SIOP Career Study
Executive Report

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December, 2015

The Center for Organizational Research at The University of Akron would like to thank all SIOP members who helped with the support, planning, development, and/or implementation of this project: Cristina Banks, Joan Brannick, Beth Bynum, Gary Carter, Samantha Chau, Rich Cober, Tracy Kantrowitz, Joy Oliver, Mark Poteet, Rob Silzer, and Michael Trusty.

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Executive Summary

Students from the University of Akron's Center for Organizational Research (COR) conducted a 5-step study with the purpose of identifying the career paths for Industrial-Organizational (I-O) Psychologists working within the fields of Academia, Consulting, Industry, and Government. We identified the competencies and critical experiences required for the successful pursuit of an I-O career within each sector.

We began by conducting a review of current models and materials (**step one**). We conducted a literature review to familiarize ourselves with the research on career decision-making. Our initial search included how decision-making influences choices in a wide range of professional areas including medical and engineering before narrowing our search down to psychology and I-O Psychology in particular. We included various topics such as protean career paths, sponsorship, fit, career success, and career self-management. Specific to I-O Psychology, we then researched the different roles of scientists and practitioners, as well as I-O Psychologists in professional psychology roles and those in academic administration.

Next, we interviewed Subject Matter Experts (SMEs) (**step two**). Data were collected by interviewing 55 SMEs across what were identified as the four most common professional sectors employing I-O Psychologists: Academia (11), Government (12), Industry (15), and Consulting (17). For inclusion, we interviewed individuals at various promotional levels identified as corresponding to Individual Contributor, Expert Individual Contributor, Manager, Manager of Managers, and Executive levels. Members of the Professional Practice Committee brainstormed various career titles that would fall under each promotional level based on a few organizations' career path structures and their own personal experiences.

The interviews were structured around the participant's current job position and what competencies and critical experiences were necessary to successfully execute their job and become a candidate for promotion. Additionally, all SMEs were asked about the necessary competencies and critical experiences at each job level that an I-O Psychologist could hold within their current organization. All but two interviews were conducted over the phone between the months of March and August 2013 and lasted approximately 30-60 minutes. Two interviews were conducted in person at the SIOP Annual Conference in Houston, Texas, in April, 2013.

Results of the interviews indicated specific differences between each of the sectors for both competencies and critical experiences necessary for advancement within each practice area. It is important to note that during this step there were difficulties in discussing exactly which competencies and experiences were the most critical as there were a multitude of work roles one could have within the same position title. For example, an Individual Contributor working within a consulting organization that was client-facing required different competencies and experiences than an Individual Contributor who was hired into a research and design role. Furthermore, within the Government, Consulting, and Industry sectors, someone in an Individual Contributor position could take two different tracks - a management track or an Expert Individual Contributor track. Thus, their critical competencies and experiences differed for Individual Contributors based on the role (e.g., research or client- facing) into which they were hired.

Although there were two different career paths that an I-O Psychologist could take within Government, Consulting, and Industry, the paths were structurally similar. An Individual Contributor could be promoted to a non-managerial Expert Individual Contributor track if they did not wish to manage others. The management track was typically outlined as a progression from an Individual Contributor to a Manager position, followed by a Manager of Managers and then Executive level. Some organizations with fewer employees had a more compressed career ladder and, therefore, did not have Manager of Managers positions.

Within Academia, I-O Psychologists often moved from Assistant to Associate to Full Professor throughout their careers. Although the option to take a management role (e.g., department chair, assistant dean) was available, it was not common for one to move higher in management than department chair unless they chose to do so.

At the conclusion of the interviews a master list of critical experiences and competencies, categorized by sector and level, was produced. Next, a Job Analysis Survey was designed and administered to current SIOP members (**step three**). Members were asked to rate the importance of the competencies and critical experiences identified through the interviews for their current job position. The survey combined all competencies and critical experiences across all levels within each sector to facilitate comparison across levels (e.g., members who indicated a current position of Manager in a consulting firm were presented with competencies indicated by the SMEs as important for consulting, regardless of level). In addition, a "where learned" component (graduate school, on-the-job, or structured training) was added to the competencies section to address potential needs of the committee tasked with revising the *Guidelines for Education and Training at the Doctoral/Masters level in I-O psychology*.

Results of the Job Analysis Survey (**step four**) indicated that a total of 1,444 SIOP members completed at least a portion of the survey. The breakdown was as follows:

- Academia (N = 522)
- Government (N = 94)
- Industry (N = 351)
- Consulting (N = 477)

Overall, oral communication and ethical behavior were listed as two of the top five competencies for Academia, Consulting, Industry, and Government, regardless of level. Within the Academia sector, teaching ability was a critical competency for Assistant, Associate, and Full Professors, but fairness and leadership became more critical as one advanced to Department Chair, Dean, or Provost. The consulting sector highlighted that written communication skills and interpersonal skills were important competencies for success at all levels of the organization. Members in industry positions noted that establishing and maintaining relationships with various stakeholders was critical for success. Government employees all agreed that integrity was the most important competency for success across all four job levels.

The ultimate aim of the Career Study is to provide interactive career path models available for members on the SIOP Website (**step five**). These interactive models will assist members in visually depicting the most critical competencies and experiences one should have to be successful at each level of a given sector.

Introduction

Agreed upon by the PPC and COR near the start of the project in December 2012, the Career Study had five overarching goals:

> Goal 1: Determine career paths for academia, industry practitioners (private sector and public sector), and consulting.
>
> Goal 2: Describe the differences in minimum requirements, education, and/or experience needed to move from one level to the next on the career ladder (e.g., PhD, completion of certificates, years of experience).
>
> Goal 3: Find out how performance criteria change as individuals move from one level to the next (e.g., sales, publications).
>
> Goal 4: Find out if there were different competencies or capabilities necessary to move from one level to the next on the career ladder.
>
> Goal 5: Determine the experiential differences involved in moving up the career ladder, including critical job experiences and assignments.

The ultimate aim of the Career Study is to provide information that is vital to understanding various career patterns within I-O Psychology. This information can then be used by SIOP to design initiatives to better assist their members in successful navigation of career paths within their particular sector. Throughout the course of the project, the PPC chose to focus the current study (on which this report is based) on goals 1 – 3 as stated above, with the intention of addressing Goals 4 and 5 in a Phase 2 follow-up study.

Project Benefits to SIOP

The creation of ***I-O career paths*** would likely provide a variety of benefits to SIOP members, student members, and potential members, including:

1. Information for academic program leaders responsible for undergraduate and graduate curriculum choices so that they can optimize the education of future recipients of advanced degrees in I-O Psychology (Byrne, Hayes, McPhail, Hakel, Cortina, & McHenry, 2014; Zelin, Lider, Doverspike, Oliver, & Trusty, 2014).

2. A body of knowledge with direct implications for future versions of the *Guidelines for Education and Training at the Doctoral/Master Level in Industrial-Organizational Psychology* (Byrne et al., 2014; Zelin et al., 2014).

3. Information that can be used to inform potential licensure and/or certification criteria.

4. A standard template, protocol, or basis of information for SIOP mentors when working with mentees.

5. A standard and informed framework from which people with advanced degrees in I-O Psychology can consider how to manage their individual careers.

6. A link with the I-O Salary Survey process to provide additional benchmarks and inform the way future salary surveys are structured.

Step 1: Review Current Models and Materials

Literature Review

We conducted a literature review of overall career decision-making spanning a wide range of professional areas. Some of the topics identified for the literature review included protean career paths, sponsorship, fit, and career success. In researching these topics we did not discriminate by job sector. An outline of the completed literature review appears in Appendix A.

In addition, we reviewed published literature on career paths within the field of Psychology and I-O Psychology specifically. With regards to generic Psychology career paths, we found that many psychologists followed one of three paths: scientists (i.e., researchers, typically within a University setting), practitioners (i.e., work outside of the research setting), or scientist-practitioner (i.e., a mixture of the two, including researchers within a practitioner setting *and* those who work in both Academia and in a practitioner setting). Within the practitioner subset, there were many different career paths that someone could take and practitioners were often expected to handle unique cases and social problems.

Scientists and practitioners also differed in their values. Whereas scientists preferred autonomy, practitioners typically valued affiliation, money, and structure.

For those psychologists in the I-O field, there were many career paths one could follow, including academia (research and teaching), consulting, and academic administration. Based on various existing reviews, we were able to identify four specific career paths:

1. Academia (e.g., university; educational),
2. Industry (e.g., working inside an organization's Human Resources department; working as a consultant within *one* organization; working as an I-O Psychologist within one organization),
3. Consulting (e.g., working as an external consultant hired to give professional advice to organizations *outside* of their own organization), and
4. Government (e.g., working in a specific government sector or branch of the Armed Forces).

As individuals progress in their career, they may move through various organizational levels corresponding to common career or promotional levels. The levels that were identified include:

1. Individual Contributor (i.e., entry level employee; does not directly supervise others),
2. Expert Individual Contributor (non-management track; i.e., considered an expert in one's field of work but does not have any supervisory responsibilities; may manage a function but does not supervise other individuals)
3. Manager (i.e., first-line manager; responsible for the supervision of other professionals or individual contributors),
4. Manager of Managers (i.e., second-, third-line managers who oversee multiple managers or departments), and
5. Executive (i.e., a leader of the organization).

Based on their knowledge of some organizations' career path structures and their own experiences in various organizations, the members of the PPC developed a sample career ladder and labeled various job titles within each level. These sample job titles can be found in Table 1.

Sample Job Titles

Table 1

Sample Career Ladder: Job Titles by Sector

	Academia	Government	Industry	Consulting
Individual Contributor	Assistant Professor Associate Professor	Analyst Associate Consultant	HR Research Specialist Project Assistant Associate Consultant Consultant	Project Assistant Associate Consultant Professional Lead Professional Consulting Associate
Expert Individual Contributor	Full Professor	Expert	Chief Scientist Principal Research Scientist Principal Consultant Managing Research Scientist	Senior Consultant Senior Professional
Manager	Department Chair	Case Team Leader Manager Senior Associate Consultant Project Leader	Director of HR Operations Manager Team Leader Program Leader	Manager Team Leader Program Manager Director
Manager of Managers	Dean	Senior Manager	Area Director of HR Senior Team Leader Principal Consultant Program Director	Senior Team Leader Principal Consultant Program Director
Executive	Vice President Provost President	Executive Senior Executive Partner Director	Vice President of HR Chief HR Officer Global HR Officer Director Executive Consultant Senior Vice President	Director Officer Executive Consultant Vice President Sr. Vice President CEO

Step Two: Subject Matter Expert Interviews

Methodology

As described in the literature review, four sectors were identified where I-O Psychologists typically find employment:

1. Academia (e.g., university; educational),
2. Industry (e.g., working inside an organization's Human Resources department; working as a consultant within *one* organization; working as an I-O Psychologist within one organization),
3. Consulting (e.g., working as an external consultant hired to give professional advice to organizations *outside* of their own organization), and
4. Government (e.g., working in a specific government sector; EEOC; Branch of the Armed Forces).

Within each sector we identified three Individual Contributor levels (entry level Individual Contributor, Individual Contributor, Expert Individual Contributor) and three Managerial levels (Manager, Manager of Managers, and Executive). One of the Individual Contributor levels is a non-managerial track; Expert Individual Contributors continue to advance in a given specialty area but do not want any supervisory duties. The other Individual Contributor levels are part of the managerial career ladder. For the purposes of the study, we asked SMEs about entry level Individual Contributor and Individual Contributors separately. However, based on the interviews, we realized that many I-O Psychologists with advanced degrees did not start an entry level Individual Contributor position in Government, Industry, or Consulting. Thus, with regard to measuring I-O career paths, there were four managerial promotional levels and we disregarded the entry level Individual Contributor position as it did not appear to apply to I-O Psychologists. The four managerial promotional levels can be found within all four sectors and include:

1. Individual Contributor (i.e., entry level employee; does not directly supervise others),
2. Manager (i.e., first-line manager; responsible for the supervision of other professionals or individual contributors),
3. Manager of Managers (i.e., second-, third-line managers who oversee multiple managers or departments), and
4. Executive (i.e., a leader of the organization).

We identified the expert level as Expert Individual Contributor (non-management track; i.e., considered an expert in one's field of work but does not have any supervisory responsibilities; may manage a function but does not supervise other individuals), which was also found within all four sectors. For the purposes of the SME interviews, we combined Individual Contributor and Expert Individual Contributor for Academia into one overall category with regards to competencies and experiences because we encountered no differences in requirements for success and promotion.

Preliminary data for the first step were collected by interviewing 55 subject matter experts (SMEs) across what were identified as the four most common professional sectors employing I-

O Psychologists: Academia (11), Government (12), Industry (15), and Consulting (17). In addition, we interviewed individuals at various promotional levels corresponding to Individual Contributor, Expert Individual Contributor, Manager, Manager of Managers, and Executive levels (See Table 1 for sample job title classifications). Additionally, we included a wide range of organizations, with some employing one or two I-O psychologists, and others employing in excess of 100 I-O psychologists. All but two interviews were conducted over the phone in the months of April through July, 2013, and lasted approximately 30 to 60 minutes. Two interviews were conducted in-person at the SIOP Annual Conference in Houston, Texas in April 2013.

The interviews were structured around the participant's current job position and what competencies and critical experiences were necessary to successfully execute their job and become a candidate for promotion. Additionally, SMEs were asked about the necessary competencies and critical experiences at each job level that an I-O psychologist could hold within their current organization.

Although we found that some of the competencies and critical experiences were similar across the four professional sectors, we also found sufficient differences and presented the results here by sector.

Subject Matter Expert Interview Results by Sector

Consulting

Overview
We interviewed seventeen SIOP I-O professionals in external consulting positions spanning a wide variety of consulting organizations. The SMEs for 14 of the 17 interviews averaged 19.54 years of experience in the Consulting sector, with a range of 8-36 years (years of experience was not available for three of the SMEs). Participant job levels included Individual Contributor, Manager, Manager of Managers, and Executive. Specific job titles included: Senior Consultant, Senior Scientist, Director of Research and Development, Consulting Director, Associate Director, Senior Director, Vice President, Senior Vice President, Partner, and CEO/President/Founder.

Acknowledging that there are many different sizes, organizational structures, and focuses of Consulting organizations, we interviewed SMEs within many different organizational settings. Consulting firms represented included those who were primarily government focused, primarily non-government focused, and those which focused on both. With regard to size, the consulting organizations represented in the SME interviews ranged from seven employees to thousands of employees, and included a wide range of managerial levels.

Summary
Within the Consulting sector there were three main tracks a professional could follow: Project Consultant, Research Consultant, and Management. All three tracks typically occur across consulting organizations. Many I-O Consulting organizations mixed the research and project career paths where consultants were responsible for *both* client-facing and research-based projects, while others maintained a separation between the two career paths.

Where there was a separation between the two paths, Project Consultants were mainly responsible for client-facing duties, whereas Research Consultants often conducted internal-facing work and did not regularly interact with clients. Some Project and Research Consultants chose not to, or were not provided the opportunity to, move into management roles within their organizations and instead focused on becoming an expert within their particular area or field. Thus, their career path would include moving from an Individual Contributor position to an Expert Individual Contributor position. This may mean that someone could be with an organization for 25 years and be considered an "Expert Individual Contributor", or given a title of "Senior Vice President," but not hold a management or supervisory position. By the time a Project Consultant was in the "Expert Individual Contributor" or "Senior Vice President" position they were directly working with and maintaining a strong relationship with large, long-term clients. Research Consultants, however, became experts within a particular domain (e.g., selection, coaching) and reported working with Project Consultants on specific client needs.

Other Project and Research Consultants took a management track and followed the career path of Individual Contributor → Manager → Manager of Managers → Executive. For Project Consultants, this path meant responsibility for creating and maintaining portfolios with clients, building more rapport with clients as they moved up their career ladder, and managing other

consultants. For Research Consultants, this path means overseeing various research projects and having multiple subordinates.

Participants noted that the size of the consulting firm often dictated the complexity of the management structure. Many of the smaller organizations (fewer than 50 employees) often only had two (Project/Research Consultant and CEO) or three (Project/Research Consultant, Manager, CEO) levels. CEOs in the smaller organizations often directly oversaw Individual Contributors, provided direct feedback, and also had a hand in many of the projects.

The size of the consulting firm also dictated the scope of clientele. Small consulting firms (e.g., approximately 50 or fewer employees) often sold their services locally, mid-sized firms (e.g., approximately 51-250 employees) increased their sales throughout a region and expanded nationally, whereas large consulting firms (e.g., usually greater than 250 employees) often engaged in global consulting in addition to national, regional, and local consulting projects. As a result, employees of medium- and large-sized consulting firms were required to be willing to travel, and in the case of large global consulting firms, had the option of becoming an expatriate.

The main goal of consulting firms was to meet client needs. This included meeting or coming in under final budget and completing projects according to their assigned deadlines.

Frequently, Project Consultants were promoted based on how successful they were interfacing with clients, whether they could independently generate business with new clients, whether they could obtain client referrals, and whether they could expand the services provided to current clients (i.e., offer training services after successfully creating a selection system). The higher one moved up the career ladder within the organization, the larger their client portfolios became. As a consultant's client portfolio increased, he or she became involved in a wider range of projects in which he or she was the lead or was in charge of assigning someone else to be the lead. Within both the Managerial and Expert Individual Contributor tracks it was expected that consultants would bring in new clients and accounts prior to receiving promotions.

In contrast, some organizations noted that their Research Consultants were more involved with the statistics, analyses, and item/content development and were typically more likely to have a Ph.D. than a master's degree. Limited information was available for promotion in the Research Consultant track, but one organization noted that the career level hierarchy is flatter for Research Consultants than for Project Consultants as the work requirements were similar and the primary difference was in the number of subordinates.

Most consulting firms did not require any additional licensures or certifications for initial hiring or promotion. Becoming a member of organizations such as Society for Industrial and Organizational Psychology (SIOP), Society for Human Resource Management (SHRM), and Academy of Management (AOM) were at the discretion of the employee. Backgrounds in I-O Psychology were valued above backgrounds such as that of an MBA, and therefore I-O degrees were given preference above MBAs in the hiring process.

SMEs also noted that most consulting organizations primarily promoted employees from within; it became less common to hire from outside the organization at the Manager of Managers and

Executive levels. In some organizations, the Manager of Managers and Executive roles were not filled by I-O Psychologists. This often occurred in large organizations, especially government-focused consulting firms, where the services offered were broader than the field of I-O Psychology alone.

Having competency in financial management was critical throughout all levels of the organization, but was especially important for consultants in Manager of Managers and Executive roles. In addition, innovation, creativity, planning, organization, and attention to detail were essential skills to being a successful consultant at all levels. Performance criteria often included the extent to which client needs were met, extent to which high quality deliverables were produced in a timely manner, number of billable hours, and display of required competencies.

The main focus of Individual Contributors was to master skills and successfully complete smaller projects. Both Individual Contributor levels (Individual Contributor, Expert Individual Contributor) were considered to require the same competencies. The difference was in the expectation of execution, such that an Individual Contributor may need more supervision for tasks, while an Expert Individual Contributor should be able to complete tasks without any supervision. It was expected that many Individual Contributors early in their careers would need training to become successful in the organization. Organizations planned for this and often required managers to guide the new hires through their first year.

The main focus of Managers was to help develop their employees and successfully manage projects. They were expected to coach and mentor the Individual Contributors they managed and were held accountable for the success of their teams. In addition, Managers were expected to utilize their team's resources and strengths effectively.

Many competencies were gained from working on the job. There were very few formal training sessions to develop competencies and employees were expected to increase their competency levels as they advanced through their career ladders. Additional competencies were added as they progressed upward in the organization especially with regard to managerial success (e.g., mentoring of subordinates).

In some organizations, the Manager of Manager and Executive roles were not filled by Industrial-Organizational Psychologists. This often occurred in large organizations, especially government-focused consulting firms, where the services offered were broader than the field of Industrial-Organizational Psychology.

Industry

Overview
We interviewed fifteen SIOP I-O professionals spanning a wide range of industry positions. Participants ranged from one year to eighteen years of experience within the industry sector. Job levels included those of Expert Individual Contributors, Managers, Manager of Managers, and Executive. Specific job titles included Senior Consultant, Senior Workforce Analyst, Talent Management Consultant, Human Resources Director, Human Resources Manager, and Vice President of Human Resources. Individuals interviewed represented a wide range of industries and a wide range of positions. We interviewed members who were internal consultants as well as members who worked within their organization's Human Resources department.

Summary
There were many different career paths that an I-O Psychologist in Industry could take. Many of these paths depended on what their current organization offered, and/or if they could move to another organization to better meet their career aspirations. Internal I-O Psychologists often took one of two tracks: (1) specialist roles (typically located within an HR department) where one worked mainly within one specific I-O related area (e.g., selection, training, *or* talent management) with either external departments or internal HR colleagues; or (2) generalist roles (often located outside of HR departments in organizations that typically employ few I-O Psychologists overall) where one worked across multiple I-O related areas (e.g., selection, training, *and* talent management), most often with multiple departments or client groups external to HR (e.g., Finance).

Within both generalist and specialist roles, there were a few different tracks one could take within an organization. Some organizations were large enough that I-O Psychologists could progress up the career ladder from Individual Contributor → Manager → Manager of Managers → Executive. However, many organizations did not employ enough I-O Psychologists to have a management career ladder. Thus, many I-O Psychologists were limited to reaching the Manager level, as many of the Manager of Manager and Executive positions were filled by individuals with business backgrounds and did not involve I-O related work. Additionally, especially for generalist roles, many of their direct supervisors were not I-O Psychologists themselves. These I-O Psychologists were often limited to potentially becoming Managers, but often became Expert Individual Contributors and did not manage others.

Organizations that employed many I-O Psychologists often allowed them to choose whether they wanted to take the traditional management route (Individual Contributor → Manager → Manager of Managers → Executive) or if they wanted to grow as an Expert Individual Contributor working mainly in I-O related areas. However, many participants from organizations that employed a small number of I-O Psychologists noted that their organizations preferred to keep I-O Psychologists in specialist positions rather than promoting them to managerial positions. This occurred because once in the management position, I-O Psychologists would not be completing I-O work and would also be responsible for managing non-I-O Psychologists. Thus, it made the most sense for the I-O Psychologists to remain in specialist roles because those roles allowed for I-O type work, unless they wanted to branch into the management level.

It is important to note that not all Industry positions allowed for I-O Psychologists to remain in specialized Expert Individual Contributor roles; a few individuals reported moving to a different company because they wanted to continue to perform I-O work but would have been required to move to a management position at their previous organization if they wanted to advance their career. In fact, many of the people we interviewed mentioned changing organizations to further their desired career path. Some moved to a different organization because they wanted to become Expert Individual Contributors and did not want a management role. Others moved between organizations because they wanted to advance up the management ladder, but those positions in their former organization were only filled by non-I-O Psychologists.

Some organizations were large enough to have I-O Psychologists in both generalist and specialist roles. Within these organizations, I-O Psychologists could fluctuate between jobs, especially in the beginning of their tenure with the organization, to gain broader experience. These organizations often encouraged their employees to take a less-traditional career path of moving horizontally without necessarily rising higher in the management hierarchy during their first few years. For instance, one could move from compensation to general HR to training to selection, and back to general HR while maintaining the same job level, and oftentimes the same job title. This fluctuation allowed the employees to have a broader perspective of the organization as a whole prior to becoming a manager.

Roughly 20% of the interviewees worked in external consulting firms prior to obtaining an industry position. Many mentioned that this helped them progress more quickly up the internal career path because they had a great deal of prior experience in a wide range of areas. Working in external consulting firms helped the interviewees to:

1. Think through problems more quickly because they had experienced how different problems were solved in a variety of other organizations;
2. Have the opportunity to do projects earlier in their careers than if they had gone straight to working within an industry;
3. Know what questions to ask their internal clients when discussing projects; and
4. Develop specialty skills that may not have developed in a small internal company that doesn't have specialist roles.

Interviewees who began their careers as external consultants prior to moving to an internal industry position highly recommended that if students wanted to pursue I-O Psychology positions within an industry that they begin their careers working as consultants. They explained that working as a consultant first allowed for a breadth of experience in many different I-O topics (e.g., selection, performance appraisal, organizational change) while working with various organizations. These experiences were helpful in presenting new directions and ideas to their current organizations based on what worked (and what did not work) in other companies.

A salient topic that emerged from the Industry SME interviews included the hiring process. Industries hiring for Individual Contributor roles often looked for applicants who had participated in many extracurricular activities, presented at conferences, published articles, and had interests and experiences across the board. Some organizations preferred applicants with both an I-O degree and an MBA because it showed they also understood how businesses operate.

Industries hiring Expert Individual Contributors looked for someone who had a specialization in a certain area of I-O psychology. Organizations would hire someone with the specialty they currently needed (e.g., if needing to change selection processes, an organization would hire an Expert Individual Contributor with a specialization in selection).

Most learning happened on the job; employers expected that Individual Contributors would enter needing a significant degree of development. Managers and Expert Individual Contributors often acted as mentors for Individual Contributors. Managers were instrumental in helping find projects and opportunities to help their subordinates grow and demonstrate competencies.

For all positions, having business acumen, financial acumen, and political savvy were critical. As I-O Psychologists moved up a managerial career path, they often became more organization-focused rather than specialty-focused in that with each successive managerial level they supervised a broader portion of the organization. Thus, when in an Individual Contributor position, an individual was responsible for more specialty-focused projects (e.g., selection or compensation). These projects grew in scope as one moved up in the organization to include multiple sectors within I-O or HR positions (e.g., projects spanning both selection and compensation).

Government

Overview
Twelve SIOP I-O professionals were interviewed in Government positions spanning a wide variety of government agencies. Seven of the twelve participants who provided their tenure had an average of 13.14 years of experience working within the Government sector with a range from 2-31 years, with the remaining five participants having at least eight years of experience. Job levels included those of Expert Individual Contributors, Managers, Manager of Managers, and Executive. Specific job titles included: Personnel Psychologist, Senior Psychologist, Senior Research Psychologist, Manager of Staffing and Compensation, and Chief Psychologist. Although most individuals represented the federal government, we also had participants from state and city government, and within the Armed Forces.

Summary
According to the respondents, a unique feature of government work was that many of the competencies remained the same throughout one's government career; employees were just expected to perform them at a higher level as they advanced up the career ladder. This was because government employees at every level were expected to perform technical delivery; supervisory competencies only became critical once one moved into a management position. Many government titles were different in that people retained the same general title (e.g., "Test & Validation Specialist") and progressed through numerical band levels or Government service levels (numerical) after their title as they progressed up the career ladder. For example, someone could hold the title Test & Validation Specialist I, II, III, IV, V, VI, VII, where only Test & Validation Specialist VII would be considered executive level. Alternatively, others progressed up the career path by changing agencies because the higher-level positions in their current agency either (a) did not exist, or (b) would not become open to move into until the current person within the position was promoted.

Within their roles, some I-O Psychologists completed client-facing projects with various government agencies, whereas others worked internally and conducted research on best practices. Within both tracks, some employees chose to take the management track career ladder, whereas others chose to remain Individual Contributors who did not take on management positions. They were considered "Expert Individual Contributors," even if they had been in the position for many years. This makes it difficult for an outside person looking at a job title to determine whether an employee was a Manager or an Expert Individual Contributor, as both had the same General Schedule (GS) band titles.

Both Individual Contributor levels (Individual Contributor, and Expert Individual Contributor) were considered to require the same competencies. The difference was in the expectation of execution, such that an Individual Contributor would need more supervision for tasks, while an Expert Individual Contributor should be able to complete that task without any supervision. As an employee became more proficient, knowledgeable, and completed more complex tasks, he/she was promoted to a higher level of their job. Additionally, as an employee moved up the career path, his/her focus expanded to the organization as a whole because they were involved in projects that spanned multiple departments across the organization. As such, their focus included

interaction with other parts of the organization rather than a project solely involving their position or department.

In order to be promoted to a Manager of Managers or Executive level jobs, an employee must have developed a broader understanding of how all of the different departments in the organization worked together. For instance, an employee would take on a project that spanned over multiple departments in his/her organization rather than just his/her own department. Furthermore, many of the employees who worked within a Manager of Managers or Executive level position were responsible for projects that spanned outside the domain of I-O Psychology. Thus, many of the interviewees noted that few I-O Psychologists enter these levels.

Interviewees also stated that organizations also typically used titles such as “Director” and “Deputy Director” within the Executive level category rather than “VP” or “President”.

Performance criteria and reviews were based upon successful mastery of the competencies required for one’s position.

Academia

Overview
We interviewed eleven SIOP members identified as employed in academic positions from a wide range of colleges and universities. Participants had an average of 17.64 years of experience in Academia with a range of 8-31 years. Job levels included those of Individual Contributor, Manager, Manager of Managers, and Executive. Specific job titles included: Associate Professors, Full Professors, Department Chairs, Deans, Assistant Provosts, and Program Directors.

We selected a diverse set of individuals spanning both research- and teaching-focused schools, small to large student populations, those with I-O graduate school programs, those without graduate school programs, and individuals holding administrative positions. We also included professors in both Business and Psychology Departments.

