty believes, however, that making sure that people with diverse knowledge, skills, abilities, and other job-related qualifications are represented in the workplace is the most important goal (e.g., deep-level team composition; Bell, 2007). Creating and using job-related tools and processes (e.g., tests, interviews, etc.) to make employment decisions results in fair treatment of all applicants and employees regardless of demographic group membership. It also results in the diversity that an organization needs to perform effectively.

From an employee development standpoint, those outside the specialty typically view diversity as the extent to which individuals in different demographic groups are viewed or are treated differently based on the background, culture, and other factors that members in a particular group may share or have in common as well as from a fairness and justice perspective. The specialty, however, views diversity from the broader perspective of individual differences. The specialty recognizes the importance of cultural, experiential, and other differences among different demographic groups. The specialty, however, believes the most effective approach to take in developing employees is to treat them as individuals, regardless of demographic membership, who have different knowledge, skills, abilities, and other qualities that affect their job performance. In this sense, demographic membership is only one of many facets that those practicing in the specialty should consider in developing employees. Research by members in the specialty has shown that stereotypical notions about individuals of different demographic groups may be inaccurate. For example, in her book published in 2006, Retiring the Generation Gap: How Employees Young and Old Can Find Common Ground, Jennifer Deal provides data that demonstrates the inaccuracy of several stereotypes associated with different age groups. The specialty, therefore, approaches employee development from an individual differences standpoint. Students are trained on how
to measure and use information about individuals, over and beyond their membership in one or more demographic groups, to create development efforts that best meet the needs of the individual and the organization relative to job and organizational performance.

The Guidelines for Education and Training at the Doctoral Level in Industrial-Organizational Psychology (1999), approved by Division 14 and the American Psychological Association, describes the competencies required to practice the specialty and the means by which students are educated and trained to practice the specialty. Individual differences is one of the core competencies of the specialty and is a core element in the foundation of education and training in the specialty. Students receive education and training in most, if not all, coursework as well as in their research, about how to measure differences in knowledge, skills, abilities and other characteristics among individuals. They are also trained on how to create tests and other measures that are free from bias towards demographic groups. The specialty views this knowledge and the actions associated with it, in both employee selection and development contexts, as an important way to promote diversity (and effective individual, team, and organizational performance) in organizations.

A. Coursework

The specialty promotes diversity by ensuring the use of valid assessments and fair treatment in the employee selection process. It also promotes diversity by accurately identifying individual differences among employees, over and beyond demographic group membership. This notion of diversity is infused throughout all graduate training in the specialty including but not limited to, such courses as:

Legal Issues in Personnel Psychology – educates students on the laws affecting employment related decisions in organizations. Includes such topics as the legal definition of validity, the concept of adverse impact (the extent to which a measure discriminates against a particular demographic group), what constitutes job-related information in making employment decisions, and practices to use and to avoid in interpreting tests (e.g., Civil Rights Act of 1991 prohibits using different demographic norm groups to interpret test results).

Test Development – educates students on the techniques for developing reliable and valid (e.g., job-related) measures of individual differences. Includes such topics as definitions of reliability and validity, ways to assess the reliability and validity of a measure, and how to construct measures in a way that is fair to all applicants and employees.

Individual Differences/Assessment – educates students on effective administrative and interpretive practices for measuring individual differences. Includes such topics as things to do to administer tests and assessments in a fair manner to all applicants and employees, tests that are and are not biased towards different demographic groups, and best practices in interpreting tests in a way that does not discriminate against different demographic groups.

Performance Management – educates students on creating and implementing job-related performance evaluation measures in organizations. Includes such topics as different methods of evaluating individual and group performance, how to create reliable and valid (job-related) measures of performance in organizations, and how to implement a performance management process in organizations that is consistent and fair towards all employees, regardless of
demographic group membership.

Training and Development – educates students on creating and implementing job-related training and development efforts in organizations. Includes such topics as different types of training methods, most effective training methods based on individual and/or situational requirements, and ways to evaluate training efforts at the individual, group, and organizational level.

Organizational Surveys – educates students on creating and using effective employee surveys. Includes such topics as different types of surveys (e.g., opinion, engagement, 360 feedback, etc.), different methods and tools for constructing effective employee surveys, and ways to analyze/evaluate results based on different factors including, but not limited to, demographic information.

Besides diversity, as the specialty views it, being infused throughout coursework in the specialty (see above), it is also important to note that seminars on workforce diversity, as many others outside the specialty view it, are common in graduate training programs. For example, below is the description of a course offered at Baruch College.

–Diversity in Organizations addresses diversity issues at individual, group and organizational levels, and the relevant theoretical and empirical literature. Topics include issues specific to historically underrepresented groups such as women, racial and ethnic minority groups, religious minority groups, LGBT workers, people with disabilities, and older workers, as well as organizational approaches to workforce diversity.

B. Other Formal and Informal Training Experiences

Most I-O programs require that students complete an internship. Through these internships, students gain experience in the real world of diversity from a variety of standpoints. They gain experience in creating and implementing fair and valid selection tools and procedures that do not discriminate against different demographic groups. They also gain experience in creating tools that provide accurate information on the knowledge, skills, abilities, and other qualities of individuals for development purposes. Internships also provide the student with the opportunity to work with diverse populations of people. An example of this type of experience is: The Center for Research and Engagement in Diversity (RED; www.uga.edu/red/) at the University of Georgia. This program provides I-O students with the opportunity to be diversity practitioners by developing and implementing diversity training systems and conducting diversity climate assessments within the contexts of higher education, traditional workplaces, and school districts around the country.

Exposure to faculty research, department colloquia, and university workshops are other methods by which diversity issues are integrated into I-O curricula. For example, the University of Connecticut requires that all graduate student teaching assistants take a workshop on cultural and individual differences in the classroom.

2. Describe how knowledge of cultural and individual differences and diversity are applied in practice.
Practicing I-O psychologists are called upon to deal with diversity and related issues on a frequent basis. I-O psychologists, however, must balance organizations’ desire and need for diversity with the need to ensure that organizations make employment decisions (e.g., hiring, promotion, development, etc.) based on job requirements. Organizations must use job requirements as the foundation for their decision-making for both legal compliance purposes and to ensure the best possible outcomes from those decisions.

Creating or using tools to assess individuals for job-fit and for organizational culture-fit is a primary responsibility for many industrial and organizational psychologists. In some situations, these tools may limit diversity within an organization. As a result, I-O psychologists are required to have in-depth knowledge of both individual and cultural differences as well as knowledge of research methods related to test development and employment law. While diversity is important, ensuring that there is a good fit between a person’s knowledge, skills, and abilities and job and organizational requirements is a top priority for Industrial and Organizational Psychologists and the organizations that they serve (Landy, 2005; Outtz, 2009; Ployhart & Holtz, 2008; Pyburn, Ployhart, & Holtz, 2008; Scott & Reynolds, 2010).

Industrial and organizational psychologists help organizations develop programs to promote diversity and to promote effectiveness in diverse workforces and workgroups. They are often called upon to observe and analyze the work in contexts where there might be linguistic diversity. They are frequently called as experts in litigation dealing with discrimination on the basis of age, gender, race and other demographic characteristics. In addition to their graduate training in a range of diversity-related topics, practitioners have access to frequent workshops and CE activities dealing in diversity-related practice. As described further below, the 2010 SIOP conference alone offered 52 different possibilities for practitioners to attend diversity-related sessions. Please go to http://www.siop.org/Conferences/18con/Program/searchable.aspx to search the 2018 or 2017 programs which show that these examples continue throughout the years. Practitioners in the specialty have a long history of research in the field of diversity, both from a fairness and individual difference perspective and from a demographic group perspective. The following references below demonstrate the specialty’s contribution and commitment to the research and practice of diversity.


King, E. B., & Cortina, J. M. (2010). The social and economic imperative of lesbian, gay,
3. Describe the opportunities for continuing professional development and education related to cultural and individual differences and diversity.

SIOP sponsors numerous professional workshops and regularly includes papers, symposia and other presentations dealing with diversity as part of its annual conference.

For example, at the 2010 SIOP conference there were a total of 52 different papers/symposia that dealt with a wide range of topics associated with cultural and individual differences and diversity. A sample of the titles include:

- Workplace Experiences of Bilingual Employees: A Replication and Extension
- Race Still Matters: Racial Identity, Perceived Discrimination, and Organizational Attraction
- Implicit Measures of Attitudes Toward Persons with Disabilities: Current Status
- Effects of Sexual Orientation Antidiscrimination Legislation on Interpersonal Discrimination
- Reading Between the Lines: Reactions to Gendered Managerial Communications

SIOP has created a Learning Center (http://www.siop.org/learningcenter.aspx) that houses all conference materials from 2005 to now. Hence, all members have the ability to access material even if they were not able to attend the conference.

SIOP also circulates information relevant to diversity through its many publications. For example, in 2009, the Organizational Frontiers book series published a volume entitled,

4. Describe how students are evaluated. How is competency measured? Please include samples of evaluation tools related to an understanding of cultural and individual differences and diversity.

Because of the specialty’s perspective on diversity related to employee selection and development, the specialty’s focus on individual differences, and the specialty’s commitment to fair treatment of applicants and employees, students are evaluated on their knowledge and understanding of concepts related to these areas. Evaluation tools vary by course and by graduate program, however, they strongly support the competencies related to diversity that are described in the Guidelines for Education and Training at the Doctoral Level in Industrial-Organizational Psychology. Evaluation tools commonly used in student coursework and other educational experiences include oral and written comprehensive examinations, course exams (in-class or take home), in-class skill assessments, oral presentations, research proposals, literature reviews, and participation in practitioner-related projects. Sample course material and exam questions related to the specialty’s assessment of diversity were collected from some of the exemplary training programs described in this document. This information is provided in two separate attachments to this document. One document contains PowerPoint slides on diversity and cross-cultural issues from an Organizational Research Methods course. The other document contains sample diversity-related items and other information from various course final exams and comprehensive exams.
Education and Training

**Criterion V. Advanced Scientific and Theoretical Preparation.** In addition to the scientific and professional foundations described above, a specialty requires advanced, specialty specific scientific knowledge.

1. **Specialty education and training occurs at the doctoral, postdoctoral, or both levels?**

   Doctoral Guidelines for Education and Training at the Doctoral Level in Industrial-Organizational Psychology were approved by APA in 1999, and are available at:

   [http://www.siop.org/PhDGuidelines98.aspx](http://www.siop.org/PhDGuidelines98.aspx)

2. **If specialty training occurs at the doctoral level, which is assumed to be broad and general, describe how specialty education and training is integrated into the general professional psychology doctoral curriculum using the requirements for the advanced scientific core in the following areas, as appropriate. This refers to the specialty specific scientific knowledge that builds upon the basic common and scientific core.**

   **Education and Training of I-O Psychologists**

   The regulation of a profession generates the problem of identifying basic qualifications in training for members of the profession. In the past, issues have arisen because laws or regulations were enacted which were inconsistent with the training of an I-O psychologist. SIOP has adopted Guidelines for Education and Training at the Doctoral Level in Industrial and Organizational Psychology (SIOP, 1999). The Guidelines are specified relative to competencies rather than specific course work, reflecting the diverse paths by which I-O psychologists come into the field. Not every qualified I-O psychologist possesses every competency. Below are listed the competencies that may be considered in advising licensing boards and others as to the areas that are relevant for I-O psychology. The competency categories are based on the Guidelines.

   **Basic Fields of Psychology**

   1. Biological Bases of Behavior: e.g., Physiological, Comparative, Neuropsychology, Sensation and Perception, Psychopharmacology
   2. Cognitive-Affective Bases of Behavior: Learning, Thinking, Motivation, Emotion
   4. Individual Differences: Cognitive Ability, Personality, Human Development, Abnormal Psychology
   5. History and Systems: How the discipline of psychology developed and changed into its present configuration
   6. Ethical, Legal, and Professional Issues: Knowledge and awareness of relevant principles and guidelines as they relate to psychology

   **Research Fields**

   1. Research Methods: Methods, procedures, and techniques useful in the conduct of empirical
research of phenomena of interest to I-O psychology
2. Statistical Method/Data Analysis: Statistical methods used in the analysis of data generated by empirical research
3. Measurement of Individual Differences: A sound background in both classical and modern measurement theories

Core I-O Fields

1. Work Motivation: Conditions within the individual and his or her environment that influence the direction, strength, and persistence of individual behaviors
2. Organizational Theory: An understanding of the complex nature of organizations
3. Understanding Jobs and Job Performance: Job analysis, criterion development, and performance appraisal (i.e., methods of measuring and evaluating individuals as they perform organizational tasks)
4. Individual Differences in Worksettings: Identification and measurement of job related knowledge, skills, abilities, and other personal characteristics
5. Evaluating Psychological Interventions: Conducting personnel selection research, assessing the effectiveness of training, and evaluating other interventions
6. Professional Ethics
7. The Legal Context of Psychology in Organizations

Additional I-O Fields

(Not all required but expectation is that there is competency in some of these fields)
1. Organizational Development
2. Attitudes
3. Career Development
4. Decision Theory
5. Human Performance/Human Factors
6. Consumer Behavior
7. Small Group Theory and Process
8. Criterion Theory and Development
9. Job and Task Analysis
10. Individual Assessment

The rationale for the list in each of the fields is as follows:

The basic fields of psychology are required for a fundamental orientation to our roots in psychology as a scientific field. The list is generally consistent with the APA task force recommendation and will in our opinion be required by most state boards if we are to be licensed as psychologists.

The research fields are required by the scientific approach we have adhered to in our training model. We are a scientist-practitioner field and our training must reflect these skills. These core I-O fields reflect the basic beginnings for both the industrial and organizational areas. The list is not intended to be exhaustive but rather it embodies the major themes that have been present in the field of I-O psychology.
The additional fields of I-O psychology are a reflection of two trends. Some of the fields represent areas where I-O psychologists have made major contributions (human factors, career development, etc.), but they are not necessarily very often practiced by I-O psychologists. Other fields represent subsets of the core areas (e.g., criterion development, job and task analysis, etc.). We believe it is unreasonable to require an I-O psychologist to show competence in all of these fields, but the expectation is that individuals should be able to demonstrate competence in at least some fields.

**Biological Bases of Behavior:**

The practice of I-O psychology has drawn much less from the research and theory on the biological bases of behavior than from the research and theory on the social, affective, cognitive, and individual difference bases. Three of the areas of scientific knowledge within I-O psychology that do build to some extent on basic scientific work on the biological bases are work stress, human factors, and work related attitudes. The descriptions of these three areas are meant to provide representative examples and are not meant as an exhaustive list.

**Work stress.** The area of work stress focuses on the special physical and/or psychological demands in the work setting that result in unusual or out-of-ordinary responses (Ganster, Fox, & Dwyer, 2001; Bond & Bunce, 2001; Buessing, & Glaser, 2000; Keller, 2001; Tetrick, Slack, Da Silva, Sinclair, 2000. The circumstance is technically termed a stressor, the unusual or out-of-ordinary response is called a stress response, and the outcomes of stress responses are strains which can occur along a time continuum, from fairly short-term to long-term (Ford et al., 2014). This definition of stress implies a process which includes both a stimulus (stressor) and a set of short and (potentially) long-term outcomes. Work stress can be viewed as a chain of physiological events that occurs when the employee encounters a stressor. The fight or flight response, a train of changes in nerves and glands in the body, maps out a sequence of events which, scientists believe, is the result of millions of years of evolution. When the animal or human perceives a stressor, the message is sent to the brain. The brain then simultaneously activates the nervous system and the adrenal glands (one of which rests on top of each kidney). The adrenal gland activation produces two hormones, or chemicals that regulate body functions, adrenalin (epinephrine) and nor-adrenalin (nor-epinephrine). These hormones are collectively called catecholamines. Activation of the nervous system and the effects of adrenalin and nor-adrenalin produce a host of changes, physiologically and biochemically, in the body. These changes, such as increased heart rate and elevated blood pressure, are commonly associated with the experience of stress.

The work in I-O psychology is indebted to at least some extent to Hans Selye’s work on the General Adaptation Syndrome. Selye extended Cannon’s work on the stress response by showing that in addition to the fight or flight response, the pituitary gland in the brain activates the adrenal glands to produce other types of hormones in addition to the catecholamines. One of the end products of this activation is the production of a second set of powerful hormones, the glucocorticoids, by the adrenal glands. The glucocorticoids include steroids, such as cortisol. Their immediate and short-term function is primarily to facilitate the conversion of non-sugars, particularly protein, into sugar (glucose) for energy. In the longer term, especially at high concentrations, these steroids can be very harmful to the body by inhibiting the immune system, weakening muscle tissue, ulcerating the stomach lining, and provoking undesirable
mental changes. One of the effects of nervous system activation is to stimulate the immune system, for example, through increased white blood cell production. The enhanced immune response provides extra protection for the body in case of injury. However, steroid hormones build up as the result of stress-related adrenal activation, and concentrations of steroid hormones in the body over time can suppress immune functioning. Therefore, it seems obvious that how our bodies successfully adapt to stress in the short term can be very detrimental in the longer term.

Selye called the second chain of physiological events, which culminate in steroid production, the stage of resistance. During the experience of stress, the fight or flight response occurs almost instantaneously. For example, your first responses when experiencing a near-miss auto accident (such as a wildly beating heart and rapid breathing) are the result of the fight or flight response, which Selye also called the alarm stage. The stage of resistance occurs shortly thereafter. According to Selye the body, at this point, seems to be recovering. However, if the stressor is not eliminated, this appearance is only illusory. As discussed above, the costs of longer-term adaptation are high, and if continued, can result in many of the long-term or chronic strains (for example, heart disease).

Eventually, Selye proposed that the body enters the stage of exhaustion. In many ways, at least initially, the stage of exhaustion mimics the alarm stage, with the body rallying its last round of defenses. Of course, if the stressor remains or returns too frequently, the eventual outcome is death of the organism. Autopsies Selye performed on animals revealed the effects of this progression of biochemical events: adrenal glands enlarged from overstimulation, lymphatic tissue shrunken from the effects of the steroid hormones, and bloody, ulcerated stomachs. Selye called this sequence of events (i.e., the alarm stage, the stage of resistance, and the stage of exhaustion) the general adaptation syndrome.

Human factors psychology. Those I-O psychologists involved in human factors work on human reliability and error also rely to some degree on basic knowledge of the biological bases of behavior. The concept of maximizing the fit between the human and the machine is the cornerstone of contemporary human factors. Another way of expressing the idea of fit is to view the human and machine not as separate entities, but as interacting components of a human-machine system. In a human-machine system, the human perceives (senses) the situation and interacts with or directs the machine, typically through some type of control (e.g., switches, wheels, or knobs). The machine acts on or processes this information (e.g., raises the temperature or reduces the speed). The result of this information processing is communicated back to the human, usually through some type of visual or auditory display (e.g., a TV screen or buzzer). If we systematically attempt to reduce or eliminate error, we must be able to accomplish more than simply identifying and measuring it. Our historical exploration of human capabilities and limitations proceeds from auditory and visual functioning, to the more current research on human information processing. The human factors specialist must have a working knowledge of the human auditory system. Given that many human-machine interfaces include visual stimuli, such as words or color coding, the human factors specialist must also be knowledgeable about the human visual system.

Work-related attitudes, mood and affect, and work motivation. A third area of research within I-O psychologists that builds on basic research on the biological bases of human behavior is research and application on work-related attitudes and work motivation.
Three of the work-related attitudes that have been studied to the greatest extent within I-O psychology are job satisfaction, job involvement, and organizational commitment (Judge & Kemmeyer-Mueller, 2012). Job satisfaction can be defined as the general affective response of the individual to facets of his or her job and is by far the most widely known job attitude. Job involvement is the extent a person psychologically identifies with his or her job. Organizational commitment is the extent to which a person identifies with and is involved in a particular organization. Even though job satisfaction, job involvement, and organizational commitment are positively related (the typical r is about .50), empirical research has confirmed the discriminant validity, or relative independence of these three job attitudes (Brooke, Russell, & Price, 1988).

In recent years, a few I-O psychologists have given attention to the biological bases of these and other work-related attitudes. Research in neuropsychology is providing insights into how brain functions influence affect and emotion and these insights are likely to provide new perspectives for examining work-related attitudes. A clear example of a biological approach to understanding work-related attitudes is Landy's (1978) opponent process theory of job satisfaction. Opponent process theory assumes that when you experience an extreme emotional state, central nervous system mechanisms attempt to bring you back to a state of emotional equilibrium or neutrality. In returning to neutrality, the emotional state may even surpass equilibrium and progress to the opposite emotional state. For example, after obtaining salary increase or a coveted promotion, the individual may feel happy, even elated. This positive emotional state decreases over time to a neutral state or perhaps to a slightly depressed or unhappy state. According to the theory, the magnitude of the opponent process changes over time, increasing each time it is activated. Consequently, upon receiving future salary increases or promotions, the eventual opponent process reaction will be considerably more negative than prior reactions. Landy's theory has not been tested empirically, so we cannot judge whether it is a viable theory of job satisfaction. Nevertheless, the theory is an intriguing example of an attempt to understand the biological bases of work-related attitudes.

Another example of a biological approach to understanding work-related attitudes is the research treating job attitudes as enduring traits or personal dispositions. This perspective assumes that, because of their personalities, some people are more satisfied with life (including their work life) than other people. Some studies have presented compelling evidence for treating job satisfaction as a disposition rather than a response to a particular work environment. Staw and Ross (1985) investigated the job satisfaction of a national sample of 5,000 male workers over a five-year interval. Regardless of whether the workers changed jobs or occupations, the researchers found that reported job satisfaction was very stable over time. Arvey and his colleagues (reported in Arvey & Bouchard, 1994) completed an unusual study of job satisfaction in 34 pairs of identical twins who were reared apart and concluded that approximately 30% of the variance in job satisfaction was due to genetic factors.

A third example of I-O work that is linked conceptually to the biological bases is the research on affect and mood in the workplace. I-O psychologists conducting investigations in this area do not typically concern themselves with the neuropsychological processes that underlie work-related attitudes and behaviors. There are exceptions, however. For instance, some researchers have given considerations to the biological mechanisms of mood at work (Burke et al., 1989). In this study 20 markers of positive and negative mood at work were administered to managerial and professional workers in an insurance firm, retail sales personnel, and a
heterogeneous group of students who were employed. The findings support a four-factor model with descriptively unipolar factors labeled as Positive Arousal (Enthusiasm), Negative Activation (Nervousness), Low Arousal (Fatigue), and Low Activation (Relaxation) provided a better fit across the samples. The authors explore in their article the conceptual linkages between the four mood factors and the two major cortical regulatory systems, left-lateralized dopaminergic activation and right-lateralized noradrenergic arousal.


Cognitive Affective Bases of Behavior:

Human beings not only perceive the environment through their senses, they also use this information in some systematic fashion to interpret their environment. The human mind can be conceived as an information processing system composed of three subsystems. The first subsystem receives information from the environment (typically visual or auditory information) and holds that information for a very short time interval, varying from milliseconds to a few seconds. This subsystem is called sensory store and has been likened to a camera that snaps very brief visual and auditory pictures of the world. The second subsystem receives the information from sensory store. This subsystem is called working or short-term memory and, unlike sensory store, requires purposeful involvement of the human as an information processor. To retain the information transferred from sensory store, the human processor must actively work at encoding, or giving meaning, to the information so it can be permanently stored. We often struggle to keep information from slipping out of short-term memory, such as our frequently futile attempts to rehearse new phone numbers. The ability to retain information in short-term memory can be enhanced if some meaning is attached to the information there.

Information processing. Information in short-term memory is thought to be encoded in three ways: visually, acoustically (or phonetically), and semantically. Information that survives short-term memory is transferred to permanent storage in the third subsystem, long-term memory. In addition to the memory deficits that can occur because information was not effectively stored in long-term memory, human beings are susceptible to many cognitive distortions and biases when they process information. These biases are inherent in the manner people seek information, estimate the outcomes of certain situations, and attach values to outcomes.

Modern theorists have combined knowledge about human capabilities and limitations to produce general models of human information processing that incorporate both sensory (auditory and visual) functioning and cognitive processing. Wickens (see Wickens, 2001) suggested one such model. Through one's physical senses, information is received in mostly visual and auditory form from the environment. This sensory information is initially processed in sensory store and subsequently in short-term (working) and long-term memory. Many of the cognitive distortions and biases just discussed come into play during the decision and response selection (i.e., when you decide what to do with the information you perceive) and the response execution phases. For example, you may not seek to discover a person's positive attributes if he or she made a bad first impression. From perception to response execution, your motivation and ability to exert and maintain attention have a pervasive influence. Because of its significance in human information processing, attention is discussed in detail next.

Attention and Mental Work Load. Closely related to the concept of information processing is attention. Although paying attention implies that one purposefully and selectively processes information about some aspect of the environment, that processing can occur in a variety of forms. One way to maintain selective or focused attention is to focus on some specific event or set of events and filter out or ignore other, unrelated events (Broadbent, 1958). Another


approach is to measure divided attention which refers to the ability to focus attention on more than one event simultaneously (Lane, 1982). One of the most currently researched topics in human factors involves the allocation of mental resources in task performance, commonly called mental work load (MWL, Wickens, 2001).

The basic idea behind MWL is a comparison between a person's limited mental resources and the resources demanded by the task; another definition is the information processing demands placed on a person by a task. Mental workload has been measured with physiological, behavioral (task-based) and subjective (self-report) indexes. There are several direct implications of MWL research for the work environment. If the MWL of specific jobs or parts of jobs can be reliably determined, that information can be used to select workers with sufficient capabilities for mentally demanding tasks and to redesign jobs so certain functions are allocated more appropriately to humans or machines (Sanders & McCormick, 1987). Such constructs as job-related stress, work motivation, and job satisfaction may have direct relationships with measures of MWL. For example, a task rated as requiring a great deal of mental effort also may be perceived as a work stressor.

Cognitive Categorization. In the attempt to make sense of the physical and social world, cognitive structures are used in the form of schemes and categories. These are essentially beliefs that help us to deal with the huge amount of information that we must process in our day-to-day interactions with others. Cognitive categories allow us to group together objects, individuals, events, and social roles that we consider equivalent. Vivid instances of these categories (called prototypes or exemplars) are used in deciding what belongs and what does not belong in the category. When a critical level of similarity with the prototype or exemplar is surpassed, we then assign the object, person, event, or role to the associated category.

Another cognitive structure that can enter into this process is the schema, which is a network of perceived relationships among beliefs or ideas. For instance, we might believe that introverted people are also unfriendly, cold, and aloof. The schema in this case is the belief we hold about how these traits are interrelated. This type of schema is also known as an implicit personality theory. Schemas and cognitive categories are similar in many respects and appear to work together in the perception of others. Lord, Foti, and Phillips (1982) have explained the process by which people perceive others as leaders in terms of these basic cognitive processes.

According to their cognitive categorization model, people develop cognitive structures that organize the way they think about leadership. Perceiving someone as a leader involves a categorization of the person into leader/nonleader or leader/follower categories and the use of schemes to infer other characteristics of the categorized person (Lord, 1985; Lord et al., 1982, p. 104). The categorization may be effortless if several behaviors of the leader clearly fit the person's conception of the good leader. Once a person is labeled as a leader, other behaviors and traits are attributed to the person that are consistent with the observer's conception of a leader.

Another example of how the work on the cognitive bases of behavior has been important in I-O psychology is in the work on understanding and improving the performance appraisal process. A rater might first label an individual on the basis of category membership (e.g., a typical lazy worker), and then schemata relating that label to other attributes leads to an inference of other characteristics (e.g., a lazy worker is also unreliable, dishonest, unintelligent). As we will show, cognitive structures can influence the encoding, integration, storage, causal attributions, recall, and evaluations of those conducting performance appraisals.


Social Bases of Behavior:

A variety of social processes and structures serve as a basis for work in I-O psychology because of their influence on the effectiveness with which individuals perform their organizational tasks. Social process consists of the various acts that people perform at a point in time as they interact. A basic category of social process involves competition, conflict, and cooperation, three different but interrelated social behaviors. Tjosvold (1986) defines conflict as activities that are incompatible in that one activity obstructs, interferes, impairs, or in some other way lessens the effectiveness of another activity. Competition and cooperation refer to the interdependence of goals as perceived by two or more people. Competition arises when the achievement of one person's goal is seen as negatively related to the achievement of another person's goal, as in a footrace, in which one person's win necessitates another person's loss. Cooperation occurs when the achievement of one person's goal is seen as positively related to the achievement of another person's goal.

Some failures of the U.S. economy have been blamed on self-defeating conflicts in organizations and the apparent inability to achieve cooperation among internal units of the organization (Kanter, 1989). While competition is still revered in American culture, there seems to be a trend among some of the largest firms to encourage collaborative efforts between as well as within firms. Crucial to the effectiveness of organizations is being able to manage competition so that people can disagree and still work together to achieve their common objectives. Conflict and conflict resolution are a function of contextual factors, such as scarcity of resources, as well the personalities of the individuals involved.

Two additional basic social processes are influence and power. We define influence as the actual change of one person's perceptions, attitudes, or behavior by another person or persons. The amount of influence that is achieved depends on social power, which is defined as the ability to influence others. French and Raven (1959) proposed that there are five bases of power, each originating from a different type of relationship between the agent of power and the recipient of the influence attempts: Whereas power is defined by the potential to influence others, influence tactics are what an individual actually does to influence others. As in the case of power, questionnaires have been constructed to measure these alternative influence tactics.
Closely related to influence and power is leadership, another basic aspect of social behavior that has been used in I-O psychology. In attempting to understand the origins of effective leadership, researchers have taken very different and often conflicting approaches. The trait approach emphasizes the personality, abilities, and other personal dispositions of the leader as the primary determinants of effectiveness (Bono & Judge, 2004). The behavioral approach hypothesizes that effective leaders differ as a function of what the leader does in performing his or her role. The situational approach stresses the organization, task, role, and other factors outside the leader as the crucial determinants. Finally, cognitive approaches emphasize the beliefs and perceptions of the leader and follower. Contingency approaches have explored the situational factors that determine the types of leader behaviors and traits needed for specific situations. An important distinction that is receiving increasing attention in research and practice is that between transactional leadership and transformational leadership (Bass, 1997; Judge & Piccolo, 2004).

People in a group or organization develop stable patterns of relations that make life more predictable. For example, leaders form individualized relationships with employees they supervise (Erdogan & Bauer, 2014), and these individualized relationships are important for an incredibly broad range of organizational and individual outcomes such as performance (Martin, Guillame, Thomas, Lee, & Epitropaki, 2016), job satisfaction and commitment (Rockstuhl, Dulebohn, Ang, & Shore, 2012). The specific social structures that emerge are determined by the context, the personal characteristics of the people involved, and the functions that these structures serve. As the result of task and personal needs, individuals form stable work and social relationships within the organization. Norms and roles emerge that dictate how group participants should behave. Mutual attractions also form between individuals, and the extent to which there are many mutual attractions relative to the total possible attractions determines the cohesiveness of a group. Over time a culture or climate can emerge that encompasses all the other structural forms and reflects the meaning attached to events in the organization by employees. All of these basic elements of social structure are essential to team-building and other interventions aimed at improving the social functioning of groups and organizations (Mathieu, Heffner, Goodwin, Salas, & Cannon-Bowers, 2000; Salas, & Bowers, 2001).


**Individual Bases of Behavior:**

Historically I-O psychologists have relied to the greatest extent on the basic psychological research and theory on individual differences. Three basic domains of individual differences have received the greatest attention: abilities, personality, and vocational interests.

Abilities are those stable individual differences that determine how well individuals can perform on tasks, problems, or other goal-oriented activities. Where the tasks require that individuals effectively process information and make correct judgments and decisions, cognitive abilities are the crucial component. Where perception and physical action must be coordinated, psychomotor abilities are the important abilities to consider. On tasks requiring strength, flexibility, agility, and speed to perform, physical abilities are crucial to consider (e.g., Firefighters; Henderson, Berry, & Matic, 2007). There are other potential types of abilities that can be considered but have a much more tenuous status on the basis of the extent of scientific research. These other abilities include social competence, emotional intelligence, and the ability to judge others. A primary application in I-O psychology is the measurement of abilities in order to predict success on tasks in work roles. No matter which of these four categories that I-O psychologists attempt to measure, they must base their work on the large body of scientific research on human abilities.

Whereas abilities relate to maximum performance, personality reflects how individuals typically respond to situations. I-O psychologists have made much use of measures of personality constructs in their research and their applied work. The Five Factor Model of Costa and McCrae (1995) has had a major impact on work of I-O psychologists, many of whom have used this model as an organizing taxonomy (Chiaburu, Oh, Berry, Li, & Gardner, 2011; Mount, Barrick, Scullen, & Rounds, 2005) Although there is some controversy about whether the Five Factor Model is adequate for many applications to organizations (Schneider & Hough, 1995), the basic research on personality has provided the foundation for attempts of I-O psychologists to use personality in the workplace. More nuanced approaches to personality in organizations
have noted the importance of considering an “at work” frame of reference (Shaffer & Postlethwaite, 2012), and considering facet-level personality traits in addition to the Five Factor Model (Judge, Rodell, Klinger, Simon, & Crawford, 2013).

Vocational interests refer to stable patterns of likes or dislikes for activities, roles, and types of people. The most widely accepted structure for describing vocational interests is arguably Holland’s six fold taxonomy (Holland 1973) in which persons are differentiated on the basis of six types of vocational interest: realistic, investigative, artistic, social, enterprising, conventional. The possibility that vocational interests can predict the level of satisfaction and satisfactoriness of persons in work-roles has led I-O psychologists to devote considerable attention to the measurement and use of vocational interests in selection and coaching of employees.

The work on abilities, personality, and vocational interests requires accurate assessments of unobservable psychological traits and a sound background in both classical and modern measurement theories. The domain of measurement includes theory and assessment of individual differences in skills and abilities. This exposure would cover the philosophy of science, the nature of construct measurement, and assumptions underpinning many of our approaches to scale development. Other topics which might be covered are the measurement of attitudes (e.g., job satisfaction) and product preferences by scaling procedures, measurement of performance on complex jobs, and measurement of comparable worth of individuals to organizations. Classical true score theory has been the traditional approach. Classical theory can provide only approximate solutions to problems of item and scale bias, test equating, minimum competence assessments, mastery testing, and tailored testing. Although these areas of application were originally studied in relation to ability measurement, they have been generalized to attitude scales, surveys, questionnaires, and rating scales. Thus, researchers and practitioners in I-O psychology must be familiar with both classical measurement procedures and more contemporary procedures (e.g., Item Response Theory; Embretson & Reise, 2013; Stark, Chernyshenko, Drasgow, & Williams, 2006).


Other Areas of Specialty 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. 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.

It is also important that I-O psychologists be aware of the extensive literature on attitude theory, attitude measurement, and attitude change. In particular, I-O psychologists must know how attitudes are formed and changed and how they are related to behaviors. With respect to the latter, a knowledge of the literature on the relationship between attitudes and behavior is important if for no other reason than to know the limitations of the connections between these two constructs.

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.

Knowledge in this area would reflect an understanding of these processes, events, or phenomena as they are considered both by the individual employee and from the perspective of the employing organization. Knowledge of how organizational practices such as recruitment, selection, job placement, socialization, training, performance appraisal, and career planning programs enhance or retard career development is also necessary, as is an understanding of the special career issues and challenges faced by particular groups (e.g., women, ethnic minorities, the disabled).

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. Criterion Theory and Development

Almost all applications of I-O psychology (e.g., selection, human resources planning, leadership, performance appraisal, organization design, organization diagnosis and development, training) involve measurements 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. These necessarily include skills in many of the other domains identified in the document (e.g., job analysis, psychometrics).

7. Health and Stress in Organizations

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 and 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 toxic 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 assessing fit to a specific job or career track and assessing 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.

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 process 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 generate 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, redesign 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. Performance Appraisal and Feedback

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. Personnel Recruitment, Selection, and Placement
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. Small Group Theory and Team Processes

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.


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. Work Motivation

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
3. If specialty training occurs at the postdoctoral level, describe:

   a. Any doctoral level prerequisites beyond an APA-accredited degree in professional psychology.

   NA – specialty training at the postdoctoral level is extremely rare. If such training occurs, it typically involves individuals who have education and/or experience in areas of psychology other than industrial-organizational psychology who, then, receive the same training as graduate students in the specialty receive in their doctoral program.

   b. Required coursework and other experiences in the postdoctoral residency.

   NA – specialty training at the postdoctoral level is extremely rare. If such training occurs, it typically involves individuals who have education and/or experience in areas of psychology other than industrial-organizational psychology who, then, receive the same training as graduate students in the specialty receive in their doctoral program.

4. Describe how students in this specialty are evaluated. How is competency measured? Please include samples of evaluation tools.

   Specific evaluation methods vary across programs, and standardized evaluation tools are rare. Students typically receive evaluations in formal coursework, in practical experience activities (e.g., practicum, predoctoral internships, consulting projects), in comprehensive examinations in their doctoral programs and in structured research activities. Depending upon the state or states in which I-O psychologists practice, they may be eligible for licensure (which may be required in some states). Many I-O psychologists are also evaluated by organizations such as the American Board of Professional Psychology.

Criterion VI. Advanced Preparation in the Parameters of Practice. A specialty requires the advanced didactic and experiential preparation that provides the basis for services with respect to the essential parameters of practice. The parameters to be considered include: a) populations, b) psychological, biological, and/or social problems, and c) procedures and techniques. These parameters should be described in the context of the range of settings or organizational arrangements in which practice occurs. If the specialty training occurs at both the doctoral and postdoctoral levels, please list the levels of preparation separately.

1. Describe the advanced didactic and experiential preparation for specialty practice in each of the following parameters of practice:

   a. Populations (target groups, other specifications):

      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. Throughout their coursework, practicum or internship experiences and field research experiences, I-O doctoral students are given extensive exposure to work organizations and their specialized issues, language, and problems.

   b. Problems (psychological, biological, and/or social (including symptoms, problems
behaviors, prevention, etc):

Formal coursework, directed study, practicum and internship experiences, consulting experiences and field research experiences are used to expose students to the key problems studied by I-O psychologists and to develop competence and expertise in these areas. The problems most commonly studied by I-O psychologists 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 (for assessment, diagnosis, intervention, prevention, etc.):

I-O Psychologists are scientist-practitioners who are expected to develop and demonstrate expertise in performing and interpreting research and in applying the results of psychological research in organizations. I-O psychologists do not typically provide psychological services to individuals, but rather direct their interventions and assessments toward groups and organizations.

I-O psychologists are required to develop unique and specialized skills in analyzing jobs and work, in assessing organizational functioning, in consulting with organizational clients, and in communicating the methods, theories, and findings of psychological research to organizational audiences. They must be fluent in the language of business and
organizations (e.g., skilled in translating findings about psychological interventions into terms such as return on investment) and must be skilled in understanding how individuals approach, perceive and relate to work organizations.

Examples of procedures and techniques that I-O psychologist use in their assessment, intervention and consulting activities are:

Recruitment, Selection and Placement: conducting job analysis interviews and administering job analysis questionnaires; working with human resource managers to develop recruitment procedures; constructing and validating tests, assessments, and interviews; devising decision processes for the placement of personnel; and designing programs to be used by managers for identifying the management potential of their subordinates.

Training and Development: conducting surveys and interviews for identifying training and development needs of individuals or categories of employees; designing and implementing training courses and programs; coaching employees, managers, and executives for improved job performance; conducting evaluations of the effectiveness of training and development programs; and working with human resource managers to design promotion and career planning practices.

Performance Measurement: identify existing or create new criterion measures for use in performance appraisals, pay administration, and test validation research; calculate utility analyses to determine the economic value of various levels of job performance; and conduct formal evaluations of organizational effectiveness.

Motivation and Reward Systems: develop, implement, and evaluate motivation and reward programs such as goal setting programs or pay-for-performance plans.

Organizational Development: administer surveys and conduct interviews and focus group meetings for analyzing organizational structures and climates; devise programs for maximizing the job satisfaction and effectiveness of individuals and work groups; and consult with managers and executives to facilitate organizational change.

Quality of Work Life: conduct studies to identify factors associated with job attitudes; design and implement programs to reduce work stress and strain; develop programs to promote safety and prevent accidents, illnesses, and injuries; and design programs that enhance work/family life balance.

Consumer Behavior: conduct surveys and interviews to assess consumer preferences; conduct surveys and interviews to evaluate customer satisfaction with products and services; and consult with managers and executives to develop market segmentation strategies.

The Structure of Work and Human Factors: consult with executives, managers, and other professionals (e.g., ergonomists) to design jobs and work and to optimize person-machine effectiveness; and work with engineers and other professionals and specialists to develop team and systems technologies.
Post-Doctoral Training

Training in industrial and organizational psychology occurs at the doctoral level. Post-doctoral training is rare and not required to practice in the specialty. If such training occurs, it typically involves individuals who have education and/or experience in areas of psychology other than industrial-organizational psychology who, then, receive the same training as graduate students in the specialty receive in their doctoral program. The profession’s approach to training in the specialty is to provide, at the doctoral level, the education and experience that students need to satisfactorily perform in the specialty after obtaining their doctorate degree. For more information about education and training in industrial-organizational psychology at both the Master’s and Doctorate level, visit the SIOP website (see links below). SIOP approved the Guidelines for Education and Training at the Master’s Level in Industrial-Organizational Psychology in 1994. SIOP and APA approved the Guidelines for Education and Training at the Doctoral Level in Industrial-Organizational Psychology in 1999.

http://www.siop.org/guidelines.aspx (Master’s level education and training guidelines)

http://www.siop.org/PhDGuidelines98.aspx (Doctorate level education and training guidelines)

Criterion VII. Structures and Models of Education and Training in the Specialty. The specialty has structures and models to implement the education and training sequence of the specialty. The structures are stable, sufficient in number, and geographically distributed. Specialty education and training may occur at the doctoral, postdoctoral, or both.

1. List the names of the exemplary training programs that exist in the specialty.

   University of Minnesota
   Michigan State University
   The Pennsylvania State University
   Bowling Green State University
   Georgia Institute of Technology
   University of South Florida

   A full list of graduate training programs in Industrial and Organizational Psychology can be obtained at http://www.siop.org/gtp

2. How are education and training programs in the specialty recognized? How many programs exist in the specialty?

   There are 51 universities in the USA offering doctoral training in I-O Psychology. There is no formal accreditation body for the specialty of I-O Psychology.

3. Describe the qualifications necessary for faculty who teach in these programs. Describe the qualifications required for the director of such programs.
Faculty in I-O Psychology programs typically hold a PhD in psychology or in a closely related area of social or organizational science, and have records of accomplishment in research and application. Program directors are generally senior faculty members, but there are no specific qualifications required for these directors, whose roles are generally administrative.

4. If programs are doctoral level, what qualifications are sought for student admission? Provide sample evaluation forms.

Students applying for admission to doctoral programs are typically evaluated on the basis of their academic record, Graduate Record Examination scores, letters of recommendation, research experience and success (e.g., publications, presentations at meetings), and their fit to the emphases of individual doctoral programs. Evaluation forms vary from program to program and sometimes from year to year.

5. If programs are postdoctoral, what qualifications are required or preferred for admission? Provide sample evaluation forms.

NA

6. Include or attach education and training guidelines, if available, for this specialty as appropriate for doctoral training, postdoctoral training, or both.

The Guidelines for Education and Training at the Doctoral Level in Industrial-Organizational Psychology (approved by APA, 1999) are shown at: http://www.siop.org/PhDGuidelines98.aspx

7. Provide sample curriculum expected of model programs.

Doctoral training in I-O psychology will vary from one program to another in terms of course sequencing, research, supervision, and student evaluation. Although several schools offer a Psy.D. degree in I-O psychology, the vast majority of doctoral programs in I-O psychology offer the Ph.D. degree. Therefore, we provide an overview of some of the common elements of Ph.D. doctoral training programs below with respect to course sequencing, research, supervision, and student evaluation.

Emphasis. In the typical I-O program, there is a strong commitment to empirical research but within this framework a student may often elect to concentrate on basic or applied problems in laboratory or field settings. In addition to their master's thesis and doctoral dissertation, students frequently have numerous opportunities to complete research in conjunction with faculty, other students, or on their own. The typical I-O doctoral program involves application of methods and theories from a variety of areas in psychology to problems in organizations. Specific topics include theories and applied research in the content areas are discussed below.

General structure of the typical PhD program. Students in I-O doctoral programs usually graduate in 5 years, although programs may be shorter or longer depending on progress made in research and courses and whether or not the student is engaged in an external internship. The main elements of the program are courses, independent research with faculty or research groups, teaching, and internships. A general structure for an I-O program is as follows:
Year 1 and 2. Students are often required to complete several core or foundation courses. These include courses such as foundations of cognitive psychology, foundations of social psychology, statistical methods, research methods, measurement/psychometrics, and survey courses in I-O psychology. Frequently, students are also expected to initiate independent research with members of the faculty. Most students commence work on a Masters thesis during the first two years. The Masters thesis is intended to develop the student's ability to conduct and report independent research effectively.

Year 3 and beyond. During the third year, students take advanced seminars and are often expected to complete a qualifying examination (typically referred to as comprehensive exams or preliminary exams) that will allow them to proceed with the program, and with their dissertation research. Students usually commence planning their dissertation research in their third or fourth year. The dissertation must be research that can make an original contribution to scientific knowledge in the field of I-O Psychology. Most students complete their course requirements by the end of the third or fourth year. Some students also attend semester-long internships at various organizations during the third or fourth year. This allows them to concentrate fully on their dissertation research in their final year before graduation.

To illustrate more concretely the specific requirements of a typical program, the curriculum of one leading program, The Pennsylvania State University, is attached in Appendix B.

8. Select four exemplary doctoral and/or postdoctoral level geographically distributed, and publicly identified programs in psychology in this specialty and provide the requested contact information. If programs are not APA accredited, please complete Attachment A and/or Attachment B. If the specialty education and training occurs at both the doctoral and postdoctoral level provide examples of both and not from the same program.

<table>
<thead>
<tr>
<th>Program One</th>
<th>Doctoral</th>
<th>X</th>
</tr>
</thead>
</table>

Name of University, School, or Institution offering program:
The Pennsylvania State University

Name of Program: PhD in I-O Psychology

Address: Dept of Psychology, The Pennsylvania State University, Moore Building

City/State/Zip: University Park, PA 16802

Contact Person: Dr. Alicia Grandey Telephone No. (814) 863-1867

E-mail address: aag6@psu.edu

Website: psych.la.psu.edu/graduate/programareas/ioprogram.html

APA Accreditation: NA
Program Two

Name of University, School, or Institution offering program: University of South Florida

Name of Program: PhD in I-O Psychology

Address: Dept of Psychology, PCD 4118G
       University of South Florida

City/State/Zip: Tampa, FL  33620-8200

Contact Person: Dr. Tammy Allen   Telephone No. (813) 974-0484

E-mail address: allen@mail.usf.edu

Website: www.cas.usf.edu/psychology    APA Accreditation: NA

Program Three

Name of University, School, or Institution offering program: Colorado State University

Name of Program: PhD in I-O Psychology

Address: Colorado State University, Psychology Dept
       1876 Campus Delivery

City/State/Zip: Fort Collins, CO 80523-1876

Contact Person: Dr. Kurt Kraiger   Telephone No. (970) 491-6821

E-mail address: kurt.kraiger@colostate.edu

Website: www.colostate.edu/Depts/Psychology/io

APA Accreditation: NA

Program Four

Name of University, School, or Institution offering program: Michigan State University

Name of Program: PhD in I-O Psychology

Address: Dept of Psychology
       Michigan State University

City/State/Zip: East Lansing, MI 48824-1117
Criterion VIII. Continuing Professional Development and Continuing Education. A specialty provides its practitioners a broad range of regularly scheduled opportunities for continuing professional development in the specialty practice and assesses the acquisition of knowledge and skills.

1. Describe the opportunities for continuing professional development and education in the specialty practice. Provide detailed examples, such as CE offerings that are available.