Summary
Most of the I-O psychologists we interviewed moved from Assistant → Associate → Full Professor within their careers. Over half (N = 6) became Department or Program Chairs, and the same amount (N = 6) had moved into a higher-level management role at some point during their career, such as Assistant Dean/Dean. Overall, participants noted that very few I-O psychologists were in the Provost, Vice President, or President roles.

Within the typical career movement from Assistant → Associate → Full Professor, the three most important competencies necessary for success were: research, teaching, and service. The relative weight of importance to career success for each competency depended on the research orientation of the school. At universities that focused heavily on research and article production, the research competency took on more importance relative to other competencies in determining job role success. However, as one moved Full Professor and reached tenure, the service competency took on greater importance and research competency became relatively less weighted. In comparison, colleges and universities which focused more on teaching rather than article production placed relatively equal weights on research, teaching, and service with regard to job role success.

SMEs also noted that the Department Chair/Head position was not necessarily regarded as a step up the career ladder from Associate or Full Professor. Some Department Chairs actively sought the Chair position, others took on the job because it was their turn via seniority to serve, and a few were nominated. Some SMEs noted that they or others chose to become Department Chairs as a step in moving higher up the administrative ladder in their careers. Some of the academics who chose to become Department Chair saw their career path as entailing more administrative work, compared to research and teaching, in positions such as an Associate Vice President or Associate Dean. However, most typically did not want to move any further up the career ladder after these positions. Others were selected into Associate Dean or Interim Dean roles without first acting as a Department Chair. All SMEs noted that it was likely that Academics could return to a teaching position after working in a university managerial role full-time, or concurrently while retaining some of their academic duties. Thus, the career path for a typical Academic may not be considered linear.

Step 3: Design and Administer a Careers Study Survey

Methodology

Data collected from Steps 1 and 2 were combined to launch a careers study survey of the SIOP membership during winter 2014. A master list of critical experiences and competencies, categorized by sector and level, was produced from the SME interviews. The survey itself combined all competencies and critical experiences across all levels within each sector to facilitate comparison across levels (e.g., members who indicated a current position of Manager in a consulting firm were presented with all competencies indicated by the SMEs as important for consulting, regardless of level).

Competencies were presented along with the question, "Please indicate how important these various job-related competencies are in terms of performing your *current* job." Critical experiences were then presented along with the question, "Please indicate how important these various job-related experiences are in terms of performing your *current* job." Responses for both sets of questions ranged from 1 (*not important*) to 5 (*critical*). Respondents were also able to select a "Not Applicable" answer only for the critical experience section if the experience did not apply to their current position. We allowed participants to select "Not Applicable" rather than "not important" to make the distinction between a critical experience that is part of a job but not very important in the scheme of success in the position (not important) versus an experience that is not part of the job at all (Not Applicable). We coded "Not Applicable" responses as "system missing" in the data analysis. Thus, results that are provided solely incorporate the critical experiences that were designated as being a part of the job.

A "where learned" component was added for the competencies section specifically to address potential needs of the committee tasked with revising the *Guidelines for Education and Training at the Doctoral/Masters level in I-O Psychology*. Members were asked to indicate whether they learned the particular competency in graduate school, on-the-job, through structured training, or not applicable, with the survey only allowing members to pick one of the options. Members also were asked questions about their background information, including their highest obtained degree, years of work experience, all sectors in which they have worked, current sector of work, current job title and job level, length of time spent in current job sector, gender, ethnicity, and age.

We worked with SIROTA to design the survey as an on-line platform that SIOP members could easily access. SIOP members were e-mailed via the SIOP listserv and asked to participate in the survey. A total of 1,444 members completed at least some portion of the survey.

Step 4: Results of Careers Study Survey

Participant Demographics

Participants completed surveys in March 2014 with responses from 1,444 SIOP members holding advanced degrees in I-O Psychology and other related fields. The 1,444 participants completed at least some portion of the survey. The breakdown was as follows:

- Academia (N = 522)
- Government (N = 94)
- Industry (N = 351)
- Consulting (N = 477)

Participant demographics were collected for age, gender, ethnicity, highest degree earned, whether their degree was earned online, year they received their highest degree, subject of their highest degree, any professional licenses and/or certificates, whether they have top-secret government-issued security, and all other sectors in which they have previously worked. Data can be found below in Figures 1 – 10 respectively.

Overall, participants had a mean age in their 40s, were primarily white, and approximately 50% were female. A majority of participants earned a Ph.D. and very few earned their highest degree online. Most of the participants received their highest degree between 1990 and 2014 and a large majority of the degrees awarded were in Industrial-Organizational Psychology. About one-fourth of all Government employees and a little over 10% of Consulting employees indicated they had top-secret government-issued security clearance. Lastly, very few participants reported being previously employed in a different sector prior to their current sector.

Figure 1. Participant Age

Participant age for all sectors is reflected in the Figure below. On average, participants in the Consulting sector had the oldest recorded age (M = 47.96, SD = 14.95) and participants in the Industry sector had the youngest recorded age (M = 41.07, SD = 11.0).

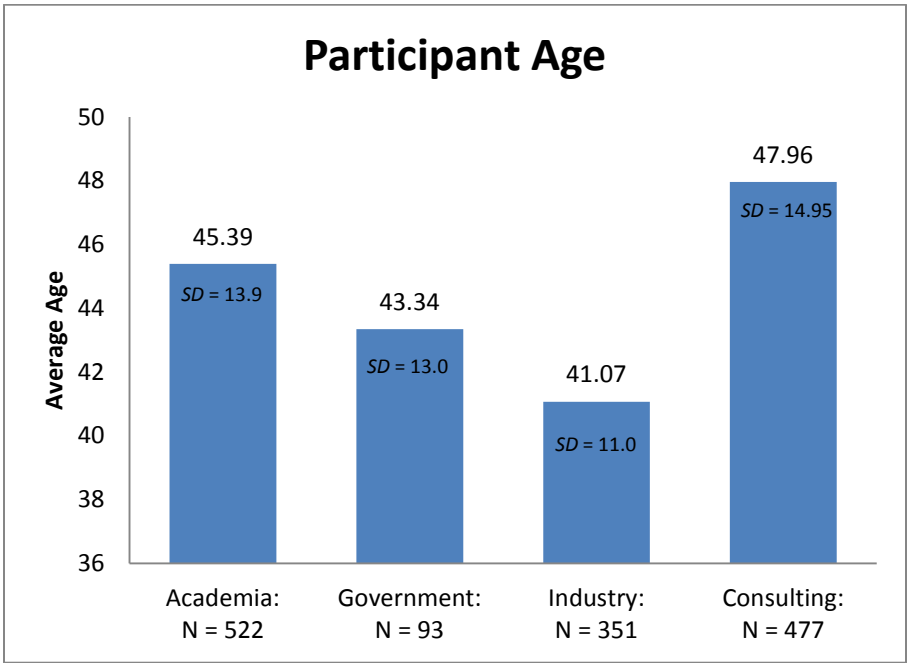


Figure 2. Highest Degree Earned

Participants were asked to indicate the highest degree they have earned. No participants indicated that their highest degree was a Bachelors' degree of Arts or Science. The Industry sector had the highest percentage of participants with a Masters' degree and Academia had the smallest percentage of participants with a Masters' degree.

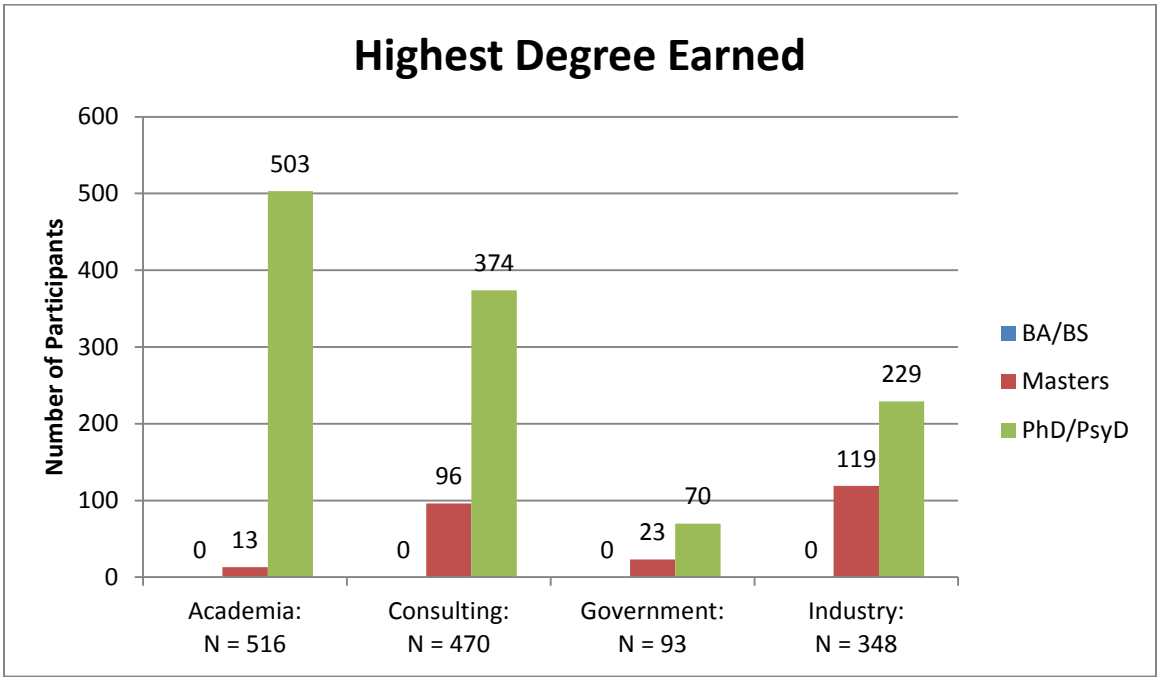


Figure 3. Was Degree Earned Online?

Participants were asked to indicate if their highest degree was earned through an online institution. Very few participants indicated that they received their highest degree through an online institution.

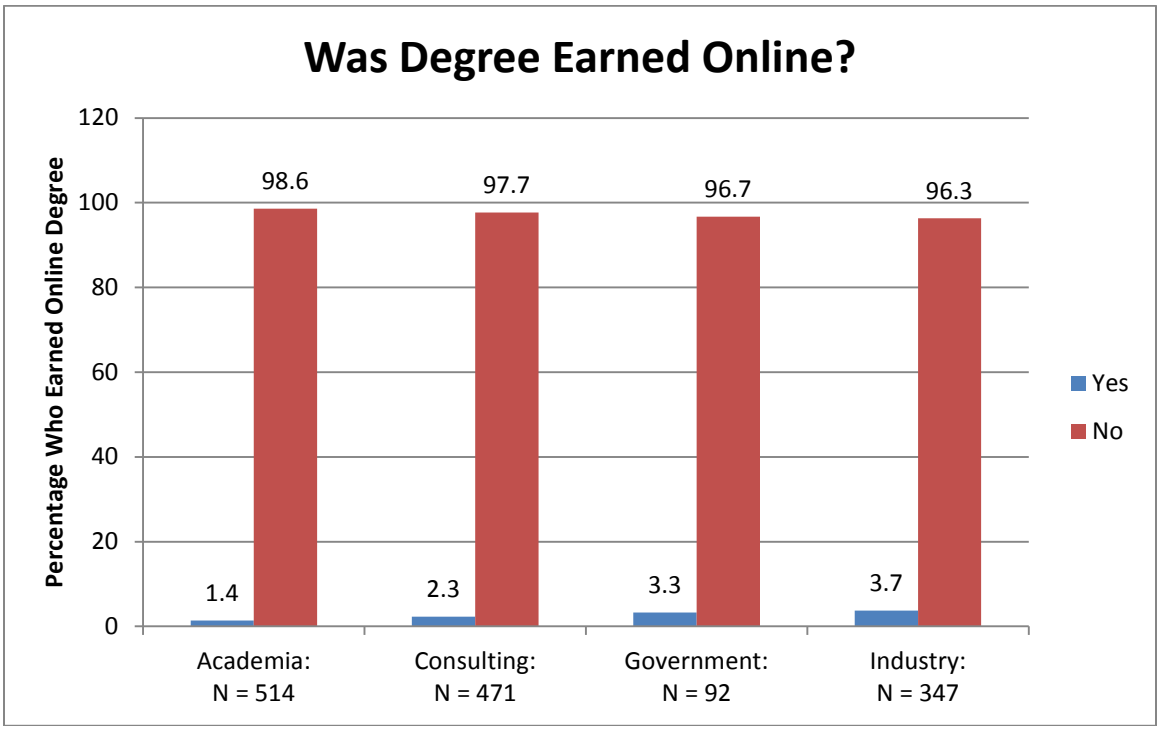


Figure 4. Year Highest Degree was Received

A majority of the participants in each sector reported that they received their highest degree between 2000 and 2009. The Academia and Industry sectors had their second highest participation rate from those who received their highest degrees between 2010 and 2014; participants in the degree year range of 1990 through 1999 had the third highest participation rate. The Consulting and Government sectors were opposite of Academia and Industry, with their second highest level of participation from those who received their highest degree between 1990 and 1999, and their third highest level of participation from those who received their degree between 2010 and 2014. Of note, the Academia sector had one participant who received their degree prior to 1960 and 12 participants who received their degree between 1960 and 1969. The Consulting sector had three participants who received their degree prior to 1960 and 11 participants who received their degree between 1960 and 1969.

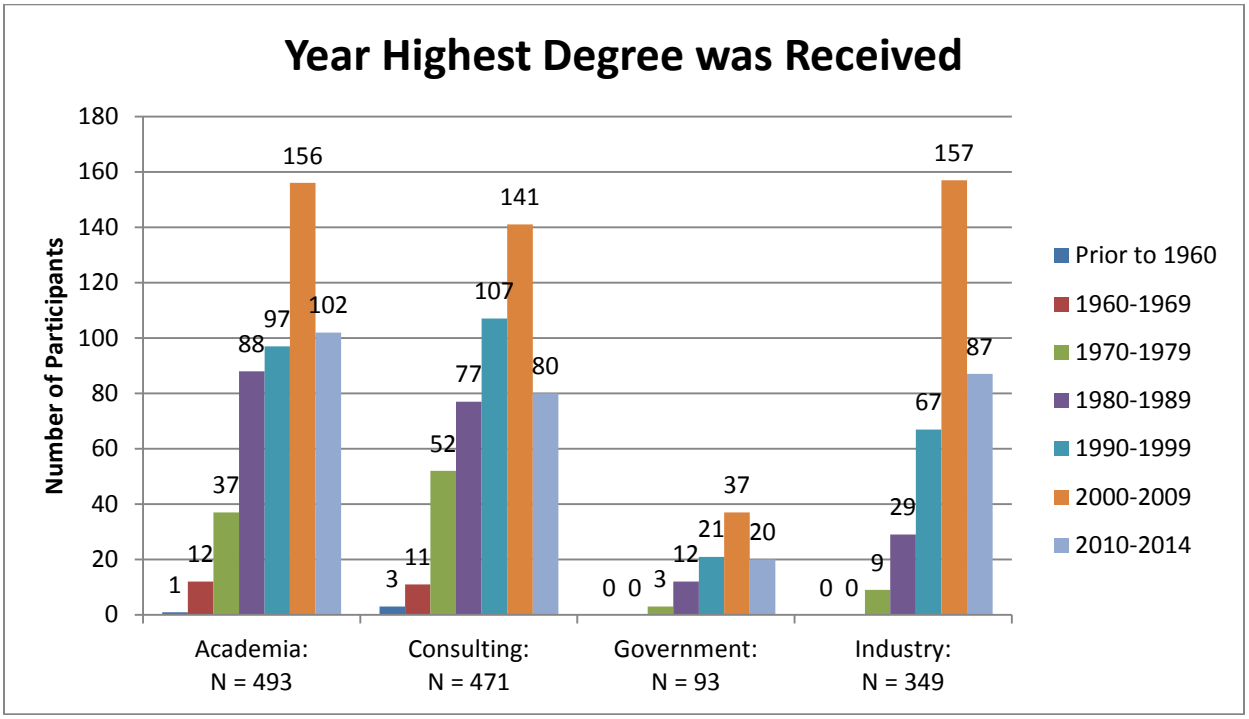


Figure 5. Subject of Highest Degree

Participants from each sector indicated the subject in which they received their highest degree. A majority of participants received their highest degree in I-O (Industrial-Organizational Psychology). Other common degrees included General, OB (Organizational Behavior) and "other" subject area.

Note: I-O is Industrial-Organizational Psychology, HRM is Human Resource Management, OB is Organizational Behavior, IR is Industrial Relations, and MBA is Management/Business Administration.

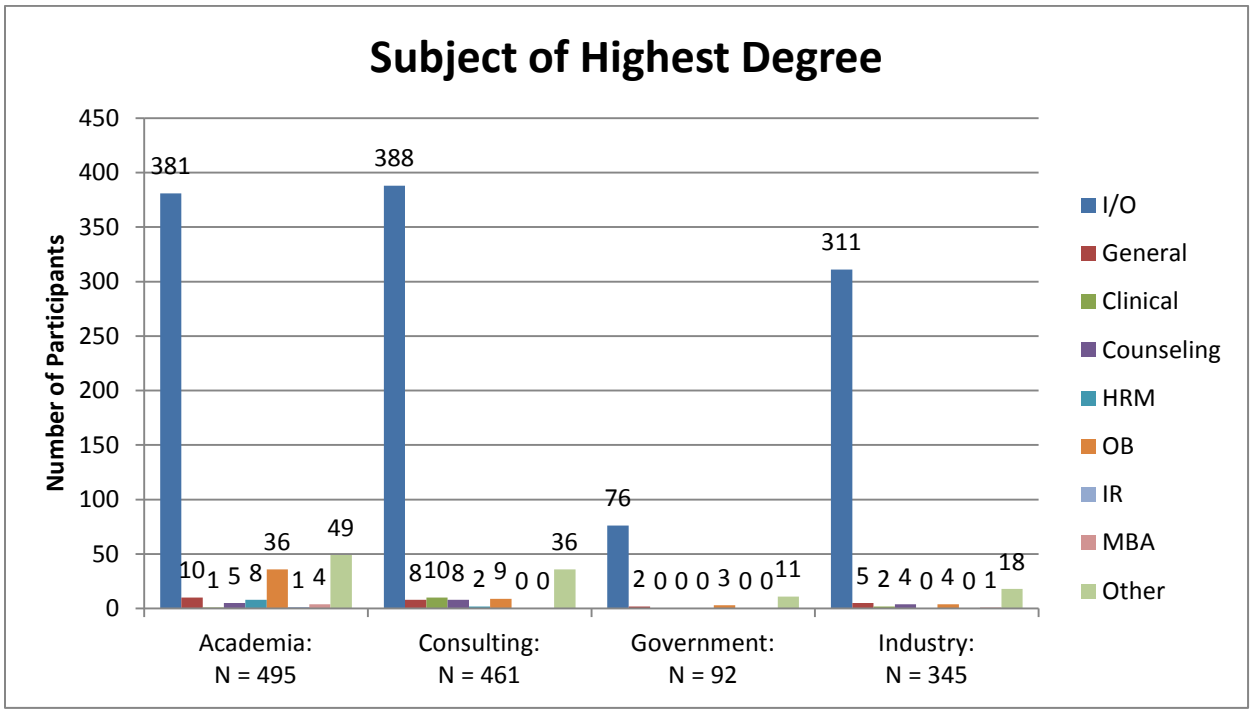


Figure 6. Professional Licensures & Certificates

Members were also asked if they held any professional licensures and/or certificates. Participants marked all of the professional licensures/certificates they hold, thus one participant may account for multiple memberships within one sector. A strong majority of the participants indicated they received certification in a license that we did not list. Based upon reviewing the qualitative data collected with the question, there was not one overwhelming majority license or certificate mentioned. We believe a potential explain for a portion of the high response for the "other" category may because there was no place for participants to mark if they had a general professional license to practice psychology. Thus, we stress that these numbers might not be a representation of the SIOP community as a whole.

Note. Participants were asked to mark which licenses/certificates they had received from the following options:

1. Society for Human Resources Management (SHRM) Professional in Human Resources (PHR) Certification
1. Society for Human Resources Management (SHRM) Senior Professional in Human Resources (SPHR) Certification
2. Society for Human Resources Management (SHRM) Global Professional in Human Resources (GPHR) Certification
3. American Society for Training and Development (ASTD) Certified Professional in Learning and Performance Certification (CPLP)
4. American Board of Professional Psychology (ABPP) Organizational and Business Consulting Psychology Certification
5. World at Work Certified Compensation Professional (CCP)
6. World at Work Certified Benefits Professional (CBP)
7. World at Work World-Life Certified Professional (WLCP)
8. World at Work Global Remuneration Professional (GRP)
9. World at Work Certified Executive Compensation Professional (CECP)
10. Other _____

Members did not indicate being licensed/certifications for the following: CBP, GRP, or CECP.

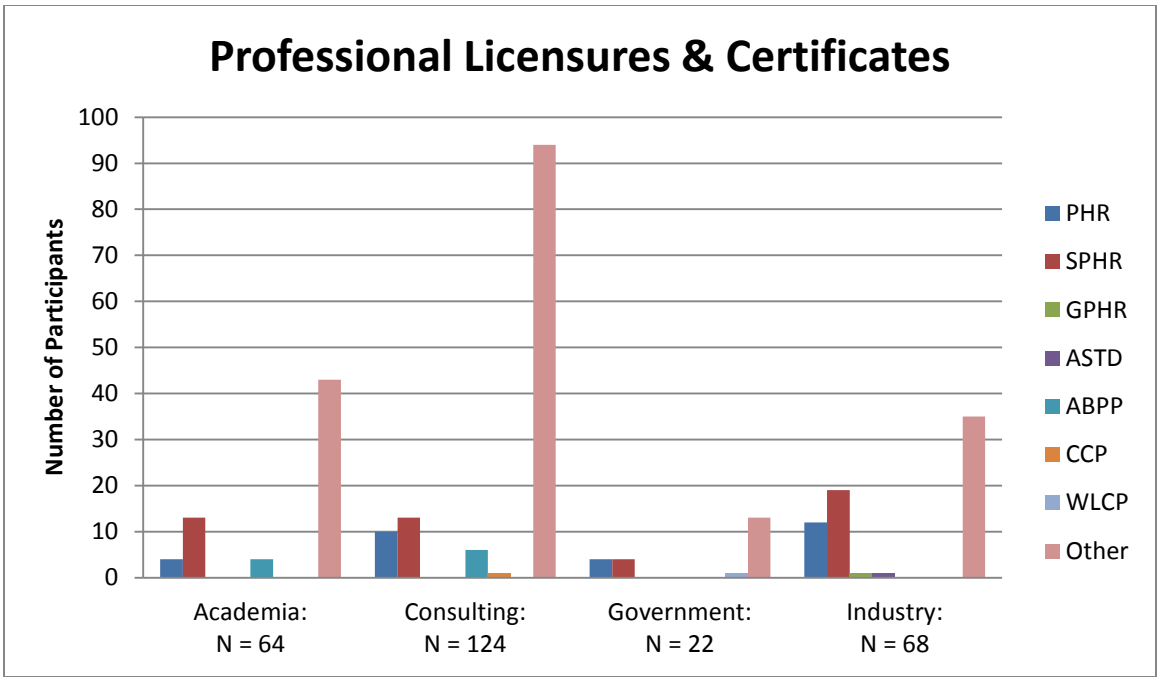

Professional Licensures & Certificates
Number of Participants
100
90
80
70
60
50
40
30
20
10
0
Academia: N = 64
Consulting: N = 124
Government: N = 22
Industry: N = 68
PHR
SPHR
GPHR
ASTD
ABPP
CCP
WLCP
Other

Figure 7. Top Secret Government-Issued Security Clearances

A point of interest from the SIOP community included whether I-O Psychologists and those in related fields received top-secret government-issued security clearances. As expected, the Government sector reported the largest percentage of participants with top-secret government-issued security clearances (23.3%). The Consulting sector had the next largest number of participants with top-secret government-issued security (11.6%). While appearing high, we believe this number is representative of the overall Consulting population. As the Consulting sector definition stated, "[those] working as an external consultant hired to give professional advice to organizations *outside* of their own organization," this included *both* consulting firms that provide contract work for various aspects of the Government and those that contract work from the private sector. Thus, consulting firms who contract for the Government may require that some of their employees to receive top-secret government-issued security clearances.

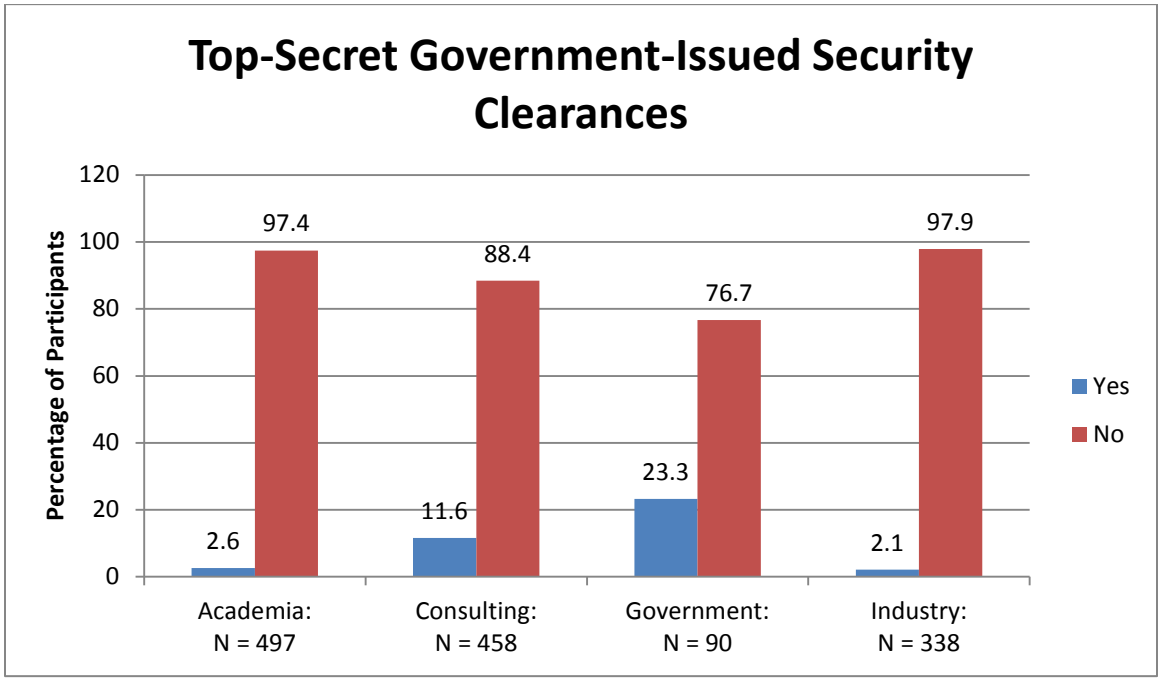


Figure 8. Gender of Participants

The gender of participants was almost evenly split among the sectors. Industry had the largest difference, with more women (56%) than men (44%), and Academia had the second largest gender difference with more men (54%) than women (46%).

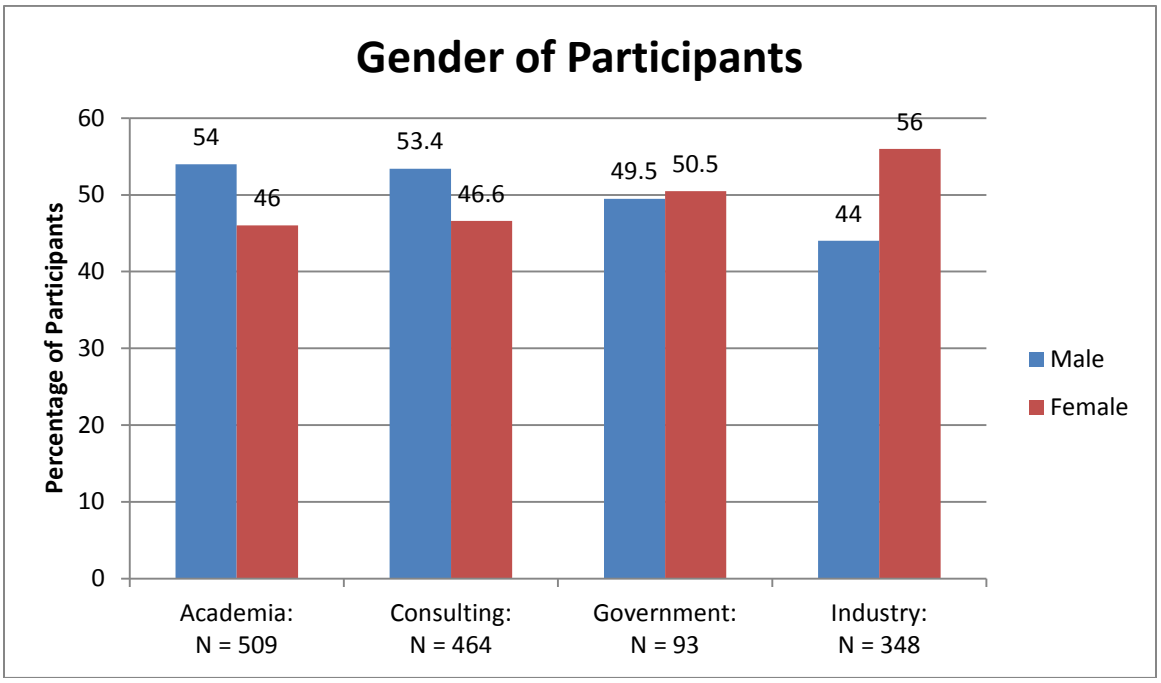


Figure 9. Ethnicity

A majority of participants across all sectors indicated that they were ethnically white. A much smaller percentage of all participants indicated they were Asian/Pacific Islander, and there was a larger Black/African American presence in the Government sector than in other sectors.