The specialty, represented by Division 14 of APA, encourages and supports continuing education and professional development of its members in many ways. In recent years, SIOP has collected data from its members about their education and development needs and interests and then implemented various programs to address those needs and interests. The most recent member survey, conducted in the fall of 2011, included items on continuing education and professional development. Results from that survey are being prepared and will be shared with the membership in 2012. Results from past surveys that addressed continuing education and professional development issues can be found at:


The most obvious manner in which I-O psychology supports its members in their education and development efforts is through Division 14’s annual conference. The conference provides both workshops and specific sessions designed to provide CE credits to members. SIOP has offered workshops for well over 40 years and, in the last few years, has offered between 12-15 workshops at each conference. For example, here are the 15 workshops conducted at SIOP’s 2010 annual conference:

1. Human Capital Risk: Communicating Metrics Through the New Language of the C-Suite. Seymour Adler, Aon; Kevin Kline, FBI. Coordinator: Amy Grubb, FBI.

   Risk, threat, mitigation—the new language of your C-suite—leads to significant opportunity for translating traditional I-O metrics into organizational success. This workshop introduces a risk mitigation framework through practical examples to assist practitioners in elevating human capital strategy to equate to corporate and financial strategies.

An organization’s employment brand, internal communications, and long-term strategy are all impacted by its culture. Yet, culture remains a difficult subject to understand and evaluate. This workshop will make culture more meaningful for your organization through an active discussion around three real-world cases that led to dramatic results.

3. Unproctored Internet Testing: What to Consider Before Taking the Leap (To Jump or Not to Jump?). Nancy Tippins, Valtera; Rodney McCloy, HumRRO. Coordinator: Robert Gibby, Procter & Gamble.

This workshop will address important topics regarding unproctored Internet testing (UIT) for selection purposes, including their development, implementation, and interpretation. Both cognitive and noncognitive UIT will be considered, as will implementation of UIT in both the private and public sectors. The workshop will conclude with brief case studies involving UIT.

4. Using HR Data to Make Smarter Organizational Decisions. Wayne Cascio, University of Colorado; Brian Welle, Google. Coordinator: Margaret Barton, OPM.

This workshop is designed to help participants maximize use of HR systems and data-collection efforts to improve organizational decision making. Presenters will demonstrate practical strategies for making informed decisions using HR data across the organization and discuss how integrated systems, combined with thoughtful analysis, can improve organizational performance.


This practical workshop outlines the key steps in hiring and managing a pool of external executive coaches. Participants will learn how to select the right coaches, match them with participants, contract, design and set up effective engagements, provide appropriate monitoring and support, and evaluate coaches and the coaching process.


The Angoff technique is often the default option for setting cut scores in employment settings. This workshop focuses on alternatives to the Angoff technique for setting cut scores and performance standards. The workshop will demonstrate how to choose an alternative technique, give the participants practice in making the judgments required, and broaden participant’s thoughts about setting standards on assessments other than tests.

This workshop will explore the role of ambiguity and managing uncertainty in the development of successful executives. Participants will learn about the relationship of addressing uncertainty and ambiguity to other critical leadership variables, and the presenters will demonstrate and explain an approach to the assessment of individual capacity and aptitude for ambiguity.

8. Addressing Organizational Fixations With Fads. Paul Sackett, University of Minnesota; Kevin Nilan, 3M Corporation. Coordinator: Mindy Bergman, Texas A&M.

Organizational decision makers often embrace popular concepts that have insufficient supporting evidence. The presenters review ways in which psychologists encounter fads in organizational settings and discuss strategies for countering organizational interest in fads. We discuss how psychologists have addressed fads in favor of evidence-based practice in the past.


By far the most common lament of survey practitioners and employees is nothing happened. This workshop provides a framework for effective survey feedback organization development, spotlighting common missteps and focusing on an extremely powerful feedback process that includes linkage research as a key step in moving from results to action.

10. Innovative Techniques for Improving Job Analysis: Leveraging 50 Years of I-O Research and Automation. Elaine Pulakos, PDRI; Mike Meyrowitz, PDRI. Coordinator: Cheryl Paullin, HumRRO.

Organizations demand that human capital systems be implemented efficiently and cost effectively. Too often, rigorous job analysis studies are viewed as too slow and expensive. This workshop will focus on conducting rigorous job analysis studies efficiently by leveraging existing I-O research and by automating steps in the job analysis process.


This workshop provides a guide for understanding ethical and unethical behavior, and includes a discussion of the cognitive and motivational components of ethical behavior and a general decision-making strategy for coping with ethical dilemmas. Participants will learn and practice applying a model of ethical reasoning to ethical challenges.

Today’s e-learning technologies offer powerful mechanisms for improving learning and workplace results. Unfortunately, many e-learning interventions fail to maximize learning outcomes. This workshop will provide a practical research-based approach to e-learning design and evaluation. In particular, participants will learn how e-learning can minimize forgetting and improve workplace remembering and performance.


Aside from highlighting important distinctions between social networking applications (e.g., Facebook, LinkedIn) and social networks and their analysis, this workshop will review most current concepts in social networks analysis (SNA), showcase current methodologies to measure and apply social networks data, and engage workshop participants in a live, hands-on SNA exercise.


This workshop will cover best practices for localizing, administering, and interpreting the results of assessments and organizational surveys; legal and security issues; a comparison of utilizing assessments for selection and development; and an exploration of critical behaviors for success based on organizational vision and values.


The Supreme Court’s decision in the controversial Ricci v. DeStefano case is just one of many new developments in employment law. Lundquist and Ashe will review significant new court decisions, discuss the implications for HR processes, and propose options for aligning HR processes with the new legal environment.

In addition, these CE sessions were held during the 2010 annual conference:

1. Four Friday Seminars with 3 credits awarded for attending one session (morning and afternoon sessions offered)
2. Thursday Theme Track: Exploring the Potential and Pitfalls of Virtually Connected Work with 5.25 credits awarded for attending the entire day’s programming
3. Saturday Theme Track: Reengineering I-O Psychology for the Changing World of Work with 5.5 credits awarded for attending the entire day's programming
4. Master tutorials with 1, 1.5, or 2 credits awarded for attending each session
5. Master Collaboration with 1.5 credits awarded for attending each session
SIOP also holds its Leading Edge Consortium each autumn. This event consists of several sessions over two days that provide CE credit for participants. Typical attendance is about 250. The most recent topics for this event were, in 2010, developing and enhancing high performance teams and, in 2011, the virtual workforce.

In addition, many I-O psychologists pursue continuing education opportunities through APA and other professional societies such as the Society for Human Resource Management.

These examples of continuing education offerings show both the specificity and the diversity of content available to I-O psychologists. SIOP’s standing committees on Education & Training and Continuing Education & Workshops plan for and oversee these offerings on an annual basis.

2. **Describe the formal requirements, if any, for continuing professional development and education in the specialty and recognition of practitioners.**

Industrial-organizational psychologists, as a group, enthusiastically support professional development and continuing education in the specialty. They respond well to CE and other non-CE professional development opportunities. Currently, CE in industrial-organizational psychology is voluntary in most states and the national association involved in industrial-organizational psychology does not require CE. Some industrial-organizational psychologists pursue various certifications that do require CE. These certifications are offered by organizations, whose purpose is related to SIOP’s. Examples of such certifications, and the organizations sponsoring them, include but are not limited to, the Society for Human Resource Management (e.g., PHR, SPHR, GPHR), the International Coach Federation (e.g., ACC, PCC, MCC), and the American Society for Quality (e.g., CSSGB, CSSBB, etc.)

Other formal requirements for continuing professional development and education vary largely as a function of state licensing laws. I-O psychologists are required to be licensed in some states, are not required to be licensed in others and are not eligible to be licensed in still others. SIOP itself sets no specific formal requirements for continuing professional development and education. It does, however, expect its members to conduct all of their professional activities in accord with the APA Ethical Principles of Psychologists and Code of Conduct as well as with applicable laws, rules, and regulations. To that end, its continuing education offerings frequently include ethical and legal issues content.

SIOP offers several substantial opportunities for continuing education and professional development. These opportunities include the annual conference, pre-conference workshops, and annual Leading Edge Consortium, a conference that presents the best of the specialty’s research and practice on one important topic within the specialty. As one example of the commitment of the specialty’s practitioners to continuing education and professional development, see the following attendance numbers at the annual conference and workshops over the last seven years. In reviewing the numbers, it is important to note that the workshop attendance is capped at 300-450 attendees depending on several factors including number of workshops offered and space. Attendees (or their employers) pay an additional cost to attend the workshops and they are intended to provide specialty practitioners with the opportunity to learn, network, and grow their skills in a small group environment.
<table>
<thead>
<tr>
<th>Year</th>
<th>Membership #'s</th>
<th>Conference #'s</th>
<th>Workshop #'s</th>
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<td>3301</td>
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<tr>
<td>2006</td>
<td>5955</td>
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</tr>
<tr>
<td>2017</td>
<td>9633</td>
<td>4801</td>
<td>305</td>
</tr>
</tbody>
</table>

*SIOP changed the conference format in 2008. Prior to 2008, workshops occurred on Thursday and the conference occurred over the next two and a half days starting on Friday. Beginning in 2008, workshops occur on Wednesday, and the conference occurs over the next three days starting on Thursdays. The change in workshop and conference scheduling appears to have affected workshop attendance.

SIOP also encourages and supports its members in their efforts to develop their knowledge and use of best practices beyond the conferences and workshops SIOP created and sponsors a Professional Practice book series that provides practitioners with up-to-date information and case studies of best practices within the specialty. For more than 20 years, this series, currently consisting of more than 20 books, has been an informative resource for industrial and organizational psychologists, organizational scientists and practitioners, and others interested in organizational behavior and performance. Each volume in the series offers guidance, insights, and advice on the practice and application of industrial and organizational psychology in solving organizational problems related to people. There are more than 20 books in this series. Recent titles in the series include:


As a result of the Division 14 member surveys mentioned earlier in this section and other sources within the specialty, SIOP created and implemented several additional resources to support further education and development of its members. These resources include:
http://www.siop.org/ce/ (page on Division 14 website that provides information on continuing education and professional development opportunities for its members)

http://siopexchange.typepad.com/the_siop_exchange/about-the-siop-exchange.html (the SIOP Exchange; using an interactive blog format, the SIOP Exchange allows I-O psychologists to share their reactions to the latest news and innovations in all areas of the field.)

http://siop.editme.com/ (the SIOP/Division 14 wiki that provides research, practice and teaching resources to SIOP members)

http://www.siop.org/learningcenter.aspx (contains more than 1500 hours of content from past programs at annual conferences and Leading Edge Consortiums and access to the SIOP Research Access site - http://www.siop.org/SRA/default.aspx - that provides access to several EBSCO databases)

In recent years, SIOP created and implemented a practitioner mentoring program for members that consists of three components – speed mentoring at the annual conference and Leading Edge Consortium events, group mentoring and virtual mentoring. The speed mentoring component provides members with the opportunity to meet face-to-face, in small groups, with leading experts in the field on different topics. The group mentoring component of this program provides members with the opportunity to meet, in small groups via phone and/or internet, on an ongoing basis with a single mentor who provides information, support, and guidance on a wide variety of practice-related issues. The virtual mentoring component of the program provides webinars and other online resources to support the education and development of Division 14 members.

Clearly, Division 14 has consistently, over the years, discussed and identified ways to support and evaluate the acquisition of knowledge and skills of those who hold the specialty. It will continue to discuss and identify actions that are designed to encourage, enhance, and ensure the acquisition of knowledge and skills of those who practice in the specialty.

3. **Describe how the assessment of an individual's professional development and education is accomplished in the specialty.**

There are several ways in which an individual’s professional development and education is assessed within the specialty. The first, and most obvious, method of assessment is through CE hours associated with ongoing education and training.

Second, in working with organizations, industrial-organizational psychologists frequently work closely with colleagues in the same or related fields (e.g., human resource professionals, management, legal, etc.) within private or public sector organizations as well as in consulting organizations. In these situations, it is standard practice to evaluate the work of those who practice in the specialty. Informal feedback on specific projects and work products is provided on an ongoing basis by supervisors, peers, clients, and other colleagues who work with the person. In addition, organizations typically require annual performance reviews to assess the knowledge, skills, abilities, and other qualities of those who practice in the specialty relative to specific job-performance criteria. Evaluation of technical knowledge and skills are always a part of that process. The work of those who practice in the specialty is also frequently reviewed and critiqued by attorneys who are legally bound to challenge or expose any potential weaknesses or mistakes in work products or testimony. This type of evaluation usually occurs
during litigation related to claims of employment discrimination. Third, the most formal assessment of individual professional development occurs through the American Board of Business and Consulting Psychology, which is a member of the American Board of Professional Psychology. This board certification process consists of a review of credentials, training, ethics, experience, work samples and oral examination pertaining to legal, practice, and ethics issues related to the specialty as well as a candidate’s knowledge of a broad range of topics related to the specialty. This voluntary process provides a thorough and exacting process for industrial-organizational psychologists to demonstrate advanced competence in the specialty.

**Evaluation and Assessment**

**Criterion IX. Effectiveness.** Petitions demonstrate the effectiveness of the services provided by its specialist practitioners.

*PLEASE NOTE: If the same article illustrates more than one of these items, it may be referenced under each applicable category.*

1. Provide at least five psychological manuscripts published in refereed journals (or equivalent) that demonstrate the efficacy of the specialty’s services for dealing with the types of clients or populations (including groups with a diverse range of characteristics and human endeavors) usually served by this specialty. Summarize and discuss the relevance of the findings of the studies, specify populations, interventions, and outcomes in relation to the specialty practice.


Abstract

Meta-analytic techniques were used to estimate the effects of flexible and compressed workweek schedules on several work-related criteria (productivity/performance, job satisfaction, absenteeism, and satisfaction with work schedule). In general, the effects of both schedules were positive. However, the effects of both flextime and compressed workweek schedules were different across the outcome criteria (e.g., compressed workweek schedules did not significantly affect absenteeism). Thus, the level of positive impact associated with either schedule is dependent on the outcome criterion under consideration. Further, several variables were found to be moderators of flexible work schedules. For example, highly flexible flextime programs were less effective in comparison to less flexible programs, and the positive benefits of flextime schedules were found to diminish over time. (PsycINFO Database Record (c) 2000 APA, all rights reserved) (journal abstract)


Abstract

This study was undertaken to estimate the validity of tests designed to measure cognitive and mechanical/spatial abilities used in the selection of firefighters. The literature on the use of written
selection tests was reviewed and summarized for 13,418 individuals drawn from 101 samples conducted over the past 2 decades. Validity with respect to job performance and training performance was examined. For the prediction of job performance, cognitive tests showed substantial validity (.42), although mechanical comprehension tests showed even higher validity (.54). However, the best prediction was obtained by tests that were composites of cognitive and mechanical predictors (.56). Training criteria was best predicted by cognitive measures (.77), although mechanical comprehension predictors also showed substantial prediction value (.62). Tests that were composites of cognitive and mechanical measures showed validities equal to that of cognitive measures (.77).


**Abstract**

Meta-analysis procedures were applied to the results of 70 managerial training (MT) studies. The meta-analysis for 34 distributions of MT effects representing 6 training-content areas, 7 training methods, and 4 types of criteria (subjective learning, objective learning, subjective behavior, and objective results) indicated that MT was moderately effective. For 12 of the 17 MT method distributions, the 90% lower-bound credibility values were positive, and thus the effectiveness of these training methods, at least minimally, can be generalized to new situations. A list of the 70 MT studies is included. (97 ref) (PsycINFO Database Record (c) 2000 APA, all rights reserved)


**Abstract**

Conducted a meta-analysis on literature published from 1971 to 1981 concerning the effects on worker productivity of 11 types of psychologically based organizational interventions (e.g., appraisal and feedback, management by objectives, work redesign). Data came from the reports of productivity experiments initially reviewed by the 3rd author et al (1977) and by the 1st author and J. A. Bondy (1983). Results show that such programs, on average, raised worker productivity by nearly one-half of a standard deviation. The strength of effects was found to vary by type of intervention, criterion of productivity, contextual factors in organizations, and features of research design. Comparisons of conclusions reached through meta-analysis vs. traditional methods of literature review suggest that behavioral science techniques for increasing worker productivity are generally effective. (20 ref) (PsycINFO Database Record (c) 2000 APA, all rights reserved)


**Abstract**

This study examined the relationship between safety climate and various outcomes. Safety climate was defined by such factors as development and adherence to safety protocols and open and constructive responses to errors. Some of the outcomes examined were nurse back injuries, needle sticks, medication errors, and patient urinary tract infections. The participants in the study were 1,127 nurses working in 81 general medical surgical nursing units in 42 randomly
selected, non-federal, non-psychiatric, not-for-profit, accredited acute care hospitals with more than 150 beds throughout the US. The results revealed that safety climate predicted medication errors, nurse back injuries, urinary tract infections, patient satisfaction, patient perceptions of nurse responsiveness, and nurse satisfaction. The relationship between safety climate and both medication errors and nurse back injuries was moderated by the complexity of the patient conditions on the unit. Specifically, the effect of the overall safety climate of the unit was accentuated when dealing with more complex patient conditions.


Abstract

Recent reviews of executive selection have catalogued much that we as industrial and organizational psychologists are doing right in our research and practice. We are confronted, however, with the fact that executive selection decisions are often, if not usually, wrong and that I-O psychologists seldom have a place at the table when these decisions are made. This article suggests that, in our thinking, we have failed to differentiate executive selection from selection at lower levels and that we have applied the wrong models. Our hope for the future lies not in job analyses, developing new tests, meta-analyses, or seeking psychometric validity, but in viewing executive selection as a judgment and decision-making problem. With the right focus, applying our considerable methodological skills should enable us to contribute toward making better judgments.


Abstract

Reviewed the validity evidence for psychological measures used in pilot selection and detected possible moderators for the relation between predictors and pilot performance (PP). 66 independent samples from 50 studies were included in the meta-analysis. The best predictors of PP were previous training experience and combined indices, a combination of several cognitive and/or psychomotor tests. The next best predictors were tests measuring cognitive and psychomotor/information-processing abilities, aviation information and biographical inventories. Personality, intelligence, and academic tests yielded lowest mean validities of moderators in all test categories except in academics. The analysis indicated that moderators might be operating for all test categories except academics, and the effect of several moderators were examined. (PsycINFO Database Record (c) 2000 APA, all rights reserved)


Abstract

Through a quantitative meta-analysis of 40 studies of realistic job previews (RJPs), 26 of which were published, the effects of RJPs on attrition from the job recruitment process, the level and accuracy of initial job expectations, affective reactions, job performance, and turnover were assessed. In general, RJPs were related to higher performance and to lower attrition from the recruitment process, initial expectations, voluntary turnover, and all turnover. Moderating effects of the timing and medium of an RJP and of whether a study was conducted in the laboratory or the field indicated that the effectiveness of RJPs can be enhanced through properly matching RJP methods with the organizational outcomes of interest. (PsycINFO Database Record (c)

Abstract

Goal setting, participation in decision making, and objective feedback have each been shown to increase productivity. As a combination of these 3 processes, management by objectives (MBO) also should increase productivity. A meta-analysis of studies supported this prediction: 68 out of 70 studies showed productivity gains, and only 2 studies showed losses. The literature on MBO indicates that various problems have been encountered with implementing MBO programs. One factor was predicted to be essential to success: the level of top-management commitment to MBO. Proper implementation starts from the top and requires both support and participation from top management. Results of the meta-analysis showed that when top-management commitment was high, the average gain in productivity was 56%. When commitment was low, the average gain in productivity was only 6%. (PsycINFO Database Record (c) 2000 APA, all rights reserved)


Abstract

In this article, meta-analytic integration of research examining the effects of team building on performance is reported. Overall, there was no significant effect of team building on performance. However the effects of team building varied as a function of the type of operationalization of performance: On objective measures of performance, there was a nonsignificant tendency for team building to decrease performance, whereas on subjective measures of performance, there was a significant, albeit small, tendency for team building to increase performance. Examination of the specific components of team building revealed that interventions emphasizing role clarification were more likely to increase performance, whereas interventions that emphasized goal setting, problem solving, or interpersonal relations were no more likely to render an increase or decrease in performance. Finally, the effects of team building decreased as a function of the size of the team. The discussion considers implications of these effects of team building on performance. (PsycINFO Database Record (c) 2000 APA, all rights reserved)


Abstract

This article summarizes the practical and theoretical implications of 85 years of research in personnel selection. On the basis of meta-analytic findings, this article presents the validity of 19 selection procedures for predicting job performance and training performance and the validity of paired combinations of general mental ability (GMA) and the 18 other selection procedures. Overall, the 3 combinations with the highest multivariate validity and utility for job performance were GMA plus a work sample test (mean validity of .63), GMA plus an integrity test (mean validity of .65), and GMA plus a structured interview (mean validity of .63). A further advantage of the latter
2 combinations is that they can be used for both entry level selection and selection of experienced employees. The practical utility implications of these summary findings are substantial. The implications of these research findings for the development of theories of job performance are discussed. (PsycINFO Database Record (c) 2000 APA, all rights reserved) (journal abstract)


Abstract

This article examines 3 points: 1st, an approach to meta-analysis which combines meta-analytic procedures with a more complete description of the organizational setting is presented. 2nd, a meta-analysis of the influence of team building on workgroup effectiveness is conducted. The results of this meta-analysis support the contention that team building impacts positively on workgroup productivity. Finally, a discussion of the role of meta-analysis in providing information which both scientists and practitioners may use to understand the relationship between organizational characteristics and the effects of team building on productivity measures is given. (PsycINFO Database Record (c) 2000 APA, all rights reserved)


Abstract

This meta-analysis evaluated predictors of both objective and subjective sales performance. Biodata measures and sales ability inventories were good predictors of the ratings criterion, with corrected r's of .52 and .45, respectively. Potency (a subdimension of the Big 5 personality dimension Extraversion) predicted supervisor ratings of performance (r = .28) and objective measures of sales (r = .26). Achievement (a component of the Conscientiousness dimension) predicted ratings (r = .25) and objective sales (r = .41). General cognitive ability showed a correlation of .40 with ratings but only .04 with objective sales. Similarly, age predicted ratings (r = .26) but not objective sales (r = -.06). On the basis of a small number of studies, interest appears to be a promising predictor of sales success. (PsycINFO Database Record (c) 2000 APA, all rights reserved) (journal abstract)


Abstract

Provides an integration and a quantitative review of the rater training literature. A general framework for the evaluation of rater training is presented in terms of 4 rating training strategies (rater error training, performance dimension training, frame-of-reference training, and behavioral observation training) and 4 dependent measures (halo, leniency, rating accuracy and observational accuracy). A meta-analytic review is presented to assess the effectiveness of the rater training strategies across the 4 dependent measures. Each of the 4 training strategies appeared to be at least moderately effective in addressing the aspect of performance ratings that it was designed to address. In most cases, each of the 4 training strategies resulted in
positive effects on all of the 4 dependent measures. The effects of rater training on rating accuracy appeared to be moderated by the nature of the specific error training approach. (PsycINFO Database Record (c) 2000 APA, all rights reserved) (unassigned)

2. Provide at least five psychological manuscripts published in refereed journals (or equivalent) that demonstrate the efficacy of the specialty's services for dealing with the types of psychological, biological, and/or social problems usually confronted and addressed by this specialty. Summarize and discuss the relevance of the findings of these studies, particularly their measures and outcome results.


Abstract

Recent conceptual and methodological advances in behavioral safety research afford an opportunity to integrate past and recent research findings. Building on theoretical models of worker performance and work climate, this study quantitatively integrates the safety literature by meta-analytically examining person- and situation-based antecedents of safety performance behaviors and safety outcomes (i.e., accidents and injuries). As anticipated, safety knowledge and safety motivation were most strongly related to safety performance behaviors, closely followed by psychological safety climate and group safety climate. With regard to accidents and injuries, however, group safety climate had the strongest association. In addition, tests of a meta-analytic path model provided support for the theoretical model that guided this overall investigation. The implications of these findings for advancing the study and management of workplace safety are discussed. (PsycINFO Database Record (c) 2009 APA, all rights reserved)


Abstract

This study meta-analytically tested hypotheses concerning factors that affect sex discrimination in simulated employment contexts. These hypotheses, derived from the social psychological literature on stereotyping, predicted that salience of applicant sex, job sex-type, sex of rater, and amount of job-relevant information would affect discrimination against female and male applicants. The literature search involved computer searches of psychological and organizational behavior journals and dissertation abstracts in order to identify empirical studies that examined sex discrimination in employment. The literature search covered the yrs 1964-1994. Generally, the hypotheses concerning job sex-type and job-relevant information were supported. Female and male applicants received lower ratings when being considered for an opposite-sex-type job, and the difference between ratings of males and females decreased as more job-relevant information was provided. However, ratings of males and females did not differ as hypothesized in regard to salience of sex and rater sex. The research and practice implications of these results are discussed. (PsycINFO Database Record (c) 2000 APA, all rights reserved)


Abstract
Using refinements of hypotheses by L. M. Finkelstein, M. J. Burke, and N. S. Raju (1995), the authors examined the effects of rater age, age salience, and job-relevant information on 324 managers' ratings of an older or a younger hypothetical applicant's interpersonal skills, economic worth, and likelihood of being interviewed. Ss were aged 23-69 yrs. They hypothesized that age identity would interact with age salience to produce in-group biases that would lead raters to favor workers from their own age groups. There was a main effect of target age on all dependent variables, with the strongest effects on the ratings of economic worth: The participants rated the older target as less economically beneficial than the younger target. When age was salient and when the raters identified psychologically with their age groups, older raters actually disfavored older workers in ratings of economic worth. The authors also discuss directions of future research into the roles of the target's economic worth and the rater's age identity in age stereotyping and age discrimination in employment decisions. (PsycINFO Database Record (c) 2000 APA, all rights reserved)


Abstract

Examined the relation between employee positivity and job performance. It is suggested that a broad personality trait, labeled positive self-concept or core self-evaluations, is a potentially important personality trait in the prediction of job performance. Positive self-concept consists of 4 specific traits: self-esteem, generalized self-efficacy, locus of control, and (low) neuroticism or emotional stability. Data analyzed from a meta-analysis of 12 samples revealed that these specific traits are strongly correlated and comprise a common factor. Drawing from 4 motivation theories, it is argued that the principal reason positive self-concept is linked to job performance is because positive employees are more motivated to perform their jobs. It is also argued that, in some jobs, positive self-concept may be an ability factor. Implementation issues involved in using positive self-concept in selection decisions are discussed. Overall, this article suggests that positive self-concept is a trait deserving of more attention in selection research and practice. (PsycINFO Database Record (c) 2000 APA, all rights reserved)


Abstract

On the basis of a review of 22 years of articles published in 46 behavioral science journals, we found a total of 96 independent studies that reported age-performance correlations. Total sample size was 38,983 and represented a broad cross-section of jobs and age groups. Meta-analysis procedures revealed that age and job performance generally were unrelated. Furthermore, there was little evidence that the type of performance measure (ratings vs. productivity measures) or type of job (professional vs. nonprofessional) moderated the relation between age and performance significantly. However, for very young employees the relation between age and job performance was consistent and modestly positive. Implications of these results for future research are discussed. (PsycINFO Database Record (c) 2000 APA, all rights reserved) (unassigned)

Abstract

Examined the effects of rater and ratee race on performance ratings by comparing data from 3 sources: a large-scale civilian study, a large-scale military study (E. D. Pulakos et al, 1989), and a meta-analytic study (K. Kraiger and J. K. Ford, 1985). Results from the civilian and military data converged, but they differ from the meta-analytic results and challenge the conclusion that raters generally give more favorable ratings to members of their own race. (PsycINFO Database Record (c) 2000 APA, all rights reserved) (unassigned)


Abstract

Perspectives from 22 countries on aspects of the legal environment for selection are presented in this article. Issues addressed include (a) whether there are racial/ethnic/religious subgroups viewed as —disadvantaged, (b) whether research documents mean differences between groups on individual difference measures relevant to job performance, (c) whether there are laws prohibiting discrimination against specific groups, (d) the evidence required to make and refute a claim of discrimination, (e) the consequence of violation of the laws, (f) whether particular selection methods are limited or banned, (g) whether preferential treatment of members of disadvantaged groups is permitted, and (h) whether the practice of industrial and organizational psychology has been affected by the legal environment.


Abstract

Surprisingly few data exist concerning whether and how utilization of job-related selection and training procedures affects different aspects of unit or organizational performance over time. The authors used longitudinal data from a large fast-food organization (N = 861 units) to examine how change in use of selection and training relates to change in unit performance. Latent growth modeling analyses revealed significant variation in both the use and the change in use of selection and training across units. Change in selection and training was related to change in 2 proximal unit outcomes: customer service performance and retention. Change in service performance, in turn, was related to change in the more distal outcome of unit financial performance (i.e., profits). Selection and training also affected financial performance, both directly and indirectly (e.g., through service performance). Finally, results of a cross-lagged panel analysis suggested the existence of a reciprocal causal relationship between the utilization of the human resources practices and unit performance. However, there was some evidence to suggest that selection and training may be associated with different causal sequences, such that use of the training procedure appeared to lead to unit performance, whereas unit performance appeared to lead to use of the selection procedure. (PsycINFO Database Record (c) 2009 APA, all rights reserved)


Abstract
This meta-analysis integrates the correlations of 77 studies on V. H. Vroom's (1964) original expectancy models and work-related criteria. Correlations referring to predictions with the models and the single components—valence, instrumentality, and expectancy—were included in relation to 5 types of criterion variables: performance, effort, intention, preference, and choice. Within-subjects correlations and between-subjects correlations were included separately. Overall, the average correlations were somewhat lower than reported in previous narrative reviews. In certain categories, moderators pertaining to the measurement of the concepts were analyzed with a hierarchical linear model, but these moderators did not explain heterogeneity. The results show a differentiated overview: the use of the correlational material for the validity of expectancy theory is discussed. (PsycINFO Database Record (c) 2000 APA, all rights reserved) (journal abstract)


**Abstract**

Investigated the usefulness of short-term memory tests (STMTs) as a strategy for reducing adverse impact in personnel selection decisions and achieving high validity in predicting job and training performance by conducting 2 meta-analytic studies. Study 1 analyzed Black-White differences on STMTs for which literature search and review yielded 17 studies and 31 Black-White STMT comparisons with 27,973 Ss. Study 2 reviewed the validity of STMT in predicting job and training performance in 11 studies and 141 validity coefficients covering 34,262 Ss. Results showed that although there are differences between Blacks and Whites on STMTs (d = .42), these differences are less than half the size of those typically found on general cognitive ability measures (d = 1.0). The STMTs result in smaller racial mean differences than test of general cognitive ability. Thus STMTs are valid predictors of both job (p = .41) and training performance (p = .49). (PsycINFO Database Record (c) 2000 APA, all rights reserved)


**Abstract**

In a meta-analysis, 40 samples were classified into 3 categories according to the types of performance measures used: (a) supervisory ratings, (b) peer ratings, and (c) individual productivity. Results show a pattern of increases in performance, as measured by productivity indices, at higher ages. Conversely, supervisory ratings showed a slight tendency to be lower for older employees. Performance ratings showed more positive relations with age for professionals than for nonprofessionals. Implications concerning personnel policies regarding older employees are discussed. (21 ref) (PsycINFO Database Record (c) 2000 APA, all rights reserved) (unassigned)


**Abstract**

This study meta-analyzed data from 41 studies, with a total sample of nearly 70,000 respondents, to examine several negative consequences of workplace sexual harassment as well as how situational factors may play a role in facilitating these occurrences. Sexual harassment
experiences are associated with negative outcomes such as decreased job satisfaction, lower organizational commitment, withdrawing from work, ill physical and mental health, and even symptoms of post-traumatic stress disorder. In addition, organizational climate for sexual harassment figured prominently in facilitating these occurrences.

3. Provide at least five psychological manuscripts published in refereed journals (or equivalent) that demonstrate the efficacy of the specialty's procedures and techniques when compared with services rendered by other specialties or practice modalities. Summarize and discuss the relevance of the findings of these studies, particularly their measures and outcome results and the comparisons to other specialties or modalities.


Abstract

This article examines whether differences in the equations commonly used to calculate effect size for single group pretest-posttest (SGPP) designs versus those for control group designs can account for the finding that SGPP designs yield larger mean effect sizes (e.g., M. S. Lipsey & D. B. Wilson, 1993). It was found that the assumptions of no control group effect and the equivalence of pretraining and posttraining dependent variable standard deviations required for these equations to produce equivalent estimates of effect size were violated for some dependent variable types. Results indicate that control group effects and inflation in the standard deviation of the posttraining dependent variable measure account for most of the observed difference in effect size. The most severe violations occurred when the dependent variable was a knowledge assessment. Methods for including data from SGPP designs in meta-analyses that minimize potential biases are discussed. (PsycINFO Database Record (c) 2000 APA, all rights reserved) (journal abstract)


Abstract

Examined the interrater reliabilities within sources and correlations between sources of subordinate, supervisor, peer, and self-ratings of job performance. Different job types and dimension types were compared. Subordinates showed the lowest mean reliability (.30) and supervisors showed the highest (.50), with peers in between (.37). Mean correlations between sources were low for subordinate ratings (.22 with supervisor, .22 with peer, and .14 with self-ratings) and for self-ratings (.22 with supervisor and .19 with peer ratings). The mean supervisor-peer correlation was higher at .34. Both reliabilities and correlations between sources tended to be higher for nonmanagerial and lower complexity jobs. Comparisons of between-source correlations with within-source reliabilities indicate that, with some qualifications, the different sources had somewhat different perspectives on performance. Dimension reliabilities differed somewhat for interpersonal and cognitive dimensions. (PsycINFO Database Record (c) 2000 APA, all rights reserved)


Abstract
The purpose of this study was to extend previous research on the contextual and task performance distinction to managerial jobs. It was hypothesized that, unlike results for nonmanagerial work, the job dedication facet of contextual performance would contribute uniquely to overall managerial performance. The interpersonal facilitation facet of contextual performance was expected to be redundant with leadership task performance and therefore not to make a unique contribution. A multitrait-multirater correlation matrix was developed on the basis of meta-analysis. Structural equation modeling results generally supported the hypotheses, although there was some evidence of a unique contribution by interpersonal facilitation. Results also suggested that peers paid more attention to interpersonal facilitation when making overall performance ratings, whereas supervisors paid more attention to task performance. (PsycINFO Database Record (c) 2000 APA, all rights reserved)


Abstract

Theoretical and empirical efforts focusing on the interplay between work context and managerial role requirements have been conspicuously absent in the scholarly literature. This paucity exists despite over 60 years of research concerning the requirements of managerial work and with the rather universal recognition that work context meaningfully shapes organizational behavior. The authors developed a theoretical model linking different types of role requirements to different forms of work context. They empirically tested this framework with a nationally representative sample of 8,633 incumbents spanning 52 managerial occupations. Findings from hierarchical linear modeling analyses demonstrated that discrete forms of context (task, social, and physical) exert significant and predictable effects on managerial role requirements. (PsycINFO Database Record (c) 2009 APA, all rights reserved)


Abstract

Meta-analysis (Hunter, Schmidt, & Jackson, 1982) of 50 assessment center studies containing 107 validity coefficients revealed a corrected mean and variance of .37 and .017, respectively. Validities were sorted into five categories of criteria and four categories of assessment purpose. Higher validities were found in studies in which potential ratings were the criterion, and lower validities were found in promotion studies. Sufficient variance remained after correcting for artifacts to justify searching for moderators. Validities were higher when the percentage of female assessees was high, when several evaluation devices were used, when assessors were psychologists rather than managers, when peer evaluation was used, and when the study was methodologically sound. Age of assessees, whether feedback was given, days of assessor training, days of observation, percentages of minority assessees, and criterion contamination did not moderate assessment center validities. The findings suggest that assessment centers show both validity generalization and situational specificity. (PsycINFO Database Record (c) 2000 APA, all rights reserved) (unassigned)

Abstract

Despite substantial growth in the service industry and emerging work on turnover consequences, little research examines how unit-level turnover rates affect essential customer-related outcomes. The authors propose an operational disruption framework to explain why voluntary turnover impairs customers’ service quality perceptions. On the basis of a sample of 75 work units and data from 5,631 employee surveys, 59,602 customer surveys, and organizational records, results indicate that unit-level voluntary turnover rates are negatively related to service quality perceptions. The authors also examine potential boundary conditions related to the disruption framework. Of 3 moderators studied (group cohesiveness, group size, and newcomer concentration), results show that turnover’s negative effects on service quality are more pronounced in larger units and in those with a greater concentration of newcomers.


Abstract

Conducted a review of the literature using the following sources: (1) Psychological Abstracts, (2) Social Science Citation Index, (3) Personnel Psychology Validity Information Exchange, and (4) Handbook of Employee Selection. 23 studies (N = 3,178) were identified, and a meta-analysis was conducted to assess the relationship between supervisory ratings and results-oriented measures of performance. As hypothesized, the corrected mean correlation was higher when a relative vs. absolute rating format and a composite vs. overall rating method were used. These differences did not, however, account for all of the remaining variance around the relationship between ratings and results. (23 ref) (PsycINFO Database Record (c) 2000 APA, all rights reserved) (unassigned)


Abstract

More than 40 years ago, Taylor and Wherry (1951) hypothesized that performance appraisal ratings obtained for administrative purposes, such as pay raises or promotions, would be more lenient than ratings obtained for research, feedback, or employee development purposes. However, research on appraisal purpose has yielded inconsistent results, with roughly half of such studies supporting this hypothesis and the other half refuting it. To account for those differences, a meta-analysis of performance appraisal purpose research was conducted with 22 studies and a total sample size of 57,775. Our results support Taylor and Wherry’s hypothesis as performance evaluations obtained for administrative purposes were, on average, one-third of a standard deviation larger than those obtained for research or employee development purposes. In addition, moderator analyses indicated larger differences between ratings obtained for administrative and research purposes when performance evaluations were made in field settings, by practicing managers, and for real world subordinates. Implications for researchers and practitioners are discussed. (PsycINFO Database Record (c) 2000 APA, all rights reserved) (journal abstract)

Abstract

Presents the findings of a project investigating the validity of the employment interview. Analyses are based on 245 coefficients derived from 86,311 individuals. Results show that interview validity depends on the content of the interview (situational, job related, or psychological), how the interview is conducted (structured vs. unstructured; board vs. individual), and the nature of the criterion (job performance, training performance, and tenure; research or administrative ratings). Situational interviews had higher validity than did job-related interviews, which, in turn, had higher validity than did psychologically based interviews. Structured interviews were found to have higher validity than unstructured interviews. Interviews showed similar validity for job performance and training performance criteria, but validity for the tenure criteria was lower. (PsycINFO Database Record (c) 2000 APA, all rights reserved)


Abstract

Investigated the incremental effect of adding feedback to goal setting using only within-study comparisons of feedback plus goal setting to goal setting alone. 16 effect sizes were located in 11 studies that contained sufficient information to compare the effect size for goal setting only conditions and the effect size of combined feedback and goal setting conditions. Results provide greater confidence in the generalizability of previous assertions that combining feedback and goal setting is superior in affecting performance to providing goal setting alone. (PsycINFO Database Record (c) 2000 APA, all rights reserved)


Abstract

Examined, via meta-analysis, the validity of peer assessments and factors that may moderate the relationship between peer assessments and other measures of performance. 32 peer assessment studies were reviewed. Results indicate that peer assessments of ability and/or performance may show substantial validity. Peer assessments appear most informative and most valid when (1) peers have had sufficient time to become familiar with each other's work-related qualifications, skills, and abilities, (2) objectively-measured criteria are used for validation, and (3) the peers believe that the data they provide will be used only for research purposes. (PsycINFO Database Record (c) 2000 APA, all rights reserved) (unassigned)


Abstract

This experimental study investigated the mechanisms by which learner control influences learning in an e-learning environment. The authors hypothesized that learner control would enhance
learning indirectly through its effect on trainee reactions and learner engagement (in particular, off-task attention), such that learners who were more satisfied with the training and devoted more cognitive resources toward the instructional content versus off-task thoughts would possess greater posttraining knowledge. The study also examined the role of individual differences (training motivation and goal orientation) in the prediction of these 2 mediating variables. A sample of 274 undergraduates completed an e-learning program, either with or without interactive, learner control tools. Results suggest that both training satisfaction and off-task attention predicted subsequent learning. Learner control had a positive impact on training satisfaction but was not related to off-task attention. The individual difference variables had a differential impact on the mediating variables. In particular, performance orientation was linked to off-task attention, whereas mastery orientation was found to indirectly influence satisfaction via its direct effect on training motivation. Implications for the design and further study of e-learning are discussed. (PsycINFO Database Record (c) 2009 APA, all rights reserved)


Abstract

Using 20 validation studies (1983-1990) involving the Occupational Personality Questionnaire, this study explored the criterion-related validity (CRV) of personality variables. 12 criterion areas were developed, and practitioners indicated their hypotheses about the predictive value of each personality scale for each criterion area. Three meta-analysis techniques were used to cumulate the results and to assess CRV: (1) an average scale method, (2) a composite scale method, and (3) an incremental method. Results show mean sample size-weighted validity coefficients of around .20 for the personality variables, with higher values for criteria such as creativity, analysis, and judgment. They also revealed little overlap between the criterion variance correlated with ability and that associated with personality, with estimates of validity derived from the incremental meta-analysis similar in magnitude to those from methods using personality alone. (PsycINFO Database Record (c) 2000 APA, all rights reserved)


Abstract

Employers and academics have differing views on the value of grades for predicting job performance. Employers often believe grades are useful predictors, and they make hiring decisions that are based on them. Many academics believe that grades have little predictive validity. Past meta-analyses of the grades-performance relationship have suffered either from small sample sizes or the inability to correct observed correlations for research artifacts. This study demonstrated the observed correlation between grades and job performance was .16. Correction for research artifacts increased the correlation to the .30s. Several factors were found to moderate the relationship. The most powerful factors were the year of research publication and the time between graduation and performance measurement. (PsycINFO Database Record (c) 2000 APA, all rights reserved) (journal abstract)

Provide at least five psychological manuscripts published in refereed journals (or
equivalent) that demonstrate the efficacy of the specialty's services for dealing with the types of settings or organizational arrangements where this specialty is practiced. Summarize and discuss the relevance of the findings of these studies in relation to the specialty practice.


Abstract

Assessed the relationship between objective and subjective performance measures and estimated the population correlation between these measures in journal articles. A meta-analysis of studies containing both objective and subjective ratings of employee performance resulted in a corrected mean correlation of .389. This value, although significantly greater than 0, indicates that objective and subjective performance measures should not be used interchangeably. Moreover, in no moderator subgroup examined did the correlation suggest convergent validity. After discussing issues related to resolving the previous anomalies of primary and meta-analytic results, a secondary analysis suggested that objective and subjective measures of the same construct at the same level may be used interchangeably. The secondary analysis, however, was based on a limited sample. Future research should address the appropriate dimensionality of employee performance. (PsycINFO Database Record (c) 2000 APA, all rights reserved)


Abstract

Theoretical and empirical efforts focusing on the interplay between work context and managerial role requirements have been conspicuously absent in the scholarly literature. This paucity exists despite over 60 years of research concerning the requirements of managerial work and with the rather universal recognition that work context meaningfully shapes organizational behavior. The authors developed a theoretical model linking different types of role requirements to different forms of work context. They empirically tested this framework with a nationally representative sample of 8,633 incumbents spanning 52 managerial occupations. Findings from hierarchical linear modeling analyses demonstrated that discrete forms of context (task, social, and physical) exert significant and predictable effects on managerial role requirements. (PsycINFO Database Record (c) 2009 APA, all rights reserved)


Abstract

Conducted a comprehensive review of nearly 200 relevant studies on the model developed by J. R. Hackman and G. R. Oldham (1980) and applied meta-analytic procedures to a large portion of the data. Results show that the available correlational results were reasonably valid in light of the issues examined. Whereas some aspects of the model were supported, evidence is offered that corrections or modifications are needed. Findings do not resolve the issue of the relationship between objective and perceived job characteristics, but they do support the
relationships between job characteristics and employee responses. Task identity showed the highest relationship with work performance. Implications for potential revisions of the model and for practice are discussed. (PsycINFO Database Record (c) 2000 APA, all rights reserved)


Abstract

Reports the results of a meta-analysis that investigated the degree to which dimensions of the Five-Factor Model (FFM) of personality are related to performance in jobs involving interpersonal interactions. The article also investigated whether the nature of the interactions with others moderates the personality-performance relations. The meta-analysis was based on 11 studies (total $N = 1,586$), each of which assessed the FFM at the construct level using the Personal Characteristics Inventory. Results support the hypothesis that Conscientiousness, Agreeableness, and Emotional Stability are positively related to performance in jobs involving interpersonal interactions. Results also support the hypothesis that Emotional Stability and Agreeableness are more strongly related to performance in jobs that involve teamwork (where employees interact interdependently with coworkers), than in those that involve dyadic interactions with others (where employees provide a direct service to customers and clients). Implications for developing theories of work performance and for selecting employees are discussed. (PsycINFO Database Record (c) 2000 APA, all rights reserved)


Abstract

A meta-analysis was conducted to estimate more accurately the bivariate relationships between leadership behaviors, substitutes for leadership, and subordinate attitudes, and role perceptions and performance, and to examine the relative strengths of the relationships between these variables. Estimates of 435 relationships were obtained from 22 studies containing 36 independent samples. The findings showed that the combination of the substitutes variables and leader behaviors account for a majority of the variance in employee attitudes and role perceptions and a substantial proportion of the variance in in-role and extra-role performance; on average, the substitutes for leadership uniquely accounted for more of the variance in the criterion variables than did leader behaviors. (PsycINFO Database Record (c) 2000 APA, all rights reserved)


Abstract

Created a framework specifying 2 dimensions along which work experience (WEX) measures can vary. The dimensions of measurement mode and level of specificity formed 9 separate categories of measures of WEX. The usefulness of the framework was tested with a meta-analysis of 22 studies on WEX gathered from information databases and a manual search of key journals for the past 2 yrs. The relationship between WEX and job performance was positive
regardless of the WEX measure used. The relationship was stronger when hard performance measures such as work samples were used as compared with soft performance measures such as supervisory ratings. Also, some variation was observed in the relationship between WEX and job performance as a function of measurement mode and as a function of level of specificity. (PsycINFO Database Record (c) 2000 APA, all rights reserved) (unassigned)


Abstract

Beginning in the early 1970s, American Telephone and Telegraph (AT&T) and the associated Bell companies have used minicourses for selecting personnel in a variety of jobs involving new technologies. The minicourse approach uses material representative of training content to assess the candidate's ability to acquire knowledge relevant to full-scale training and the job. A major advantage of the minicourse approach is the ability to implement a selection procedure concurrent with the introduction of a new training program. Although minicourses are initially validated using a content-oriented strategy, the AT&T model has included criterion-related validation where possible. The experience of AT&T with seven minicourses is discussed, and validities for training criteria and job performance are reported. Minicourses are a specific example of the general class of predictors known as trainability tests. The results of a meta-analysis indicate that validities for trainability tests are comparable with validities found for ability tests and work sample tests by Hunter and Hunter (1984). (PsycINFO Database Record (c) 2000 APA, all rights reserved) (unassigned)


Abstract

Laboratory investigations reveal that components of rating accuracy are often independent of one another and contribute distinct pieces of information. The generalizability of these lab results to field settings may be limited by real-life rating dynamics. In this study, the ability to generate performance true scores in realistic settings allows an assessment of the extent of independence of components of rating accuracy under conditions approximating those in field settings. Results obtained under realistic conditions from a sample of 125 Ss were compared with results of a meta-analysis of lab results. Overall, the 2 sets of results are not significantly different; however, some correlations, particularly those involving rating leniency, are lower in the realistic setting than in the lab. (PsycINFO Database Record (c) 2000 APA, all rights reserved) (unassigned)


Abstract

Conducted a meta-analysis to examine the relationship between participative decision making (PDM) and performance. Based on a 2-phased process model in which attitudes mediate between PDM and performance, several conditions that enhance the PDM-performance relationship are proposed. These are a group (nonleadership) rather than a leadership setting, a "tell" rather than a "tell and sell" persuasion strategy, and subjective rather than objective measures of participation. The author proposes that confounding other intervention methods with PDM
or organizational outcomes with performance influences the PDM-performance relationship. Using the dual test of differentiating among effect sizes and reducing variance, a moderator analysis of 70 field and laboratory studies provided support for the propositions. Diversity of the results implies that the PDM effect on performance is indirect. (PsycINFO Database Record (c) 2000 APA, all rights reserved) (unassigned)

**Criterion X. Quality Improvement.** A specialty promotes ongoing investigations and procedures to develop further the quality and utility of its knowledge, skills, and services.