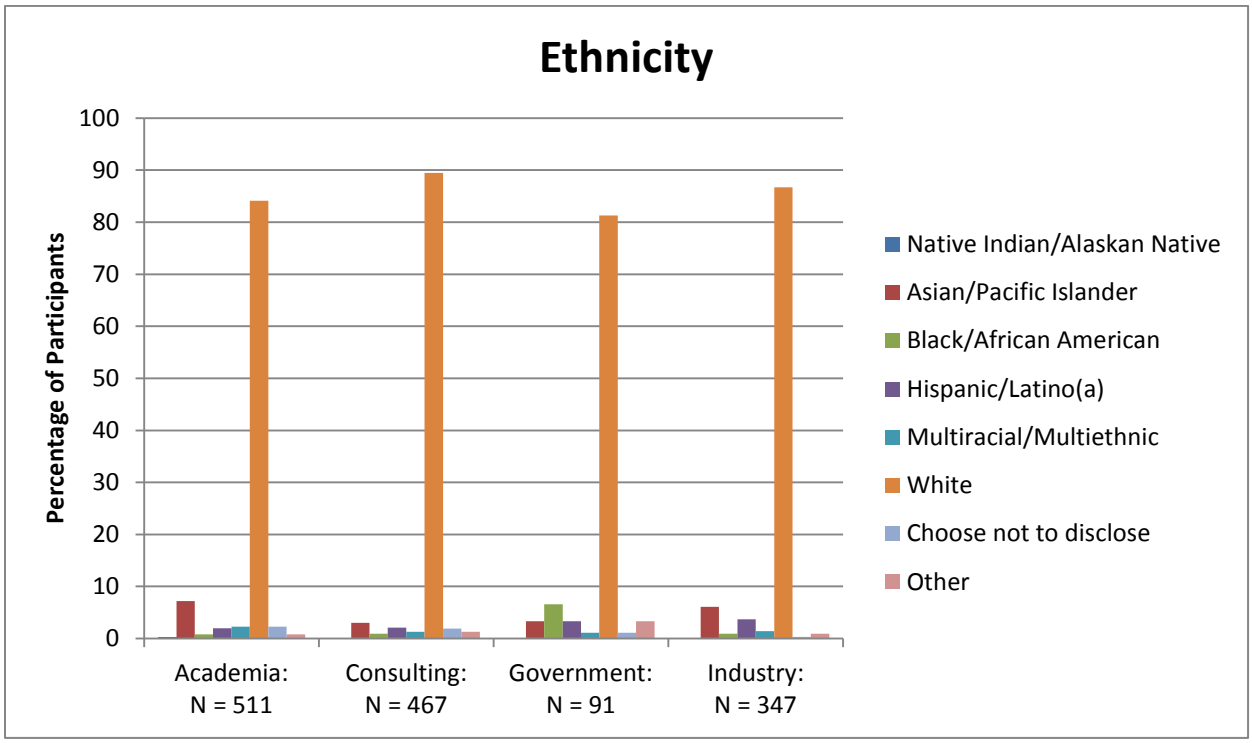
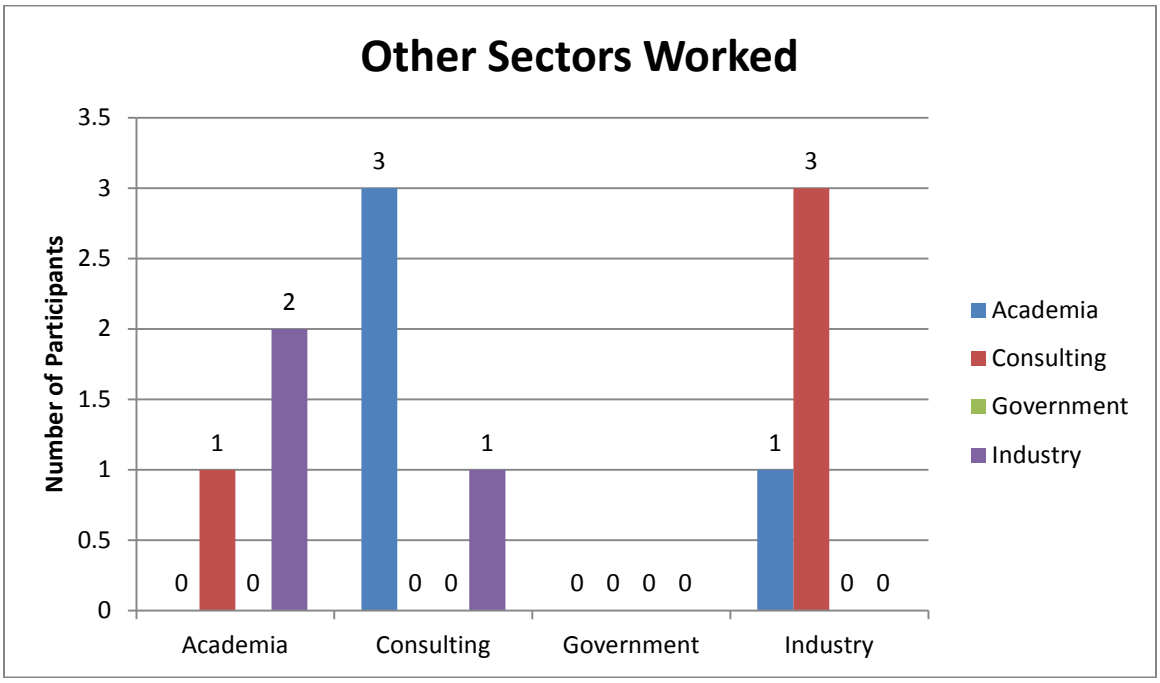


Figure 10. Other Sectors Worked

To gather the basics for a career path model, participants were asked if they had worked in another sector prior to their current position, and if so, to indicate the other sector(s) in which they have worked. Only three participants in the Academia sector reported working previously in another sector, including one in Consulting and two in Industry. Three Consulting respondents indicated they had worked in Academia in the past and one reported working in the Industry sector prior to Consulting. No Government employees noted that they previously worked in a different sector. One Industry employee reported working previously in Academia, and three reported working previously within the Consulting sector. As these numbers appear to be unusually low, we encourage future studies to further investigate the number of people who have held positions in multiple sectors.



Results by Sector

Means and standard deviations were analyzed for all competencies and critical experiences within each sector. In addition, the "where learned" component was analyzed for each competency based on the level. All means and standard deviations can be located in Appendix B (Tables B-1 through B-8). Participants' ratings of the ten most important competencies and ten most important critical experiences as determined by mean score for each sector and level are featured in their respective sections below. Additionally, an analysis of the data and resulting trends is presented within each respective sector.

As was stated earlier, for the critical experiences, participants were also able to select a "Not Applicable" answer if the experience did not apply to their current position. We did this to make the distinction between an experience that is part of a job but not very important (Not Important) versus an experience that is not part of the job at all (Not Applicable). We coded "Not Applicable" responses as "system missing." Thus, the results provided solely incorporate the critical experiences that were designated as being a part of the job.

Consulting

When analyzing the results, it was determined that the Consulting career path model could be effectively described using five job levels (see Figure 11 below). The SME interviews supported this distinction as they noted that I-O Psychologists typically did not enter an organization in an entry-level Individual Contributor position, but that the other noted career levels were commonly found in most consulting firms. Survey participation rates also supported the separation of the sector into five job levels. Employees were hired as an Individual Contributor and could take one of two different tracks: an Expert Individual Contributor track where they became a specialist in a given area(s), or a management track where they were responsible for supervising others within the organization. Oftentimes the decision on which career path to take was dependent on the individual employee, but other times it depended on the organization's needs and structure. For instance, some organizations did not have the need for someone to take an Expert Individual Contributor position, and thus the individual would need to move into a Managerial position to remain with the organization, or move to a different organization which offered such a position.
Of note, not every consulting organization is large enough to create this extensive of a career ladder and thus may only have 3-tiers consisting of Individual Contributor, Manager, and Executive.

Below, Tables 2 and 3 provide a list of the top 10 competencies across levels and top five overall competencies, respectively. Tables 4 and 5 provide a list of the top 10 critical experiences across levels and the top five overall critical experiences, respectively. Please refer to Appendix B, Tables B-1 and B-2, for a full list of results for competencies and critical experiences required for various Consulting roles and levels, respectively.

Figure 11. Consulting career path

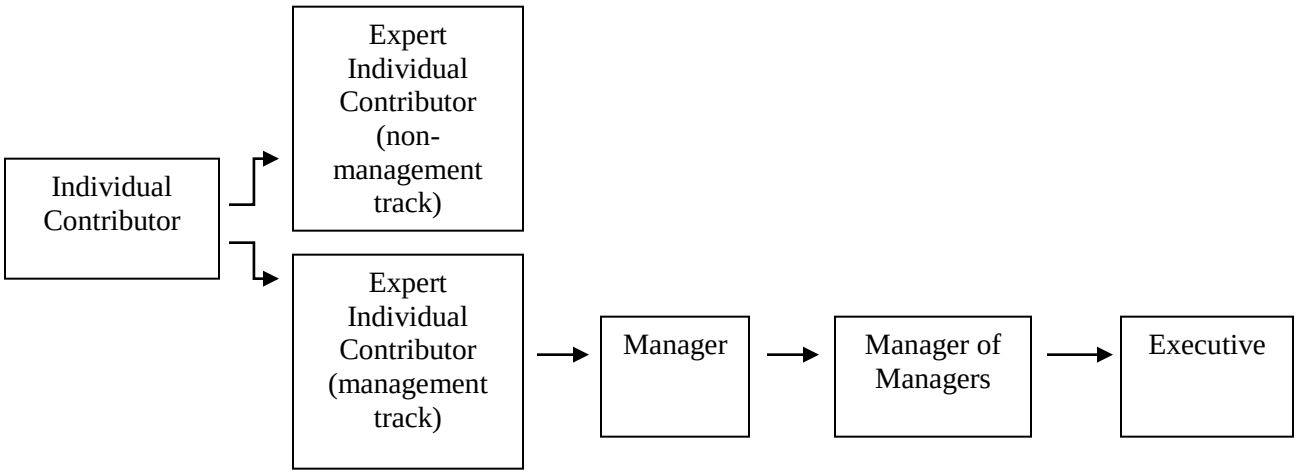


Table 2

Top 10 Competencies for Each Level within Consulting

Top Competencies				
Individual Contributor	**Expert Individual Contributor**	**Manager**	**Manager of Managers**	**Executive**
1. Communication: Written[a]	**1.** Communication: Verbal[a]	**1.** Communication: Verbal[a]	**1.** Communication: Verbal[a]	**1.** Integrity[a]
2. Critical Thinking[a]	**2.** Ethical Behavior[ab]	**2.** Critical Thinking[a]	**2T.** Decision Making[a]	**2.** Trustworthiness[b]
3. Communication: Verbal[a]	**3.** Communication: Written[a]	**3.** Communication: Written[a]	**2T.** Problem Solving	**3.** Communication: Verbal[a]
4. Interpersonal Skills[a]	**4T.** Critical Thinking[a]	**4T.** Interpersonal Skills[a]	**2T.** Strategic Thinking	**4.** Ethical Behavior[b]
5T. Knowledge of Validation Principles	**4T.** Integrity[a]	**4T.** Adaptability[a]	**5T.** Critical Thinking[a]	**5.** Interpersonal Skills[a]
5T. Initiative[a]	**4T.** Trustworthiness[ab]	**6.** Trustworthiness[a]	**5T.** Ethical Behavior[ab]	**6T.** Critical Thinking[a]
5T. Problem Solving[a]	**7.** Interpersonal Skills[a]	**7T.** Customer Service	**7.** Prioritization	**6T.** Initiative[a]
8. Attention to Detail	**8.** Conscientiousness[a]	**7T.** Ethical Behavior[a]	**8.** Interpersonal Skills[a]	**8.** Adaptability[a]
9. Conscientiousness[a]	**9.** Problem Solving	**7T.** Project Management	**9.** Adaptability[a]	**9.** Communication: Written[a]
10. Ethical Behavior[a]	**10.** Self-Discipline	**10.** Decision Making[a]	**10T.** Initiative[a]	**10.** Decision Making[a]
			10T. Integrity[a]	

Note: T indicates same means. Superscripts reflect potential mean differences for the same competencies across levels. The same competency across levels sharing the same superscript had means that did not differ from one another (e.g., Communication: Written compared across Individual Contributor, Expert Individual Contributor, Manager, Manager of Managers, and Executive). The same competency across levels with a different superscript reflected a significant mean difference (e.g., Trustworthiness between Executive and Manager differed; Trustworthiness for Expert Individual Contributor did not differ from Manager or Executive as it shares the same superscript with both).

Table 3

Top Five Competencies Across Levels within Consulting

Overall Top Five Competencies		
Competency	***M***	***SD***
1. Communication: Verbal	4.65	.59
2. Ethical Behavior	4.58	.66
3. Critical Thinking	4.57	.60
4. Integrity	4.56	.65
5. Trustworthiness	4.54	.65

Many of the competencies necessary for success as an Individual Contributor were relevant across the consulting job ladder. However, there were differences with the competency's

importance ranking across the levels. For instance, written communication was rated by Individual Contributors as the most important competency for success in that position. However, it dropped down to third most important competency to master for success at the Expert Individual Contributor and Managerial levels, disappeared completely for Manager of Managers, and re-emerged as the ninth most important competency to master for success at the Executive level.

An interesting trend appeared when analyzing where participants indicated they learned the critical competencies necessary for success at each level. At the earlier stages in their career, participants noted that they learned certain competencies during their graduate school career. However, a greater percentage of participants at higher levels in the organization noted that they learned the *same competencies* on-the-job rather than during graduate school. For instance, for oral communication, 62.5% of Individual Contributors indicated they learned the competency in graduate school versus 18.8% on-the-job, whereas only 12.5% of Manager of Managers indicated they learned the competency in graduate school versus 62.5% on-the-job. Leadership was another example of the trend, as 43.8% of Individual Contributors indicated developing the competency in graduate school versus 28.1% on-the-job, whereas no Manager of Managers reported developing the competency in graduate school, but 87.5% reported developing the leadership competency on-the-job.

It should be noted that participants rated some of the competencies highest as learned in graduate school across all levels, whereas other competencies were mostly learned on-the-job. Knowledge of multiple content areas in psychology, data analysis, critical thinking, knowledge of test development, knowledge of validation principles, research skills, and psychometrics were all rated highly as competencies developed in graduate school regardless of level within the organization. Business development, coaching, creating a vision, customer service, decision making, delegation, political savvy, and product knowledge were all rated highly as developed on-the-job rather than in graduate school or structured training.

Overall, most of the participants indicated that the competencies were developed either in graduate school or on-the-job, whereas very few were learned through structured training. Financial acumen, feedback skills, product knowledge, presentation skills, project management, business development, and coaching were among the competencies in which more than three percent of participants in each level indicated they developed through structured training. The only exceptions were financial acumen and project management where the Individual Contributor levels of each competency had fewer than three percent of participants noting that the competency was learned through structured training, but other levels had more than ten percent of participants noting that they learned the competency through structured training.

Table 4

Top Ten Critical Experiences for Each Level within Consulting

Top Critical Experiences	
Individual Contributor	**Expert Individual Contributor**
1. Contribute to the success of projects or consulting assignments[a]	**1.** Contribute to the success of projects or consulting assignments[a]
2. Work independently with minimal supervision[a]	**2.** Work independently with minimal supervision[a]
3. Maintain composure under pressure[a]	**3.** Maintain composure under pressure[a]
4. Collaborate with others on various projects[a]	**4.** Present information at client meetings[a]
5. Present information at client meetings[a]	**5.** Attend client meetings to build client relations[a]
6. Develop strong relationships with client contacts[ab]	**6.** Develop strong relationships with client contacts[a]
7. Attend client meetings to build client relations[a]	**7.** Interact with clients regarding requests, inquiries, and questions[a]
8. Follow timelines and budgets on project work[a]	**8.** Serve as a subject matter expert in a given area[a]
9. Monitor outcomes of assigned projects[a]	**9.** Follow timelines and budgets on project work[a]
10T. Assist with project delivery[a]	**10.** Collaborate with others on various projects[a]
10T. Manage relationships and networks with others in the organization[a]	

Top Critical Experiences		
Manager	**Manager of Managers**	**Executive**
1. Contribute to the success of projects or consulting assignments[a]	**1T.** Monitor outcomes of assigned projects[a]	**1.** Develop strong relationships with client contacts[b]
2. Interact with clients regarding requests, inquiries, and questions[a]	**1T.** Manage relationships and networks with others in the organization[a]	**2.** Maintain composure under pressure[a]
3. Assist with project delivery[a]	**1T.** Oversee and guide projects of others	**3.** Attend client meetings to build client relationships[a]
4. Develop strong relationships with client contacts[ab]	**4.** Manage performance of subordinates	**4.** Contribute to the success of projects or consulting assignments[a]
5. Present information at client meetings[a]	**5T.** Attend client meetings to build client relations[a]	**5T.** Present information at client meetings[a]
6T. Attend client meetings to build client relations[a]	**5T.** Serve as a subject matter expert in a given area[a]	**5T.** Interact with clients regarding requests, inquiries, and questions[a]
6T. Follow timelines and budgets on project work[a]	**5T.** Allocate resources effectively	**7.** Manage relationships and networks with others in the organization[a]
8. Maintain composure under pressure[a]	**8T.** Present information at client meetings[a]	**8.** Maintain high client retention rate
9. Manage relationships and networks with others in the organization[a]	**8T.** Contribute to the success of projects or consulting assignments[a]	**9.** Expand number of clients
10. Understand how to apply I-O psychology consulting skills in a way that enhances business[a]	**8T.** Provide developmental opportunities to subordinates	**10T.** Work independently with minimal supervision[a]
		10T. Understand how to apply I-O psychology consulting skills in a way that enhances business[a]

Note: T indicates same means. Superscripts indicate mean differences, if any, for the same experiences that appeared across the levels (e.g., Mean ratings for "Maintain composure under pressure" compared across Individual Contributor, Expert Individual Contributor, Manager, and Executive did not differ from one another as they share the same superscript). The same experiences across levels with a different superscript reflected a significant mean difference (e.g., Means ratings for "Develops relationships with client contacts" differed between Executive and Expert Individual Contributor as they had different superscripts).

Table 5

Top Five Critical Experiences Across Levels within Consulting

Overall Top Critical Experiences Across Levels		
Critical Experience	***M***	***SD***
1. Contribute to the success of projects or consulting assignments	4.67	.66
2. Develop strong relationships with client contacts	4.55	.79
3. Maintain composure under pressure	4.54	.72
4. Present information at client meetings	4.50	.78
5. Attend client meetings to build client relations	4.49	.83

Although participants rated many of the same critical experiences as important for success across all levels, they noted a few differences in the critical experiences necessary for success across the levels. Employees at the non-management or lower management levels reported that to be successful, an employee should be able to contribute to multiple projects, work independently with minimal supervision, follow timelines and budgets, and assist on project delivery. As an employee was promoted to higher managerial levels, his/her ability to work directly with clients, effectively allocate resources, and expand and maintain his/her client contacts was increasingly important for success.

Industry

Similar to the Consulting career path, we determined that we could effectively capture the Industry career path using five job levels (see Figure 12 below). The SME interviews as well as the number of participants who indicated working within each level also helped validate our use of five overall job levels. Employees are hired as an Individual Contributor and can take two different tracks: an Expert Individual Contributor track where they become specialists in a given area, or a management track where they are responsible for supervising others within the organization. Of note, not every company has the option for employees to enter a management position. Some industries only employed a few I-O Psychologists and those employees were expected to be experts in their field.

Within this section, Tables 6 and 7 provide a list of the top 10 competencies across levels and the top five overall competencies, respectively. Tables 8 and 9 provide a list of the top 10 critical experiences across levels and the top five overall critical experiences, respectively. Please refer to Appendix B, Tables B-3 and B-4, for a full list of results for competencies and critical experiences required for various Industry roles and levels, respectively.

Figure 12. Industry career path

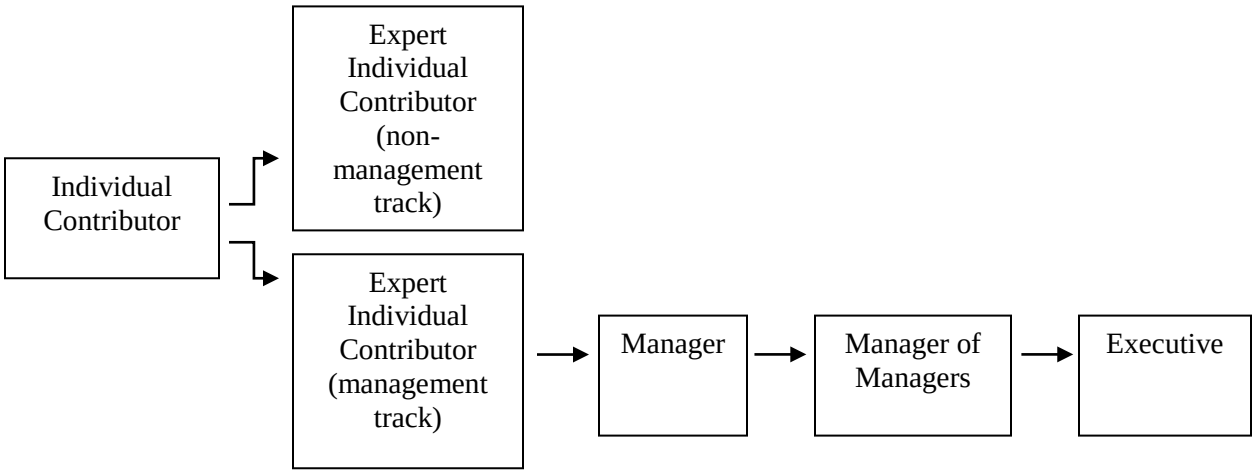


Table 6

Top 10 Competencies for Each Level within Industry

Top Competencies				
Individual Contributor	**Expert Individual Contributor**	**Manager**	**Manager of Managers**	**Executive**
1. Critical Thinking[a]	**1.** Critical Thinking[a]	**1.** Critical Thinking[a]	**1T.** Communication: Verbal[a]	**1.** Critical Thinking[a]
2. Accountability[ab]	**2.** Communication: Verbal[a]	**2.** Communication: Verbal[a]	**1T.** Leadership[a]	**2T.** Accountability[b]
3. Professionalism[a]	**3.** Professionalism[a]	**3.** Problem Solving[a]	**3T.** Accountability[b]	**2T.** Ethical Behavior[a]
4. Communication: Verbal[a]	**4T.** Ethical Behavior[a]	**4.** Accountability[ab]	**3T.** Ethical Behavior[a]	**4.** Interpersonal Skills[a]
5T. Ethical Behavior[a]	**4T.** Interpersonal Skills[a]	**5.** Interpersonal Skills[a]	**5.** Adaptability[a]	**5.** Adaptability[a]
5T. Interpersonal Skills[a]	**6.** Adaptability[a]	**6.** Ethical Behavior[a]	**6T.** Critical Thinking[a]	**6.** Leadership[a]
5T. Planning	**7.** Collaboration[a]	**7.** Adaptability[a]	**6T.** Interpersonal Skills[a]	**7.** Executing Strategy[a]
8. Communication: Written[a]	**8.** Problem Solving[a]	**8.** Collaboration[a]	**8T.** Decision Making[a]	**8.** Professionalism[a]
9. Data Analysis	**9.** Accountability[a]	**9.** Flexibility	**8T.** Results Driven	**9.** Strategic Thinking
10. Problem Solving[a]	**10T.** Communication: Written[a]	**10.** Professionalism[a]	**10.** Executing Strategy[a]	**10T.** Decision making[a]
	10T. Presentation Skills			**10T.** Learning Agility

Note: T indicates same means within level. Superscripts reflect mean differences for the same competencies across levels. The same competency across levels sharing the same superscript had means that did not differ from one another (e.g., Critical Thinking compared across Individual Contributor, Expert Individual Contributor, Manager, Manager of Managers, and Executive). The same competency across levels with a different superscript reflected a significant mean difference (e.g., Accountability between Expert Individual Contributor and Executive differed; Accountability for Individual Contributor did not differ from Expert Individual Contributor or Executive as it shares the same superscript with both).

Table 7

Top Five Competencies Across Levels within Industry

Overall Top Five Competencies		
Competency	***M***	***SD***
1. Critical Thinking	4.49	.62
2. Communication: Verbal	4.40	.66
3. Ethical Behavior	4.38	.82
4. Interpersonal Skills	4.36	.67
5. Accountability	4.35	.69

Participants rated many of the competencies as important across all levels of the Industry sector, with most competencies being rated 3.00 or higher and critical thinking rated as the most important competency for all levels except for Manager of Managers. As shown in Table 6, many of the competencies that were shared across all or multiple job levels (e.g., critical thinking; communication: verbal; ethical behavior; interpersonal skills) showed no significant differences in mean importance ratings between job levels. However, there were a few differences in the rankings of top ten competencies between job levels. For example, data analysis, presentation skills, and communication: written were ranked within the top ten for Individual Contributor and Expert Individual Contributor levels, yet not for higher level Manager, Manager of Managers, and Executive levels. On the other hand, executing strategy and leadership were among the top ten for Manager of Managers and Executive levels. Also, the rank-order of importance ratings for some shared competencies varied between levels. For instance, professionalism was ranked third for individual-level positions compared to tenth for the Manager level.

It is important to note how participants rated each of the competencies. An examination into the entire set of 62 competencies rated in Table B-3 noted some interesting trends. Specifically, for individual-level positions, no ratings of importance exceeded 4.50, compared to five for Manager of Managers and six for Executives. Additionally, the range of importance ratings was a bit lower for Individual Contributor and Expert Individual Contributor levels (2.17 to 4.48 and 2.28 to 4.41, respectively) relative to Executives (2.97 to 4.71). Also, of the 62 total competencies, several more were rated less than 3.00 for Individual Contributor (N = 15) and Expert Individual Contributor (N = 13) than for Manager of Managers (N = 0) and Executives (N = 1). Finally, greater mean importance ratings differences between job levels were observed for competencies that were not ranked within the top ten. Overall, these findings suggest that movement into management positions may require a broader range of competencies for job success. It could also mean that other competencies were critical for success for Individual Contributors that were not included in the list of competencies participants ranked.

Industry sector participants also showed an interesting trend when noting where the proficiency for the competency was developed. Participants in the Individual Contributor positions noted that they learned certain competencies primarily in graduate school. However, participants in management positions were more likely to note that they learned the *same* competencies either on the job or "not applicable" rather than in graduate school. Achievement oriented, collaboration, conflict management, and facilitation skills represent a few of the competencies where this trend was found.

Competency development reflected high levels of graduate school education across all levels in Industry for the following competencies: data analysis and I-O content knowledge. On-the-job developed proficiency was reflected at high levels for the subsequent competencies: business acumen, delegation, and executing strategy.

Table 8

Top 10 Critical Experiences for Each Level within Industry

Top Critical Experiences	
Individual Contributor	**Expert Individual Contributor**
1. Execute and deliver on results[a]	**1.** Serve as a subject matter expert in a given area[a]
2. Work independently with minimal supervision[a]	**2.** Execute and deliver on results[a]
3. Create relationships with various organizational stakeholders[a]	**3.** Work independently with minimal supervision[a]
4. Manage relationships and networks with others in the organization[ab]	**4.** Earn and maintain trust of leadership team[a]
5. Facilitate meetings with stakeholders in the organization	**5.** Collaborate with people from different teams on various projects[ab]
6T. Adapt and embrace organizational culture	**6.** Maintain composure under pressure[a]
6T. Deliver presentations to stakeholders in the organization[a]	**7.** Work through ambiguity and uncertainty[ac]
6T. Work through ambiguity and uncertainty[a]	**8.** Create relationships with various organizational stakeholders[a]
9T. Complete high visibility assignments[a]	**9T.** Manage relationships and networks with others in the organization[a]
9T. Collaborate with people from different teams on various projects[a]	**9T.** Demonstrate ability to effectively handle ambiguous situations[a]

Top Critical Experiences		
Manager	**Manager of Managers**	**Executive**
1T. Serve as a subject matter expert in a given area[a]	**1.** Earn and maintain trust of leadership team[b]	**1.** Complete high visibility assignments[b]
1T. Earn and maintain trust of leadership team[ab]	**2.** Manage relationships and networks with others in the organization[b]	**2.** Earn and maintain trust of leadership team[ab]
3. Work through ambiguity and uncertainty[bc]	**3.** Execute and deliver on results[a]	**3.** Work through ambiguity and uncertainty[b]
4. Maintain composure under pressure[a]	**4.** Create relationships with various organizational stakeholders[a]	**4.** Manage relationships and networks with others in the organization[b]
5. Manage large portions of projects	**5.** Deliver presentations to stakeholders in the organization[a]	**5.** Maintain composure under pressure[a]
6. Lead long-term projects	**6T.** Collaborate with people from different teams on various projects[b]	**6.** Create relationships with various organizational stakeholders[a]
7T. Collaborate with people from different teams on various projects[ab]	**6T.** Demonstrate ability to effectively handle ambiguous situations[a]	**7.** Deliver presentations to stakeholders in the organization[a]
7T. Complete high visibility assignments[ab]	**8.** Work through ambiguity and uncertainty[bc]	**8.** Maintain high visibility with executives
9T. Create and administer own projects from start to finish	**9.** Maintain composure under pressure[a]	**9.** Execute and deliver on results[a]
9T. Manage relationships and networks with others in the organization[ab]	**10.** Lead people through change	**10.** Demonstrate ability to effectively handle ambiguous situations[a]
9T. Create relationships with various organizational stakeholders[a]		

Note: T indicates same means within level. Superscripts indicate mean differences, if any, for the same experiences that appeared across the levels (e.g., Mean ratings for "Execute and deliver on results" compared across Individual Contributor, Expert Individual Contributor, and Executive did not differ from one another as they share the same superscript). The same experiences across levels with a different superscript reflected a significant mean difference (e.g., Means ratings for "Earn and maintain trust of leadership team" differed between Expert Individual Contributor and Manager of Managers as they had different superscripts).

Table 9

Top Five Critical Experiences Across Levels within Industry

Overall Top Critical Experiences		
Critical Experience	***M***	***SD***
1. Execute and deliver on results	4.66	.62
2. Earn and maintain trust of leadership team	4.55	.68
3. Serve as a subject matter expert	4.49	.74
4. Work through ambiguity and uncertainty	4.48	.68
5. Collaborate with people from different teams on various projects	4.47	.70

Similar to critical competencies, only one critical experience for Individual Contributors was rated at above a 4.50 level. However, all ten of the Executive level critical experiences for success were rated at above a 4.50 level. This may indicate that while Individual Contributors needed a wide range of experiences for success, it may also depend on the individual organization and career track/role as to what experiences were deemed as critical for success. For instance, if one was hired into as a selection specialist, their critical experiences necessary for success would be different than if one was hired into an HR position working with compensation. For the Executive level, the data suggested that all I-O Psychologists and those with similar backgrounds were required to have similar experiences to be successful in their position. We hypothesize that higher-level leadership experiences for success are similar across organizations, but within the Individual Contributor levels the more technical work required for success varies more dramatically. However, as we did not specifically ask about individual organizations, we are only speculating about the reasons for the differences in ratings. Future data collections should explore this further.

Government

Although the interviews noted that the job titles within many Government positions differ from typical job titles, initial interview results indicated that the Government career path model could be represented using the five job level structure. These levels also include two separate routes: Expert Individual Contributor and Managerial.

However, it was also noted in the interviews that the levels of Manager of Managers and Executive contained similar types of work that involved more than traditional I-O content, and that consequently few I-Os were employed at these levels. This was borne out in the survey data, where a small number of respondents who completed the entire survey were from one of these two levels (N = 9 for Manager of Managers; N = 1 for Executive). Given the similarity of the work between these two job levels, the low numbers of I-O Psychologists in Executive positions within the Government sector, the low number of survey respondents within these two job levels, as well as wanting to ensure anonymity and validity of data, we combined these two job levels for the survey analyses, resulting in four job levels overall. Figure 13 presents the revised four-level government career path.

Within this section, Tables 10 and 11 provide a list of the top 10 competencies across levels and the top five overall competencies, respectively. Tables 12 and 13 provide a list of the top 10 critical experiences and the top five overall critical experiences, respectively. Please refer to Appendix B, Tables B-5 and B-6, for a full list of results for competencies and critical experiences required for various Government roles and levels, respectively.

Figure 13. Government career path

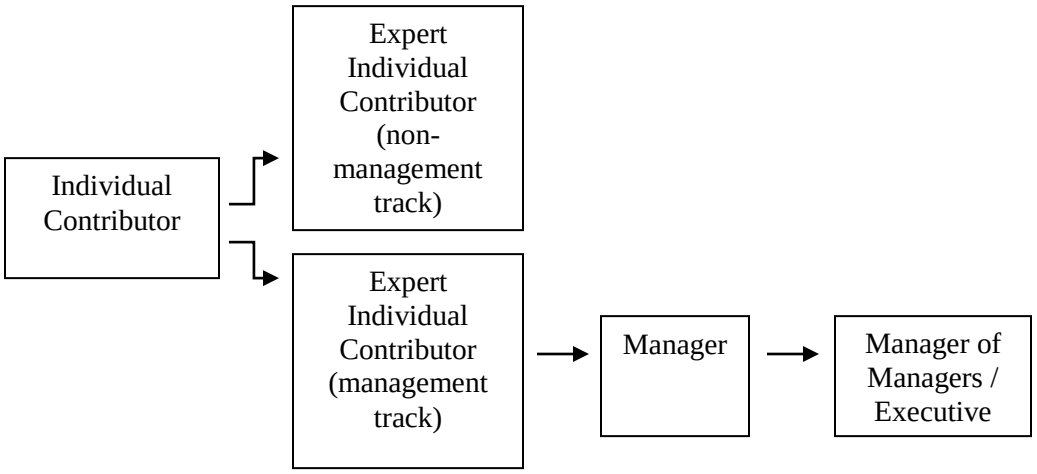


Table 10

Top 10 Competencies for Each Level within Government

Top Competencies			
Individual Contributor	**Expert Individual Contributor**	**Manager**	**Manager of Managers/Executive**
1T. Communication: Verbal	**1.** Integrity	**1.** Integrity	**1T.** Communication: Verbal
1T. Communication: Written	**2.** Ethical Behavior	**2.** Ethical Behavior	**1T.** Critical Thinking
1T. Critical Thinking	**3.** Communication: Written	**3.** Problem Solving	**1T.** Problem Solving
1T. Customer Service	**4.** Communication: Verbal	**4.** Critical Thinking	**4T.** Communication: Written
1T. Ethical Behavior	**5.** Critical Thinking	**5.** Communication: Written	**4T.** Integrity
1T. Integrity	**6.** Problem Solving	**6.** Decision Making	**6T.** Decision Making
1T. Interpersonal Skills	**7.** Attention to Detail	**7T.** Communication: Verbal	**6T.** Ethical Behavior
1T. Listening Skills	**8.** Interpersonal Skills	**7T.** Results Driven	**6T.** Presentation Skills
9T. Attention to Detail	**9.** Presentation Skills	**9T.** Customer Service	**6T.** Strategic Thinking
9T. Data Analysis	**10T.** Data Analysis	**9T.** Interpersonal Skills	**10.** Interpersonal Skills
9T. Knowledge of internal workings of the State or Federal government	**10T.** Listening Skills	**9T.** Time Management	
9T. Networking			
9T. Problem Solving			

Note. T indicates same means. Due to low numbers of respondents within some job levels, significance testing was not performed for the Government sector.

Table 11

Top Five Competencies Across Levels within Government

Overall Top Five Competencies		
Competency	***M***	***SD***
1. Integrity	4.73	.53
2. Ethical Behavior	4.69	.54
3. Communication: Written	4.61	.54
4. Critical Thinking	4.52	.67
5. Communication: Verbal	4.51	.64

Results indicated that most top-ranked competencies overlapped in importance for success at all job levels. The top five overall competencies (e.g., integrity; ethical behavior; critical thinking; and written and verbal communication) were seen within the top 10 competencies for each of the four levels. With the majority of participants being Expert Individual Contributors, it is not

surprising that the top five competencies overall almost directly map onto the top five competencies for the Expert Individual Contributors. Other top 10 competencies that were shared across the four job levels included interpersonal skills and problem solving. The overlapping critical competencies for levels differed only in their ranking of importance to master for success. Thus, we speculated that overall success in the Government sector can be enhanced in one's ability to master these seven important competencies. The non-managerial levels (Individual Contributor and Expert Individual Contributor) included listening skills, data analysis skills, and attention to detail within the top 10 most critical competencies to their success. Managerial levels (Manager and Manager of Managers/Executive), on the other hand, indicated that having decision making skills as necessary for success.

We found that both Individual Contributors and Managers had customer service competencies within their top 10, suggesting that working with clients is not just limited to certain levels. Furthermore, presentation skills were listed as important for Expert Individual Contributors and Manager of Managers/Executives, potentially indicating that these individuals may be required to present more often or to a larger range of groups. The four competencies that did not overlap across the levels included: knowledge of internal workings of the State or Federal government for Individual Contributors, being results driven and having time management skills as a Manager, and having strategic thinking as a Manager of Managers/Executive.

Compared with the other sectors, Government employees indicated that proficiency for almost all of the competencies was learned on-the-job. The competencies that stood out as mostly developed in graduate school included: written communication; critical thinking; data analysis; knowledge of Federal guidelines on employee selection; knowledge of principles, procedures, and techniques for test validation; knowledge of test theory as it pertains to personnel testing; and, knowledge of various tests and measurements available for selection. That these competencies were developed primarily through formal education should not be surprising given several are knowledge-based in nature or focused on core critical thinking and communication competencies. Structured training was considered important for developing competency within financial accountability and gaining knowledge of the internal workings of the State or Federal governments. Managers and Managers of Managers/Executives indicated structured training helped them to develop competency in mentoring, risk management, strategic leadership, and stress management.

Table 12

Top 10 Critical Experiences for Each Level within Government

Top Critical Experiences	
Individual Contributor	**Expert Individual Contributor**
1. Communicate with people outside of current branch, agency, or organization	**1.** Complete highly complex projects that include a wide range of skills necessary (e.g., analytical skills, knowledge of various methodologies)
2. Follow timelines and budgets on project work	**2T.** Deliver presentations to customers
3T. Create and administer own projects from start to finish	**2T.** Create and administer own projects from start to finish
3T. Lead project teams	**4.** Deliver effective briefings to senior management and/or customers
5T. Write technical reports	**5.** Follow timelines and budgets on project work
5T. Demonstrate that project work adds value to the organization	**6.** Demonstrate that project work adds value to the organization
5T. Become a part of a task force and/or committees	**7.** Complete high visibility assignments
5T. Work with customers or stakeholders who are not local	**8.** Monitor work to ensure it adheres to Federal law, regulations, and policies
5T. Monitor work to ensure it adheres to Federal law, regulations, and policies	**9.** Communicate with people outside of current branch, agency, or organization
5T. Complete high visibility assignments	**10T.**Work on a breadth of projects with different types of customers and on multiple teams
5T. Manage available resources	**10T.** Manage multiple projects and/or working with one specific, long-term client
5T. Partner with others in the organization	
5T. Develop knowledge and familiarity with multiple areas in the organization	
5T. Lead subject matter expert (SME) meetings	

Top Critical Experiences	
Manager	**Manager of Managers/Executive**
1. Manage performance of subordinates	**1T.** Partner with others in the organization
2. Lead project teams	**1T.** Engage employees or colleagues
3. Provide developmental opportunities to subordinates	**3.** Monitor work to ensure it adheres to Federal law, regulations, and policies
4. Demonstrate that project work adds value to the organization	**4T.** Oversee work to ensure meeting Federal law, regulations, and policies
5. Lead multiple projects	**4T.** Make decisions in a timely manner that will benefit the organization
6T. Deliver effective briefings to senior management and/or customers	**4T.** Communicate with people outside of current branch, agency, or organization
6T. Make decisions in a timely manner that will benefit the organization	**4T.** Personally complete special assignments from an Executive
8T. Follow timelines and budgets on project work	**7T.** Deliver presentations to customers
8T. Manage multiple projects and/or working with one specific, long-term client	**7T.** Demonstrate that project work adds value to the organization
8T. Monitor work to ensure it adheres to Federal law, regulations, and policies	**7T.** Complete highly complex projects that include a wide range of skills necessary (e.g., analytical skills, knowledge of various methodologies)
8T. Complete high visibility assignments	**7T.** Manage performance of subordinates
8T. Manage available resources	**7T.** Lead project teams
8T. Develop knowledge and familiarity with multiple areas in the organization	**7T.** Complete high visibility assignments
	7T. Manage available resources
	7T. Deliver effective briefings to senior management and/or customers
	7T. Demonstrate political savvy in structuring and designing projects
	7T. Lead multiple projects

Note. T indicates same means. Due to low numbers of respondents within some job levels, significance testing was not performed for the Government sector.

Table 13

Top Five Critical Experiences Across Levels within Government

Overall Top Critical Experiences Across Levels		
Critical Experience	***M***	***SD***
1. Complete highly complex projects that include a wide range of skills necessary (e.g., analytical skills, knowledge of various methodologies)	4.44	.81
2. Deliver presentations to customers	4.37	.92
3. Create and administer own projects from start to finish	4.36	.70
4. Deliver effective briefings to senior management and/or customers	4.35	1.00
5. Demonstrate that project work adds value to the organization	4.33	.88

Whereas many of the competencies critical for success within the Government sector were considered of similar importance for all levels, there was more of a divide with regard to critical experiences necessary for success. As can be seen in Table 12, following timelines on project work and monitoring work to ensure it adheres to Federal law, regulations, and policies were top-rated critical experiences across all job levels. A top rated critical experience unique to both individual contributor levels was creating and administering own projects from start to finish. Top-rated critical experiences unique to the managerial levels included "Manage performance of subordinates," "Lead multiple projects," and "Make decisions in a timely manner that will benefit the organization." Manager of Managers/Executives' top-rated critical experiences included "Engage employees or colleagues," "Oversee work to ensure meeting Federal law, regulations, and policies," "Personally complete special assignments from an executive," and "Demonstrate political savvy in structuring and designing projects," reflecting the strategic focus of this job level. Conversely, writing technical reports, leading subject matter meetings, becoming a part of a task force and/or committee, and working with non-local customers or stakeholders, more "hands on" or technical in nature, were top-rated critical experiences unique to Individual Contributors. As one moved beyond the Individual Contributor level, delivering effective briefings to senior management and/or customers became a top-rated critical experience. Overall, while there may be similar competencies necessary for success within the Government sector, the differentials for success across levels of the job ladder appeared in the experiences of the employees.

Supplemental Analyses: Two Job Level Model

As noted earlier, we observed low numbers of participants within some job levels (e.g., $N = 3$ for Individual Contributors; $N = 7$-9 for Manager of Managers). Additionally, there were a low number of participants for the Government sector overall relative to other employment sectors we studied. For this reason, we conducted supplemental analyses examining the data from a two job-level model. Specifically, consistent with the Government GS levels of non-managerial/managerial, we combined the Individual Contributor and Expert Individual levels into a single "Individual Contributor" level, and Managers and Manager of Managers/Executive into a single "Manager" level. This afforded us a larger combined sample size from which to conduct significance testing comparing competencies and critical experiences across the two levels.

Overall, results were similar to those reported for a four job-level model for both required competencies and critical experiences. Integrity, ethical behavior, written and verbal communication, problem solving, critical thinking, and interpersonal skills were top 10 competencies for both levels, as they were for all levels in the four job-level model. Among these competencies, only problem solving showed a significant difference in mean importance ratings between the two levels (4.35 for Individual Contributors vs. 4.73 for Managers). Individual Contributors noted that attention to detail and listening skills were critical competencies for success in their position, whereas Managers noted that decision making, customer service, and strategic thinking were critical competencies; again, similar to the results from the four job-level model.

Both job levels shared top rated critical experiences of completing high visibility assignments, monitoring work to ensure it adheres to federal law, regulations, and policies, delivering effective briefings to senior management and/or customers, and demonstrating that project work adds value to the organization, none of which differed significantly in their mean ratings of importance. The top three critical experiences for Individual Contributors (create and administer own projects from start to finish; complete highly complex projects; deliver presentations to customers) were not found on the top 10 critical experiences list for the Managerial level. The top two critical experiences for the Managerial level (manage performance of subordinates; lead project teams) were not found in the top-rated competencies for Individual Contributors. Managers are also required to make decisions in a timely manner, provide developmental opportunities to subordinates, and partner with others in the organization.

Academia

After reviewing the SME interviews and the survey data, we felt that the Academia career path was best described by three overall levels rather than five overall levels. The final levels included: Individual Contributor (Assistant and Associate Professor), Expert Individual Contributor (Full Professor), and Managerial (e.g., Department Chair, Dean, Vice President, Provost, President). We collapsed the Managerial positions as only two respondents identified as holding a Dean position and one responded indicated they held a Vice President position (e.g., Manager of Managers positions), and only three respondents indicated they held an executive position (i.e., two Provosts and one President). Although we did not expect there to be many I-O Psychologists in the Manager of Managers or Executive positions upon survey launch, we wanted to include those options in the survey to ensure we were not missing out on a group of Academics.

In addition, and based on both the SME interviews and the data, we realized that Academia does not have one clear career path. The progression from Individual Contributor to Expert Individual Contributor is often the progression that Academics first follow. However, from there, Academics may move up to a managerial position and continue to stay in a managerial position until retirement or leaving the school. Or, they may move into a managerial position for a few years before returning to a professor position. Others may bounce back and forth between the two or even hold two positions (e.g., Full Professor and Department Chair) at the same time. Still others may remain as a Full Professor and never pursue a managerial position. Thus, the Academia career path is often set around the individual's ultimate career goals, or the needs and/or rules of the University (e.g., needing a Department Chair; unable to move into an administrative position beyond Department Chair), rather than following a set career ladder. A model of the path can be found in Figure 14.

Within this section, Tables 14 and 15 provide a list of the top 10 competencies across levels and the top five overall competencies, respectively. Tables 16 and 17 provide a list of the top 10 critical experiences across levels and the top five overall critical experiences, respectively. Please refer to Appendix B, Tables B-7 and B-8, for a full list of results for competencies and critical experiences required for various Academia roles and levels, respectively.

Figure 14. Academia career path

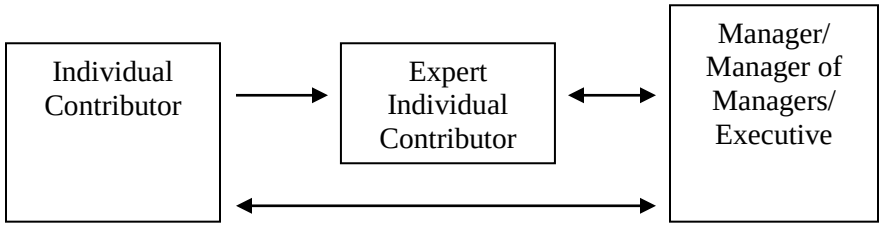


Table 14

Top Ten Competencies for Each Level within Academia

Top Competencies		
Individual Contributor	**Expert Individual Contributor**	**Manager/ Manager of Managers/ Executive**
1. Communication: Written[a]	**1.** Communication: Written[a]	**1.** Integrity[b]
2. Research Ability[a]	**2.** Communication: Verbal[a]	**2.** Fairness[b]
3. Communication: Verbal[a]	**3.** Research Ability[a]	**3.** Ethical Behavior[a]
4. Integrity[a]	**4T.** Ethical Behavior[a]	**4T.** Communication: Verbal[a]
5. Ethical Behavior[a]	**4T.** Integrity[ab]	**4T.** Trustworthiness[b]
6. Teaching Ability[a]	**6.** Trustworthiness[b]	**6.** Leadership
7. Disciplinary Competence[a]	**7.** Creative Thinking[a]	**7.** Communication: Written[b]
8. Creative Thinking[a]	**8.** Teaching Ability[a]	**8.** Collaboration
9. Fairness[a]	**9.** Disciplinary Competence[a]	**9.** Attention to Detail[a]
10T. Attention to Detail[a]	**10.** Energy	**10.** Administrative Skills
10T. Trustworthiness[a]		

Note. Individual Contributor = Assistant Professors and Associate Professors; Expert Individual Contributor = Full Professors, Manager/Manager of Managers/Executive = Department Chair, Dean, Vice President, Provost, President. T indicates same means. The same competency across levels sharing the same superscript had means that did not differ from one another (e.g., mean rating for Communication: Verbal compared across Individual Contributor, Expert Individual Contributor, and Manager/Manager of Managers/Executive did not differ significantly). The same competency across levels with a different superscript reflected a significant mean difference (e.g., Fairness between Individual Contributor and Manager/Manager of Managers/Executive differed).

Table 15

Top Five Competencies Across Levels within Academia

Overall Top Five Competencies		
Competency	***M***	***SD***
1. Communication: Written	4.75	.52
2. Communication: Verbal	4.64	.57
3. Research Ability	4.49	.83
4. Integrity	4.48	.71
5. Ethical Behavior	4.47	.75

While we reported the top ten competencies within each level, participants only rated a few of the competencies above a mean average of 4.00 (i.e., *very important*) especially within the Individual Contributor level. We did find that there were many differences in importance of certain competencies across career paths. For instance, while written communication was rated in the top ten across all three levels, it was significantly more important for Individual Contributors and Expert Individual Contributors than for those in a Managerial position, $F(2, 388) = 7.97$, $p < .001$. Further differences can be found in Table 14. Both the Individual Contributor and Expert

Individual Contributor levels had no significant differences in ratings of importance, which was expected as they both hold the title of Professor.

The rankings of the critical competencies changed slightly as one moved into the Managerial role, as new duties required additional leadership and administrative skills. For instance, creative thinking, research ability, disciplinary competence, and teaching ability fall out of the top ten, underscoring the shift in the nature of Individual Contributor and Managerial roles. In turn, integrity, fairness, and ethical behavior become the top three most important competencies necessary for success once one moves into a Managerial role.

Participants' responses varied on where they developed proficiency for the competencies. Interestingly, many marked "N/A" throughout the list of competencies, especially for competencies that are more innate and personality-related, such as compassion, empathy, energy, and enthusiasm. Other competencies were marked as "N/A" for Individual Contributors and Expert Individual Contributors, but were indicated as learned through structured training by Managers (e.g., financial acumen). This difference could also be due to the relative importance of the competencies for each level, as financial acumen was rated as more important for success by Managers than Individual Contributors or Expert Individual Contributors. Thus, such competencies not required for success may have not yet been learned.

Table 16

Top Ten Critical Experiences for Each Level within Academia

Top Critical Experiences		
Individual Contributor	**Expert Individual Contributor**	**Manager/ Manager of Managers/ Executive**
1. Publish articles in field of expertise[a]	**1.** Design and conduct studies[a]	**1.** Demonstrate effective administration for successful department operation
2. Design and conduct studies[a]	**2.** Publish articles in field of expertise[a]	**2.** Provide service to the Department
3. Balance research, teaching, and service effectively[a]	**3.** Mentor students[a]	**3.** Maintain successful running of department (e.g., classes offered; department respected across campus)
4. Effectively manage class discussions, creating assignments, tests, quizzes, or papers, and grading course work[a]	**4.** Balance research, teaching, and service effectively[a]	**4.** Provide service to the College
5. Deliver engaging lectures[a]	**5.** Effectively manage class discussions, creating assignments, tests, quizzes, or papers, and grading course work[a]	**5.** Advocate for department within the broader College and/or University
6. Mentor students[a]	**6.** Deliver engaging lectures[a]	**6.** Make decisions based on competing interests
7. Use different types of analytical methods (e.g., Structural Equation Modeling, Hierarchical Linear Modeling, Multiple Regression, ANOVAs)	**7.** Provide career advice and other professional guidance to students	**7.** Act as a successful liaison between faculty and administration
8. Use different types of analytical software (e.g., SPSS, Mplus, SAS)	**8.** Provide research experiences to students	**8.** Manage performance of department faculty
9. Receive favorable evaluations from students	**9.** Manage the successful completion of thesis and/or dissertations of student advisees	**9.** Manage performance of employees
10. Become recognized in field of expertise[a]	**10.** Become recognized in field of expertise[a]	**10.** Provide service to the University

Note. Individual Contributor = Assistant Professors and Associate Professors; Expert Individual Contributor = Full Professors, Manager/Manager of Managers/Executive = Department Chair, Dean, Vice President, Provost, President. T indicates same means. Superscripts indicate mean differences, if any, for the same experiences that appeared across the levels (e.g., Mean ratings for "Deliver engaging lectures" compared across Individual Contributor and Expert Individual Contributor did not differ from one another as they share the same superscript).

Table 17

Top Five Critical Experiences Across Levels within Academia

Overall Top Critical Experiences		
Critical Experience	***M***	***SD***
1. Design and conduct studies	4.44	.92
2. Publish articles in field of expertise	4.42	.93
3. Balance research, teaching, and service effectively	4.37	.87
4. Effectively manage class discussions, creating assignments, tests, quizzes, or papers, and grading course work	4.30	.90
5. Mentor students	4.26	.90

Similar to the Academia competencies, many of the experiences for Individual Contributors and Expert Individual Contributors were not significantly different from one another. For instance, the ANOVA for "design and conduct studies" was significant, $F(2, 352) = 6.28$, $p < .01$, but the factor driving the significance were the ratings from those in Managerial positions. Thus, the differences occur in the critical experiences that do not overlap between the two Individual Contributor levels (e.g., "Use different types of analytical software," and "Provide career advice and other professional guidance to students").

Also unlike the competencies, the critical experiences necessary for success are markedly more different when one moves from a professorial position into a managerial position. In fact, there were no overlapping experiences between Managerial positions and either of the Individual Contributor positions. For instance, the experiences necessary for success in a managerial position included management of various areas (e.g. performance of faculty, performance of employees, liaison between faculty and administration), whereas (a) designing and conducting studies, (b) publishing research, and (c) balancing research, teaching, and service were more important for success for professors in Individual Contributor and Expert Individual Contributor roles.

Step 5: Creating Final Career Path Models and Future Directions

Finally, our plan is to have interactive career path models available for members to view on the SIOP website. These interactive models will assist SIOP members, students, and potential members in visually depicting the most critical competencies and experiences one should have to be successful at each level of a given sector.

The results of the project and corresponding interactive career models we believe offer the potential to provide a great career resource for all SIOP members, including:

1. Graduate students and faculty advisors:
    - Exploring career options
    - Determining internship objectives
    - Designing coursework for graduate programs
2. Early career I-O Psychologists:
    - Charting a career path/trajectory
    - Creating a framework for seeking new experiences and developing competencies
    - Considering individual contributor vs. managerial career tracks
3. Mid- and-late career I-O Psychologists:
    - Considering career transitions by matching necessary competencies/experiences to current state
    - Setting expectations and managing other I-O Psychologists

Conclusion

A 5-step study was conducted for the purpose of identifying the career paths for Industrial-Organizational (I-O) Psychologists working within the fields of Academia, Consulting, Industry, and Government. We identified the competencies and critical experiences required for the successful pursuit of an I-O career within each sector and also investigated where members developed those competencies.

Overall, oral communication and ethical behavior were listed as two of the top five competencies for Academia, Consulting, Industry, and Government, regardless of level. While sectors may share similar competencies, it was clear that each sector had its own set of specialized competencies that were necessary for success. Specifically, within the Academia sector, teaching ability was a critical competency for Associate, Assistant, and Full Professors, but fairness and leadership became more critical as one advanced to Department Chair, Dean, or Provost. The consulting sector highlighted that written communication skills and interpersonal skills were important competencies for success at all levels of the organization. Members in Industry positions noted that establishing and maintaining relationships with various stakeholders was critical for success. Government employees indicated that they had to monitor their work more closely to ensure it adhered to federal law, regulations, and policies.

Critical experiences for success in each sector told a different story. While it may be important to deliver effective briefings or presentations to clients (e.g., consulting, government), many of the top critical experiences were unique to each sector.

The overall study had many implications, including where skills were learned, whether SIOP and/or graduate schools play a role in developing those skills, whether SIOP and/or graduate schools could be doing more to prepare I-O Psychologists to enter into executive roles, and overarching career path patterns. First, we noticed a pattern in which skills were learned across all sectors. Technical skills, such as writing competence, were needed for success at lower levels within a sector, but at upper levels participants indicated that non-technical skills such as leadership and adaptability were needed for success. In addition, many of the participants in the Individual Contributor positions noted that they learned their technical skills in graduate school, whereas the non-technical skills were often marked as being learned on-the-job rather than in training or in graduate school. In regards to training to these competencies, graduate programs can develop curriculum to help build some of these non-technical skills (that are particularly important for the management track) along with the typically focused harder skills. For example, working in collaborative research groups could help develop collaboration, leadership, and trustworthiness competencies along with research ability and written communication skills.

We also noticed a general trend across all sectors for where participants indicated they developed their competencies depending on their current career level. In the Individual Contributor levels, participants said that they developed certain technical competencies (e.g., written communication) in graduate school. However, Manager of Managers and Executive level participants indicated learning the *exact same* competencies on-the-job rather than in graduate school. We are intrigued by this finding and think future research should focus on why this may happen.