1. Provide a description of the types of investigations that are designed to evaluate and increase the usefulness of the skills and services in this specialty. Estimate the number of researchers conducting these types of studies, the scope of their efforts, and how your organization and/or other organizations associated with the specialty will act to foster and communicate these developments to specialty providers. Provide evidence of current efforts in these areas including examples of needs assessed and changed that resulted.

Industrial and Organizational Psychology is somewhat unique as an applied area of psychology in that practitioners are constantly asked to evaluate and provide evidence of the efficacy of their services. This situation is especially true in the area of testing and selection, but is also true in other areas including training and development and organization development, thus, an evaluation is frequently built into the specialty’s interventions. These evaluations then impact future services. As such, SIOP is not directly involved in the assessment of the services offered by individual practitioners or groups of practitioners, these services, especially in the area of testing and selection, do often come under review both by professionals within the specialty and those outside the profession during court cases or government reviews conducted by the EEOC or OFCCP.

I-O psychologists conduct evaluations of the services and practices, procedures, and interventions associated with the specialty in a number of ways including (a) primary, individual studies (b) meta-analytic investigations, and (c) assessments of the economic or social utility of the practices, procedures, and interventions. Thousands of primary studies of the usefulness of I-O psychology-related practices, procedures, and interventions are referenced in the meta-analytic studies listed in Criterion VIII above. Examples of meta-analytic efforts to evaluate the cross-situational effectiveness of services of the specialty are given in Criterion VIII above for most types of practices, procedures, and interventions. As indicated by the above meta-analytic studies, I-O psychologists as scientist/practitioners are very much concerned with the effectiveness of single, primary interventions (or studies) as well as with the generalizability or limits to the effectiveness of their services and interventions across situations. Efforts to evaluate the usefulness of the services of the specialty are reported in journal articles, book chapters including SIOP’s Organizational Frontiers and Professional Practice Series, and in the Society’s newsletter TIP.

Notably, an important on-going effort of SIOP is the work of its task force on the revision of the Principles for the Validation and Use of Personnel Selection Procedures (SIOP, 2003).


2. Describe how the specialty seeks ways to improve the quality and usefulness of its practitioners’ services beyond its original determinations of effectiveness.
The specialty attempts to improve the quality and usefulness of I-O practitioner services by continual self-monitoring of continuing education opportunities and evaluations of the effectiveness of practitioner-oriented continuing education workshops at its annual conference. In addition, a key component of SIOP’s Annual Conference is the offering of dozens of practitioner forums and panel discussions specifically designed to enhance practitioners’ knowledge and skills. In addition, SIOP’s newsletter TIP regularly includes articles with suggestions related to improving the knowledge, skills, and services of I-O psychologists. Finally, as noted throughout this document, SIOP’s Professional Practice Series is a key means for communicating knowledge for advancing the services of I-O psychologists. White papers, webinars and a series of presentations are available to practitioners from SIOP to guide continuous learning. Recently, SIOP has also created a mentoring program for practitioners within the specialty (Kraiger, 2010) and informal benchmarking groups for internal practitioners (e.g., Mayflower Group, Dearborn Group, Local I-O groups) have been in place for more than half a century.

Kraiger, K. (2010). The SIOP Conference at 25 Years: The World has Changed. Presidential address presented at the 2010 SIOP Conference, Atlanta, GA.

3. Describe how the research and practice literature are regularly reviewed for developments which are relevant to the specialty’s skills and services, and how this information is publicly disseminated. Give examples of recent changes in specialty practice and/or training based upon this literature review.

Information concerning research and practice developments is regularly reviewed and disseminated in several ways. Many Industrial and Organizational Psychologists rely upon the publications of SIOP. One of the main publication vehicles is in The Industrial-Organizational Psychologist (TIP), which is published four times per year. This journal features contributions from researchers and practitioners within the field and provides some of the most up to date information on advances in the use of technology, trends in employment issues that affect the practice of Industrial and Organizational Psychology, and thought leading articles from researchers. TIP’s editorial departments include: The History Corner, On the Legal Front, The Academic’s Forum, Practitioners Forum, Practitioner Perspectives, Good Science-Good Practice, Spotlight on Global I-O, and Tip Topics for Students. These sections in addition to news, reports, and other articles provide academics, practitioners, and more general audiences who obtain access to TIP with a real-time update on the events and work occurring in the field.

In addition to TIP, SIOP now publishes a new journal called Industrial-Organizational Psychology: Perspectives on Science and Practice. The format of this journal is that focal articles are submitted, reviewed, and then accepted by the editorial board. Once accepted, the focal articles are then posted on SIOP’s web site for informed commentary to be submitted by SIOP’s membership. Submitted commentary is reviewed and decisions made on acceptance. This journal is published quarterly and has been received with great enthusiasm by the membership for both the topic areas covered by articles as well as the facilitation of ideas an exchange of opinions amongst members of SIOP who may not otherwise have the forum to express thoughts or contribute evidence from applied projects that help others better understand and think through current issues and topics of interest in the field.

The final area worth note with regard to this area is that Industrial and Organizational Psychologists publish chapters reflecting the latest in research and practice through books and chapter published as part of the SIOP Frontiers Series and Professional Practice Series of books. Of course, many Industrial and Organizational Psychologists publish and disseminate
knowledge through a variety of scientific journals, including Journal of Applied Psychology and Personnel Psychology, technical journals, and books. I-O psychologists also promulgate research and methodology through teaching in Business schools, in courses like Organizational Behavior, Human Capital Analytics and Management Consulting.

Training in Industrial and Organizational psychology is closely tied to improvements in research methods and statistical techniques. In recent years, the potential of statistical techniques such as structural equation modeling, multi-level analysis, and especially meta-analytic techniques, has led to major changes in practice as well as in the training of graduate students and professionals.

The coaching movement has led to renewed interest in areas such as leadership, executive assessment, and executive coaching. This interest has been addressed through targeted research reviews, conference presentations, and the new SIOP Leading Edge Consortiums which are focused each year on a different key topic. Studies currently underway are examining the effectiveness of executive coaching as carried out by Industrial and Organizational Psychologists.

Technology has had a major impact on Industrial and Organizational Psychology. This is especially true in areas including training, selection, and recruitment. This has led to new bodies of research dealing with web based training, testing, and recruitment. In turn, this has led to major changes in both current practice and training. Many Industrial and Organizational Psychologist now work side-by-side with Information Processing professionals and are faced with new ethical and delivery challenges. Because of its ease of use, in many cases the use of the web for training and testing involves global as well as local issues. For example, a paper by Industrial and Organizational Psychologists (Cober, Brown, Blumental, Doverspike, & Levy, 2000) was included in the UN Tool Kit on Public Sector selection.


This article was included by the United Nations in the IPMA-HR & UN Release Report—Human Resource Recruitment and Best Talent Retention: Tool Kit for the Public Sector. This was a toolkit that the United Nations released in 2005 that was designed for an international audience and includes 12 articles on HR strategy.

4. Describe how the specialty promotes and participates in the process of accreditation in order to enhance the quality of specialty education and training. How many programs in this specialty are accredited at the doctoral and/or postdoctoral level?

The specialty does not promote or participate in the process of accreditation. As emphasized and described throughout this document, training in I-O psychology does not subscribe to a clinical model of training nor does APA offer accreditation for Industrial and Organizational programs. Although APA does not accredit Industrial and Organizational Psychology programs, Industrial and Organizational Psychology programs can be designated through the ASPPB/National Register Designation Committee. The guidelines for this designation are available at http://www.asppb.net/files/public/1122_doc.pdf.

However, SIOP strongly promotes the enhancement of the quality of specialty education and training in I-O psychology via the publication of Guidelines for Education and Training in Industrial-Organizational Psychology. This document is available on the SIOP web site,
Petition Form


**Criterion XI. Guidelines for Specialty Service Delivery.** Specialty practitioners conform their professional activities to not only the profession's general practice guidelines and ethical principles but also to appropriate specialty guidelines.

1. **Do specialty-specific practice guidelines exist for this specialty? If so, please attach. How do such guidelines differ from general practice guidelines and ethics guidelines?**

   No centralized all-encompassing specialty guidelines exist other than educational and training guidelines, see below.

2. **If specialty-specific practice guidelines for this specialty do not exist, how does your specialty encourage the development of practice guidelines? What body of knowledge provides guidance to this specialty in lieu of guidelines?**

   Given the related nature of these questions, our combined response is as follows: Effective and ongoing communication to I-O psychologists and the public occurs through a variety of mechanisms, described in more detail earlier in this report, including: the annual SIOP Conference; the SIOP website; the quarterly SIOP newsletter (TIP); professional (continuing education) workshops held before each annual conference; the two SIOP book series (Professional Practice and Organizational Frontiers); special SIOP taskforces and reports (e.g., Guidelines for Education and Testing at the Doctoral Level in I-O Psychology). These mechanisms also encourage the development of standards of practice. Also noteworthy is the SIOP publication described above, The Ethical Practice of Psychology in Organizations (Lowman, 1998, 2006).

   Guidelines also exist for those practicing in specific areas. For example, for those involved in testing, assessment, and employee selection, guidelines include the U.S. Department of Labor Interpretative Standards (1971), OFCCP (2006), AERA, APA & NCME Standards for Educational and Psychological Testing (1999), EEOC, CSC, DOL, & DOJ Uniform Guidelines on Employee Selection Procedures (1978; 1979; 1980), SIOP Principles for the validation and use of personnel selection procedures (2003; revised 2018), and ASA Ethical Guidelines for Statistical Practice (1999)), applicable laws [Civil Rights Act of 1964 and 1991] and relevant court cases. In addition to the guidelines listed above, there are graduate level textbooks that provide guidance to the specialty. For example, in the area of testing and selection several commonly used textbooks include Gatewood, Field, & Barrick, 2008; Gutman, 2000; and Cascio & Aguinis (2005) and there are Guidelines and Ethical Considerations for the Assessment Center Operations (2014).

   Job analysis serves as the first step or the basis for many of the functions carried out by the Industrial and Organizational Psychologist. As listed above, job analysis is often carried out under the guidance offered by the Uniform Guidelines or the SIOP Principles. Again, textbooks or reference books are available for each job analysis including Brannick, Levine, and Morgenson (2007).

   For other areas such as training and development (Noe, 2006), organization development (Cummings & Worley, 2009), and coaching and executive assessment (Prien, Shippman, & Prien, 2003), basic guidelines and standards are communicated through journals, basic graduate textbooks, or specialized interest groups or societies.
**References** (Note, All textbooks listed are listed as examples, There are a number of textbooks available in each area and a listing here is not intended as an endorsement):


3. **Describe how the specialty’s practitioners assure effective and ongoing communication to members of the discipline and the public as to the specialty's practices, practice enhancements, and/or new applications.**

Through annual conferences, meetings, publications (e.g., TIP, Industrial and Organizational Psychology: Perspectives on Science and Practice) and other methods, practitioners and academics have an opportunity to interact and to communicate regarding current research, theory and trends in application. The SIOP website ([http://www.SIOP.org](http://www.SIOP.org)) also provides a wide range of information for members, students, organizations and the public.

SIOP members are regularly asked by the media for opinions on workplace issues. In SIOP’s TIP publication, there is an ongoing column to feature SIOP members in the news which typically is between four and six pages in length.

More formally, SIOP maintains a Visibility Committee whose responsibility for the membership is to create a means of communicating the science and practice of I-O Psychology to the public. This committee creates stock presentations that can be used by members to present about I-O Psychology in arenas that include college class rooms, chambers of commerce, and other professional meetings.

As noted earlier, SIOP has more recently worked with other professional associations to reach the public in new ways to better inform about practices and applications that may positively impact business and work life. SIOP is currently working with SHRM to publish a series of white papers on I-O related topics. These articles are being featured throughout SHRM outlets since 2011. SIOP members have also worked with other divisions and initiatives within APA to communicate with broader audiences about the work and impact of I-O Psychology. More specifically, past SIOP President Lois Tetrick has been heavily involved in APA’s Psychologically Healthy Workplace Program and several SIOP members have presented at that conference as well as APA’s annual conference and other, related conferences and meetings.

4. **How does the specialty communicate its identity and services to the public?**

The Society for Industrial and Organizational Psychology is actively involved in educating the public and profession about this specialty. As mentioned in the response above, SIOP maintains and has instituted a standing Visibility Committee to enhance those efforts and public communication efforts. SIOP publishes and distributes brochures describing this specialty (See Appendices C and D). In addition, SIOP’s web site features several sections designed specifically for communication with the general public. These sections of the web site include:

- SIOP’s Consultant locator ([http://www.siop.org/consultantlocator/search.aspx](http://www.siop.org/consultantlocator/search.aspx)). SIOP operates a web site and consultant locator service designed to provides a searchable directory to help those interested in finding an individual or firm with experience and expertise in particular practice areas.
- Media Resources Service ([http://www.siop.org/media/MediaLookup.asp](http://www.siop.org/media/MediaLookup.asp)) that provides a directory of SIOP members that have agreed to be contacted by the media (if requested).
- What is an I-O Psychologist? ([http://www.siop.org/siophoshin.aspx](http://www.siop.org/siophoshin.aspx)) is a site that provides a high level overview of this discipline.
- Student outreach section ([http://www.siop.org/studentdefault.aspx](http://www.siop.org/studentdefault.aspx)) provides resources for college students who may believe they are interested in this discipline to learn more about it and start to establish some professional connections.
provides the brochures mentioned above along with other communication collateral that communicates what the field is about.

- The SIOP Exchange (http://www.siopexchange.typepad.com/) is a blog that is maintained by SIOP members and available for public access. On this blog, current topics in I-O are actively discussed and news that may affect the field is linked into the interface.
- Other social media outreach that is sponsored and maintained by SIOP includes pages on Facebook, a professional group on LinkedIn, and the establishment of wikis to facilitate the exchange of learning related resources.

### Criterion XII. Provider Identification and Evaluation. A specialty recognizes the public benefits of developing sound methods for permitting individual practitioners to secure an evaluation of their knowledge and skill and to be identified as meeting the qualifications for competent practice in the specialty.

1. Describe how and by whom the specialty identifies those who are qualified to practice in the specialty.

SIOP provides guidelines for the training of Masters and Ph.D. level Industrial and Organizational Psychology (http://www.siop.org/educatorsdefault.aspx); this document was last updated in 1999. Although APA does not accredit Industrial and Organizational Psychology programs, Industrial and Organizational Psychology programs can be designated through the ASPPB/National Register Designation Committee. The guidelines for this designation are available at http://www.asppb.net/files/public/1122_doc.pdf.

In many states, there is a requirement that psychologists be licensed. The licensure requirements for Industrial and Organizational Psychologists vary by state, although most states follow a generalist model. The training guidelines provide by SIOP are consistent with the preparation and knowledge base required for sitting for licensure exams and to fulfill other license-related criteria, and those training guidelines are consistent with the designation criteria of the ASPPB/National Register.

Applicants for membership in Society for Industrial and Organizational Psychology (Div 14) are required to submit documentation that they have received doctoral-level training in this field, including a dissertation that is psychological in character. Both the Membership Committee and the SIOP Executive Office participate in evaluation of the credentials of applicants.

The American Board of Professional Psychology (www.abpp.org) also certifies or technically offers a diplomate in the area of Industrial and Organizational Psychology. The diplomate is in the broader area of Organizational and Business Consulting Psychology, which replaced the older Industrial and Organizational Psychology. The Organizational and Business Consulting Psychology diplomate covers two areas, Consulting Psychology and Industrial and Organizational Psychology. Licensure is a requirement for admission to the exam for the diplomate. More information can be obtained at http://www.abpp.org/i4a/pages/index.cfm?pageid=3314. The ABPP has been certifying Industrial-Organizational psychologist specialists for over 50 years.
2. **Describe how and by whom the specialty assesses the actual knowledge and skills of individuals who wish to be identified as practitioners in this specialty.**

Beyond the mechanisms described above, there is no specialized mechanism for assessing knowledge and skills, although assessments of this type are often part of the process of licensure (in those states where licenses are available for Industrial and Organizational psychologists or part of the process of obtaining a diplomate or ABPP in Organizational and Business Consulting Psychology with an Industrial and Organizational specialization.)

SIOP currently is exploring the possibility of creating a certification process that would be administered to would-be practitioners in this field. Those conversations, however, are at a fairly introductory level and would require cooperation from a number of stakeholders.

It should be noted that I-O Psychologists have played central roles in setting certification standards and writing items for exams related to licensing associated with the American Board of Professional Psychology as well as the Professional and Senior Professional in Human Resources Management (PHR and SPHR) that is administered and maintained by the Human Resources Certification Institute.

3. **Describe how and by whom the specialty educates the public and the profession concerning those who are identified as a practitioner of this specialty. How does the public identify practitioners of this specialty?**

The Society for Industrial and Organizational Psychology is actively involved in educating the public and profession about this specialty and has instituted a standing Visibility Committee to enhance those efforts. SIOP publishes and distributes brochures describing this specialty (See Appendices C and D). 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.

Although not under the control of SIOP, various states have web sites or mechanisms for identifying psychologist licenses in the respective states. ABPP has a website that identifies individuals who have obtained diplomates in Organizational and Business Consulting Psychology or Industrial and Organizational Psychology.

For additional information on the communication of SIOP with the general public, please see the response to Section XI number 4, which provide more detail on other outreach efforts SIOP is involved in and maintains.
4. **Estimate how many practitioners there are in this specialty (e.g., spend 25% or more of their time in services characteristic of this specialty and provide whatever demographic information is available).**

The most recent count of professional members in SIOP is 4689. Of this membership, 51% identify themselves as full or part-time practitioners ($N=2,391$). Practitioners in this specialty are primarily employed in private sector companies, Federal or State Government Agencies, non-profit research organizations, are independent practitioners, or members of larger consulting organizations. It should be noted that in this discipline especially, there are many researchers and academics who spend considerable time in practice sharing the latest in research findings as well as maintaining a healthy connection with current workplace and organizational issues.

Additional demographic information on membership: 43% male, 59% Caucasian (30% non-specified)
Appendix A
BYLAWS
ARTICLE I: NAME AND PURPOSE

1. The name of this organization shall be the Society for Industrial and Organizational Psychology, Inc. (hereinafter referred to as the “Society”).

2. Its mission is to enhance human well-being and performance in organizational and work settings by promoting the science, practice, and teaching of Industrial and Organizational Psychology. Towards this end, the Society:

   2a. supports SIOP members in their efforts to study, apply, and teach the principles, findings, and methods of Industrial and Organizational Psychology.
   2b. provides forums for Industrial and Organizational Psychologists to exchange research, insights, and information related to the science, practice, and teaching of Industrial and Organizational Psychology.
   2c. identifies opportunities for expanding and developing the science and practice of Industrial and Organizational Psychology;
   2d. monitors and addresses challenges to the understanding and practice of Industrial and Organizational Psychology in organizational and work settings;
   2e. promotes the education of current and future Industrial and Organizational Psychologists;
   2f. promotes public awareness of the field of Industrial and Organizational Psychology.
   2g. foster cooperative relations with allied groups and professions;
   2h. encourage its members to uphold the provisions of the American Psychological Association’s Ethical Principles of Psychologists and Code of Conduct, which have been adopted as the ethical code of the Society;
   2i. contribute to the broad advancement of psychology.

The purposes for which this corporation is formed are purely scientific, professional, and educational and not for financial gain, and no financial gain shall ever accrue to any member of this Corporation, nor any other person or institution, in the conduct of same.

ARTICLE II: MEMBERSHIP

1. The Society shall have four categories of membership: Society Member, Society Fellow, Society Associate, and Society Student Affiliate. Criteria for membership are specified in the following definitions of each membership category.

2. Society Member status shall be open to applicants who satisfy the conditions stated below.

   2a. The minimum standard for election to Society Member status shall be:
      a) The receipt of an earned doctoral degree based in part upon a psychological dissertation conferred by a university that is regionally accredited, or that has achieved such accreditation within five years of the year the doctoral degree was granted, or a graduate program in a university of equivalent standing outside the United States.
      b) Engagement in professional activities, as demonstrated by research, teaching, and/or practice, which are related to the purpose of the Society as stated in Article I, Section 2. Such activities may be performed in a variety of settings, such as private business or industry, educational institution, consulting firm, government agency, public service, foundation, or self-employment.

   2b. The minimum standard for Society Associate Members who wish to apply for election to Society Member status shall be meeting eligibility requirements established by the Executive Board.

   2c. Society Members shall be entitled to the rights and privileges of the Society without restriction. The designation “Society Member” as used in these Bylaws shall be deemed to include Society Fellows, except where there is an express provision to the contrary.
3. Society Fellows shall be distinguished researchers and professionals who have made an unusual and outstanding contribution to the field.

3a. As evidence of having made an unusual and outstanding contribution to industrial-organizational psychology, a candidate for Society Fellow status must have done work that is widely recognized and accepted by other members of the Society as having advanced their own thinking and practice. In order for this impact to have occurred, it is generally expected that he or she will have generated new knowledge, formulations, or programs that contribute to theory, methods, or practices relevant to industrial-organizational psychology, and that these contributions will have been set forth in publications generally available to the profession or otherwise widely communicated through means such as participation in the programs and meetings of professional groups or associations.

3b. Society Fellows shall at the time of their election to Society Fellow status have been Society Members for no less than two years. Society Fellows who are also members of the APA, CPA, or EAWOP may seek Fellowship status in those organizations as part of the SIOP Fellow application process but such Society Fellows must also be approved by those organizations for Fellowship status. Society Fellows who have not also been approved for Fellowship status in the APA, CPA, or EAWOP applied for on the basis of their SIOP membership may only refer to themselves as being Fellows of SIOP but not of these other associations.

3c. Society Fellows shall be entitled to the rights and privileges of the Society without restriction.

4. Society Associates who do not meet the requirements for Society Member status as stated in Article I, Section 2, shall satisfy the conditions stated below.

4a. Society Associates shall be presently engaged primarily in professional or graduate work related to the purpose of the Society as stated in Article I, Section 2.

4b. The minimum standard for selection to Society Associate status shall be (a) Engagement in professional activities as described in Article II, Section 2 and completion of at least two years of graduate work in Psychology in a regionally accredited graduate school or (b) Completion of a Master’s degree in psychology from a regionally accredited graduate school plus professional activities as described in Article II, Section 2.

4c. Society Associates may not vote or hold office in the Society but are entitled to all rights and privileges of the Society not specifically denied them by these Bylaws.

4d. Society Associate Members who meet the eligibility requirements established by Executive Board policy may apply to become a Society Member.

5. Society Student Affiliates shall be students presently engaged in formal study related to the purpose of the Society as stated in Article I, Section 2e.

5a. Society Student Affiliates shall not have voting privileges accorded to Society Members, but they are invited to participate in the Society’s program of activities.

6. The Membership Committee of the Society will review applications and make recommendations for Society Member and Society Associate status in the Society. Applicants will be notified of the decision in a timely manner.

6a. Rejected applicants may resubmit their application with additional supporting information.

6b. Society Associates who meet the standards for Society Member status will be so advanced upon application to and recommendation by the Membership Committee.