The question then became what can SIOP do to help teach and train these hard and soft competencies, and is it really SIOPs role to help train? It may be possible to have online courses, workshops, articles in TIP, continuing education courses, and mentorship from others within the same sector to help build the hard and soft competencies needed for success. However, one needs to consider if SIOP should have a role in training I-O Psychologists and those from related fields.

In addition, should graduate schools be held accountable for teaching hard and soft competencies? This pointed us in the direction of the Byrne et al., (2014) article and our subsequent Zelin et al., (2014) reply in answering the question, "what will best prepare graduate students for success in their future sector(s)?" It appeared from the data that hard competencies were what employees needed to achieve for success in the early stages of their career. Thus, it was worth considering if graduate schools should only focus on mastery of hard competencies or if they should also be focused on developing soft competencies that become more important for success later on in careers.

Another question raised from the data were, "who should be helping to prepare I-O Psychologists to enter into executive roles?" Is this training something that SIOP should take part in, or something that employees should learn in graduate school? Or should it be a mixture of the two? As many of the soft-competencies were learned on-the-job, it is worth considering if there are actually any ways to teach the soft competencies and if those methods will be effective since they could not be specifically tailored to each workplace.

Lastly, the data indicated that there were two tracks in all sectors: Expert Individual Contributor versus Management. Thus, even within individual sectors, people were able to make a choice as to which career path to take that best suited their ultimate career goals, strengths, and personality. Even within the Government sector, I-Os reported that they were able to maintain an Expert Individual Contributor status even in the higher GS levels. This was promising for people who were interested in either becoming an Expert Individual Contributor or pursuing a management track, as they would not be limited to certain sectors to obtain success on their chosen path. Additionally, as evidenced in the SME interviews, we noticed that employees who first worked in the Consulting sector had a much faster upward career ladder succession within the Industry sector as they brought a wide range of skills, knowledge, and background from multiple organizations into their particular industry.

Overall, the SIOP Career Study has many benefits for the SIOP community, including being a career resource for all career points, creating a framework to manage careers, providing an information source for mentoring, a discussion topic for graduate training and education as well as SIOP training, and potential advising efforts for licensure and certifications.

Appendix A: Literature Review

Career Decision Making in General

- Protean Careers
    - More and more people are choosing their own paths in the workplace instead of relying on promotions within their organization
    - Baby boomer generation & switching organizations after only a couple of years
    - Career self-management (King, 2004)
    - Ibarra & Barbulescu, (2010)
    - Identity Development
        - Bosma & Kunnen, (2001)
        - Day & Harrison, (2007)
        - DeRue & Ashford, (2010)
        - Ibarra, (1999)
        - Ibarra & Petriglieri, (2010)
        - Johnson et al., (2006)
        - Kornives et al., (2005)
        - Walsh & Gordon, (2008)
- Graduating Degree
    - Graduating with a Masters- where to go from there? (Erdwins & Buffardi, 1983)
- Person-Organization Fit
    - Thrive in an organization with good P-O fit (Holland, 1996)
    - Identity workplaces (Petriglieri & Petriglieri, 2010)
- Career Barriers
    - Swanson, Daniels & Tokar, (1996)
- Does Personality Play a Role?
    - FFM and what job influences (Reed, Bruch, Haase, 2004)
- As Skills Progress:
    - Mumford, Campion, & Morgeson, (2007)

Sponsorship and Career Success

- Doctoral program prestige and publications as a PhD Student influenced the prestige of first job
- First job prestige and career publications influenced success in terms of rank, salary, presence on editorial boards along with other extrinsic factors (Judge, Kammeyer-Mueller, & Bretz, 2004)

Fit with the Environment

- People tend to continue in jobs because their interests are aligned with their work environment
- Openness is associated with more frequent job-changing (Holland, 1996)
- Job satisfaction has a strong correlation (.70) with vocational identity
    - A person with a clear sense of identity has a stable picture of his or her goals, interests, skills, and compatible occupations

Career Success

- Personal feelings of career success may depend on the community in which the person was raised (Heslin, 2005)
    - In either a figurative or literal sense, people can go back to where they were raised and help the people who are there
    - The diversity of contexts where graduate students come from may predict the diversity of positions they develop after they graduate

The Boundaryless Career

- Careers now transcend boundaries between different employers and seek legitimacy from outside the employing organization (Arnold & Cohen, 2007)
- Involve challenging the traditional approach of movement upward in a single organizational hierarchy
    - Individuals reject opportunities for advancement in lieu of personal or family reasons
- The new expectation is for employees to be flexible

Scientists and Practitioners have Different Roles

- Scientists value autonomy while practitioners value structure, money, and affiliation more (Brooks et al., 2003)

Professional Psychology Roles

- Psychology and public policy (Levant et al. 2001)
    - Psychologists are in a unique position to handle social problems like health, education, welfare, crime and violence prevention
    - Psychologists may serve on public policy boards, obtain positions on local hospital staffs, or join their communities' chamber of commerce

Career Self-Management

- Job content innovation was discussed as the development of substantive changes in methods or procedures used in performing job tasks (King, 2004)
    - Results in an enlargement of one's task environment (Graen, 1976)
- The strategic choice of careers may depend on the instrumental value of job moves
    - Career choice is also affected by one's social network and gatekeepers between positions
- Career anchors are somewhat like higher-order goals which guide career-related decisions

I-O Psychologists in Academic Administration (Hays-Thomas et al., 2006)

- Academic administration is attractive because there may be a need to focus on the future of higher education as it changes with society
- I-Os have knowledge of compensation, benefits, and staffing
- May be appealing for I-Os with political savvy
    - However, I-O's aren't trained in negotiation, conflict resolution, or mediation

General Psychology Careers

- Clinical Psychologists & the three different career paths: Scientists, Practitioners, & Scientist-Practitioners (Conway, 1988)
- Different routes to take for Professional Psychology (Levant et al., 2001)

I-O Careers

- Scientist-Practitioner roles (Hays-Thomas et al., 2006)
- SIOP Article with I-O careers, including Academia & Consulting (Hinrichs, 2003)
- Individual performance in graduate school program predicting success (Judge, Kemmeyer-Mueller, & Bretz, 2004)

Other Careers

- Medical (Pratt et al., 2008)

Appendix B: Additional Large Tables

Consulting

Table B-1

Consulting Competencies and Where Proficiency Developed

Consulting Competencies						Where is Proficiency for this Competency Developed? (%)			
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers	Executive	*Graduate School*	*On-the-job*	*Structured Training*	*N/A*
1. Adaptability	*M* = 4.29 *SD* = .69	*M* = 4.31 *SD* = .72	*M* = 4.43 *SD* = .73	*M* = 4.61 *SD* = .50	*M* = 4.53 *SD* = .59	IC = 25.0 EIC =9.6 M = 7.9 MoM = 0 Exec = 5.1	IC = 46.9 EIC = 73.0 M = 74.6 MoM = 75.0 Exec = 79.5	IC = 0 EIC = 1.7 M = 0 MoM = 0 Exec = 0	IC = 28.1 EIC = 15.7 M = 17.5 MoM = 25.0 Exec = 15.4
2. Attention to detail	*M* = 4.39 *SD* = .62	*M* = 4.24 *SD* = .76	*M* = 4.30 *SD* = .71	*M* = 4.06 *SD* = .90	*M* = 4.14 *SD* = .75	IC = 53.1 EIC = 36.3 M = 38.1 MoM = 28.6 Exec = 28.7	IC = 12.5 EIC = 42.5 M = 44.4 MoM = 28.6 Exec = 56.5	IC = 0 EIC = .9 M = 0 MoM = 0 Exec = .9	IC = 34.4 EIC = 20.4 M = 17.5 MoM = 42.9 Exec = 13.9
3. Knowledge of multiple content areas in psychology	*M* = 3.06 *SD* = 1.00	*M* = 3.44 *SD* = .99	*M* = 3.49 *SD* = .94	*M* = 3.44 *SD* = 1.04	*M* = 3.72 *SD* = .88	IC = 93.8 EIC = 85.2 M = 83.9 MoM = 87.5 Exec = 83.1	IC = 0 EIC = 10.4 M = 14.5 MoM = 12.5 Exec = 14.4	IC = 3.1 EIC = .9 M = 0 MoM = 0 Exec = 1.7	IC = 3.1 EIC = 3.5 M = 1.6 MoM = 0 Exec = .8
4. Business development	*M* = 3.00 *SD* = .95	*M* = 3.55 *SD* = 1.02	*M* = 3.97 *SD* = .95	*M* = 4.06 *SD* = .87	*M* = 4.23 *SD* = .86	IC = 6.3 EIC = 0 M = 1.7 MoM = 0 Exec = .8	IC = 71.9 EIC = 89.7 M = 86.7 MoM = 93.8 Exec = 94.1	IC = 3.1 EIC = 4.3 M = 8.3 MoM = 6.3 Exec = 3.4	IC = 18.8 EIC = 6.0 M = 3.3 MoM = 0 Exec = 1.7
5. Coaching	*M* = 2.59 *SD* = 1.04	*M* = 3.15 *SD* = 1.27	*M* = 3.28 *SD* = .98	*M* = 3.71 *SD* = .99	*M* = 3.80 *SD* = 1.11	IC = 15.6 EIC = 5.2 M = 4.8 MoM = 6.3 Exec = 4.3	IC = 53.1 EIC = 59.5 M = 69.4 MoM = 75.0 Exec = 78.6	IC = 3.1 EIC = 17.2 M = 8.1 MoM = 12.5 Exec = 8.5	IC = 28.1 EIC = 18.1 M = 17.7 MoM = 6.3 Exec = 8.5

Consulting Competencies						Where is Proficiency for this Competency Developed? (%)			
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers	Executive	*Graduate School*	*On-the-job*	*Structured Training*	*N/A*
6. Collaboration	*M* = 4.28 *SD* = .73	*M* = 4.00 *SD* = .83	*M* = 4.34 *SD* = .71	*M* = 4.13 *SD* = .72	*M* = 4.01 *SD* = .81	IC = 56.3 EIC = 19.1 M = 24.6 MoM = 18.8 Exec = 9.4	IC = 21.9 EIC = 69.6 M = 67.2 MoM = 56.3 Exec = 75.2	IC = 0 EIC = 2.6 M = 0 MoM = 0 Exec = .9	IC = 21.9 EIC = 8.7 M = 8.2 MoM = 25.0 Exec = 14.5
7. Commitment	*M* = 3.72 *SD* = .68	*M* = 4.06 *SD* = .91	*M* = 3.89 *SD* = .94	*M* = 3.94 *SD* = .83	*M* = 4.10 *SD* = .85	IC = 40.6 EIC = 26.1 M = 21.0 MoM = 12.5 Exec = 19.3	IC = 21.9 EIC = 38.7 M = 35.5 MoM = 31.3 Exec = 57.9	IC = 0 EIC = .9 M = 0 MoM = 0 Exec = .9	IC = 37.5 EIC = 34.2 M = 43.5 MoM = 56.3 Exec = 21.9
8. Communication: Verbal	*M* = 4.50 *SD* = .76	*M* = 4.66 *SD* = .61	*M* = 4.62 *SD* = .58	*M* = 4.71 *SD* = .59	*M* = 4.70 *SD* = .49	IC = 62.5 EIC = 34.2 M = 26.2 MoM = 12.5 Exec = 19.8	IC = 18.8 EIC = 52.6 M = 62.3 MoM = 62.5 Exec = 69.0	IC = 6.3 EIC = 4.4 M = 0 MoM = 0 Exec = 5.2	IC = 12.5 EIC = 8.8 M = 11.5 MoM = 25.0 Exec = 6.0
9. Communication: Written	*M* = 4.66 *SD* = .55	*M* = 4.58 *SD* = .62	*M* = 4.52 *SD* = .62	*M* = 4.53 *SD* = .72	*M* = 4.42 *SD* = .66	IC = 71.9 EIC = 58.3 M = 52.5 MoM = 37.5 Exec = 41.9	IC = 15.6 EIC = 35.7 M = 36.1 MoM = 43.8 Exec = 51.3	IC = 3.1 EIC = 2.6 M = 0 MoM = 0 Exec = 2.6	IC = 9.4 EIC = 3.5 M = 11.5 MoM = 18.8 Exec = 4.3
10. Conscientiousness	*M* = 4.32 *SD* = .75	*M* = 4.41 *SD* = .67	*M* = 4.31 *SD* = .68	*M* = 4.18 *SD* = 1.02	*M* = 4.37 *SD* = .67	IC = 53.1 EIC = 25.2 M = 19.7 MoM = 6.3 Exec = 21.2	IC = 9.4 EIC = 36.0 M = 32.8 MoM = 12.5 Exec = 51.3	IC = 0 EIC = .9 M = 0 MoM = 0 Exec = 0	IC = 37.5 EIC = 37.8 M = 47.5 MoM = 81.3 Exec = 27.4
11. Creating a vision	*M* = 2.97 *SD* = 1.00	*M* = 3.07 *SD* = .93	*M* = 3.20 *SD* = .83	*M* = 4.35 *SD* = .86	*M* = 3.89 *SD* = .94	IC = 0 EIC = 4.4 M = 5.0 MoM = 0 Exec = 4.4	IC = 56.3 EIC = 64.9 M = 73.3 MoM = 93.8 Exec = 82.5	IC = 0 EIC = 7.0 M = 3.3 MoM = 0 Exec = 2.6	IC = 43.8 EIC = 23.7 M = 18.3 MoM = 6.3 Exec = 10.5

Consulting Competencies						Where is Proficiency for this Competency Developed? (%)			
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers	Executive	*Graduate School*	*On-the-job*	*Structured Training*	*N/A*
12. Creativity	*M* = 3.09 *SD* = 1.09	*M* = 3.51 *SD* = .83	*M* = 3.33 *SD* = .82	*M* = 3.76 *SD* = .66	*M* = 3.90 *SD* = .77	IC = 21.9 EIC = 15.2 M = 13.3 MoM = 12.5 Exec = 8.8	IC = 34.4 EIC = 43.8 M = 41.7 MoM = 25.0 Exec = 63.7	IC = 0 EIC = 1.8 M = 0 MoM = 0 Exec = .9	IC = 43.8 EIC = 39.3 M = 45.0 MoM = 62.5 Exec = 26.5
13. Critical thinking	*M* = 4.56 *SD* = .56	*M* = 4.56 *SD* = .67	*M* = 4.60 *SD* = .61	*M* = 4.65 *SD* = .61	*M* = 4.55 *SD* = .55	IC = 68.8 EIC = 68.1 M = 65.0 MoM = 50.0 Exec = 61.4	IC = 12.5 EIC = 15.9 M = 16.7 MoM = 25.0 Exec = 30.7	IC = 0 EIC = 2.7 M = 0 MoM = 0 Exec = .9	IC = 18.8 EIC = 13.3 M = 18.3 MoM = 25.0 Exec = 7.0
14. Cross cultural acumen	*M* = 2.97 *SD* = 1.00	*M* = 2.84 *SD* = 1.02	*M* = 3.02 *SD* = 1.02	*M* = 3.29 *SD* = 1.31	*M* = 3.26 *SD* = .99	IC = 21.9 EIC = 13.2 M = 25.0 MoM = 12.5 Exec = 6.3	IC = 37.5 EIC = 55.3 M = 61.7 MoM = 50.0 Exec = 75.7	IC = 0 EIC = 6.1 M = 0 MoM = 0 Exec = 4.5	IC = 40.6 EIC = 25.4 M = 13.3 MoM = 37.5 Exec = 13.5
15. Customer service	*M* = 4.13 *SD* = .94	*M* = 4.16 *SD* = .97	*M* = 4.38 *SD* = .76	*M* = 4.53 *SD* = .72	*M* = 4.37 *SD* = .81	IC = 9.4 EIC = .9 M = 1.7 MoM = 0 Exec = .9	IC = 78.1 EIC = 84.3 M = 86.7 MoM = 86.7 Exec = 90.3	IC = 3.1 EIC = 2.6 M = 5.0 MoM = 0 Exec = 2.7	IC = 9.4 EIC = 12.2 M = 6.7 MoM = 13.3 Exec = 6.2
16. Data analysis	*M* = 4.19 *SD* = .93	*M* = 3.58 *SD* = 1.10	*M* = 3.70 *SD* = .99	*M* = 3.41 *SD* = 1.12	*M* = 3.44 *SD* = .99	IC = 87.1 EIC = 94.8 M = 86.9 MoM = 100.0 Exec = 93.1	IC = 12.9 EIC = 4.3 M = 11.5 MoM = 0 Exec = 6.9	IC = 0 EIC = 0 M = 1.6 MoM = 0 Exec = 0	IC = 0 EIC = .9 M = 0 MoM = 0 Exec = 0
17. Data management	*M* = 3.94 *SD* = 1.13	*M* = 3.11 *SD* = 1.19	*M* = 3.42 *SD* = 1.06	*M* = 3.06 *SD* = 1.12	*M* = 2.95 *SD* = 1.09	IC = 56.3 EIC = 62.9 M = 62.3 MoM = 75.0 Exec = 64.0	IC = 34.4 EIC = 31.9 M = 34.4 MoM = 18.8 Exec = 31.6	IC = 0 EIC = 0 M = 0 MoM = 0 Exec = .9	IC = 9.4 EIC = 5.2 M = 3.3 MoM = 6.3 Exec = 3.5

Consulting Competencies						Where is Proficiency for this Competency Developed? (%)			
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers	Executive	*Graduate School*	*On-the-job*	*Structured Training*	*N/A*
18. Decision making	*M* = 3.88 *SD* = .83	*M* = 3.91 *SD* = .83	*M* = 4.37 *SD* = .70	*M* = 4.69 *SD* = .48	*M* = 4.40 *SD* = .67	IC = 21.9 EIC = 8.9 M = 16.7 MoM = 6.3 Exec = 7.1	IC = 65.6 EIC = 74.1 M = 65.0 MoM = 81.3 Exec = 82.1	IC = 0 EIC = 2.7 M = 1.7 MoM = 0 Exec = 2.7	IC = 12.5 EIC = 14.3 M = 16.7 MoM = 12.5 Exec = 8.0
19. Dedication	*M* = 3.78 *SD* = .71	*M* = 3.93 *SD* = .88	*M* = 3.98 *SD* = .83	*M* = 4.00 *SD* = .79	*M* = 4.23 *SD* = .79	IC = 46.9 EIC = 32.1 M = 25.4 MoM = 12.5 Exec = 17.9	IC = 12.5 EIC = 29.5 M = 30.5 MoM = 25.0 Exec = 57.1	IC = 0 EIC = .9 M = 0 MoM = 0 Exec = .9	IC = 40.6 EIC = 37.5 M = 44.1 MoM = 62.5 Exec = 24.1
20. Delegation	*M* = 2.66 *SD* = 1.00	*M* = 2.61 *SD* = .99	*M* = 3.86 *SD* = .88	*M* = 4.18 *SD* = .73	*M* = 3.35 *SD* = 1.14	IC = 9.4 EIC = 3.5 M = 1.6 MoM = 0 Exec = 1.8	IC = 62.5 EIC = 71.1 M = 86.9 MoM = 87.5 Exec = 88.2	IC = 0 EIC = 7.9 M = 4.9 MoM = 0 Exec = 3.6	IC = 28.1 EIC = 17.5 M = 6.6 MoM = 12.5 Exec = 6.4
21. Entrepreneurship	*M* = 2.34 *SD* = 1.13	*M* = 3.02 *SD* = 1.23	*M* = 2.83 *SD* = 1.09	*M* = 3.82 *SD* = .81	*M* = 4.16 *SD* = .83	IC = 12.5 EIC = 1.7 M = 8.5 MoM = 0 Exec = 1.8	IC = 12.5 EIC = 61.2 M = 54.2 MoM = 75.0 Exec = 90.2	IC = 0 EIC = 2.6 M = 0 MoM = 0 Exec = .9	IC = 75.0 EIC = 34.5 M = 37.3 MoM = 25.0 Exec = 7.1
22. Ethical behavior	*M* = 4.31 *SD* = .74	*M* = 4.62 *SD* = .60	*M* = 4.38 *SD* = .77	*M* = 4.65 *SD* = .49	*M* = 4.69 *SD* = .65	IC = 43.8 EIC = 28.1 M = 45.8 MoM = 12.5 Exec = 33.9	IC = 18.8 EIC = 33.3 M = 25.4 MoM = 43.8 Exec = 42.0	IC = 3.1 EIC = 5.3 M = 0 MoM = 0 Exec = .9	IC = 34.4 EIC = 33.3 M = 28.8 MoM = 43.8 Exec = 23.2
23. Executive disposition	*M* = 2.81 *SD* = 1.18	*M* = 3.37 *SD* = 1.16	*M* = 3.32 *SD* = .95	*M* = 4.06 *SD* = .75	*M* = 4.05 *SD* = .92	IC = 9.4 EIC = 0 M = 1.7 MoM = 0 Exec = 0	IC = 34.4 EIC = 67.0 M = 71.7 MoM = 81.3 Exec = 92.9	IC = 0 EIC = 2.7 M = 0 MoM = 0 Exec = .9	IC = 56.3 EIC = 30.4 M = 26.7 MoM = 18.8 Exec = 6.3

Consulting Competencies						Where is Proficiency for this Competency Developed? (%)			
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers	Executive	*Graduate School*	*On-the-job*	*Structured Training*	*N/A*
24. Feedback skills	*M* = 3.66 *SD* = 1.13	*M* = 3.75 *SD* = 1.03	*M* = 3.86 *SD* = .86	*M* = 4.12 *SD* = .78	*M* = 4.09 *SD* = .80	IC = 28.1 EIC = 9.5 M = 11.9 MoM = 0 Exec = 4.4	IC = 56.3 EIC = 69.0 M = 74.6 MoM = 81.3 Exec = 84.2	IC = 6.3 EIC = 15.5 M = 8.5 MoM = 6.3 Exec = 9.6	IC = 9.4 EIC = 6.0 M = 5.1 MoM = 12.5 Exec = 1.8
25. Financial acumen	*M* = 2.06 *SD* = .84	*M* = 2.89 *SD* = .95	*M* = 3.05 *SD* = 1.04	*M* = 3.71 *SD* = .69	*M* = 3.61 *SD* = .83	IC = 3.1 EIC = 2.6 M = 5.0 MoM = 0 Exec = 5.3	IC = 56.3 EIC = 68.4 M = 76.7 MoM = 87.5 Exec = 78.9	IC = 0 EIC = 7.7 M = 5.0 MoM = 12.5 Exec = 8.8	IC = 40.6 EIC = 21.4 M = 13.3 MoM = 0 Exec = 7.0
26. Flexibility	*M* = 4.16 *SD* = .92	*M* = 4.18 *SD* = .76	*M* = 4.33 *SD* = .70	*M* = 4.41 *SD* = .51	*M* = 4.29 *SD* = .68	IC = 45.2 EIC = 9.6 M = 20.7 MoM = 6.3 Exec = 10.7	IC = 25.8 EIC = 92.6 M = 46.6 MoM = 31.3 Exec = 67.9	IC = 0 EIC = 0 M = 0 MoM = 0 Exec = .9	IC = 29.0 EIC = 27.8 M = 32.8 MoM = 62.5 Exec = 20.5
27. Initiative	*M* = 4.44 *SD* = .67	*M* = 4.26 *SD* = .74	*M* = 4.27 *SD* = .71	*M* = 4.59 *SD* = .51	*M* = 4.55 *SD* = .61	IC = 46.9 EIC = 24.8 M = 30.5 MoM = 6.3 Exec = 15.5	IC = 9.4 EIC = 43.4 M = 28.8 MoM = 18.8 Exec = 62.7	IC = 0 EIC = 0 M = 0 MoM = 0 Exec = 0	IC = 43.8 EIC = 31.9 M = 40.7 MoM = 75.0 Exec = 21.8
28. Innovation	*M* = 3.44 *SD* = 1.01	*M* = 3.61 *SD* = .93	*M* = 3.57 *SD* = .88	*M* = 4.12 *SD* = .70	*M* = 3.91 *SD* = .75	IC = 28.1 EIC = 8.9 M = 16.9 MoM = 0 Exec = 14.5	IC = 31.3 EIC = 65.2 M = 52.5 MoM = 62.5 Exec = 66.4	IC = 0 EIC = 2.7 M = 1.7 MoM = 0 Exec = .9	IC = 40.6 EIC = 23.2 M = 28.8 MoM = 37.5 Exec = 18.9
29. Integrity	*M* = 4.25 *SD* = .67	*M* = 4.56 *SD* = .62	*M* = 4.33 *SD* = .75	*M* = 4.59 *SD* = .62	*M* = 4.75 *SD* = .55	IC = 37.5 EIC = 19.8 M = 23.7 MoM = 6.3 Exec = 16.8	IC = 9.4 EIC = 36.0 M = 32.2 MoM = 12.5 Exec = 47.7	IC = 0 EIC = 0 M = 0 MoM = 0 Exec = 0	IC = 53.1 EIC = 44.1 M = 44.1 MoM = 81.3 Exec = 35.5

Consulting Competencies						Where is Proficiency for this Competency Developed? (%)			
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers	Executive	*Graduate School*	*On-the-job*	*Structured Training*	*N/A*
30. Intellectual stimulation	*M* = 3.75 *SD* = .80	*M* = 3.81 *SD* = .93	*M* = 3.67 *SD* = .94	*M* = 4.19 *SD* = .83	*M* = 3.91 *SD* = .74	IC = 56.3 EIC = 50.9 M = 44.1 MoM = 37.5 Exec = 46.8	IC = 6.3 EIC = 19.6 M = 25.4 MoM = 18.8 Exec = 30.3	IC = 0 EIC = .9 M = 0 MoM = 0 Exec = 0	IC = 37.5 EIC = 28.6 M = 30.5 MoM = 43.8 Exec = 22.9
31. Interpersonal skills	*M* = 4.47 *SD* = .67	*M* = 4.45 *SD* = .66	*M* = 4.43 *SD* = .70	*M* = 4.62 *SD* = .62	*M* = 4.58 *SD* = .56	IC = 31.3 EIC = 15.2 M = 13.8 MoM = 6.3 Exec = 6.4	IC = 37.5 EIC = 55.4 M = 53.4 MoM = 37.5 Exec = 68.2	IC = 3.1 EIC = 3.6 M = 1.7 MoM = 0 Exec = 4.5	IC = 28.1 EIC = 25.9 M = 31.0 MoM = 56.3 Exec = 20.9
32. Knowledge of test development	*M* = 4.06 *SD* = 1.13	*M* = 3.38 *SD* = 1.31	*M* = 3.43 *SD* = 1.20	*M* = 3.31 *SD* = 1.49	*M* = 3.17 *SD* = 1.26	IC = 90.6 EIC = 87.0 M = 86.7 MoM = 100.0 Exec = 86.0	IC = 9.4 EIC = 10.4 M = 13.3 MoM = 0 Exec = 13.2	IC = 0 EIC = 0 M = 0 MoM = 0 Exec = 0	IC = 0 EIC = 2.6 M = 0 MoM = 0 Exec = .9
33. Knowledge of validation principles	*M* = 4.44 *SD* = .80	*M* = 3.51 *SD* = 1.26	*M* = 3.60 *SD* = 1.25	*M* = 3.31 *SD* = 1.58	*M* = 3.39 *SD* = 1.22	IC = 90.6 EIC = 93.9 M = 90.0 MoM = 93.8 Exec = 88.6	IC = 9.4 EIC = 5.2 M = 10.0 MoM = 6.3 Exec = 10.5	IC = 0 EIC = 0 M = 0 MoM = 0 Exec = .9	IC = 0 EIC = .9 M = 0 MoM = 0 Exec = 0
34. Leadership	*M* = 3.09 *SD* = 1.12	*M* = 3.44 *SD* = 1.07	*M* = 4.05 *SD* = .75	*M* = 4.31 *SD* = .60	*M* = 4.18 *SD* = .79	IC = 43.8 EIC = 14.8 M = 15.0 MoM = 0 Exec = 12.4	IC = 28.1 EIC = 64.3 M = 66.7 MoM = 87.5 Exec = 78.8	IC = 3.1 EIC = 5.2 M = 5.0 MoM = 0 Exec = 5.3	IC = 25.0 EIC = 15.7 M = 13.3 MoM = 12.5 Exec = 3.5
35. Marketing	*M* = 2.41 *SD* = .88	*M* = 2.84 *SD* = .97	*M* = 3.05 *SD* = 1.07	*M* = 3.19 *SD* = .66	*M* = 3.54 *SD* = .82	IC = 9.4 EIC = 3.5 M = 3.3 MoM = 0 Exec = 6.3	IC = 56.3 EIC = 73.9 M = 80.0 MoM = 86.7 Exec = 84.7	IC = 0 EIC = 5.2 M = 5.0 MoM = 0 Exec = 6.3	IC = 34.4 EIC = 17.4 M = 11.7 MoM = 13.3 Exec = 2.7

Consulting Competencies						Where is Proficiency for this Competency Developed? (%)			
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers	Executive	*Graduate School*	*On-the-job*	*Structured Training*	*N/A*
36. Mentoring	*M* = 2.19 *SD* = .93	*M* = 2.56 *SD* = 1.10	*M* = 3.27 *SD* = .88	*M* = 3.75 *SD* = .93	*M* = 3.08 *SD* = 1.02	IC = 31.3 EIC = 15.8 M = 13.6 MoM = 18.8 Exec = 5.4	IC = 34.4 EIC = 59.6 M = 76.3 MoM = 75.0 Exec = 83.0	IC = 0 EIC = 8.8 M = 3.4 MoM = 0 Exec = 4.5	IC = 34.4 EIC = 15.8 M = 6.8 MoM = 6.3 Exec = 7.1
37. Multi-tasking	*M* = 4.22 *SD* = .91	*M* = 3.97 *SD* = .94	*M* = 4.16 *SD* = .87	*M* = 4.13 *SD* = 1.09	*M* = 3.90 *SD* = .96	IC = 56.3 EIC = 25.7 M = 42.4 MoM = 18.8 Exec = 19.8	IC = 21.9 EIC = 52.2 M = 42.4 MoM = 43.8 Exec = 64.0	IC = 0 EIC = 1.8 M = 0 MoM = 0 Exec = .9	IC = 21.9 EIC = 20.4 M = 15.3 MoM = 37.5 Exec = 15.3
38. Organization	*M* = 4.13 *SD* = .75	*M* = 4.02 *SD* = .82	*M* = 4.02 *SD* = .75	*M* = 4.00 *SD* = .85	*M* = 3.98 *SD* = .73	IC = 56.3 EIC = 32.7 M = 39.0 MoM = 12.5 Exec = 17.9	IC = 18.8 EIC = 43.4 M = 33.3 MoM = 43.8 Exec = 66.1	IC = 3.1 EIC = 2.7 M = 1.7 MoM = 0 Exec = 1.8	IC = 21.9 EIC = 21.2 M = 25.4 MoM = 43.8 Exec = 14.3
39. Political savvy	*M* = 3.28 *SD* = .96	*M* = 3.44 *SD* = 1.15	*M* = 3.52 *SD* = .93	*M* = 4.19 *SD* = .83	*M* = 3.77 *SD* = .88	IC = 6.3 EIC = 2.6 M = 1.7 MoM = 0 Exec = 2.7	IC = 75.0 EIC = 82.6 M = 87.9 MoM = 93.3 Exec = 90.9	IC = 0 EIC = .9 M = 0 MoM = 0 Exec = .9	IC = 18.8 EIC = 13.9 M = 10.3 MoM = 6.7 Exec = 5.5
40. Presentation skills	*M* = 4.28 *SD* = .73	*M* = 4.17 *SD* = .79	*M* = 4.23 *SD* = .80	*M* = 4.50 *SD* = .63	*M* = 4.24 *SD* = .77	IC = 68.8 EIC = 34.8 M = 29.3 MoM = 25.0 Exec = 20.5	IC = 21.9 EIC = 54.8 M = 62.1 MoM = 62.5 Exec = 63.4	IC = 3.1 EIC = 7.8 M = 5.2 MoM = 6.3 Exec = 13.4	IC = 6.3 EIC = 2.6 M = 3.4 MoM = 6.3 Exec = 2.7
41. Prioritization	*M* = 4.19 *SD* = .64	*M* = 4.04 *SD* = .84	*M* = 4.23 *SD* = .71	*M* = 4.63 *SD* = .50	*M* = 4.13 *SD* = .69	IC = 53.1 EIC = 26.5 M = 28.1 MoM = 25.0 Exec = 18.5	IC = 21.9 EIC = 54.0 M = 59.6 MoM = 43.8 Exec = 71.3	IC = 3.1 EIC = 2.7 M = 1.8 MoM = 0 Exec = .9	IC = 21.9 EIC = 16.8 M = 10.5 MoM = 31.3 Exec = 9.3

Consulting Competencies						Where is Proficiency for this Competency Developed? (%)			
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers	Executive	*Graduate School*	*On-the-job*	*Structured Training*	*N/A*
42. Problem solving	*M* = 4.44 *SD* = .50	*M* = 4.35 *SD* = .66	*M* = 4.33 *SD* = .65	*M* = 4.69 *SD* = .48	*M* = 4.35 *SD* = .69	IC = 56.3 EIC = 35.1 M = 40.4 MoM = 18.8 Exec = 25.9	IC = 28.1 EIC = 42.3 M = 40.4 MoM = 43.8 Exec = 64.8	IC = 0 EIC = 5.4 M = 0 MoM = 0 Exec = 0	IC = 15.6 EIC = 17.1 M = 19.3 MoM = 37.5 Exec = 9.3
43. Product knowledge	*M* = 3.88 *SD* = 1.07	*M* = 3.48 *SD* = 1.13	*M* = 3.59 *SD* = 1.04	*M* = 3.56 *SD* = .96	*M* = 3.69 *SD* = 1.04	IC = 0 EIC = 8.7 M = 1.7 MoM = 6.3 Exec = 6.3	IC = 90.6 EIC = 70.4 M = 88.1 MoM = 81.3 Exec = 82.1	IC = 6.3 EIC = 8.7 M = 3.4 MoM = 6.3 Exec = 2.7	IC = 3.1 EIC = 12.2 M = 6.8 MoM = 6.3 Exec = 8.9
44. Productive	*M* = 4.17 *SD* = .70	*M* = 4.13 *SD* = .81	*M* = 4.11 *SD* = .74	*M* = 4.12 *SD* = .96	*M* = 4.15 *SD* = .76	IC = 37.5 EIC = 27.0 M = 22.4 MoM = 25.0 Exec = 13.6	IC = 18.8 EIC = 41.4 M = 44.8 MoM = 37.5 Exec = 67.3	IC = 0 EIC = 0 M = 0 MoM = 0 Exec = 0	IC = 43.8 EIC = 31.5 M = 32.8 MoM = 37.5 Exec = 19.1
45. Project management	*M* = 4.25 *SD* = .80	*M* = 3.76 *SD* = .98	*M* = 4.38 *SD* = .79	*M* = 3.75 *SD* = 1.00	*M* = 3.98 *SD* = .92	IC = 21.9 EIC = 8.7 M = 8.6 MoM = 6.7 Exec = 8.2	IC = 75.0 EIC = 78.3 M = 79.3 MoM = 73.3 Exec = 81.8	IC = 0 EIC = 7.8 M = 5.2 MoM = 13.3 Exec = 8.2	IC = 3.1 EIC = 5.2 M = 6.9 MoM = 6.7 Exec = 1.8
46. Psychometrics	*M* = 4.25 *SD* = .88	*M* = 3.37 *SD* = 1.19	*M* = 3.42 *SD* = 1.12	*M* = 3.44 *SD* = 1.32	*M* = 3.30 *SD* = 1.06	IC = 93.8 EIC = 94.8 M = 91.4 MoM = 87.5 Exec = 88.5	IC = 6.3 EIC = 2.6 M = 8.6 MoM = 12.5 Exec = 10.6	IC = 0 EIC = .9 M = 0 MoM = 0 Exec = 0	IC = 0 EIC = 1.7 M = 0 MoM = 0 Exec = .9
47. Research skills	*M* = 3.69 *SD* = .97	*M* = 3.39 *SD* = 1.23	*M* = 3.62 *SD* = 1.05	*M* = 3.53 *SD* = 1.25	*M* = 3.24 *SD* = 1.14	IC = 96.9 EIC = 96.6 M = 91.5 MoM = 87.5 Exec = 92.0	IC = 3.1 EIC = 3.4 M = 8.5 MoM = 12.5 Exec = 8.0	IC = 0 EIC = 0 M = 0 MoM = 0 Exec = 0	IC = 0 EIC = 0 M = 0 MoM = 0 Exec = 0

Consulting Competencies						Where is Proficiency for this Competency Developed? (%)			
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers	Executive	*Graduate School*	*On-the-job*	*Structured Training*	*N/A*
48. Sales ability	*M* = 2.97 *SD* = 1.05	*M* = 3.10 *SD* = .94	*M* = 3.34 *SD* = 1.07	*M* = 3.44 *SD* = .89	*M* = 3.80 *SD* = .85	IC = 3.1 EIC = 0 M = 0 MoM = 0 Exec = 1.8	IC = 65.6 EIC = 76.3 M = 81.0 MoM = 81.3 Exec = 85.7	IC = 3.1 EIC = 12.3 M = 8.6 MoM = 6.3 Exec = 8.0	IC = 28.1 EIC = 11.4 M = 10.3 MoM = 12.5 Exec = 4.5
49. Self-discipline	*M* = 4.13 *SD* = .71	*M* = 4.33 *SD* = .70	*M* = 4.11 *SD* = .74	*M* = 4.19 *SD* = .54	*M* = 4.35 *SD* = .68	IC = 56.3 EIC = 44.6 M = 31.0 MoM = 25.0 Exec = 30.0	IC = 3.1 EIC = 25.9 M = 29.3 MoM = 18.8 Exec = 46.4	IC = 0 EIC = 0 M = 0 MoM = 0 Exec = 0	IC = 40.6 EIC = 29.5 M = 39.7 MoM = 56.3 Exec = 23.6
50. Strategic planning	*M* = 2.78 *SD* = 1.04	*M* = 3.09 *SD* = .99	*M* = 3.17 *SD* = .97	*M* = 4.25 *SD* = .68	*M* = 3.80 *SD* = .88	IC = 12.5 EIC = 2.7 M = 6.9 MoM = 0 Exec = 3.5	IC = 53.1 EIC = 70.8 M = 81.0 MoM = 87.5 Exec = 83.2	IC = 0 EIC = 8.8 M = 1.7 MoM = 0 Exec = 5.3	IC = 34.4 EIC = 17.7 M = 10.3 MoM = 12.5 Exec = 8.0
51. Strategic thinking	*M* = 3.19 *SD* = 1.09	*M* = 3.62 *SD* = 1.02	*M* = 3.83 *SD* = .83	*M* = 4.69 *SD* = .48	*M* = 4.19 *SD* = .84	IC = 19.4 EIC = 6.1 M = 8.6 MoM = 0 Exec = 6.2	IC = 48.4 EIC = 70.2 M = 81.0 MoM = 87.5 Exec = 84.1	IC = 0 EIC = 6.1 M = 0 MoM = 0 Exec = 1.8	IC = 32.3 EIC = 17.5 M = 10.3 MoM = 12.5 Exec = 8.0
52. Stress management	*M* = 3.78 *SD* = .83	*M* = 3.49 *SD* = 1.07	*M* = 3.72 *SD* = 1.00	*M* = 3.81 *SD* = .83	*M* = 3.67 *SD* = .90	IC = 62.5 EIC = 26.1 M = 31.0 MoM = 18.8 Exec = 10.1	IC = 12.5 EIC = 39.6 M = 43.1 MoM = 50.0 Exec = 65.1	IC = 0 EIC = 8.1 M = 1.7 MoM = 0 Exec = 6.4	IC = 25.0 EIC = 26.1 M = 24.1 MoM = 31.3 Exec = 18.3
53. Teamwork	*M* = 3.97 *SD* = .74	*M* = 3.76 *SD* = .95	*M* = 4.13 *SD* = .81	*M* = 4.13 *SD* = .62	*M* = 3.68 *SD* = .92	IC = 59.4 EIC = 25.9 M = 27.6 MoM = 37.5 Exec = 19.5	IC = 18.8 EIC = 57.1 M = 51.7 MoM = 43.8 Exec = 68.1	IC = 3.1 EIC = 4.5 M = 3.4 MoM = 0 Exec = 2.7	IC = 18.8 EIC = 12.5 M = 17.2 MoM = 18.8 Exec = 9.7

Consulting Competencies						Where is Proficiency for this Competency Developed? (%)			
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers	Executive	*Graduate School*	*On-the-job*	*Structured Training*	*N/A*
54. Time management	*M* = 4.34 *SD* = .65	*M* = 4.04 *SD* = .78	*M* = 4.29 *SD* = .61	*M* = 4.19 *SD* = .75	*M* = 4.07 *SD* = .74	IC = 62.5 EIC = 30.4 M = 35.1 MoM = 31.3 Exec = 25.2	IC = 18.8 EIC = 47.0 M = 42.1 MoM = 43.8 Exec = 59.5	IC = 3.1 EIC = 6.1 M = 5.3 MoM = 0 Exec = 7.2	IC = 15.6 EIC = 16.5 M = 17.5 MoM = 25.0 Exec = 91.9
55. Tolerance for ambiguity	*M* = 4.28 *SD* = .89	*M* = 4.22 *SD* = .79	*M* = 4.36 *SD* = .78	*M* = 4.44 *SD* = .96	*M* = 4.33 *SD* = .74	IC = 43.8 EIC = 17.9 M = 22.4 MoM = 6.7 Exec = 8.9	IC = 31.3 EIC = 58.0 M = 60.3 MoM = 53.3 Exec = 72.3	IC = 0 EIC = .9 M = 0 MoM = 0 Exec = 0	IC = 25.0 EIC = 23.2 M = 17.2 MoM = 40.0 Exec = 18.8
56. Transformational leadership	*M* = 2.19 *SD* = .90	*M* = 2.67 *SD* = 1.13	*M* = 2.79 *SD* = .90	*M* = 3.88 *SD* = .72	*M* = 3.36 *SD* = 1.02	IC = 34.4 EIC = 15.9 M = 22.4 MoM = 0 Exec = 14.2	IC = 12.5 EIC = 38.9 M = 34.5 MoM = 75.0 Exec = 62.8	IC = 3.1 EIC = 5.3 M = 6.9 MoM = 0 Exec = 7.1	IC = 50.0 EIC = 39.8 M = 36.2 MoM = 25.0 Exec = 15.9
57. Trustworthiness	*M* = 4.00 *SD* = .82	*M* = 4.56 *SD* = .62	*M* = 4.40 *SD* = .66	*M* = 4.56 *SD* = .63	*M* = 4.72 *SD* = .55	IC = 34.4 EIC = 13.4 M = 19.0 MoM = 6.3 Exec = 12.1	IC = 12.5 EIC = 40.2 M = 32.8 MoM = 18.8 Exec = 50.5	IC = 0 EIC = 1.8 M = 1.7 MoM = 0 Exec = 0	IC = 53.1 EIC = 44.6 M = 46.6 MoM = 75.0 Exec = 37.4

Note: Means and standard deviations reported by level for all competencies within Consulting. Proficiency development for each competency is also included. Individual Contributor (*n* = 30 - 32); Expert Individual Contributor (*n* = 117 – 123); Manager (*n* = 61 - 65); Manager of Managers (*n* = 15 - 18); Executive (*n* = 117 - 122). For the section where members indicated they developed the competencies, the provided percentages were determined within level, not across levels.

Table B-2

Consulting Critical Experiences

Consulting Experiences					
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers	Executive
1. Use different types of analytical software (e.g., SPSS, Mplus, SAS)	*M* = 3.38 *SD* = 1.36	*M* = 2.58 *SD* = 1.32	*M* = 2.70 *SD* = 1.21	*M* = 2.60 *SD* = .91	*M* = 2.30 *SD* = 1.25
2. Use different types of analytical methods (e.g., Structural Equation Modeling, Hierarchical Linear Modeling, Multiple Regression, ANOVAs)	*M* = 2.91 *SD* = 1.28	*M* = 2.47 *SD* = 1.30	*M* = 2.55 *SD* = 1.23	*M* = 2.40 *SD* = .99	*M* = 2.10 *SD* = 1.13
3. Works independently with minimal supervision	*M* = 4.53 *SD* = .62	*M* = 4.58 *SD* = .66	*M* = 4.43 *SD* = .76	*M* = 3.81 *SD* = .91	*M* = 4.42 *SD* = .85
4. Write technical reports	*M* = 3.81 *SD* = 1.26	*M* = 3.60 *SD* = 1.29	*M* = 3.78 *SD* = 1.26	*M* = 3.19 *SD* = 1.11	*M* = 3.29 *SD* = 1.22
5. Write project proposals	*M* = 3.38 *SD* = 1.19	*M* = 3.78 *SD* = 1.09	*M* = 4.07 *SD* = 1.15	*M* = 4.00 *SD* = 1.16	*M* = 4.14 *SD* = .96
6. Monitor outcomes of assigned projects	*M* = 4.28 *SD* = .85	*M* = 4.01 *SD* = .99	*M* = 4.37 *SD* = .76	*M* = 4.81 *SD* = .40	*M* = 4.10 *SD* = .95
7. Recommend changes to projects	*M* = 4.00 *SD* = .92	*M* = 4.03 *SD* = .85	*M* = 4.25 *SD* = .81	*M* = 4.44 *SD* = .73	*M* = 4.15 *SD* = .92
8. Attend client meetings to build client relations	*M* = 4.37 *SD* = .87	*M* = 4.38 *SD* = .87	*M* = 4.56 *SD* = .83	*M* = 4.56 *SD* = .89	*M* = 4.60 *SD* = .75
9. Present information at client meetings	*M* = 4.41 *SD* = .88	*M* = 4.42 *SD* = .78	*M* = 4.57 *SD* = .79	*M* = 4.50 *SD* = .82	*M* = 4.57 *SD* = .74
10. Contribute to the success of projects or consulting assignments	*M* = 4.75 *SD* = .51	*M* = 4.68 *SD* = .68	*M* = 4.85 *SD* = .41	*M* = 4.50 *SD* = .73	*M* = 4.58 *SD* = .74
11. Assist with training new employees	*M* = 3.03 *SD* = 1.03	*M* = 2.66 *SD* = 1.13	*M* = 3.74 *SD* = .87	*M* = 4.13 *SD* = .99	*M* = 3.08 *SD* = 1.24

Consulting Experiences					
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers	Executive
12. Assist with project delivery	*M* = 4.25 *SD* = .80	*M* = 4.22 *SD* = .86	*M* = 4.60 *SD* = .59	*M* = 3.88 *SD* = 1.15	*M* = 4.11 *SD* = .99
13. Create and administer own projects from start to finish	*M* = 4.06 *SD* = 1.11	*M* = 4.13 *SD* = 1.03	*M* = 4.40 *SD* = .85	*M* = 3.67 *SD* = 1.23	*M* = 4.36 *SD* = 1.00
14. Contribute to or complete projects in different areas (e.g., selection, training, coaching)	*M* = 4.09 *SD* = .93	*M* = 3.96 *SD* = 1.14	*M* = 4.25 *SD* = .93	*M* = 3.56 *SD* = 1.09	*M* = 4.30 *SD* = .89
15. Follow timelines and budgets on project work	*M* = 4.34 *SD* = .83	*M* = 4.29 *SD* = .78	*M* = 4.56 *SD* = .76	*M* = 4.37 *SD* = .81	*M* = 4.33 *SD* = .84
16. Manage relationships and networks with others in the organization	*M* = 4.25 *SD* = .84	*M* = 4.12 *SD* = .98	*M* = 4.52 *SD* = .70	*M* = 4.81 *SD* = .54	*M* = 4.49 *SD* = .84
17. Participate in professional development programs	*M* = 3.28 *SD* = .96	*M* = 2.98 *SD* = 1.14	*M* = 3.08 *SD* = 1.15	*M* = 2.93 *SD* = .59	*M* = 3.44 *SD* = 1.03
18. Support colleagues in sales of products to clients	*M* = 3.48 *SD* = 1.26	*M* = 3.23 *SD* = 1.29	*M* = 3.71 *SD* = 1.19	*M* = 3.79 *SD* = 1.19	*M* = 3.68 *SD* = 1.18
19. Collaborate with others on various projects	*M* = 4.44 *SD* = .72	*M* = 4.24 *SD* = .92	*M* = 4.36 *SD* = .71	*M* = 4.27 *SD* = 1.03	*M* = 4.06 *SD* = .96
20. Develop strong relationships with client contacts	*M* = 4.38 *SD* = .79	*M* = 4.36 *SD* = .99	*M* = 4.59 *SD* = .67	*M* = 4.44 *SD* = .89	*M* = 4.76 *SD* = .54
21. Manage small client accounts	*M* = 3.47 *SD* = 1.55	*M* = 3.63 *SD* = 1.25	*M* = 3.49 *SD* = 1.30	*M* = 3.25 *SD* = 1.39	*M* = 4.08 *SD* = 1.12
22. Develop or contribute innovative ideas	*M* = 3.41 *SD* = 1.10	*M* = 3.91 *SD* = .84	*M* = 3.88 *SD* = .90	*M* = 4.38 *SD* = .72	*M* = 4.25 *SD* = .78
23. Oversee and guide projects of others	*M* = 3.00 *SD* = 1.21	*M* = 2.95 *SD* = 1.13	*M* = 4.18 *SD* = .91	*M* = 4.81 *SD* = .40	*M* = 3.68 *SD* = 1.25
24. Work on a diverse array of projects	*M* = 3.91 *SD* = 1.06	*M* = 3.90 *SD* = .96	*M* = 4.28 *SD* = .78	*M* = 4.13 *SD* = .89	*M* = 3.95 *SD* = .95

Consulting Experiences					
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers	Executive
25. Create original products or processes	*M* = 3.25 *SD* = 1.27	*M* = 3.60 *SD* = 1.08	*M* = 3.72 *SD* = 1.04	*M* = 4.44 *SD* = .81	*M* = 4.09 *SD* = .90
26. Plan complex tasks or projects	*M* = 3.69 *SD* = 1.15	*M* = 4.10 *SD* = .92	*M* = 4.41 *SD* = .67	*M* = 4.47 *SD* = .74	*M* = 4.18 *SD* = .83
27. Complete highly complex projects that require a wide range of skills (e.g., analytical skills, knowledge of various methodologies)	*M* = 3.84 *SD* = 1.00	*M* = 3.88 *SD* = 1.09	*M* = 4.30 *SD* = .86	*M* = 4.00 *SD* = .82	*M* = 3.99 *SD* = 1.03
28. Manage budgets for a portfolio of projects	*M* = 2.25 *SD* = 1.14	*M* = 2.77 *SD* = 1.23	*M* = 3.56 *SD* = 1.25	*M* = 4.33 *SD* = .98	*M* = 3.83 *SD* = 1.08
29. Serve as a subject matter expert in a given area	*M* = 3.90 *SD* = .98	*M* = 4.30 *SD* = .89	*M* = 4.20 *SD* = .89	*M* = 4.56 *SD* = .73	*M* = 4.37 *SD* = .78
30. Track business opportunities	*M* = 2.71 *SD* = 1.24	*M* = 3.11 *SD* = 1.21	*M* = 3.38 *SD* = 1.38	*M* = 3.87 *SD* = 1.26	*M* = 4.17 *SD* = .83
31. Expand services clients beyond those originally contracted for	*M* = 3.09 *SD* = 1.28	*M* = 3.50 *SD* = 1.22	*M* = 3.83 *SD* = 1.13	*M* = 3.50 *SD* = 1.55	*M* = 4.05 *SD* = .85
32. Interact with clients regarding requests, inquiries, and questions	*M* = 4.07 *SD* = 1.14	*M* = 4.32 *SD* = .91	*M* = 4.65 *SD* = .66	*M* = 4.31 *SD* = 1.08	*M* = 4.57 *SD* = .65
33. Manage large client accounts	*M* = 3.03 *SD* = 1.38	*M* = 3.35 *SD* = 1.32	*M* = 3.68 *SD* = 1.43	*M* = 3.67 *SD* = 1.40	*M* = 4.21 *SD* = 1.01
34. Mentor and coach new consultants	*M* = 2.64 *SD* = 1.13	*M* = 2.61 *SD* = 1.10	*M* = 3.78 *SD* = .89	*M* = 4.13 *SD* = .92	*M* = 3.25 *SD* = 1.13
35. Build client portfolios	*M* = 2.43 *SD* = 1.31	*M* = 2.90 *SD* = 1.24	*M* = 3.27 *SD* = 1.24	*M* = 3.33 *SD* = 1.68	*M* = 3.85 *SD* = 1.06
36. Become a part of a task force and/or committee	*M* = 2.45 *SD* = 1.27	*M* = 2.76 *SD* = 1.20	*M* = 2.85 *SD* = 1.06	*M* = 3.53 *SD* = .99	*M* = 2.97 *SD* = 1.24
37. Demonstrate that project work adds value to the organization	*M* = 4.00 *SD* = 1.13	*M* = 3.56 *SD* = 1.14	*M* = 3.85 *SD* = 1.12	*M* = 4.06 *SD* = 1.00	*M* = 3.73 *SD* = 1.16

Consulting Experiences					
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers	Executive
38. Publish research	*M* = 2.13 *SD* = .97	*M* = 2.19 *SD* = 1.09	*M* = 2.30 *SD* = 1.09	*M* = 2.19 *SD* = 1.22	*M* = 2.30 *SD* = 1.19
39. Lead project teams	*M* = 3.30 *SD* = 1.27	*M* = 3.37 *SD* = 1.30	*M* = 4.33 *SD* = .82	*M* = 3.94 *SD* = 1.12	*M* = 3.50 *SD* = 1.25
40. Manage performance of subordinates	*M* = 1.75 *SD* = .79	*M* = 2.15 *SD* = 1.05	*M* = 4.10 *SD* = .80	*M* = 4.73 *SD* = .46	*M* = 3.43 *SD* = 1.40
41. Provide developmental opportunities to subordinates	*M* = 1.90 *SD* = 1.00	*M* = 2.22 *SD* = 1.15	*M* = 3.93 *SD* = .88	*M* = 4.50 *SD* = .52	*M* = 3.31 *SD* = 1.31
42. Expand number of clients	*M* = 2.69 *SD* = 1.37	*M* = 3.41 *SD* = 1.28	*M* = 3.60 *SD* = 1.25	*M* = 4.06 *SD* = 1.12	*M* = 4.44 *SD* = .77
43. Complete projects on a global scale	*M* = 3.52 *SD* = 1.01	*M* = 2.91 *SD* = 1.32	*M* = 3.00 *SD* = 1.50	*M* = 3.73 *SD* = 1.22	*M* = 3.39 *SD* = 1.34
44. Develop expertise in multiple content areas of I-O	*M* = 3.45 *SD* = 1.09	*M* = 3.49 *SD* = 1.12	*M* = 3.64 *SD* = 1.07	*M* = 2.88 *SD* = .89	*M* = 3.65 *SD* = 1.05
45. Manage available resources	*M* = 3.83 *SD* = 1.00	*M* = 3.65 *SD* = 1.11	*M* = 4.27 *SD* = .83	*M* = 4.31 *SD* = .95	*M* = 4.15 *SD* = .85
46. Conduct succession planning	*M* = 1.86 *SD* = .96	*M* = 2.08 *SD* = 1.16	*M* = 2.33 *SD* = 1.07	*M* = 3.40 *SD* = .99	*M* = 2.85 *SD* = 1.29
47. Monitor global competitors	*M* = 2.50 *SD* = 1.29	*M* = 2.07 *SD* = 1.19	*M* = 2.32 *SD* = .90	*M* = 3.00 *SD* = 1.00	*M* = 2.57 *SD* = 1.21
48. Conduct performance reviews for team leaders	*M* = 1.60 *SD* = 1.00	*M* = 1.72 *SD* = .95	*M* = 2.90 *SD* = 1.36	*M* = 4.27 *SD* = .70	*M* = 2.72 *SD* = 1.35
49. Collaborate with other divisions in the organization (e.g., technology, sales)	*M* = 3.79 *SD* = 1.40	*M* = 3.24 *SD* = 1.42	*M* = 4.10 *SD* = .89	*M* = 4.33 *SD* = .82	*M* = 2.96 *SD* = 1.45
50. Collaborate with other staff who are not in an I-O role	*M* = 4.10 *SD* = 1.05	*M* = 3.85 *SD* = 1.25	*M* = 4.31 *SD* = .90	*M* = 4.19 *SD* = .75	*M* = 3.60 *SD* = 1.32

Consulting Experiences					
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers	Executive
51. Attract and retain top talent to organization	*M* = 2.38 *SD* = 1.24	*M* = 2.38 *SD* = 1.21	*M* = 3.41 *SD* = .97	*M* = 4.20 *SD* = .94	*M* = 3.38 *SD* = 1.38
52. Establish a core vision	*M* = 2.24 *SD* = 1.04	*M* = 2.43 *SD* = 1.24	*M* = 2.96 *SD* = 1.24	*M* = 4.31 *SD* = .95	*M* = 3.96 *SD* = 1.08
53. Establish a strategy to reach the organization mission	*M* = 2.41 *SD* = 1.14	*M* = 2.56 *SD* = 1.29	*M* = 2.98 *SD* = 1.14	*M* = 4.25 *SD* = .93	*M* = 4.10 *SD* = 1.06
54. Coordinate between the consulting and the research and design areas of the organization	*M* = 3.14 *SD* = 1.49	*M* = 2.82 *SD* = 1.48	*M* = 3.62 *SD* = 1.17	*M* = 3.87 *SD* = .99	*M* = 3.19 *SD* = 1.46
55. Maintain high client retention rate	*M* = 3.48 *SD* = 1.27	*M* = 3.79 *SD* = 1.37	*M* = 4.15 *SD* = 1.05	*M* = 4.13 *SD* = 1.15	*M* = 4.48 *SD* = .79
56. Serve as advocate for employees	*M* = 2.20 *SD* = 1.06	*M* = 2.16 *SD* = 1.14	*M* = 3.20 *SD* = 1.07	*M* = 4.38 *SD* = .50	*M* = 2.83 *SD* = 1.23
57. Decide which markets to expand into	*M* = 1.90 *SD* = .79	*M* = 2.35 *SD* = 1.28	*M* = 2.50 *SD* = 1.19	*M* = 3.33 *SD* = 1.45	*M* = 3.72 *SD* = 1.14
58. Allocate resources effectively	*M* = 3.05 *SD* = 1.19	*M* = 3.25 *SD* = 1.21	*M* = 4.08 *SD* = .96	*M* = 4.56 *SD* = .73	*M* = 4.06 *SD* = 1.00
59. Represent division to the rest of the organization	*M* = 2.65 *SD* = 1.13	*M* = 2.23 *SD* = 1.26	*M* = 3.63 *SD* = 1.10	*M* = 4.19 *SD* = .98	*M* = 2.76 *SD* = 1.47
60. Demonstrate political savvy in structuring and designing projects	*M* = 3.00 *SD* = 1.26	*M* = 3.43 *SD* = 1.34	*M* = 3.60 *SD* = 1.17	*M* = 4.33 *SD* = .72	*M* = 3.94 *SD* = 1.23
61. Demonstrate value of research and development for future revenue generation	*M* = 2.92 *SD* = 1.47	*M* = 2.79 *SD* = 1.44	*M* = 3.23 *SD* = 1.38	*M* = 3.69 *SD* = 1.49	*M* = 3.32 *SD* = 1.34
62. Track and measure success of programs	*M* = 3.37 *SD* = 1.28	*M* = 3.16 *SD* = 1.15	*M* = 3.68 *SD* = 1.06	*M* = 3.94 *SD* = .93	*M* = 3.72 *SD* = 1.02
63. Understand how to apply I-O psychology consulting skills in a way that enhances business	*M* = 4.14 *SD* = 1.13	*M* = 4.20 *SD* = 1.06	*M* = 4.44 *SD* = .75	*M* = 4.19 *SD* = 1.05	*M* = 4.42 *SD* = .81

Consulting Experiences					
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers	Executive
64. Translate organizational strategy into action	*M* = 3.32 *SD* = .99	*M* = 3.29 *SD* = 1.31	*M* = 3.67 *SD* = 1.12	*M* = 4.40 *SD* = .63	*M* = 4.19 *SD* = .99
65. Maintain composure under pressure	*M* = 4.45 *SD* = .74	*M* = 4.46 *SD* = .86	*M* = 4.53 *SD* = .57	*M* = 4.44 *SD* = .73	*M* = 4.64 *SD* = .63
66. Use organizational performance data to support a recommendation	*M* = 3.77 *SD* = 1.34	*M* = 3.61 *SD* = 1.21	*M* = 3.88 *SD* = 1.13	*M* = 3.87 *SD* = 1.19	*M* = 3.88 *SD* = 1.09
67. Track hours billed to various projects	*M* = 3.75 *SD* = 1.36	*M* = 3.95 *SD* = 1.33	*M* = 3.95 *SD* = 1.20	*M* = 3.00 *SD* = 1.46	*M* = 3.80 *SD* = 1.20

Note: Means and standard deviations reported by level for all critical experiences within Consulting. Individual Contributor (*n* = 20 - 32); Expert Individual Contributor (*n* = 84-118); Manager (*n* = 47 - 61); Manager of Managers (*n* = 14 - 16); Executive (*n* = 79 - 117). N/A analyzed as "system missing."