7. The Fellowship Committee of the Society will review the qualifications of all persons nominated for Society Fellow status. A Society Member may be nominated for Society Fellow status by either a Society Member or a Society Fellow. SIOP Fellow applicants must be sponsored by three Society Fellows. The nominator may be
one of the sponsors if he or she is a Society Fellow. Candidates for Fellow status shall specify in their application if they are also applying for new Fellowship status in APA or APS as part of the SIOP Fellow application process. Such applicants must also comply with the procedures prescribed for new Fellows by the organization to which the nomination is being made. Persons who are approved for SIOP Fellow status but not for Fellowship status in another association (APA or APS) may not refer to themselves as being a Fellow in the other association(s).

7a. The Fellowship Committee will submit recommendations to the Executive Board; the Executive Board will act upon the recommendations of the Fellowship Committee and will approve candidates.
7b. Approved candidates seeking fellow status in APA or APS will be recommended by the Society to the intended organization for final approval.
7c. If a nominee for Society Fellow status is not approved by the Executive Board, or if a candidate for APA or APS fellowship is not approved by the organization to which the nomination is submitted, the Chair of the Fellowship Committee notifies the nominator.

8. All elections to membership are not effective until payment of dues and by satisfying any other regulations established by the membership of the Society.

9. A Society Fellow, Society Member, or Society Associate may be dropped from membership for conduct which tends to injure the Society, or to affect adversely its reputation, or which is contrary to or destructive of its purpose, or on the basis of violations of the Society’s ethics code. Investigations and taking of actions will be governed by rules and procedures established by the Executive Board.

9a. If revocation of membership or restrictive disciplinary action is being considered following a completed investigation, those who are implicated will have an opportunity to appeal to the Executive Board before a vote on the restriction is taken. All restrictive disciplinary decisions approved by the Executive Board will be final.

ARTICLE III: OFFICERS

1. The officers of this organization shall be: a President, a President-Elect, the immediate Past-President, a Financial Officer/Secretary, and eight elected members of the Executive Board, together with the Division Representatives the APA Council of Representatives provided by the APA Bylaws.

2. The Division Representatives to the APA Council of Representatives shall be elected according to the Bylaws and regulations of APA.

3. It shall be the duty of the President to preside at all meetings of the Society, to act as chair of the Executive Board, to exercise general supervision over the affairs of the Society, and to be an ex-officio member of all committees.

4. It shall be the duty of the President-Elect to serve on the Executive Board and to preside in the absence of the President, to chair the Election Committee, and to carry out such other duties as may be delegated to him or her by the President.

5. Each of the eight elected members of the Executive Board, as well as the officer elected to the position of Financial Officer/Secretary, shall perform such duties as specified in these bylaws or in the SIOP Administrative Manual.

6. It shall be the duty of the Financial Officer/Secretary to have executive oversight of all Society funds, dues collections, disbursements, maintenance of financial records, preparation of financial statements, and financial planning in conjunction with the Executive Board. The Financial Officer/Secretary shall also serve as the
Secretary of the corporation and also as the officially designated Secretary of Division 14 of the American Psychological Association, and will be responsible for carrying out all official functions associated with those roles. He or she shall serve as a member of the Executive Board.

7. The APA Division Representatives shall perform the duties outlined in the APA Bylaws. They shall also serve as members of the Executive Board.

8. In the absence of any APA Division Representative at a meeting of the APA Council of Representatives, the President is authorized to appoint such alternates as may be permitted by APA.

ARTICLE IV: EXECUTIVE BOARD

1. There shall be an Executive Board of the Society, consisting of the President, the President-Elect, the immediate Past-President, a Financial Officer/Secretary, and eight elected members, together with the Division Representatives to the APA Council of Representatives approved by the APA Bylaws.

2. The Executive Board shall have general supervision over the affairs of the Society. It may use mail ballots whenever it is deemed appropriate in matters affecting Society policy. It shall meet at least once a year, and shall make a full report to the membership at the time of each scheduled business meeting.

3. During the intervals between Executive Board meetings, an Emergency Action Subcommittee of the Executive Board shall be empowered to take action on behalf of the Executive Board when, in the President’s judgment, time does not permit contacting all members of the Executive Board before an action is needed. The Emergency Action Subcommittee shall consist of the following six or seven members of the Executive Board: President, Immediate Past-President, President-Elect, the Financial Officer/Secretary, and the three senior elected members (which in some years could include the Financial Officer/Secretary). Depending on the staggered terms of the Financial Officer/Secretary and elected members, every third year there will be two senior elected members on the Emergency Action Subcommittee (those serving in their third year on the Executive Board). Actions of this group require a unanimous vote. Any actions taken by this Emergency Action Subcommittee shall be reported in full by the President at the next scheduled meeting of the full Executive Board.

4. The Executive Board and Emergency Action Subcommittee may transact business by electronic media by voting on any proposal mailed or e-mailed by the President or from the Administrative Office with the approval of the President. Thirty (30) days from the mailing or e-mailing shall be allotted for the return of the vote thereon to the Administrative Office. The voting shall be deemed closed at the end of the 30-day period or when all members have returned their vote. Any proposal not receiving a majority affirmative vote, or 2/3rds majority when required, at the end of the 30-day period shall be deemed lost.

5. Wherever in these Bylaws the term “Executive Board” is used, it shall be construed to mean and be equivalent to “Board of Directors” and wherever the terms “Executive Board Member” or “Member of the Executive Board” or the like are used, they shall be construed to mean and be equivalent to “Director.”

ARTICLE V: NOMINATIONS AND ELECTION

1. The Election Committee (see Article VII, Sections 1 and 5) shall conduct and supervise all elections of the Society. The officers and members of the Executive Board shall be elected by the members of the Society.

2. The Election Committee, using the facilities of the Administrative Office, shall distribute a call for nominations each year. The Elections Committee shall establish the Society’s annual election date. The nomination process shall allow for at least three nominees each office to be filled. The following will govern the call for nominations:
   2a. Schedule of terms of office:
President-Elect: to serve a term of one year, as President for the subsequent year, and as immediate Past-President the following year.

Representatives to APA Council: to serve staggered terms of three years, or in accord with any rules set forth by the APA Bylaws governing their term of office. In the event that apportionment ballots would result in an unusual number of Representatives with identical terms, the Executive Board will adjust the length of the term for one or more seats being contested at that time.

Executive Board Members (including the Financial Officer/Secretary): to serve staggered terms of three years. Either three new Executive Board Members or two new Executive Board Members and the Financial/Officer/Secretary will be elected each year.

2b. Eligibility for office:

For President-Elect and for Members of the Executive Board (including the Financial Officer/Secretary), any Society Fellow or Society Member.

For Division Representative to the APA Council, any Society Fellow or Society Member who is also a Fellow or Member of APA.

3. The Election Committee chair shall prepare a ballot for all offices for which terms expire each year.

3a. The Election Committee of the Society shall review the nomination data and certify to the Administrative Office a list of names of persons who are nominated for each office, plus any persons nominated under Section 3, paragraph b, below. The ballot shall include at least three and no more than five Society Members nominated nominees for the office of Society President-Elect, and Financial Officer/Secretary, at least two and no more than five Society Members nominated candidates for each vacancy on the Executive Board, and at least two and no more than three nominees for each APA Division Representative to be elected. In formulating the ballot, the Elections Committee shall comply with election policies and procedures enacted by the Executive Board.

3b. At its direction, in order to promote better representation as to geographic location, sex, institutional affiliation, age, etc., of the officers of the Society, the Election Committee may place one additional name on the ballot for each office for which election is being held, without reference to the results of the nominating balloting, provided the consent of the individual has been obtained. Using this provision is subject to approval by the Executive Board.

3c. Before placing a nominee on the ballot the Administrative Office shall secure in writing a statement that the nominee is willing to be a candidate for the office.

4. The Society may conduct its nominations and elections, other than APA Division Representatives, through the facilities selected by the Executive Board.

5. The Election Committee shall send its list of nominees for APA Division Representative(s) to the Executive Officer of APA before the date specified by APA.

6. All elections shall be by a preferential voting system, according to the procedures established by the Executive Board.

7. The Election Committee shall file a report with the Executive Board and shall report the names of those elected to the membership at the next scheduled business meeting of the Society.

8. Officers shall assume office on the first day following the close of the Society’s business meeting held during the Society’s annual conference at which their election was reported, except in the case of APA Division Rep-
resentatives who will assume office on the first day following the close of the APA Council of Representatives meeting at which their election was reported.

9. In the event that the number of APA Division Representatives is reduced in accordance with APA Bylaws, the recall of Division Representatives will be accomplished by employing the following rules in sequence:

9a. Failure to nominate to fill expiring term(s).
9b. Equalization of representation by length of term remaining; i.e., if two or more representatives have the same terms remaining, the appropriate number of representatives would be recalled by lot conducted by the Election Committee Chair.

10. In the event that an individual elected to the position of President-Elect, Secretary, Financial Officer, or Executive Board Member is unable to assume office, then the election ballots for the affected position would be tabulated as if the individual unable to assume the elected office was not on the ballot. The newly elected individual would serve a term of office as determined by Bylaws Article V Section 13 or 17.

11. In the event that an individual elected to an APA Council position is unable to assume office, the election ballots for the Council representative position would be tabulated as if the individual unable to serve was not on the ballot. This procedure would be in accord with APA Rule (1994) 110-5.5. The newly elected individual would serve the full term of office.

12. In the event that a President in succession to serve as Past-President is unable to assume office, then the preceding Past-President would be asked to serve the unexpired term. If unable to do so, the next preceding Past-President would be asked to serve, and if unable to do so the process would continue until the most immediate Past-President able to serve was identified and assumed the office for the unexpired term.

13. In the event the position of President-Elect is vacant prior to the Society’s annual election date, the election process would be modified and possibly extended in time if necessary to include two positions, President and President-Elect, on the ballot for the upcoming election year. The unexpired term of the President-Elect position only would be filled by the individual receiving the next largest number of votes (as certified by the Society’s Election Committee) in the most recently completed election. The new President-Elect would not necessarily assume the position of President, but would be subject to the outcomes of the Society’s election process. The individual assuming the position of President-Elect would have his/her name placed on the ballot for the position of President along with others nominated during the Call for Nominations in accord with the Society’s Administrative Manual (Section III F3).

If the President-Elect position vacancy occurs after the Society’s annual election date, then the individual receiving the next largest number of votes (as certified by the Society’s Election Committee) in the most recently completed election would assume the position of President-Elect. Furthermore, that person would continue into the positions of President and Past-President.

14. In the event the position of President is vacant, then in accord with the Society’s Administrative Manual (II B), the President-Elect would assume the duties of the President for the balance of the unexpired term. If the vacancy occurs prior to the Society’s annual election date, the Society’s regular election process would be modified to include two positions for the upcoming election year: President and President-Elect. The President-Elect would complete the unexpired term of the President and then move to the position of Past-President. If the vacancy occurred after the Society’s annual election date, the President-Elect would assume the duties of the President for the unexpired term and then would continue as President as duly elected.

Because this would create a vacancy for the position of Past-President (for the time period in which the individual unable to serve as President would have served as Past-President), the current Past-President would be asked to serve a second term. If unable to do so, the next preceding Past-President would be asked to serve. The process would continue until the vacancy was filled with the most recent Past-President able to serve in
that position.

15. In the event the position of Past-President is vacant and regardless of when the unexpired term occurs, the most immediate Past-President would be asked to complete the balance of the term of office. If unable to do so, the next preceding Past-President would be asked to serve. The process would continue until the vacancy was filled with the most recent Past-President able to serve in that position for the balance of the term.

16. In the event an APA Council Representative position becomes vacant, then the guidelines set forth by APA Rule 110-5.5 would be followed. If the individual is unable to complete a term and there is only one meeting remaining to complete his or her term, the Executive Board would appoint an individual qualified to fill the vacancy. Otherwise, a new Representative would be elected with all deliberate speed, and an interim appointment of a qualified individual would be made by the Executive Board.

17. In the event the position of Member of the Executive Board becomes vacant at any time during the term of office, that vacancy would be filled by the individual receiving the next largest number of votes (as certified by the Society’s Election Committee) in the most recent election for the position in question, and that person would serve the balance of the unexpired term. If there were less than eighteen months remaining to the term of office for the vacated position, then nothing would preclude the individual assuming the vacant position from having his/her name placed on the ballot to complete a full term of office if so nominated during any subsequent Call for Nominations held by the Society. Prospective nominees who have served 18 months or more of an unexpired term in the position of Member of the Executive Board are not eligible to be nominated or elected to complete a full term of office for the aforementioned position. If the vacancy occurs after the Society’s annual election date in the last year of a three-year term, then the Executive Board would appoint a qualified individual to assume the vacant position. This individual could serve in the position again if so nominated and elected.

18. An individual who is elected SIOP President but is unable, due to death or illness, to serve in the role shall be recognized as President in SIOP historical records. This acknowledgement will not affect the line of succession; it is intended to provide recognition of that individual as having been elected SIOP President.

ARTICLE VI: MEETINGS

1. A business meeting of the Society may take place in conjunction with the Society’s annual conference. Additional meetings may be scheduled at a time and location designated by the Executive Board.

2. A quorum for the transaction of business shall consist of not fewer than one tenth of the voting Members of the Society.

3. On all matters calling for action by the membership of the Society, each Society Member shall have one vote, and no voting by proxy shall be allowed. Associate Members may not vote, as provided by Article II, Section 4.

4. Business meetings shall be conducted according to Kesey’s rules of order.

ARTICLE VII: COMMITTEES

1. Standing committees of the Society are permanent committees formed to do their work on a continuing basis. Standing committees shall be established by majority vote of the Executive Board.

2. The authorization or reauthorization for each standing committee of the Society will be for a maximum period of five years. Continuation of a standing committee after five years will require reauthorization by a majority vote of the Executive Board. If the continuation of a committee is not authorized, a change to reflect this decision will require a majority vote of the Executive Board.

3. Ad Hoc committees may be established by the President with consent of the Executive Board. Ad Hoc
committees will be for the purpose of addressing a need not able to be filled by current standing committee. Ad Hoc committees will be appointed by the President of the Society with the advice and consent of a majority of the Executive Board.

4. The authorization or reauthorization for each Ad Hoc committee of the Society will be for a maximum period of two years. Continuation of an Ad Hoc committee after two years will require reauthorization by a majority vote of the Executive Board. Staffing of a reappointed Ad Hoc committee shall be made by the President of the Society with the advice and consent of the Executive Board and may include reappointments of current members of the committee to a maximum of four years service on the Ad Hoc committee.

ARTICLE VIII: DUES

1. Dues for Society membership will be recommended by the Executive Board and shall require a 2/3 affirmative vote of the Executive Board. All dues increases shall be announced to the membership by February 1 and members will have at least 60 days to provide input to the Executive Board before a final vote on the dues is taken at the spring meeting of the Executive Board. If the Executive Board recommends a change in dues that exceeds 15%, then a majority vote of the membership at a scheduled meeting of the society or via a mailing to the membership is required to approve such a change in dues.

2. Non-payment of the Society’s dues for one year constitutes resignation from the Society.

ARTICLE IX: AMENDMENTS

1. The Society, by vote of two-thirds of the Society Members present at a scheduled business meeting of the Society, or by a majority vote of the Society Members voting on a mail or electronic ballot, may adopt such amendments to these Bylaws as have been (a) read at the preceding Society business meeting, or (b) mailed to the last known post office address of each Society Member at least two months prior to vote, or (c) published in “The Industrial-Organizational Psychologist” at least two months prior to the vote, or (d) e-mailed to the last known e-mail address of each Society Member at least 30 days prior to the vote by the Administrative Office with the approval of the President.

2. In the case of an electronic ballot, the voting shall be deemed closed 30 days after the first day the ballot was open for voting. Any proposed amendment not receiving a majority affirmative vote of the voting members at the end of the 30-day period shall be deemed lost.

ARTICLE X: VOTING UPON SHARES OF OTHER CORPORATIONS

Unless otherwise voted by the Executive Board, the President shall have full power and authority on behalf of the Society to vote either in person or by proxy at any meeting of shareholders of any corporation in which this Society may hold shares, and at any such meeting may possess and exercise all of the rights and powers incident to the ownership of such shares which, as the owner thereof, this Society might have possessed and exercised if present. The Executive Board may confer like powers on any other person and may revoke any such powers as granted at its pleasure.

ARTICLE XI: FISCAL YEAR

The fiscal year of the Society shall end on June 30.

ARTICLE XII: PROHIBITION AGAINST SHARING IN SOCIETY EARNINGS

1. No Society Member or officer or person connected with the Society, or any other private individual shall receive at any time any of the net earnings or pecuniary profit from the operations of the Society, provided that this shall not prevent payment to any such person of such reasonable compensation for services rendered to
or for the Society in effecting any of its purposes as shall be fixed by the Executive Board; and no such person or persons shall be entitled to share in the distribution of any of the corporate assets upon the dissolution of the Society. All Society Members shall be deemed to have expressly consented and agreed that upon such dissolution or winding up of the affairs of the Society, whether voluntary or involuntary, the assets of the Society, after all debts have been satisfied, then remaining in the hands of the Executive Board shall be distributed, transferred, conveyed, delivered and paid over in such amounts as the Executive Board may determine or may be determined by a court of competent jurisdiction upon application of the Executive Board, exclusively to an organization organized and operated exclusively for scientific and educational purposes within the meaning of Section 501(c)(3) of the Internal Revenue Code of 1954, as amended.

2. Notwithstanding any other provisions of these Bylaws, no Society Member, officer, employee, or representative of this Society shall take any action or carry on any activity by or on behalf of this Society not permitted to be taken or carried on by an organization exempt under Section 501(c)(6) of the Internal Revenue Code of 1954, as amended, or as they may hereafter be amended, or by an organization contributions to which are deductible under Section 170(c)(2) of such Code as they now exist or as they may hereafter be amended.

ARTICLE XIII: INVESTMENTS

The Society shall have the right to retain all or any part of any securities or property acquired by it in whatever manner, and or reinvest any funds held by it, according to the judgment of the Executive Board, without being restricted for class of investments which a trustee is or may hereafter be permitted by law to make or any similar restriction, provided, however, that no action shall be taken by or on behalf of the Society if such action is a prohibited transaction or results in the denial of the tax exemption under Sections 503 or 507 of the Internal Revenue Code of 1954, as amended, or as it may hereafter be amended.

ARTICLE XIV: SEAL

The seal of the Society shall be circular in form, bearing its name, the words District of Columbia, and the year of its incorporation. The Administrative Office shall have custody of the seal and may affix it (as may any other officer if authorized by the Executive Board) to any instrument requiring the Society seal.
Appendix B
Curriculum: Pennsylvania State University

Core Psychology Courses (4 to 5)
All graduate students are required to demonstrate competency in the core areas of psychology, in particular the Biological Bases of Behavior, Cognitive-Affective Bases of Behavior, Social Bases of Behavior, Individual Differences, and History and Systems through coursework or directed study.

Core I-O Psychology courses (4 to 5)
All graduate students will be required to take four of the five courses listed below. However, all five courses are recommended as foundational preparation for the comprehensive exam.

- PSY 522A: Personnel Testing and Selection
- PSY 522B: Performance Evaluation and Appraisal
- 523A: Micro Organizational Behavior
- PSY 523B: Macro Organizational Behavior
- PSY 538: Training and Development in Organizations

Special Topics Seminars (at least 2)
All graduate students will be required to take at least two special-topics seminars offered by members of the I-O area faculty on a rotating basis (so the same course will not be taught more often than once in three years). These courses are often numbered PSY597, but other course numbers are also used. Some such courses that have been offered in the past include: Emotions, Customer Service, Teams, Diversity, International I-O, Decision-making, Creativity, Leadership, Counterproductive behaviors, Individual Differences, and Work and Family Perspectives.

Quantitative Methods (at least 2)
All graduate students will be required to take the following courses, usually in their first year in the program. Additional methodological and statistical courses are optional but encouraged; see the HDFS program.

- PSY 507: Data Analysis I
- PSY 508: Data Analysis II

I-O Practicum (at least 6)
All graduate students are required to be enrolled in the I-O Practicum course (PSY 534) for six consecutive semesters beginning with the first year in the program. First-year students attend practicum, but have a substantially reduced involvement in and responsibility for practicum.
projects.

All I-O graduate students are required to take at least two 500-level courses in Psychology outside of the area of I-O. These might be taught by I-O faculty; you should check with your academic advisor to determine what courses might count as a special topics seminar versus courses outside of I-O. Note that I-O graduate students must also meet the Department of Psychology's breadth requirement. The I-O program strongly encourages you to take 500-level courses to satisfy any of the Department's breadth requirement options, but some 400-level courses may be used if approved by your advisor. Note that courses taken to satisfy the I-O Additional Psychology Courses requirement often can also be used to satisfy the Department breadth requirement, depending on the option you choose and the specific courses you take. See your advisor about this.
Appendix C – Science for a Smarter Workplace Brochure

What Is SIOP?
The Society for Industrial and Organizational Psychology (SIOP) is an international professional organization with an annual membership of more than 8,000 industrial-organizational (I-O) psychologists. SIOP’s mission is to enhance human well-being and performance in organizational and work settings by promoting the science, practice, and teaching of I-O psychology. The Society provides a platform for scientists, academics, consultants, and practitioners to collaborate, implement, and evaluate cutting-edge solutions to workplace challenges.

SIOP Member Snapshot
• With an annual membership of more than 8,000 across the United States and the world, SIOP is a diverse group.
• SIOP members are experts, most of them possessing doctoral degrees.
• SIOP is Division 14 of the American Psychological Association and an organizational affiliate of the Association for Psychological Science.
• SIOP members have testified before Congress, written federal legislation, and have served as consultants and experts for numerous companies from small private firms to large multinational corporations.

Online Resources
More information about I-O psychology can be found on the SIOP website.

www.siop.org

On SIOP’s website you will find information about the Society’s annual conference and Leading Edge Consortium as well as an array of free resources, including webinars, white papers, continuing education credit listings, graduate training program information, job listings, a book store, and pages devoted specifically to student, professional, educator, and media needs.

Industrial and Organizational Psychology:

Science for a Smarter Workplace

Society for Industrial and Organizational Psychology
440 E. Poe Rd. Suite 101
Bowling Green, OH 43402
www.siop.org
A majority of our lives are spent working.

What happens at work can have a huge impact on people and the organizations for which they are employed. Industrial-organizational (I-O) psychologists use psychology to improve the workplace for both employees and employers.

**What Is I-O Psychology?**

I-O psychology is the scientific study of working and the application of that science to workplace issues facing individuals, organizations, and teams. It lies at the crossroads of business and psychology. Just as finance professionals advise organizations on how to maximize their financial capital, I-O psychologists teach organizations how to maximize their human capital.

I-O psychologists apply the scientific method to investigate issues of critical relevance to individuals, businesses, and society. Through these efforts, they advance the science of work, leading to smarter and more innovative evidence-based HR and organizational tools and solutions. I-O psychologists work toward—

**Maximizing Employee Potential Through:**

- **Testing:** test development, interpretation, and analysis, including tests of job knowledge, skills, reasoning, personality, and physical abilities; assessment centers; multimedia testing (Web-based, video, etc.).
- **Selection and Promotion:** recruiting, hiring, structured interviews, succession planning, performance appraisal/management.
- **Performance Evaluations/Assessments:** design of job performance measurement systems for feedback and performance improvement.
- **Training and Development:** computer-based learning; executive coaching, management development, mentoring, and leadership; competency modeling; team design and training; measuring effectiveness.
- **Employee Attitudes and Satisfaction:** involvement and empowerment; retention; job satisfaction; burnout, conflict, and stress; aging and retirement; gender issues; resignation and voluntary turnover.
- **Employee Motivation:** factors that motivate employees to perform effectively.
- **Compensation and Benefits:** pay, perks, rewards, and recognition.
- **Employee Behavior:** harassment, absenteeism, and discipline.

**Maximizing Organizational Potential Through:**

- **Change Management:** mergers and acquisitions, group processes, process reengineering, productivity and quality improvement, strategic planning.
- **Job Design and Evaluation**
- **Organizational Structure:** workforce planning; downsizing and rightsizing.
- **Cross-Cultural and Diversity Issues:** global, cross-cultural and diversity issues.
- **Impact of Technology in the Workplace**
- **Customer Service Issues**

**Strategic Planning:** understanding and advising on how to use human capital to achieve organizational goals.

**Workplace Health:** ergonomics, human factors, safety, stress, workplace violence.

**Legal:** analysis of issues and expert testimony on EEO/AA, OSHA, and other issues; discrimination; jury decision processes.