Industry

Table B-3

Industry Competencies and Where Proficiency Developed

Industry Competencies						Where is Proficiency for this Competency Developed? (%)			
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers	Executive	*Graduate School*	*On-the-job*	*Structured Training*	*N/A*
1. Accountability	*M* = 4.30 *SD* = .56	*M* = 4.19 *SD* = .70	*M* = 4.41 *SD* = .77	*M* = 4.54 *SD* = .51	*M* = 4.61 *SD* = .67	IC = 42.9 EIC = 28.3 M = 24.1 MoM = 16.2 Exec = 11.1	IC = 38.1 EIC = 58.6 M = 59.3 MoM = 64.9 Exec = 63.0	IC = 0 EIC = 0 M = 1.9 MoM = 0 Exec = 0	IC = 19.0 EIC = 13.1 M = 14.8 MoM = 18.9 Exec = 25.9
2. Achievement oriented	*M* = 3.82 *SD* = .73	*M* = 3.81 *SD* = .75	*M* = 4.10 *SD* = .76	*M* = 4.22 *SD* = .69	*M* = 4.29 *SD* = .74	IC = 52.4 EIC = 36.7 M = 38.9 MoM = 21.6 Exec = 22.2	IC = 28.6 EIC = 38.8 M = 29.6 MoM = 45.9 Exec = 25.9	IC = 0 EIC = 0 M = 0 MoM = 0 Exec = 0	IC = 19.0 EIC = 24.5 M = 31.5 MoM = 32.4 Exec = 51.9
3. Adaptability	*M* = 3.91 *SD* = .85	*M* = 4.29 *SD* = .66	*M* = 4.32 *SD* = .75	*M* = 4.51 *SD* = .60	*M* = 4.55 *SD* = .62	IC = 33.3 EIC = 12.0 M = 11.1 MoM = 5.4 Exec = 3.7	IC = 57.1 EIC = 81.0 M = 81.5 MoM = 78.4 Exec = 63.0	IC = 0 EIC = 0 M = 0 MoM = 0 Exec = 0	IC = 9.5 EIC = 7.0 M = 7.4 MoM = 16.2 Exec = 33.3
4. Assertiveness	*M* = 3.04 *SD* = .88	*M* = 3.44 *SD* = .75	*M* = 3.54 *SD* = .70	*M* = 3.88 *SD* = .75	*M* = 3.74 *SD* = .82	IC = 19.0 EIC = 5.1 M = 9.4 MoM = 8.1 Exec = 0	IC = 61.9 EIC = 73.7 M = 71.1 MoM = 78.4 Exec = 55.6	IC = 9.5 EIC = 3.0 M = 1.9 MoM = 2.7 Exec = 0	IC = 9.5 EIC = 18.2 M = 17.0 MoM = 10.8 Exec = 44.4
5. Business acumen	*M* = 3.57 *SD* = 1.20	*M* = 3.54 *SD* = .93	*M* = 3.80 *SD* = .83	*M* = 4.20 *SD* = .64	*M* = 4.29 *SD* = .82	IC = 14.3 EIC = 6.9 M = 1.9 MoM = 5.3 Exec = 14.8	IC = 81.0 EIC = 81.2 M = 88.7 MoM = 86.8 Exec = 85.2	IC = 0 EIC = 5.0 M = 3.8 MoM = 7.9 Exec = 0	IC = 4.8 EIC = 6.9 M = 5.7 MoM = 0 Exec = 0

Industry Competencies						Where is Proficiency for this Competency Developed? (%)			
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers	Executive	*Graduate School*	*On-the-job*	*Structured Training*	*N/A*
6. Change leadership	*M* = 2.83 *SD* = 1.07	*M* = 3.26 *SD* = 1.04	*M* = 3.58 *SD* = .99	*M* = 3.98 *SD* = .76	*M* = 4.39 *SD* = .96	IC = 19.0 EIC = 17.0 M = 17.0 MoM = 10.8 Exec = 18.5	IC = 52.4 EIC = 49.0 M = 56.6 MoM = 67.6 Exec = 66.7	IC = 0 EIC = 10.0 M = 9.4 MoM = 21.6 Exec = 11.1	IC = 28.6 EIC = 24.0 M = 17.0 MoM = 0 Exec = 3.7
7. Coaching	*M* = 2.26 *SD* = 1.10	*M* = 2.87 *SD* = 1.23	*M* = 3.34 *SD* = .96	*M* = 3.80 *SD* = .81	*M* = 3.97 *SD* = .72	IC = 28.6 EIC = 11.9 M = 20.8 MoM = 8.1 Exec = 14.8	IC = 38.1 EIC = 55.4 M = 43.4 MoM = 59.5 Exec = 51.9	IC = 4.8 EIC = 9.9 M = 18.9 MoM = 32.4 Exec = 29.6	IC = 28.6 EIC = 22.8 M = 17.0 MoM = 0 Exec = 3.7
8. Collaboration	*M* = 4.04 *SD* = .83	*M* = 4.26 *SD* = .75	*M* = 4.28 *SD* = .72	*M* = 4.37 *SD* = .58	*M* = 4.17 *SD* = .83	IC = 57.1 EIC = 34.7 M = 34.0 MoM = 16.2 Exec = 22.2	IC = 28.6 EIC = 57.4 M = 52.8 MoM = 73.0 Exec = 70.4	IC = 0 EIC = 1.0 M = 0 MoM = 0 Exec = 0	IC = 14.3 EIC = 6.9 M = 13.2 MoM = 10.8 Exec = 7.4
9. Communication: Verbal	*M* = 4.22 *SD* = .74	*M* = 4.40 *SD* = .68	*M* = 4.44 *SD* = .60	*M* = 4.56 *SD* = .55	*M* = 4.26 *SD* = .73	IC = 52.4 EIC = 50.0 M = 48.1 MoM = 30.6 Exec = 25.9	IC = 33.3 EIC = 43.0 M = 44.2 MoM = 61.1 Exec = 51.9	IC = 0 EIC = 3.0 M = 3.8 MoM = 5.6 Exec = 11.1	IC = 14.3 EIC = 4.0 M = 3.8 MoM = 2.8 Exec = 11.1
10. Communication: Written	*M* = 4.13 *SD* = .63	*M* = 4.17 *SD* = .72	*M* = 4.22 *SD* = .83	*M* = 4.15 *SD* = .70	*M* = 4.26 *SD* = .78	IC = 66.7 EIC = 68.0 M = 67.3 MoM = 59.5 Exec = 63.0	IC = 14.3 EIC = 25.0 M = 25.0 MoM = 37.8 Exec = 22.2	IC = 4.8 EIC = 2.0 M = 3.8 MoM = 0 Exec = 3.7	IC = 14.3 EIC = 5.0 M = 3.8 MoM = 2.7 Exec = 11.1
11. Conflict management	*M* = 2.17 *SD* = .83	*M* = 2.86 *SD* = 1.04	*M* = 3.31 *SD* = .92	*M* = 3.51 *SD* = .87	*M* = 3.77 *SD* = .92	IC = 28.6 EIC = 4.0 M = 15.4 MoM = 5.4 Exec = 0	IC = 38.1 EIC = 60.6 M = 67.3 MoM = 78.4 Exec = 77.8	IC = 0 EIC = 13.1 M = 7.7 MoM = 8.1 Exec = 14.8	IC = 33.3 EIC = 22.2 M = 9.6 MoM = 8.1 Exec = 7.4

Industry Competencies						Where is Proficiency for this Competency Developed? (%)			
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers	Executive	*Graduate School*	*On-the-job*	*Structured Training*	*N/A*
12. Courage	*M* = 2.43 *SD* = .99	*M* = 2.99 *SD* = .91	*M* = 3.22 *SD* = .85	*M* = 3.76 *SD* = .73	*M* = 3.94 *SD* = .77	IC = 33.3 EIC = 8.0 M = 17.3 MoM = 2.7 Exec = 3.8	IC = 28.1 EIC = 59.0 M = 50.0 MoM = 67.6 Exec = 42.3	IC = 0 EIC = 1.0 M = 0 MoM = 0 Exec = 0	IC = 28.6 EIC = 32.0 M = 32.7 MoM = 29.7 Exec = 53.8
13. Critical thinking	*M* = 4.48 *SD* = .67	*M* = 4.41 *SD* = .71	*M* = 4.56 *SD* = .53	*M* = 4.49 *SD* = .51	*M* = 4.71 *SD* = .53	IC = 66.7 EIC = 67.3 M = 78.8 MoM = 67.6 Exec = 57.7	IC = 28.6 EIC = 25.7 M = 15.4 MoM = 27.0 Exec = 19.2	IC = 0 EIC = 2.0 M = 0 MoM = 0 Exec = 0	IC = 4.8 EIC = 5.0 M = 5.8 MoM = 5.4 Exec = 23.1
14. Data analysis	*M* = 4.09 *SD* = 1.00	*M* = 3.89 *SD* = 1.18	*M* = 3.68 *SD* = 1.14	*M* = 3.47 *SD* = .99	*M* = 3.43 *SD* = 1.19	IC = 81.0 EIC = 89.0 M = 92.3 MoM = 92.1 Exec = 92.0	IC = 19.0 EIC = 10.0 M = 5.8 MoM = 5.3 Exec = 8.0	IC = 0 EIC = 1.0 M = 0 MoM = 2.6 Exec = 0	IC = 0 EIC = 0 M = 1.9 MoM = 0 Exec = 0
15. Decision making	*M* = 3.83 *SD* = .89	*M* = 3.82 *SD* = .80	*M* = 4.25 *SD* = .69	*M* = 4.46 *SD* = .55	*M* = 4.42 *SD* = .67	IC = 14.3 EIC = 18.0 M = 15.4 MoM = 13.5 Exec = 4.0	IC = 71.4 EIC = 73.0 M = 75.0 MoM = 75.7 Exec = 84.0	IC = 0 EIC = 1.0 M = 0 MoM = 0 Exec = 0	IC = 14.3 EIC = 8.0 M = 9.6 MoM = 10.8 Exec = 12.0
16. Delegation	*M* = 2.13 *SD* = .92	*M* = 2.39 *SD* = .85	*M* = 3.79 *SD* = .73	*M* = 4.05 *SD* = .63	*M* = 3.90 *SD* = .87	IC = 4.8 EIC = 3.0 M = 0 MoM = 2.7 Exec = 0	IC = 71.4 EIC = 80.8 M = 90.2 MoM = 91.9 Exec = 84.0	IC = 0 EIC = 1.0 M = 3.9 MoM = 2.7 Exec = 8.0	IC = 23.8 EIC = 15.2 M = 5.9 MoM = 2.7 Exec = 8.0
17. Emotional intelligence	*M* = 3.26 *SD* = 1.14	*M* = 3.58 *SD* = .94	*M* = 3.90 *SD* = .71	*M* = 4.05 *SD* = .74	*M* = 4.00 *SD* = .93	IC = 19.0 EIC = 12.1 M = 19.2 MoM = 5.6 Exec = 12.0	IC = 38.1 EIC = 49.5 M = 42.3 MoM = 66.7 Exec = 32.0	IC = 9.5 EIC = 2.0 M = 5.8 MoM = 2.8 Exec = 16.0	IC = 33.3 EIC = 36.4 M = 32.7 MoM = 25.0 Exec = 40.0

Industry Competencies						Where is Proficiency for this Competency Developed? (%)			
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers	Executive	*Graduate School*	*On-the-job*	*Structured Training*	*N/A*
18. Enthusiasm	*M* = 3.27 *SD* = .83	*M* = 3.33 *SD* = .81	*M* = 3.54 *SD* = .70	*M* = 3.56 *SD* = .71	*M* = 3.71 *SD* = 1.04	IC = 9.5 EIC = 12.2 M = 21.6 MoM = 5.4 Exec = 12.0	IC = 38.1 EIC = 43.9 M = 33.3 MoM = 54.1 Exec = 20.0	IC = 0 EIC = 1.0 M = 0 MoM = 0 Exec = 0	IC = 52.4 EIC = 42.9 M = 45.1 MoM = 40.5 Exec = 68.0
19. Ethical behavior	*M* = 4.17 *SD* = .78	*M* = 4.30 *SD* = .86	*M* = 4.33 *SD* = .81	*M* = 4.54 *SD* = .71	*M* = 4.61 *SD* = .80	IC = 45.0 EIC = 38.8 M = 39.2 MoM = 33.3 Exec = 29.2	IC = 25.0 EIC = 32.7 M = 27.5 MoM = 41.7 Exec = 25.0	IC = 0 EIC = 3.1 M = 0 MoM = 2.8 Exec = 4.2	IC = 30.0 EIC = 25.5 M = 33.3 MoM = 22.2 Exec = 41.7
20. Executing strategy	*M* = 3.78 *SD* = 1.04	*M* = 3.64 *SD* = .92	*M* = 3.98 *SD* = .97	*M* = 4.44 *SD* = .50	*M* = 4.48 *SD* = .77	IC = 25.0 EIC = 2.0 M = 11.5 MoM = 0 Exec = 0	IC = 70.0 EIC = 87.8 M = 82.7 MoM = 97.3 Exec = 83.3	IC = 0 EIC = 3.1 M = 0 MoM = 2.7 Exec = 8.3	IC = 5.0 EIC = 7.1 M = 5.8 MoM = 0 Exec = 8.3
21. Facilitation skills	*M* = 3.36 *SD* = .95	*M* = 3.52 *SD* = 1.04	*M* = 3.66 *SD* = .86	*M* = 3.65 *SD* = .77	*M* = 3.65 *SD* = .84	IC = 40.0 EIC = 18.8 M = 26.9 MoM = 24.3 Exec = 4.0	IC = 50.0 EIC = 67.3 M = 55.8 MoM = 51.4 Exec = 64.0	IC = 5.0 EIC = 10.9 M = 15.4 MoM = 24.3 Exec = 32.0	IC = 5.0 EIC = 3.0 M = 1.9 MoM = 0 Exec = 0
22. Financial acumen	*M* = 2.30 *SD* = .97	*M* = 2.28 *SD* = .92	*M* = 2.85 *SD* = 1.03	*M* = 3.22 *SD* = .69	*M* = 3.55 *SD* = .93	IC = 0 EIC = 8.0 M = 1.9 MoM = 10.5 Exec = 8.0	IC = 47.6 EIC = 52.0 M = 69.2 MoM = 71.1 Exec = 80.0	IC = 0 EIC = 12.0 M = 17.3 MoM = 10.5 Exec = 8.0	IC = 52.4 EIC = 28.0 M = 11.5 MoM = 7.9 Exec = 4.0
23. Flexibility	*M* = 3.57 *SD* = .79	*M* = 4.05 *SD* = .69	*M* = 4.27 *SD* = .61	*M* = 4.17 *SD* = .59	*M* = 4.29 *SD* = .53	IC = 42.9 EIC = 16.2 M = 26.9 MoM = 2.7 Exec = 12.0	IC = 42.9 EIC = 63.6 M = 51.9 MoM = 73.0 Exec = 44.0	IC = 0 EIC = 0 M = 0 MoM = 0 Exec = 0	IC = 14.3 EIC = 20.2 M = 21.2 MoM = 24.3 Exec = 44.0

Industry Competencies						Where is Proficiency for this Competency Developed? (%)			
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers	Executive	*Graduate School*	*On-the-job*	*Structured Training*	*N/A*
24. Global mindset	*M* = 3.22 *SD* = 1.35	*M* = 3.06 *SD* = 1.27	*M* = 3.20 *SD* = 1.16	*M* = 3.56 *SD* = 1.05	*M* = 3.61 *SD* = 1.31	IC = 14.3 EIC = 7.8 M = 8.0 MoM = 5.3 Exec = 8.0	IC = 57.1 EIC = 63.7 M = 64.0 MoM = 81.6 Exec = 72.0	IC = 0 EIC = 1.0 M = 0 MoM = 0 Exec = 0	IC = 28.6 EIC = 27.5 M = 28.0 MoM = 13.2 Exec = 20.0
25. I-O content knowledge	*M* = 3.74 *SD* = 1.25	*M* = 3.84 *SD* = 1.00	*M* = 3.75 *SD* = .92	*M* = 3.49 *SD* = .90	*M* = 3.13 *SD* = .92	IC = 100.0 EIC = 94.1 M = 98.1 MoM = 94.6 Exec = 96.0	IC = 0 EIC = 3.9 M = 0 MoM = 5.4 Exec = 4.0	IC = 0 EIC = 2.0 M = 0 MoM = 0 Exec = 0	IC = 0 EIC = 0 M = 1.9 MoM = 0 Exec = 0
26. Innovation	*M* = 3.52 *SD* = .85	*M* = 3.38 *SD* = .82	*M* = 3.57 *SD* = .80	*M* = 3.63 *SD* = .70	*M* = 3.90 *SD* = .65	IC = 23.8 EIC = 15.0 M = 7.7 MoM = 2.7 Exec = 20.0	IC = 42.9 EIC = 68.0 M = 71.2 MoM = 81.1 Exec = 56.0	IC = 0 EIC = 4.0 M = 5.8 MoM = 5.4 Exec = 4.0	IC = 33.3 EIC = 13.0 M = 15.4 MoM = 10.8 Exec = 20.0
27. Interpersonal skills	*M* = 4.17 *SD* = .78	*M* = 4.30 *SD* = .72	*M* = 4.34 *SD* = .66	*M* = 4.49 *SD* = .60	*M* = 4.58 *SD* = .50	IC = 28.6 EIC = 14.1 M = 15.7 MoM = 13.9 Exec = 12.0	IC = 38.1 EIC = 61.6 M = 52.9 MoM = 61.1 Exec = 44.0	IC = 0 EIC = 1.0 M = 2.0 MoM = 2.8 Exec = 0	IC = 33.3 EIC = 23.2 M = 29.4 MoM = 22.2 Exec = 44.0
28. Knowledge of Affirmative Action/adverse impact/diversity/inclusion	*M* = 2.70 *SD* = 1.11	*M* = 2.83 *SD* = 1.17	*M* = 3.12 *SD* = 1.22	*M* = 3.15 *SD* = 1.06	*M* = 2.97 *SD* = 1.02	IC = 85.7 EIC = 55.0 M = 57.7 MoM = 65.8 Exec = 48.0	IC = 9.5 EIC = 24.0 M = 19.2 MoM = 26.3 Exec = 32.0	IC = 0 EIC = 14.0 M = 11.5 MoM = 5.3 Exec = 20.0	IC = 4.8 EIC = 7.0 M = 11.5 MoM = 2.6 Exec = 0
29. Leadership	*M* = 3.00 *SD* = 1.04	*M* = 3.36 *SD* = 1.07	*M* = 3.93 *SD* = .81	*M* = 4.56 *SD* = .59	*M* = 4.52 *SD* = .63	IC = 42.9 EIC = 26.0 M = 34.6 MoM = 24.3 Exec = 16.0	IC = 28.6 EIC = 67.0 M = 57.7 MoM = 59.5 Exec = 80.0	IC = 4.8 EIC = 2.0 M = 0 MoM = 13.5 Exec = 4.0	IC = 23.8 EIC = 5.0 M = 7.7 MoM = 2.7 Exec = 0

Industry Competencies						Where is Proficiency for this Competency Developed? (%)			
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers	Executive	*Graduate School*	*On-the-job*	*Structured Training*	*N/A*
30. Learning agility	*M* = 3.78 *SD* = 1.00	*M* = 3.76 *SD* = .76	*M* = 3.86 *SD* = .73	*M* = 4.05 *SD* = .68	*M* = 4.42 *SD* = .62	IC = 42.9 EIC = 35.0 M = 40.4 MoM = 35.1 Exec = 28.0	IC = 28.6 EIC = 42.0 M = 34.6 MoM = 45.9 Exec = 36.0	IC = 0 EIC = 2.0 M = 0 MoM = 0 Exec = 0	IC = 28.6 EIC = 21.0 M = 25.0 MoM = 18.9 Exec = 36.0
31. Mentoring	*M* = 2.35 *SD* = .98	*M* = 2.65 *SD* = .94	*M* = 3.20 *SD* = 1.01	*M* = 3.33 *SD* = .76	*M* = 3.45 *SD* = .81	IC = 28.6 EIC = 11.9 M = 21.2 MoM = 13.5 Exec = 4.0	IC = 33.3 EIC = 62.4 M = 55.8 MoM = 62.2 Exec = 76.0	IC = 9.5 EIC = 4.0 M = 3.8 MoM = 13.5 Exec = 4.0	IC = 28.6 EIC = 21.8 M = 19.2 MoM = 10.8 Exec = 16.0
32. Negotiation	*M* = 2.39 *SD* = .78	*M* = 2.78 *SD* = .97	*M* = 2.92 *SD* = .97	*M* = 3.25 *SD* = .87	*M* = 3.50 *SD* = .86	IC = 19.0 EIC = 6.1 M = 11.5 MoM = 5.4 Exec = 20.0	IC = 38.1 EIC = 66.7 M = 67.3 MoM = 73.0 Exec = 44.0	IC = 4.8 EIC = 9.1 M = 5.8 MoM = 13.5 Exec = 28.0	IC = 38.1 EIC = 18.2 M = 15.4 MoM = 8.1 Exec = 8.0
33. Organization	*M* = 3.83 *SD* = .83	*M* = 3.83 *SD* = .83	*M* = 3.61 *SD* = .94	*M* = 3.63 *SD* = .67	*M* = 3.59 *SD* = 1.05	IC = 38.1 EIC = 28.3 M = 42.3 MoM = 22.2 Exec = 20.0	IC = 28.6 EIC = 50.5 M = 34.6 MoM = 66.7 Exec = 48.0	IC = 4.8 EIC = 2.0 M = 1.9 MoM = 0 Exec = 8.0	IC = 28.6 EIC = 19.2 M = 21.2 MoM = 11.1 Exec = 24.0
34. Organization development	*M* = 3.30 *SD* = 1.06	*M* = 3.34 *SD* = 1.12	*M* = 3.53 *SD* = 1.01	*M* = 3.82 *SD* = .79	*M* = 4.37 *SD* = .77	IC = 52.4 EIC = 50.0 M = 57.7 MoM = 59.5 Exec = 48.0	IC = 42.9 EIC = 37.0 M = 38.5 MoM = 35.1 Exec = 44.0	IC = 0 EIC = 2.0 M = 0 MoM = 5.4 Exec = 4.0	IC = 4.8 EIC = 11.0 M = 3.8 MoM = 0 Exec = 4.0
35. Perseverance	*M* = 3.52 *SD* = .79	*M* = 3.85 *SD* = .81	*M* = 4.00 *SD* = .83	*M* = 4.15 *SD* = .70	*M* = 4.20 *SD* = .66	IC = 57.1 EIC = 38.0 M = 35.3 MoM = 30.6 Exec = 28.0	IC = 19.0 EIC = 38.0 M = 29.4 MoM = 47.2 Exec = 28.0	IC = 0 EIC = 0 M = 0 MoM = 0 Exec = 0	IC = 23.8 EIC = 24.0 M = 35.3 MoM = 22.2 Exec = 44.0

Industry Competencies						Where is Proficiency for this Competency Developed? (%)			
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers	Executive	*Graduate School*	*On-the-job*	*Structured Training*	*N/A*
36. Persistence	*M* = 3.52 *SD* = .73	*M* = 3.79 *SD* = .73	*M* = 3.90 *SD* = .78	*M* = 4.13 *SD* = .65	*M* = 4.07 *SD* = .83	IC = 47.6 EIC = 31.0 M = 33.3 MoM = 27.0 Exec = 16.0	IC = 23.8 EIC = 44.0 M = 31.4 MoM = 51.4 Exec = 32.0	IC = 0 EIC = 0 M = 0 MoM = 0 Exec = 0	IC = 28.6 EIC = 25.0 M = 35.3 MoM = 21.6 Exec = 52.0
37. Persuasion	*M* = 3.32 *SD* = .78	*M* = 3.61 *SD* = .86	*M* = 3.95 *SD* = .71	*M* = 4.13 *SD* = .76	*M* = 4.17 *SD* = .83	IC = 19.0 EIC = 12.0 M = 7.8 MoM = 8.1 Exec = 4.0	IC = 57.1 EIC = 72.0 M = 70.6 MoM = 75.7 Exec = 64.4	IC = 0 EIC = 4.0 M = 2.0 MoM = 5.4 Exec = 12.0	IC = 23.8 EIC = 12.0 M = 19.6 MoM = 10.8 Exec = 16.0
38. Planning	*M* = 4.17 *SD* = .65	*M* = 4.13 *SD* = .72	*M* = 4.22 *SD* = .70	*M* = 4.10 *SD* = .63	*M* = 4.13 *SD* = .73	IC = 42.9 EIC = 33.0 M = 31.4 MoM = 24.3 Exec = 8.0	IC = 23.8 EIC = 52.0 M = 51.0 MoM = 67.6 Exec = 64.0	IC = 9.5 EIC = 3.0 M = 2.0 MoM = 5.4 Exec = 12.0	IC = 23.8 EIC = 12.0 M = 15.7 MoM = 2.7 Exec = 16.0
39. Political acumen	*M* = 3.04 *SD* = .93	*M* = 3.31 *SD* = 1.20	*M* = 3.69 *SD* = 1.01	*M* = 3.95 *SD* = .93	*M* = 4.00 *SD* = 1.15	IC = 4.8 EIC = 4.0 M = 0 MoM = 0 Exec = 0	IC = 61.9 EIC = 76.8 M = 80.8 MoM = 94.6 Exec = 84.0	IC = 0 EIC = 1.0 M = 0 MoM = 0 Exec = 0	IC = 33.3 EIC = 18.2 M = 19.2 MoM = 5.4 Exec = 16.0
40. Presentation skills	*M* = 4.04 *SD* = .93	*M* = 4.17 *SD* = .75	*M* = 4.12 *SD* = .65	*M* = 4.20 *SD* = .56	*M* = 4.23 *SD* = .77	IC = 52.4 EIC = 51.5 M = 49.0 MoM = 25.0 Exec = 20.0	IC = 33.3 EIC = 37.6 M = 43.1 MoM = 44.4 Exec = 48.0	IC = 9.5 EIC = 8.9 M = 5.9 MoM = 30.6 Exec = 28.0	IC = 4.8 EIC = 2.0 M = 2.0 MoM = 0 Exec = 4.0
41. Prioritization	*M* = 3.91 *SD* = .68	*M* = 4.09 *SD* = .72	*M* = 4.17 *SD* = .65	*M* = 4.21 *SD* = .57	*M* = 4.20 *SD* = .71	IC = 47.6 EIC = 30.3 M = 42.3 MoM = 22.2 Exec = 11.5	IC = 38.1 EIC = 62.6 M = 48.1 MoM = 75.0 Exec = 65.4	IC = 0 EIC = 1.0 M = 1.9 MoM = 2.8 Exec = 11.5	IC = 14.3 EIC = 6.1 M = 7.7 MoM = 0 Exec = 11.5