**Work-Life Programs:** flexible work arrangements, work-life balance, working parents, and telecommuting.

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**Job Titles of I-O Psychologists:**

- President, Vice President, Director, Staff Member, Manager, Principal, Consultant of:
  - Organizational Development; Organization Effectiveness; Talent Management; Management Development; Workforce Insights; Human Resources; Human Resources Research; Employee Relations; Training and Development; Leadership Development; Selection Systems; Evaluation and Assessment; Testing Programs; Leadership Research; Applied Behavioral Research; Optimization; Leadership, Learning, and Performance; Career Planning

- Full, Associate, Assistant Professor of:
  - Industrial-Organizational Psychology, Industrial and Organizational Psychology, Organizational Psychology, Industrial Psychology, Work Psychology, (General) Psychology, Management, Organizational Behavior

- Other titles include:
Our Purpose

The Society for Industrial and Organizational Psychology is the premier professional association dedicated to advancing the field of I-O psychology. More than 10,000 members worldwide embrace the value of their SIOP membership to help fulfill their career and professional development goals.

SIOP’s mission is to enhance human well-being and performance in organizational and work settings by promoting the science, practice, and teaching of industrial-organizational (I-O) psychology. This mission is activated by offering members superlative member benefits and services.

Join us at these SIOP events!

SIOP Annual Conference
www.SIOP.org/conferences

Leading Edge Consortium
www.SIOP.org/LEC

Your path to success as an I-O psychologist

440 E. Poe Road, Suite 101
Bowling Green, OH 43402
419-353-0032
siop@siop.org
www.siop.org

SIOP Membership:
Your Path to Success as an Industrial-Organizational Psychologist

Follow SIOP on social media:
As my career has progressed, I've come to realize that SIOP is special and unusual among professional organizations. As a community, SIOP is characterized by deep scientific and content expertise, a strong ethical core, and genuine passion and curiosity.

-Dr. Alexis Fink
SIOP Fellow
SIOP Member since 2006

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**What value does SIOP membership provide?**

A small annual investment provides numerous rewards to help you keep up to date with your colleagues and the I-O profession. SIOP offers you:

- **Peer Networking:** Attendance at SIOP's Annual Conference and Leading Edge Consortium gives you access to the best I-O research and practice, and the opportunity to connect with top graduate students, practitioners, and academics.

- **Leveraged Community Involvement:** Your membership also offers you numerous opportunities to influence your scientific community, as well as expand your visible impact and professional skills through volunteer and leadership positions.

- **Research Availability:** Access and contribute to research and practice resources to keep you informed of and involved in I-O advancements.

---

**How does SIOP support your career as an I-O psychologist?**

Join SIOP to receive the following exclusive advantages:

- Scholarships, grants and recognition opportunities
- Access to cutting edge research, e.g., white papers, webinars, and the Industrial and Organizational Psychology (IOP) quarterly journal
- A platform to submit and present research at the Annual Conference
- Member discount for Conference and Leading Edge Consortium
- Opportunities to serve on several expert registries, including the Media Resources directory
- Consulting services advertisement via the SIOP Consultant Locator
- Continuing education credit
- Avenues to gain leadership experience through volunteering
- Advocacy in Washington, D.C.
- And much more...

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**Who is eligible for SIOP membership?**

SIOP has three types of membership: Student Affiliate, Associate, and Member. The membership requirements and instructions for application are outlined on the SIOP website at www.siop.org/joinsiop.

**If I qualify, how do I apply for membership and pay dues?**

Student Affiliate dues are paid at the time of application and are automatically approved. Professional dues are paid after completing the application. An applicant is notified of approval for membership, within 4-5 weeks. Please review the dues payment schedule at www.siop.org/Dues before applying for membership.

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There's no better organization out there for people in our field. SIOP is a wonderfully collegial environment, and its Annual Conference is one of the most energizing events of my entire year.

-Adam W. Hilliard
SIOP member since 2008
Attachment A

Structures and Models of Education and Training in (name of specialty) Psychology
Doctoral Program

Program One
Name of University, School, or institution offering program:
Colorado State University
Name of Program:
Ph.D. in Industrial/Organizational Psychology
Address:
Department of Psychology, Campus Delivery 1876
City/State/Zip:
Fort Collins, CO 80523-1876
Contact Person:
Dr. Kurt Kraiger
Telephone No.
970.491.6821
E-mail address:
Kurt.kraiger@colostate.edu
Website: http://www.colostate.edu/Depts/Psychology/io/

1. Provide evidence that your program, regardless of setting, (a) maintains a psychology faculty; (b) provides opportunities for scholarly inquiry and practice by the faculty; and (c) provides support for trainees to encourage and expand learning opportunities beyond course work.

a) The following link indicates the faculty associated with the graduate program (http://www.colostate.edu/Depts/Psychology/io/). Clicking on the link a faculty member provides details further information about the faculty member’s background (listing a Ph.D. for each) as well as another link to their vitae.

b) The department code is provided here: (http://www.colostate.edu/Depts/Psychology/DeptCode.pdf). It states The Department generally expects that faculty will distribute their effort in the following manner: 50% to teaching/advising, 40% to research/scholarly activity, and 10% to service/outreach... Research/scholarly activity includes the conduct, analysis, and written and oral presentation of original scientific inquiry, including publications based on empirical methodologies. This activity may also include the creation of other scholarly works (e.g., books, monographs, manuals, chapters, review papers, etc.), the development and description of new statistical, measurement, and/or methodological approaches, and the development of innovative technologies.

And

Consistent with the Faculty Manual, the Department expects the development of excellence in the areas of teaching/advising, research/scholarly activity, and service/outreach, as described in Section VII of this Code. The Department expects that excellence will not just eventually be achieved, but also will be sustained.

b) The link (http://www.colostate.edu/Depts/Psychology/io/) states the following:

The program emphasizes contributions of both industrial and organizational psychology to the understanding of people in their world of work. Training is received in conduct of basic and applied research, and in the applications of theory and research to organizational and human resource management problems in organizations....Seminars allow faculty and students to explore, in depth, topics of current mutual interest. Practicum arrangements in organizational settings expose students to some of the everyday problems of applying their research and professional skills.

Our graduate student manual states:
The program approach to graduate and undergraduate education follows the scientist-practitioner model. That is, we view science as a means of answering the questions and solving the problems of everyday...
life, and see effective professional practice as necessarily rooted in solid science. The Industrial/Organi-
zational Psychology Program has the philosophy that teaching, research, and practice should be collabora-
tive activities between the program faculty and all other parties to those pursuits. In the area of gradu-
ate education that is the particular focus of this handbook, students are admitted and trained by the fac-
culty as a collective, and the graduate students and faculty of the program work together toward mutual
success and progress achieving both program missions and individual goals. We value intellectual rigor,
ethical action, life-long learning, and innovative approaches to the advancement and application of the
field of Industrial/Organizational Psychology.

2. Provide evidence from your program that published descriptions of the program specify whether or not
graduates can satisfy the education and training requirements for advanced recognition in the specialty.
The Department Code states:
“Graduate education in the Department of Psychology will be responsive to the general recommendations
of the American Psychological Association. Each graduate training program will be primarily designed
and executed by that program’s faculty, but all graduate students are required to demonstrate broad core
competence in the field of psychology. Graduate training will emphasize providing a strong foundation in
psychology as a science for students aiming to become researchers, academicians, and/or practitioners.”
By providing coursework in the broad core competencies, our graduate training helps prepare our stu-
dents for a state licensing exam. However, as most I-O psychologists serve organizations and not individ-
uals, licensing as a professional is not applicable to them and the program does not explicitly prepare
them for licensing.

3. Indicate by document and page number where your program is clearly identified as a psychology program
whose intent is to educate and train psychologists.
The most recent version of the graduate bulletin for Colorado State is now online only

Industrial/organizational psychology is listed as an area of study under the degree of “psychology”. The
department website provides a link to the department code, which states: “Each graduate training program
will be primarily designed and executed by that program’s faculty, but all graduate students are required
to demonstrate broad core competence in the field of psychology. Graduate training will emphasize
providing a strong foundation in psychology as a science for students aiming to become researchers,
academicians, and/or practitioners.”

4. Enclose an organizational chart describing the administrative relationship of the program with other units
within the organization (e.g., College/Division/Department/Program/Specialty). Indicate lines of authority
for both academic decision making and resource allocation. Indicate names, titles, addresses, phone num-
bers, and authority.
Organization chart is here: http://www_president.colostate.edu/pdf/revised-organizational-chart.pdf. The
Chair of the Psychology Department reports to the Dean of the College of Natural Sciences, and
the Director of the Graduate Program in I-O Psychology reports to the Department Chair.
Dr. Anthony Frank, President, Office of the President, 0100 Campus Delivery, Colorado State University,
Fort Collins, CO 80523
Dr. Rick Miranda, Interim Provost & Executive Vice President, Office of the Provost/Executive Vice Pres-
ident Colorado State University, 108 Administration Building, Fort Collins, Colorado 80523-1001 (Reports to
President)
Dr. Janice Nerger, Interim Dean, College of Natural Sciences, 1801 Campus Delivery, Colorado State Uni-
versity, Fort Collins, CO 80523 (Reports to Provost and Executive Vice President)
Dr. Ernest Chavez, Chair, Department of Psychology, 1876 Campus Delivery, Colorado State University,
Fort Collins, CO 80523 (Reports to Dean)
Dr. Kurt Kraiger, Co-Director, Department of Psychology, 1876 Campus Delivery, Colorado State Univer-
sity, Fort Collins, CO 80523 (Chair)
5. Using examples of typical student schedules show the sequence of courses recommended for each year level of students enrolled in the program.

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>YR 1</strong></td>
<td></td>
</tr>
<tr>
<td>Num  Name</td>
<td>Cred</td>
</tr>
<tr>
<td>PSY652 Stats</td>
<td>4</td>
</tr>
<tr>
<td>PSY643 or PSY644 Advanced I or O</td>
<td>3</td>
</tr>
<tr>
<td>PSY600 Core 1</td>
<td>3</td>
</tr>
<tr>
<td>PSY595V Research</td>
<td>2-5</td>
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<tr>
<td><strong>YR 2</strong></td>
<td></td>
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<tr>
<td>Num  Name</td>
<td>Cred</td>
</tr>
<tr>
<td>PSY643 or PSY644 Advanced I or O</td>
<td>3</td>
</tr>
<tr>
<td>PSY600 Core 3</td>
<td>3</td>
</tr>
<tr>
<td>PSY596V Weekly Seminar</td>
<td>2</td>
</tr>
<tr>
<td>PSY699 Thesis credits Multivariate (or year 3)</td>
<td>2-5</td>
</tr>
<tr>
<td>PSY754</td>
<td>3</td>
</tr>
<tr>
<td><strong>YR 3</strong></td>
<td></td>
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<tr>
<td>Num  Name</td>
<td>Cred</td>
</tr>
<tr>
<td>PSY596 Weekly Seminar</td>
<td>2</td>
</tr>
<tr>
<td>PSY600 Core 5</td>
<td>3</td>
</tr>
<tr>
<td>PSY792CV Special Topic Seminar</td>
<td>2</td>
</tr>
<tr>
<td>PSY795 Independent Study (use for empirical comp)</td>
<td>3-6</td>
</tr>
<tr>
<td>PSY686 Practicum (if not in year 2)</td>
<td>1</td>
</tr>
<tr>
<td><strong>YR 4</strong></td>
<td></td>
</tr>
<tr>
<td>Num  Name</td>
<td>Cred</td>
</tr>
<tr>
<td>PSY792CV Special Topic Seminar</td>
<td>2</td>
</tr>
<tr>
<td>PSY799V Dissertation</td>
<td>3</td>
</tr>
<tr>
<td><strong>YR 5</strong></td>
<td></td>
</tr>
<tr>
<td>Num  Name</td>
<td>Cred</td>
</tr>
<tr>
<td>PSY799V Dissertation</td>
<td>3</td>
</tr>
<tr>
<td>PSY792CV Special Topic Seminar</td>
<td>2</td>
</tr>
</tbody>
</table>

Core classes include: Measurement (600K), Social Psychology (600G), Human Learning and Memory (PSY600F) or Human Performance: Intellectual and Motor Skills (PSY600L) or Cognitive Processes (PSY600M), Personality (600I), and History (600A).

Special topic courses can be applied, theoretical, methods, or statistics.

6. Do you require at least three full-time years of graduate study (or the equivalent thereof) at your institution? (Enclose documenting policy statement)

Yes. The university requires at least 72 hours beyond the baccalaureate degree. See http://graduateschool.colostate.edu/current-students/student-resources/credit-requirements/phd-degree.aspx#PhdWithCsuMasters.

7. Are two academic years of study at a single institution required for award of the degree? (enclose documenting policy statement):

Yes No more than 10 hours can be take at another institution. See http://graduateschool.colostate.edu/current-students/student-resources/credit-requirements/phd-degree.aspx#PhdWithCsuMasters

8. Do you require at least one academic year of full-time residency (or the equivalent thereof) at the same institution for the award of the degree? (enclose documenting policy statement):

Yes \[\text{At least 62 hours must be taken through CSU and all courses are on campus}\]
9. Using the following format, indicate the courses that your program requires. Please list didactic courses only here. Information about practicum experience will be requested elsewhere.

<table>
<thead>
<tr>
<th>Title</th>
<th>Number</th>
<th>Required or Elective</th>
<th>Catalog Page #</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Scientific &amp; Professional Ethics &amp; Guidelines</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>No stand alone courses.</td>
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</tr>
<tr>
<td>b. Research Design &amp; Methodology</td>
<td>PSY655 Research Issues and Models (Methods) Required</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Statistics</td>
<td>PSY652 Methods of Research in IO Psychology I (Stats) Required</td>
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<tr>
<td></td>
<td>PSY653 Methods of Research in IO Psychology II (Stats) Required</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PSY754 Multivariate Analysis in the Behavioral Sciences Required</td>
<td></td>
<td></td>
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<tr>
<td>d. Psychological Measurement</td>
<td>PSY 600K Psych of Measurement Required</td>
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<td></td>
</tr>
<tr>
<td>e. History &amp; Systems</td>
<td>PSY600A History Required</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Biological Bases of Behavior</td>
<td>PSY600F Human Learning and Memory Required</td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Affective Bases of Behavior</td>
<td>No stand alone courses.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. Social Bases of Behavior</td>
<td>PSY600G Social Psychology Required</td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. Individual Behavior</td>
<td>PSY600I Personality Required</td>
<td></td>
<td></td>
</tr>
<tr>
<td>j. Specialty course number taught in department</td>
<td>PSY643 IO Psychology I (Advanced I) Required</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PSY644 IO Psychology II (Advanced O) Required</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PSY596V Group Study—IO Psychology (Weekly Seminar) Required</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>PSY645 or PSY646 IO Psychology in the Workplace (Skills) Required</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PSY792CV Advanced Seminar (multiple offerings) Required</td>
<td></td>
<td></td>
</tr>
<tr>
<td>k. Specialty course number taught in other departments</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Using this format, show how laboratory, practicum, and internship requirements are met. NOTE: For practicum: names and agencies used, nature of agency, its mission, financial support, administrative structure, types of clients seen, services offered. For internship: name of agency, how they are selected, communication between psychology program and internship agency, name of chief psychologist and director of training, and nature of agency, its mission, financial support, administrative structure, types of clients seen, services offered. Not applicable</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. Competencies in (Industrial/Organizational Psychology) psychology (please list all of the specific competencies which graduates of this program have mastered as a requirement for completion of the
<table>
<thead>
<tr>
<th>Competency</th>
<th>Description of competency</th>
<th>Description of how competency acquired</th>
<th>Criterion for establishing competency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mastery of the knowledge and techniques of Industrial/Organizational Psychology</td>
<td>Students will be able to demonstrate knowledge of historical and current theory, applications, and methods in I-O Psychology.</td>
<td>Acquired through coursework, applied experiences, research, and concentrated study.</td>
<td>Established through passing a two-day written exam administered by faculty</td>
</tr>
</tbody>
</table>
IF YOUR PROGRAM IS NOT APA ACCREDITED, PLEASE COMPLETE THE FOLLOWING

Attachment B

Structures and Models of Education and Training in (name of specialty) Psychology
Postdoctoral Program

No postdoctoral program, does not apply.

Program One
Name of University, School, or institution offering program:

Name of Program:
Address:
City/State/Zip:
Contact Person: Telephone No.
E-mail address:
Website:

1. Provide evidence that your program, regardless of setting, (a) maintains a psychology faculty; (b) provides opportunities for scholarly inquiry and practice by the faculty; and (c) provides support for trainees to encourage and expand learning opportunities beyond course work.

2. Provide evidence from your program that published descriptions of the program’s specify whether or not graduates can satisfy the education and training requirements for advanced recognition in the specialty.

3. Indicate by document and page number where your program is clearly identified as a specialty psychology program whose intent is to educate and train psychologists in the specialty.

4. Enclose an organizational chart describing the administrative relationship of the program with other units within the organization (e.g., College/Division/Department/Program/Specialty) Indicate lines of authority for both academic decision making and resource allocation. Indicate names, titles, addresses, phone numbers, and authority.

5. Using examples of typical student schedules, show the sequence of courses recommended for each year level of students enrolled in the program.

6. Do you require at least one year of full-time training (or the equivalent thereof) at your institution? (enclose documenting policy statement):
   Yes No

7. Describe the education and training provided to the postdoctoral candidates in the program.
8. Competencies in (name of specialty) psychology (please list all of the specific competencies which graduates of this program have mastered as a requirement for completion of the postdoctoral program).

<table>
<thead>
<tr>
<th>Competency</th>
<th>Description of competency</th>
<th>Description of how competency acquired</th>
<th>Criterion for establishing competency</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>b.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>c.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d.</td>
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<td></td>
<td></td>
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<tr>
<td>e.</td>
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<td></td>
<td></td>
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<tr>
<td>f.</td>
<td></td>
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</tr>
</tbody>
</table>

END OF PETITION FORM
IF YOUR PROGRAM IS NOT APA ACCREDITED, PLEASE COMPLETE THE FOLLOWING

Attachment B

Structures and Models of Education and Training in Organizational Psychology
Postdoctoral Program

Name of University, School, or institution offering program: MICHIGAN STATE UNIVERSITY

Name of Program: ORGANIZATIONAL PSYCHOLOGY

Address: 306 PSYCHOLOGY BUILDING, Psychology, MICHIGAN STATE UNIVERSITY,

City/State/Zip: EAST LANSING, MI48824

Contact Person: RICK DESHON
Telephone No. 517.353.4624

E-mail address: DESHON@MSU.EDU

Website: We are in the midst of a website update and currently have two webpages
http://psychology.msu.edu/Organizational/
and www.iopsych.msu.edu/generalInfo/programDescription.asp

1. Provide evidence that your program, regardless of setting, (a) maintains a psychology faculty; (b) provides opportunities for scholarly inquiry and practice by the faculty; and (c) provides support for trainees to encourage and expand learning opportunities beyond course work.

a & b) The website for the Department of Psychology at Michigan State University (http://psychology.msu.edu/Organizational/) lists the eight (8) faculty in our program (DeShon, Ford, Jackson, Kozlowski, Leong, Ryan, Schaubroeck, Schmitt). A quick review of the vitae posted on this website highlights that the faculty are all research active and most are actively engaged in the practice of Organizational Psychology.

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Peer Review Publications (Last 5 years)</th>
<th>Contracts or Grants (Last 5 years)</th>
<th>Examples of Practice (Last 5 years)</th>
<th>Editorial Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>DeShon</td>
<td>13</td>
<td>4</td>
<td>United Methodist Church Clergy Competencies</td>
<td>Associate Editor, Journal of Applied Psychology</td>
</tr>
<tr>
<td>Ford</td>
<td>6</td>
<td>4</td>
<td>F.P Miller Great Lakes Industries Foote Hospital</td>
<td>International Review of Industrial and Organizational Psychology</td>
</tr>
<tr>
<td>Jackson</td>
<td>2</td>
<td></td>
<td>HomeNetToo</td>
<td></td>
</tr>
<tr>
<td>Kozlowski</td>
<td>3</td>
<td>6</td>
<td>Detroit Hospital Medical Teams</td>
<td>Editor, Journal of Applied Psychology</td>
</tr>
<tr>
<td>Leong</td>
<td>7</td>
<td>N/A</td>
<td></td>
<td>Series Editor, Cultural, Racial, and Ethnic Psychology</td>
</tr>
<tr>
<td>Ryan</td>
<td>17</td>
<td>7</td>
<td>Kelly Services Wonderlic</td>
<td>Past Editor, Personnel Psychology</td>
</tr>
<tr>
<td>Schaubroeck</td>
<td>14</td>
<td>2</td>
<td>N/A</td>
<td>Editor, Organizational Behavior and Human Decision Processes</td>
</tr>
<tr>
<td>Schmitt</td>
<td>21</td>
<td>1</td>
<td>College Board Michigan State Police Ford Motor Company</td>
<td>Past Editor, Journal of Applied Psychology</td>
</tr>
</tbody>
</table>
PROGRAM DESCRIPTION AND REQUIREMENTS
The Industrial/Organizational psychology program has approximately 15-20 graduate students who come from all over the country and from foreign countries. All are full-time students. There are eight primary faculty in the I-O program and a number of associated faculty from other departments. Thus, the faculty/student ratio is small which allows close working relationships between faculty and students to develop.

Students entering the program with a Bachelor's degree usually complete their Ph.D. within four or five years. Students are expected to complete their Master's degree within the first two years, complete their comprehensive examinations during their third year, and devote their fourth and/or fifth year to an internship and dissertation work.

In general, there are few standard course requirements for graduate study in I-O psychology. The extent of research, course, seminar, and other work in the various areas of relevance to I-O psychology varies considerably depending on the students' unique backgrounds, abilities, interests, and goals.

2. Provide evidence from your program that published descriptions of the program’s specify whether or not graduates can satisfy the education and training requirements for advanced recognition in the specialty.

Research is the central focus of the program. Students are required to be involved in research at all times during their graduate training. This involvement begins with a high degree of structure as new students join ongoing faculty research projects. Over time, students take on greater responsibility for projects depending upon their research interests and their ability to manage projects independently. In all cases, faculty members work very closely with students on a one-to-one basis in order to provide the individualized guidance that best fits the students' needs. Project objectives may include the following: (1) experience in the applications of psychology; (2) collection of data on research issues of interest to faculty and graduate students; and (3) delivery of valuable service to an organization. (Click on the Research menu button, in the left column of this web page, to learn more.)

While maintaining a research focus, the program itself is very flexible. Programs of study are shaped to fit each student's needs and interests. Students in I-O psychology have concentrated on traditional subfields within I-O psychology, but they also have developed expertise in areas such as measurement, educational psychology, cognitive psychology, social and ecological psychology, counseling, labor relations, communications. Also, many graduate students take opportunities to assist and/or teach undergraduate courses.

Also...

The aim of this graduate program is to provide Ph.D. level training to students who intend to obtain faculty positions in universities or research-oriented positions in major corporations, government, or other organizations. • The program provides a strong background in psychology and quantitative methods, as well as the content of I-O psychology. • While maintaining a research focus, the program itself is very flexible. Programs of study are shaped to fit each student's needs and interests.

3. Indicate by document and page number where your program is clearly identified as a specialty psychology
program whose intent is to educate and train psychologists in the specialty.

This is most easily seen on our main departmental webpage: http://psychology.msu.edu/GraduateProgram/
4. Using examples of typical student schedules, show the sequence of courses recommended for each year level of students enrolled in the program.

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall Semester</th>
<th>Spring Semester</th>
</tr>
</thead>
</table>
| Year 1 | Psych 860: Introduction to Organizational Psychology  
Psych 815: Regression and ANOVA  
Psych 890: Socialization to Graduate Life and Research | Psych 818: Measurement Theory General Psych Requirement* |
| Year 2 | Psych 865: Organizational Research Methods  
Psych 864: Selection & Staffing | Psych 962: Motivation General Psych Requirement* |
| Year 3 | Psych 992: Structural Equation Modeling  
Psych 992: Specialized Topics in Organizational Psychology ** | Psych 992: Specialized Topics in Organizational Psychology ** |

*All Students are required to take 2 courses in psychology outside of the course offerings within the Organizational Psychology program.

**Take three of the following possible classes: Organizational Development, Training, Leadership, Levels of Analysis, Teams, Organizational Attitudes and Well-Being, Work/Family Issues, Careers, Diversity

Note: Many students choose to take additional methods courses such as Item Response Theory, Multivariate Analysis, or Longitudinal Data Analysis

5. Do you require at least one year of full-time training (or the equivalent thereof) at your institution? (enclose documenting policy statement):

   Yes   XX   No
6. Describe the education and training provided to the postdoctoral candidates in the program.

As a general rule, we don’t have post-docs in our program

7. Competencies in Organizational psychology (please list all of the specific competencies which graduates of this program have mastered as a requirement for completion of the postdoctoral program).

We do not have a postdoctoral program. Also, with respect to our doctoral program, we do not believe in or use a generic competency modeling approach. We do not believe that “one size fits all” and strive to match student developmental milestones to the student’s particular career goals.
IF YOUR PROGRAM IS NOT APA ACCREDITED, PLEASE COMPLETE THE FOLLOWING

Attachment B

Structures and Models of Education and Training in (name of specialty) Psychology Postdoctoral Program

Name of University, School, or institution offering program: PENN STATE UNIVERSITY

Name of Program: INDUSTRIAL-ORGANIZATIONAL PSYCHOLOGY PROGRAM

Address: 112 MOORE BUILDING, Psychology, PENN STATE,

City/State/Zip: UNIVERSITY PARK, PA 16802

Contact Person: ALICIA A. GRANDEY Telephone No. 814-863-1867

E-mail address: AAG6@PSU.EDU

Website: http://psych.la.psu.edu/graduate/programAreas/ioArea/index.html

1. Provide evidence that your program, regardless of setting, (a) maintains a psychology faculty; (b) provides opportunities for scholarly inquiry and practice by the faculty; and (c) provides support for trainees to encourage and expand learning opportunities beyond course work.

a) This webpage – connected to the psychology department webpage – shows that all I-O faculty have PhDs. All PhDs are in psychology. http://psych.la.psu.edu/graduate/programAreas/io-bios.html

b) All seven academic faculty (Cleveland, Farr, Grandey, Hunter, Jacobs, Murphy, Mohammed) are active in inquiry and research – evidence of this can be seen on their faculty webpages (linked to the main dept webpage) where all have published either books, book chapters or journal articles within the last year.

c) This support can be seen in the Mission statement in the Psychology department and opportunities given students in I-O and funding opportunities. (see below),

Opportunities Beyond Coursework in IO

Practicum course: “Students in our program have taken part in a wide variety of applied projects, undertaking duties ranging from job analyses to selection system development. Throughout the three years that students act as either co-leaders or team members, they put to use valuable knowledge, skills and abilities gained through their experiences inside the classroom.” (see http://psych.la.psu.edu/graduate/programAreas/ioArea/ioExperiences.html)

Research experience: (see http://psych.la.psu.edu/graduate/programAreas/ioArea/ioRequirements.html)
1. **Two Research Projects** (minimum): You are required to conduct two independent research projects, the master’s thesis (ideally defended prior to your third year) and the doctoral dissertation (ideally defended prior between your fourth and fifth year). You work with your advisor to form the committees.
   - Thesis committee (3): Chair, I-O professor, and a psychology professor (more are optional)
   - Dissertation committee (4): Chair, 2 I-O professors, one external to psychology member

2. **Two research mentors** (minimum): You are also required by the department to conduct research with more than one member of the PSU faculty for at least two semesters, preferably consecutive, and in separate areas of psychology. Students with interests in areas outside the boundaries of Psychology Department faculty interests are encouraged to pursue their research interests with appropriate faculty from other departments and colleges (e.g., management, statistics). There are many options for how this research requirement can be met. For example, experience as a research assistant, minor project, working on the master’s and doctoral thesis count towards this requirement as well. This requirement can be met at any time during the graduate career, but must be met before the Ph.D. degree is granted.

3. **Other research experiences.** If obtaining a minor degree, that is likely to involve a research project with your minor advisor. You are also encouraged to become involved in research projects of interest with faculty in I-O or other relevant area, especially if you are interested in an academic career path.

**Funding opportunities:**
Our program and the psychology department provides funding opportunities for students to attend I-O psychology conferences and to conduct research.

Psych Department funds: [http://psych.la.psu.edu/graduate/resources.html](http://psych.la.psu.edu/graduate/resources.html)
IO program funds: students can apply for research and conference/travel (raised by practicum projects).

2. Provide evidence from your program that published descriptions of the program’s specify whether or not graduates can satisfy the education and training requirements for advanced recognition in the specialty.

Students can see the Graduate Handbook in Psychology , or the webpage for the IO program requirements (in hard copy on p.5): [http://psych.la.psu.edu/graduate/programAreas/ioArea/ioRequirements.html](http://psych.la.psu.edu/graduate/programAreas/ioArea/ioRequirements.html)

---

**Ideal Timeline for I-O Graduate Students**

- **Entry**
- **Year 1**
  - Courses, Practicum, Research involvement
  - Select thesis committee
- **Year 2**
  - Courses, Practicum, Thesis Research
- **Year 3**
  - Complete courses, Additional Research, Lead Practicum, Select Doctoral committee
  - Study for comps
- **Year 4+**
  - Dissertation research, plus Career-directed choices: Examples: Research experience, Summer Internship/ Applied projects
  - Class Instructor

3. Indicate by document and page number where your program is clearly identified as a specialty psychology program whose intent is to educate and train psychologists in the specialty.
4. Enclose an organizational chart describing the administrative relationship of the program with other units within the organization (e.g., College/Division/Department/Program/Specialty). Indicate lines of authority for both academic decision making and resource allocation. Indicate names, titles, addresses, phone numbers, and authority.

I-O psychology is one of five areas of focus in the Psychology Department, which is in the College of Liberal Arts.

http://psych.la.psu.edu/graduate/programAreas/index.html
Using examples of typical student schedules, show the sequence of courses recommended for each year level of students enrolled in the program.

<table>
<thead>
<tr>
<th>Year 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 507/508: Statistics</td>
</tr>
<tr>
<td>PSY 522A: Personnel Testing and Selection</td>
</tr>
<tr>
<td>PSY 523A: Micro Organizational Behavior</td>
</tr>
<tr>
<td>PSY 597 Research Methods</td>
</tr>
<tr>
<td>I-O Practicum</td>
</tr>
<tr>
<td>Psychology Breadth course (e.g., social, bio, cognitive)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 522B: Performance Evaluation and Appraisal</td>
</tr>
<tr>
<td>PSY 523B: Macro Organizational Behavior</td>
</tr>
<tr>
<td>PSY 538: Training and Development</td>
</tr>
<tr>
<td>PSY 597 - Special topics in I-O</td>
</tr>
<tr>
<td>Practicum</td>
</tr>
<tr>
<td>Psychology Breadth</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 597 - Special topics in I-O</td>
</tr>
<tr>
<td>Practicum</td>
</tr>
<tr>
<td>Additional Psychology Breadth or Minor courses (e.g., Stats/Methods, Management, Labor Studies)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minor courses/projects</td>
</tr>
</tbody>
</table>
6. Do you require at least one year of full-time training (or the equivalent thereof) at your institution? (enclose documenting policy statement):

No  Many take a full-time internship during their training, but it is not required.

7. Describe the education and training provided to the postdoctoral candidates in the program.

Not applicable.

8. Competencies in (name of specialty) psychology (please list all of the specific competencies which graduates of this program have mastered as a requirement for completion of the postdoctoral program).

<table>
<thead>
<tr>
<th>Competency</th>
<th>Description of competency</th>
<th>Description of how competency acquired</th>
<th>Criterion for establishing competency</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Statistics and research methods</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Course 507-508, 597</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Criteria: Grade of B or better, completion of research projects using statistics and successful oral defense of projects</td>
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</tr>
<tr>
<td>b. Content area competencies: <strong>Criterion</strong> is coursework receiving a B or higher and Passing grade in Comprehensive Exam</td>
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<td></td>
</tr>
<tr>
<td>- Job analysis</td>
<td>Course 522A</td>
<td></td>
<td></td>
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<tr>
<td>- Selection &amp; Placement</td>
<td>Course 522A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Performance (evaluation)</td>
<td>Course 522B, 597</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Criterion Development</td>
<td>Course 522B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Training and development</td>
<td>Course 538</td>
<td></td>
<td></td>
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<tr>
<td>- Motivation</td>
<td>Course 523A, 597</td>
<td></td>
<td></td>
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<tr>
<td>- Attitudes and Stress</td>
<td>Course 523A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Leadership</td>
<td>Course 523A, 597</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Groups &amp; teams</td>
<td>Course 523B, 597</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Culture and Climate</td>
<td>Course 523B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Diversity</td>
<td>Course 522A, 523A, 523B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Psychological bases of behavior</td>
<td>(varies, can be courses in biological, neuro, cognitive, personality, social psychology)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Also obtained by independent reading, attending conferences</td>
<td></td>
<td></td>
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<tr>
<td>c. Oral and written communication: Acquired by discussion-based and presentation-based coursework, course assignments for papers with feedback provided by instructors, research paper requirements; Criterion for competency: passing oral and written defense of thesis, comprehensive exam, and dissertation.</td>
<td></td>
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<tr>
<td>d. Professionalism, respect for diversity, and ethics: acquired by three years of applied projects working with persons in industry with feedback from faculty advisors; Criterion: completion of practicum course successfully</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**END OF PETITION FORM**
Attachment A

Structures and Models of Education and Training in (name of specialty) Psychology Doctoral Program

Program One
Name of University, School or institution offering program:

Name of Program: Industrial/Organizational Psychology Doctoral Program at University of South Florida
Address: Department of Psychology, PCD 4118, University of South Florida
City/State/Zip: Tampa, FL 33620

Contact Person: Tammy Allen  Telephone No. 813-974-0484
E-mail address: tallen@mail.usf.edu
Website:  http://psychology.usf.edu/ for I-O program http://psychology.usf.edu/grad/io/program/

1. Provide evidence that your program, regardless of setting, (a) maintains a psychology faculty; (b) provides opportunities for scholarly inquiry and practice by the faculty; and (c) provides support for trainees to encourage and expand learning opportunities beyond course work.

(a) The following department website link lists the department psychology faculty. Each faculty member’s name links to their vita that will indicate that their PhD is in psychology for all but one member.

http://psychology.usf.edu/faculty/

(b) Below is the department’s mission statement taken from the department bylaws which can be found here: http://psychology.usf.edu/policies/forms/Bylaws.pdf

Mission Statement
The Department of Psychology is a Community of Scholars dedicated to the creation and dissemination of knowledge. The department is committed to furthering our understanding of the mind and behavior by the methods of science, as well as to the development of applications of the science of psychology to better the human condition and that of individual persons. In keeping with the mission of the University of South Florida, the department is committed to helping its students to acquire knowledge of psychological theories, research findings and the methods used by both basic and applied psychologists. The department sees as its mission serving the general student body, its majors and its graduate students by providing these students with an understanding of the importance of the scientific approach in addressing issues of human behavior. The department also sees as its mission the training of graduate students as independent scholars who will dedicate themselves to the pursuit of knowledge, even as they are using their training as scientist-practitioners or as clinical scientists to contribute substantially to the solution of pressing human problems. We see it as an important part of our mission to assure that our students internalize the cannons of ethics of the discipline and profession, of Psychology. The Department of Psychology values and promotes diversity of its members and students.

(c) This can be found in our I-O program handbook where we list expectations for students outside of program formal requirements (see below). The handbook is here: http://psychology.usf.edu/faculty/data/gra_iohandbook.pdf

BEYOND REQUIREMENTS: EXPECTED ACTIVITIES FOR I-O GRADUATE STUDENTS
The graduate school experience is far more than fulfillment of some courses and other things that are listed in this handbook. These represent the minimum expectations, but to become a Ph.D., you must do far more than this.
In approximately five years you will become a scientist/practitioner. In other words, you will be turning yourself into one of us—either an I-O practitioner or a professor. You must not only acquire knowledge, but you must learn how to think like an I-O psychologist, and you must develop I-O research and practice skills. Our expectations are that you will become a highly talented psychologist who is able to conduct scientific research and apply the principles of scientific research. Our goal for you is that you will be able to compete for the best jobs in whatever area you choose for your career. This requires a tremendous amount of dedication and work, but if an I-O career is what you really want, it will be worth it. Below is a list of activities that will enhance your training.

1. **Join SIOP or other professional organizations.** Society for Industrial and Organizational Psychology (SIOP) is the foremost association of I-O psychologists in the world. It is one of the best places to learn about the profession of I-O psychology, and to keep up on recent developments. A student membership is cheap, and a large proportion of members are students. The association is a good place to network, which is something that will help your career. It also might help you find an internship and your first (and even subsequent) jobs. You should join during your first year. After graduation you can quit (or fail to become a regular member) if it isn’t relevant to your career, but as a student you should explore what SIOP has to offer. Other organizations are also relevant and have student membership fees that are very reasonable.

2. **Attend some conferences.** While still a student you should experience some professional conferences. Of course SIOP would be the obvious first choice, but other national organizations include Academy of Management, American Psychological Society, and American Psychological Association. These are listed in order of relevance to I-O. Regional conferences (Southern Management Association and Southeastern Psychological Association) are smaller and can be good places as well. Other specializations are also available. These conferences are invaluable for networking, looking for jobs, meeting and seeing people whose work you’ve read, and keeping up with the latest developments. It can be expensive, so we don’t expect all students to be able to go to every meeting, but you should go when you can.

3. **Develop areas of interest.** Research skills are the foundation of an I-O psychologist’s expertise. Research does not just mean theory driven inquiry for publication. It means the collection of information to address a question. This can involve the creation of new knowledge (primary research) or the investigation of what is already known about a topic (secondary research). Often practitioners are asked to research an issue (e.g., “what’s the latest federal court position on reasonable accommodation?”). To develop these skills, you must conduct research. The thesis and dissertation are vehicles for this. But you should do more. You should develop some areas of interest in which to become expert, and you should begin doing this in your first year. It doesn’t matter if this will be the area in which you will later work after graduation. What matters is that you go through the inquiry process to develop your intellectual skills. The area is one in which you should read the literature of the past, and that you should try to keep up with by reading new work as it emerges. The area might form the basis of your thesis/dissertation, but it can be something entirely different. You would be amazed how much more interesting the journals become when you have a specific interest.

4. **Present a paper at a meeting and submit a paper to a journal.** Both of these activities are tremendous learning opportunities, and the program will help cover costs of presenting at a conference when possible (see prior section on graduate student support). Of course, if you wish to become an academic, journal articles are the main selection criteria. No publications—no job. However, these are valuable experiences for practitioners too, and many present papers at SIOP and other meetings. This activity really helps hone your research skills, and who knows, you might find that you like this activity and this can help direct your career. The regional meetings can be a good place for your initial attempt, as they are smaller and can be less intimidating. For anyone thinking about an academic career, this gives a realistic job preview.

5. **Attend department colloquia.** From time to time we will ask I-O psychologists to come to campus to speak to you. Some will talk about research; others will discuss issues related to practice. Sometimes a speaker will be one of our own faculty or students. These are valuable opportunities to learn directly from researchers (you can even ask questions!) and from people who are in the field doing practice. We strongly encourage you to attend relevant colloquia both inside and outside of I-O. This helps broaden your training, and often ideas from other areas can be extremely valuable.

6. **Get involved in the program.** The I-O program is people, both the faculty and students. The more involved you become, the better the program will be, and the more you will get out of it yourself. For most of you, this is your first professional experience and your first professional network. Make the most of it. This means volunteering for various things, such as hosting out of town guests (e.g., colloquium speakers or prospective students), and serving on student committees. It also means coming to various events. You will learn from these things, and you will make connections with others. Often students don’t get to know one another across years. These extra-curricular activities enable students to become acquainted with one another and with the faculty. Don’t underestimate the effects of the network on your career. Classmates help other classmates find jobs.
7. Read TIP. The Industrial and Organizational Psychologist or TIP is the SIOP newsletter, although it is far more than that. It contains a tremendous amount of information about the I-O field and profession. One thing you might find most interesting is the TIP Topics column that concerns the graduate school experience. It was born right here at USF under Dr. Mike Coover’s TIP editorship, and has been written by USF students. TIP is published four times per year, and you should read it. As a member you will get a subscription, but it can be read online at www.siop.org.

8. Read the literature. You should look over the major journals of the field. This doesn’t mean reading every article, but it does mean scanning the tables of contents to see what’s going on in the field. It also means reading those articles that are within your areas of interest, or that might be relevant to what you are currently studying. Of course, there are far too many journals to try to keep up with everything, and you should be careful not to get overloaded. But you should keep up with your areas of interest, e.g., if you are doing a thesis on teleworking you should always be on the hunt for new things on the topic. Don’t limit your reading to just what’s needed for classwork or your thesis/dissertation.

9. Get involved in research. Besides the thesis and dissertation, you should be involved in doing research during your entire graduate school career. First year students will likely assist faculty and advanced students on research projects. More advanced students should be conducting research projects in collaboration with one another and/or the faculty. Projects might consist of empirical studies or writing conceptual or review papers. Some of these activities will be associated with courses, e.g., scale development projects, but others will be outside of class.

2. Provide evidence from your program that published descriptions of the program specify whether or not graduates can satisfy the education and training requirements for advanced recognition in the specialty.

We do not design the program to satisfy requirements for licensure because I-O is not licensed in many if not most states, and because few of our graduates go into jobs that require licensure even if the state did offer it.

3. Indicate by document and page number where your program is clearly identified as a psychology program whose intent is to educate and train psychologists.

I-O Handbook, p. 1, the title of the program is I-O psychology. Department handbook mission (above) also says that our programs are psychology programs.

4. Enclose an organizational chart describing the administrative relationship of the program with other units within the organization (e.g., College/Division/Department/Program/Specialty). Indicate lines of authority for both academic decision making and resource allocation. Indicate names, titles, addresses, phone numbers, and authority.


Provost Ralph Wilcox, Office of the Executive Vice President and Provost
University of South Florida, 4202 E. Fowler Ave. ADM226, Tampa, FL 33620 (813) 974-2154

Dean Eric Eisenberg, College of Arts and Sciences (CAS), University of South Florida, 4202 E. Fowler Ave. CIS 3050, Tampa, FL 33620 (813) 974-6823 [Dean Eisenberg reports to the Provost]

Dr. Michael Brannick, Chair, Department of Psychology, University of South Florida, 4202 E. Fowler Ave., PCD 4118, Tampa, FL 33620 (813) 974-0478 [Dr. Brannick reports to the Dean of CAS]

Dr. Paul Spector, I-O Doctoral Program Director, Department of Psychology, University of South Florida, 4202 E. Fowler Ave., PCD 4118, Tampa, FL 33620 (813) 974-0357. [Dr. Spector reports to the Chair of Psychology]

Authority for academic decision making and resource allocation rests with the Provost and is delegated as shown.

5. Using examples of typical student schedules show the sequence of courses recommended for each year level of students enrolled in the program.
<table>
<thead>
<tr>
<th>Year</th>
<th>Semester 1</th>
<th>Semester 2</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Psychometrics Personnel (INP 6935A)</td>
<td>Reg-ANOVA</td>
<td>Minor class</td>
</tr>
<tr>
<td></td>
<td>Research Methods In I-O Personality</td>
<td>Organization (INP 6935B)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Cognitive</td>
<td>1 Methods Elective</td>
<td>Minor class</td>
</tr>
<tr>
<td></td>
<td>Organizational, Res Methods</td>
<td>2 Content Electives</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 Content Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1 Methods Elective</td>
<td>3 Content Electives</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ethics</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 Content Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Comprehensive Exam</td>
<td>Propose Dissertation</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>Defend Dissertation</td>
<td></td>
</tr>
</tbody>
</table>

6. Do you require at least three full-time years of graduate study (or the equivalent thereof) at your institution? (enclose documenting policy statement)

**Yes**

No


**Institutional Residency**

Students must be enrolled in a doctoral program for a minimum of three (3) years beyond the baccalaureate degree. The majority of credits toward a doctorate degree must be earned through instruction offered by the institution granting the degree.

7. Are two academic years of study at a single institution required for award of the degree? (enclose documenting policy statement):

**Yes**

No

8. Do you require at least one academic year of full-time residency (or the equivalent thereof) at the same institution for the award of the degree? (Enclose documenting policy statement):

**Yes**

No

See #7 for policy

9. Using the following format, indicate the courses that your program requires. Please list didactic courses only here. Information about practicum experience will be requested elsewhere.
All documented in I-O Handbook [http://psychology.usf.edu/faculty/data/gra_iohandbook.pdf](http://psychology.usf.edu/faculty/data/gra_iohandbook.pdf)

a. Scientific & Professional
   Ethics & Guidelines
   Ethics and Professional Problems PSY 7931, p. 6

b. Research Design & Methodology
   Research Methods in I-O Psychology INP 7097, p. 6
   Organizational Research Methods INP 7097, p. 6

c. Statistics
   Regression - ANOVA PSY 6217, p. 6

d. Psychological Measurement
   Psychometrics PSY 6217, p. 6

e. History & Systems

f. Biological Bases of Behavior

g. Affective Bases of Behavior

h. Social Bases of Behavior
   Social Psychology SOP 6068 p. 4

i. Individual Behavior
   Personality SOP 6068 p. 4

j. Specialty course number
   taught in department
   Cognitive Psychology EXP 6608 p. 4 Personnel Psychology INP 6935 (A), p. 6 Organizational Psychology INP 6935 (B), p. 6

k. Specialty course number
   taught in other departments

10. Using this format, show how laboratory, practicum, and internship requirements are met. NOTE: For practicum: names and agencies used, nature of agency, its mission, financial support, administrative structure, types of clients seen, services offered. For internship: name of agency, how they are selected, communication between psychology program and internship agency, name of chief psychologist and director of training, and nature of agency, its mission, financial support, administrative structure, types of clients seen, services offered.

Types of agency and experience:
<table>
<thead>
<tr>
<th>Laboratory, Practicum, Internship</th>
<th>Name and qualifications of agency and institutional supervisor</th>
<th>Number of students placed in the last two years</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Year</td>
<td></td>
<td></td>
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<tr>
<td>Second Year</td>
<td></td>
<td></td>
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<tr>
<td>Third Year</td>
<td></td>
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<tr>
<td>Fourth Year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fifth Year</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Not applicable

11. Competencies in *(name of specialty)* psychology (please list all of the specific competencies which graduates of this program have mastered as a requirement for completion of the doctoral degree).

<table>
<thead>
<tr>
<th>Competency</th>
<th>Description of competency</th>
<th>Description of how competency acquired</th>
<th>Criterion for establishing competency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research methodology</td>
<td>Ability to conduct research</td>
<td>Coursework and conducting research</td>
<td>Successful completion of thesis/dissertation, getting papers accepted to conferences/journals.</td>
</tr>
<tr>
<td>Written communication</td>
<td>Being able to write clearly</td>
<td>Coursework, thesis, dissertation, other research papers and presentations</td>
<td>Successful completion of thesis/dissertation, getting papers accepted to conferences/journals.</td>
</tr>
<tr>
<td>Oral communication</td>
<td>Being able to communicate orally</td>
<td>Presentations in classes, brownbags, at conferences</td>
<td>Successful completion of oral defense of thesis/dissertation</td>
</tr>
<tr>
<td>Knowledge of I-O field</td>
<td>Demonstrate an understanding of content and methods in I-O</td>
<td>Coursework, research activities, studying for comprehensive exam</td>
<td>Passing comprehensive exam</td>
</tr>
<tr>
<td>Ethical principles</td>
<td>Understanding ethical and professional issues</td>
<td>Coursework</td>
<td>Passing ethics/professional problems course and the ethics portion of the comprehensive exam</td>
</tr>
</tbody>
</table>