Industry Competencies						Where is Proficiency for this Competency Developed? (%)			
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers	Executive	*Graduate School*	*On-the-job*	*Structured Training*	*N/A*
42. Problem solving	*M* = 4.05 *SD* = .72	*M* = 4.25 *SD* = .72	*M* = 4.42 *SD* = .59	*M* = 4.31 *SD* = .61	*M* = 4.33 *SD* = .61	IC = 52.4 EIC = 39.4 M = 48.1 MoM = 29.7 Exec = 26.9	IC = 28.6 EIC = 52.5 M = 42.3 MoM = 59.5 Exec = 53.8	IC = 0 EIC = 1.0 M = 1.9 MoM = 0 Exec = 3.8	IC = 19.0 EIC = 7.1 M = 7.7 MoM = 10.8 Exec = 15.4
43. Professionalism	*M* = 4.23 *SD* = .61	*M* = 4.36 *SD* = .67	*M* = 4.26 *SD* = .72	*M* = 4.41 *SD* = .64	*M* = 4.45 *SD* = .74	IC = 19.0 EIC = 11.1 M = 11.5 MoM = 13.5 Exec = 7.7	IC = 66.7 EIC = 82.8 M = 82.7 MoM = 83.8 Exec = 76.9	IC = 0 EIC = 0 M = 0 MoM = 0 Exec = 0	IC = 14.3 EIC = 6.1 M = 5.8 MoM = 2.7 Exec = 15.4
44. Project management	*M* = 4.00 *SD* = .76	*M* = 3.96 *SD* = .82	*M* = 4.02 *SD* = .68	*M* = 3.77 *SD* = .74	*M* = 3.47 *SD* = 1.04	IC = 38.1 EIC = 6.0 M = 15.4 MoM = 13.5 Exec = 7.7	IC = 47.6 EIC = 79.0 M = 69.2 MoM = 56.8 Exec = 69.2	IC = 4.8 EIC = 10.0 M = 9.6 MoM = 27.0 Exec = 15.4	IC = 9.5 EIC = 5.0 M = 5.8 MoM = 2.7 Exec = 7.7
45. Resource management	*M* = 2.77 *SD* = .97	*M* = 3.17 *SD* = .92	*M* = 3.58 *SD* = .91	*M* = 3.90 *SD* = .60	*M* = 3.66 *SD* = .81	IC = 14.3 EIC = 5.1 M = 11.5 MoM = 0 Exec = 0	IC = 66.7 EIC = 71.1 M = 82.7 MoM = 97.3 Exec = 84.6	IC = 0 EIC = 6.1 M = 0 MoM = 2.7 Exec = 7.7	IC = 19.0 EIC = 17.2 M = 5.8 MoM = 0 Exec = 7.7
46. Results driven	*M* = 3.76 *SD* = .83	*M* = 3.95 *SD* = .77	*M* = 4.14 *SD* = .71	*M* = 4.46 *SD* = .60	*M* = 4.40 *SD* = .86	IC = 42.9 EIC = 23.2 M = 27.5 MoM = 13.5 Exec = 7.7	IC = 38.1 EIC = 62.6 M = 52.9 MoM = 62.2 Exec = 50.0	IC = 0 EIC = 0 M = 0 MoM = 0 Exec = 0	IC = 19.0 EIC = 14.1 M = 19.6 MoM = 24.3 Exec = 42.3
47. Risk management	*M* = 2.36 *SD* = 1.00	*M* = 2.78 *SD* = 1.12	*M* = 2.97 *SD* = .96	*M* = 3.41 *SD* = .75	*M* = 3.43 *SD* = 1.07	IC = 14.3 EIC = 0 M = 3.8 MoM = 0 Exec = 0	IC = 47.6 EIC = 67.0 M =73.1 MoM = 83.8 Exec = 73.1	IC = 4.8 EIC = 4.1 M = 3.8 MoM = 2.7 Exec = 7.7	IC = 33.3 EIC = 28.9 M = 19.2 MoM = 13.5 Exec = 19.2

Industry Competencies						Where is Proficiency for this Competency Developed? (%)			
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers	Executive	*Graduate School*	*On-the-job*	*Structured Training*	*N/A*
48. Strategic planning	*M* = 3.45 *SD* = 1.01	*M* = 3.14 *SD* = 1.06	*M* = 3.49 *SD* = .94	*M* = 4.13 *SD* = .47	*M* = 4.20 *SD* = .81	IC = 23.8 EIC = 4.0 M = 5.8 MoM = 2.8 Exec = 3.8	IC = 61.9 EIC = 79.8 M = 86.5 MoM = 97.2 Exec = 76.9	IC = 0 EIC = 5.1 M = 1.9 MoM = 0 Exec = 15.4	IC = 14.3 EIC = 11.1 M = 5.8 MoM = 0 Exec = 3.8
49. Strategic thinking	*M* = 4.00 *SD* = .76	*M* = 3.73 *SD* = .97	*M* = 3.59 *SD* = .94	*M* = 4.36 *SD* = .54	*M* = 4.43 *SD* = .82	IC = 33.3 EIC = 17.3 M = 19.2 MoM = 11.1 Exec = 7.7	IC = 52.4 EIC = 66.3 M = 73.1 MoM = 83.3 Exec = 69.2	IC = 0 EIC = 5.1 M = 1.9 MoM = 0 Exec = 3.8	IC = 14.3 EIC = 11.2 M = 5.8 MoM = 5.6 Exec = 19.2
50. Succession planning	*M* = 2.27 *SD* = 1.28	*M* = 2.31 *SD* = 1.26	*M* = 3.00 *SD* = 1.25	*M* = 3.74 *SD* = 1.14	*M* = 4.07 *SD* = .87	IC = 9.5 EIC = 11.1 M = 13.5 MoM = 13.5 Exec = 11.5	IC = 47.6 EIC = 61.6 M = 65.4 MoM = 75.7 Exec = 61.5	IC = 0 EIC = 4.0 M = 0 MoM = 5.4 Exec = 19.2	IC = 42.9 EIC = 23.2 M = 21.2 MoM = 5.4 Exec = 7.7
51. Systematic thinking	*M* = 3.41 *SD* = 1.01	*M* = 3.56 *SD* = .98	*M* = 3.59 *SD* = .94	*M* = 4.18 *SD* = .60	*M* = 4.20 *SD* = .81	IC = 35.0 EIC = 27.3 M = 44.2 MoM = 29.7 Exec =46.2	IC = 45.0 EIC = 53.5 M = 48.1 MoM = 56.8 Exec = 30.8	IC = 0 EIC = 2.0 M = 0 MoM = 5.4 Exec = 0	IC = 20.0 EIC = 17.2 M = 7.7 MoM = 8.1 Exec = 23.1
52. Talent acquisition	*M* = 2.32 *SD* = 1.09	*M* = 2.41 *SD* = 1.16	*M* = 2.83 *SD* = 1.07	*M* = 3.41 *SD* = .97	*M* = 3.60 *SD* = .97	IC = 28.6 EIC = 1.8 M = 23.1 MoM = 18.9 Exec = 19.2	IC = 42.9 EIC = 61.6 M = 63.5 MoM = 75.7 Exec = 73.1	IC = 0 EIC = 3.0 M = 0 MoM = 2.7 Exec = 0	IC = 28.6 EIC = 17.2 M = 13.5 MoM = 2.7 Exec = 7.7
53. Talent Management	*M* = 3.36 *SD* = 1.36	*M* = 3.13 *SD* = 1.30	*M* = 3.73 *SD* = 1.14	*M* = 4.33 *SD* = .66	*M* = 4.27 *SD* = .98	IC = 33.3 EIC = 23.5 M = 25.5 MoM = 16.2 Exec = 15.4	IC = 51.9 EIC = 56.1 M = 68.6 MoM = 83.8 Exec = 73.1	IC = 0 EIC = 6.1 M = 0 MoM = 0 Exec = 3.8	IC = 9.5 EIC = 14.3 M = 5.9 MoM = 0 Exec = 7.7

Industry Competencies						Where is Proficiency for this Competency Developed? (%)			
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers	Executive	*Graduate School*	*On-the-job*	*Structured Training*	*N/A*
54. Teamwork	*M* = 4.00 *SD* = .76	*M* = 3.98 *SD* = .86	*M* = 3.98 *SD* = .82	*M* = 4.08 *SD* = .62	*M* = 4.07 *SD* = .87	IC = 52.4 EIC = 33.7 M = 38.5 MoM = 27.0 Exec = 23.1	IC = 28.6 EIC = 56.8 M = 48.1 MoM = 62.2 Exec = 69.2	IC = 0 EIC = 2.1 M = 0 MoM = 0 Exec = 0	IC = 19.0 EIC = 7.4 M = 13.5 MoM = 10.8 Exec = 7.7
55. Understanding & translating technical jargon	*M* = 3.14 *SD* = 1.08	*M* = 3.58 *SD* = 1.09	*M* = 3.63 *SD* = .96	*M* = 3.31 *SD* = .98	*M* = 3.43 *SD* = .94	IC = 38.1 EIC = 30.6 M = 46.2 MoM = 40.5 Exec = 30.8	IC = 52.4 EIC = 60.2 M = 50.0 MoM = 56.8 Exec = 65.4	IC = 0 EIC = 1.0 M = 1.9 MoM = 2.7 Exec = 3.8	IC = 9.5 EIC = 8.2 M = 1.9 MoM = 0 Exec = 0
56. Understanding of strategic levers for business	*M* = 3.41 *SD* = 1.18	*M* = 3.30 *SD* = 1.01	*M* = 3.56 *SD* = .90	*M* = 4.05 *SD* = .72	*M* = 4.40 *SD* = .77	IC = 9.5 EIC = 4.0 M = 5.8 MoM = 8.1 Exec = 0	IC = 71.4 EIC = 82.8 M = 84.6 MoM = 83.8 Exec = 88.5	IC = 0 EIC = 3.0 M = 0 MoM = 5.4 Exec = 7.7	IC = 19.0 EIC = 10.1 M = 9.6 MoM = 2.7 Exec = 3.8
57. Versatility	*M* = 3.41 *SD* = .91	*M* = 3.64 *SD* = .75	*M* = 3.86 *SD* = .75	*M* = 3.92 *SD* = .58	*M* = 4.20 *SD* = .66	IC = 28.6 EIC = 12.2 M = 9.8 MoM = 8.1 Exec = 3.8	IC = 42.9 EIC = 63.3 M = 58.8 MoM = 67.6 Exec = 46.2	IC = 0 EIC = 0 M = 0 MoM = 0 Exec = 0	IC = 28.6 EIC = 24.5 M = 31.4 MoM = 24.3 Exec = 50.0
58. Vision for team	*M* = 2.73 *SD* = 1.08	*M* = 2.94 *SD* = .98	*M* = 3.76 *SD* = .90	*M* = 4.13 *SD* = .73	*M* = 4.23 *SD* = .82	IC = 14.3 EIC = 1.0 M = 7.7 MoM = 0 Exec = 7.7	IC = 52.4 EIC = 79.8 M = 80.8 MoM = 89.2 Exec = 65.4	IC = 0 EIC = 1.0 M = 0 MoM = 0 Exec = 0	IC = 28.6 EIC = 18.2 M = 11.5 MoM = 10.8 Exec = 26.9
59. Workforce planning	*M* = 2.77 *SD* = 1.07	*M* = 2.45 *SD* = 1.15	*M* = 3.05 *SD* = .92	*M* = 3.21 *SD* = .81	*M* = 3.23 *SD* = .94	IC = 19.0 EIC = 10.1 M = 9.6 MoM = 5.4 Exec = 15.4	IC = 52.4 EIC = 56.6 M = 57.7 MoM = 86.5 Exec = 65.4	IC = 0 EIC = 9.1 M = 7.7 MoM = 5.4 Exec = 15.4	IC = 28.6 EIC = 24.2 M = 25.0 MoM = 2.7 Exec = 3.8

Industry Competencies						Where is Proficiency for this Competency Developed? (%)			
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers	Executive	*Graduate School*	*On-the-job*	*Structured Training*	*N/A*
60. Tolerance for ambiguity	*M* = 3.77 *SD* = 1.02	*M* = 4.02 *SD* = .78	*M* = 4.08 *SD* = .86	*M* = 4.38 *SD* = .67	*M* = 4.40 *SD* = .89	IC = 23.8 EIC = 16.5 M =17.6 MoM = 10.8 Exec = 3.8	IC = 57.1 EIC = 75.3 M = 58.8 MoM = 70.3 Exec = 38.5	IC = 0 EIC = 1.0 M = 0 MoM = 0 Exec = 0	IC = 19.0 EIC = 7.2 M = 23.5 MoM = 18.9 Exec = 57.7
61. Systems thinking	*M* = 3.23 *SD* = 1.19	*M* = 3.50 *SD* = 1.04	*M* = 3.55 *SD* = .98	*M* = 3.95 *SD* = .76	*M* = 4.31 *SD* = .71	IC = 30.0 EIC = 23.2 M = 30.8 MoM = 32.4 Exec = 38.5	IC = 45.0 EIC = 56.6 M = 57.7 MoM = 64.9 Exec = 34.6	IC = 0 EIC = 2.0 M = 0 MoM = 0 Exec = 7.7	IC = 25.0 EIC = 18.2 M = 11.5 MoM = 2.7 Exec = 19.2
62. Self-monitoring	*M* = 3.91 *SD* = 1.15	*M* = 3.97 *SD* = .86	*M* = 3.90 *SD* = .76	*M* = 4.05 *SD* = .66	*M* = 3.93 *SD* = .87	IC = 38.1 EIC = 32.0 M = 39.2 MoM = 18.9 Exec = 15.4	IC = 28.6 EIC = 40.2 M = 39.2 MoM = 51.4 Exec = 34.6	IC = 0 EIC = 1.0 M = 0 MoM = 0 Exec = 3.8	IC = 33.3 EIC = 26.8 M = 21.6 MoM = 29.7 Exec = 46.2

Note: Means and standard deviations reported by level for all competencies within Industry. Proficiency development for each competency is also included. Individual Contributor (*n* = 21 - 23); Expert Individual Contributor (*n* = 103 – 108); Manager (*n* = 57 - 59); Manager of Managers (*n* = 38 - 41); Executive (*n* = 29 - 31). For the section where members indicated they developed the competencies, the provided percentages were determined within level, not across levels.

Table B-4

Industry Critical Experiences

Industry Experiences					
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers	Executive
1. Use different types of analytical software (e.g., SPSS, Mplus, SAS)	*M* = 3.10 *SD* =1.48	*M* = 2.84 *SD* = 1.43	*M* = 2.89 *SD* = 1.29	*M* = 2.13 *SD* = 1.08	*M* = 1.93 *SD* = 1.15
2. Use different types of analytical methods (e.g., Structural Equation Modeling, Hierarchical Linear Modeling, Multiple Regression, ANOVAs)	*M* = 2.62 *SD* = 1.32	*M* = 2.58 *SD* = 1.43	*M* = 2.51 *SD* = 1.20	*M* = 2.05 *SD* = 1.06	*M* = 1.93 *SD* = 1.18
3. Works independently with minimal supervision	*M* = 4.38 *SD* = .81	*M* = 4.58 *SD* = .68	*M* = 4.29 *SD* = .79	*M* = 3.79 *SD* = .98	*M* = 3.96 *SD* = 1.07
4. Use innovation and creativity in designing new projects to suit organizational needs	*M* = 3.95 *SD* = 1.07	*M* = 4.06 *SD* = .83	*M* = 4.13 *SD* = .75	*M* = 4.13 *SD* = .92	*M* = 4.14 *SD* = .97
5. Create and administer own projects from start to finish	*M* = 3.86 *SD* = 1.11	*M* = 4.23 *SD* = .84	*M* = 4.44 *SD* = .74	*M* = 4.00 *SD* = 1.05	*M* = 4.07 *SD* = 1.09
6. Work in multiple areas of HR	*M* = 3.10 *SD* = 1.02	*M* = 2.98 *SD* = 1.16	*M* = 3.35 *SD* = .34	*M* = 3.85 *SD* = 1.07	*M* = 4.04 *SD* = 1.32
7. Facilitate meetings with stakeholders in the organization	*M* = 4.10 *SD* = .89	*M* = 4.13 *SD* = 1.06	*M* = 4.20 *SD* = 1.01	*M* = 4.54 *SD* = .56	*M* = 4.43 *SD* = .88
8. Deliver presentations to stakeholders in the organization	*M* = 4.00 *SD* = 1.14	*M* = 4.17 *SD* = .94	*M* = 4.36 *SD* = .78	*M* = 4.64 *SD* = .74	*M* = 4.64 *SD* = .62
9. Create and maintain project plans	*M* = 3.43 *SD* = 1.17	*M* = 3.85 *SD* = .92	*M* = 3.96 *SD* = .70	*M* = 3.77 *SD* = .81	*M* = 3.64 *SD* = 1.16
10. Collaborate with people from different teams on various projects	*M* = 4.05 *SD* = .92	*M* = 4.48 *SD* = .73	*M* = 4.45 *SD* = .63	*M* = 4.63 *SD* = .54	*M* = 4.54 *SD* = .64
11. Demonstrate that developed projects add value to the organization	*M* = 3.90 *SD* = .83	*M* = 4.24 *SD* = .89	*M* = 4.15 *SD* = .91	*M* = 4.46 *SD* = .64	*M* = 4.46 *SD* =.69

Industry Experiences					
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers	Executive
12. Recommend changes to projects	*M* = 3.67 *SD* = .86	*M* = 3.95 *SD* = .80	*M* = 3.93 *SD* = .69	*M* = 4.16 *SD* = .60	*M* = 4.21 *SD* = .63
13. Contribute to or complete projects in different areas (e.g., selection, training, coaching)	*M* = 3.67 *SD* = 1.16	*M* = 3.75 *SD* = 1.07	*M* = 3.89 *SD* = .97	*M* = 4.38 *SD* = .63	*M* = 4.18 *SD* = .91
14. Manage relationships and networks with others in the organization	*M* = 4.24 *SD* = 1.00	*M* = 4.25 *SD* = .94	*M* = 4.44 *SD* = .69	*M* = 4.73 *SD* = .51	*M* = 4.78 *SD* = .42
15. Complete stretch assignments that are outside of comfort zone	*M* = 3.81 *SD* = 1.03	*M* = 3.70 *SD* = .98	*M* = 4.05 *SD* = .83	*M* = 4.03 *SD* = .71	*M* = 4.33 *SD* = .83
16. Adapt and embrace organizational culture	*M* = 4.05 *SD* = .87	*M* = 4.13 *SD* = .83	*M* = 4.35 *SD* = .83	*M* = 4.51 *SD* = .60	*M* = 4.46 *SD* = .79
17. Lead people through change	*M* = 3.29 *SD* = 1.05	*M* = 3.44 *SD* = 1.19	*M* = 4.00 *SD* = .97	*M* = 4.56 *SD* = .55	*M* = 4.46 *SD* = .92
18. Create analysis plans	*M* = 3.30 *SD* = 1.08	*M* = 3.45 *SD* = 1.22	*M* = 3.43 *SD* = 1.06	*M* = 3.37 *SD* = 1.00	*M* = 3.07 *SD* = 1.24
19. Execute analysis plans	*M* = 3.35 *SD* = 1.09	*M* = 3.47 *SD* = 1.22	*M* = 3.52 *SD* = 1.23	*M* = 3.37 *SD* = 1.10	*M* = 3.00 *SD* = 1.30
20. Learn organizational politics	*M* = 3.79 *SD* = .92	*M* = 3.84 *SD* = 1.07	*M* = 4.18 *SD* = .84	*M* = 4.38 *SD* = .63	*M* = 4.50 *SD* = .96
21. Build and maintain assessments	*M* = 3.10 *SD* = 1.25	*M* = 3.34 *SD* = 1.43	*M* = 3.31 *SD* = 1.35	*M* = 3.08 *SD* = 1.26	*M* = 3.19 *SD* = 1.18
22. Partner with others on broad talent initiatives	*M* = 3.76 *SD* = 1.22	*M* = 3.62 *SD* = 1.19	*M* = 3.87 *SD* = 1.02	*M* = 4.42 *SD* = .76	*M* = 4.07 *SD* = 1.11
23. Work on a diverse array of projects	*M* = 3.95 *SD* = .87	*M* = 3.77 *SD* = .94	*M* = 4.07 *SD* = .81	*M* = 4.31 *SD* = .67	*M* = 4.35 *SD* = .75
24. Complete high visibility assignments	*M* = 4.00 *SD* = .95	*M* = 4.14 *SD* = .85	*M* = 4.45 *SD* = .63	*M* = 4.49 *SD* = .65	*M* = 4.85 *SD* = .37

Industry Experiences					
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers	Executive
25. Serve as a subject matter expert in a given area	*M* = 3.95 *SD* = 1.02	*M* = 4.64 *SD* = .66	*M* = 4.56 *SD* = .63	*M* = 4.42 *SD* = .73	*M* = 4.42 *SD* = .76
26. Implement sustainment measures to ensure current programs are up-to-date	*M* = 3.39 *SD* = 1.15	*M* = 3.38 *SD* = .91	*M* = 3.43 *SD* = .94	*M* = 3.50 *SD* = .88	*M* = 3.84 *SD* = .75
27. Participate in professional societies	*M* = 2.50 *SD* = 1.05	*M* = 2.65 *SD* = 1.04	*M* = 2.65 *SD* = .87	*M* = 3.00 *SD* = .94	*M* = 2.88 *SD* = 1.07
28. Demonstrate influence outside of the organization (e.g., through publications, presentations)	*M* = 2.10 *SD* = 1.18	*M* = 2.19 *SD* = 1.20	*M* = 2.53 *SD* = 1.12	*M* = 2.65 *SD* = 1.14	*M* = 2.65 *SD* = 1.29
29. Earn and maintain trust of leadership team	*M* = 3.79 *SD* = 1.08	*M* = 4.52 *SD* = .63	*M* = 4.56 *SD* = .63	*M* = 4.86 *SD* = .35	*M* = 4.84 *SD* = .47
30. Create relationships with various organizational stakeholders	*M* = 4.33 *SD* = .66	*M* = 4.30 *SD* = .83	*M* = 4.44 *SD* = .66	*M* = 4.68 *SD* = .53	*M* = 4.65 *SD* = .69
31. Manage large portions of projects	*M* = 3.76 *SD* = .94	*M* = 4.20 *SD* = .88	*M* = 4.49 *SD* = .64	*M* = 4.00 *SD* = .88	*M* = 3.81 *SD* = .94
32. Communicate with stakeholders often regarding project proposals and ideas	*M* = 3.90 *SD* = .79	*M* = 4.03 *SD* = .97	*M* = 4.18 *SD* = .88	*M* = 4.17 *SD* = .74	*M* = 4.26 *SD* = .86
33. Execute and deliver on results	*M* = 4.62 *SD* = .59	*M* = 4.63 *SD* = .65	*M* = 4.74 *SD* = .52	*M* = 4.71 *SD* = .57	*M* = 4.58 *SD* = .81
34. Engage in risk management	*M* = 2.58 *SD* = .90	*M* = 2.94 *SD* = 1.22	*M* = 2.94 *SD* = .92	*M* = 3.51 *SD* = .80	*M* = 3.48 *SD* = 1.12
35. Create and follow diversity objectives	*M* = 2.30 *SD* = 1.22	*M* = 2.41 *SD* = 1.12	*M* = 2.74 *SD* = 1.19	*M* = 3.24 *SD* = 1.14	*M* = 3.12 *SD* = 1.17
36. Manage multiple clients	*M* = 3.60 *SD* = 1.23	*M* = 3.62 *SD* = 1.25	*M* = 4.00 *SD* = 1.16	*M* = 4.42 *SD* = .73	*M* = 3.81 *SD* = 1.18
37. Manage projects through delegation of work	*M* = 2.61 *SD* = 1.15	*M* = 3.05 *SD* = 1.11	*M* = 4.16 *SD* = .88	*M* = 4.43 *SD* = .50	*M* = 4.30 *SD* = 1.03

Industry Experiences					
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers	Executive
38. Lead project teams	*M* = 3.11 *SD* = .94	*M* = 3.53 *SD* = 1.17	*M* = 4.33 *SD* = .72	*M* = 4.30 *SD* = .74	*M* = 3.92 *SD* = .89
39. Mentor and coach subordinates	*M* = 2.42 *SD* = 1.17	*M* = 2.46 *SD* = 1.21	*M* = 4.17 *SD* = .91	*M* = 4.51 *SD* = .65	*M* = 4.30 *SD* = .72
40. Manage available resources	*M* = 2.94 *SD* = 1.14	*M* = 3.36 *SD* = 1.07	*M* = 4.07 *SD* = .88	*M* = 4.51 *SD* = .56	*M* = 4.22 *SD* = .85
41. Manage performance of subordinates	*M* = 1.45 *SD* = .52	*M* = 2.04 *SD* = 1.23	*M* = 4.31 *SD* =.77	*M* = 4.50 *SD* = .56	*M* = 4.37 *SD* = .84
42. Lead long-term projects	*M* = 3.69 *SD* = 1.20	*M* = 3.99 *SD* = .97	*M* = 4.47 *SD* = .66	*M* = 4.38 *SD* = .68	*M* = 4.31 *SD* = .62
43. Manage client relationships	*M* = 3.76 *SD* = 1.09	*M* = 3.78 *SD* = 1.28	*M* = 4.08 *SD* = 1.09	*M* = 4.31 *SD* = .87	*M* = 4.12 *SD* = 1.17
44. Recruit new talent to the organization	*M* = 1.83 *SD* = .72	*M* = 1.95 *SD* = .96	*M* = 2.72 *SD* = 1.25	*M* = 3.69 *SD* = 1.12	*M* = 3.78 *SD* = 1.09
45. Analyze data using advanced analyses	*M* = 3.15 *SD* = 1.57	*M* = 3.21 *SD* = 1.43	*M* = 2.69 *SD* = 1.46	*M* = 2.58 *SD* = 1.20	*M* = 2.27 *SD* = 1.34
46. Negotiate with stakeholders	*M* = 2.90 *SD* = 1.02	*M* = 3.40 *SD* = 1.05	*M* = 3.58 *SD* = .83	*M* = 4.08 *SD* = .84	*M* = 3.88 *SD* = 1.03
47. Partner across multiple HR or organization groups	*M* = 3.70 *SD* = 1.08	*M* = 3.94 *SD* = 1.04	*M* = 3.89 *SD* = .97	*M* = 4.53 *SD* = .65	*M* = 4.08 *SD* = 1.19
48. Maintain high visibility with executives	*M* = 3.26 *SD* = 1.28	*M* = 3.65 *SD* = 1.10	*M* = 3.85 *SD* = .87	*M* = 4.42 *SD* = .69	*M* = 4.62 *SD* = .75
49. Manage projects outside of expertise	*M* = 2.95 *SD* = 1.18	*M* = 2.82 *SD* = 1.07	*M* = 3.15 *SD* = 1.08	*M* = 3.42 *SD* = .87	*M* = 3.46 *SD* = 1.14
50. Develop expertise in multiple content areas of I-O	*M* = 3.43 *SD* = 1.36	*M* = 3.46 *SD* = 1.13	*M* = 3.69 *SD* = .98	*M* = 3.72 *SD* = .88	*M* = 3.38 *SD* = 1.17

Industry Experiences					
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers	Executive
51. Complete projects under the direction of organization executives	*M* = 3.44 *SD* = 1.25	*M* = 3.52 *SD* = 1.01	*M* = 4.02 *SD* = .83	*M* = 4.18 *SD* = .80	*M* = 3.78 *SD* = 1.13
52. Demonstrate ability to effectively handle ambiguous situations	*M* = 3.95 *SD* = 1.12	*M* = 4.25 *SD* = .76	*M* = 4.43 *SD* = .69	*M* = 4.63 *SD* = .55	*M* = 4.56 *SD* = .96
53. Complete projects that span across multiple departments or across the organization	*M* = 3.90 *SD* = 1.25	*M* = 4.03 *SD* = .98	*M* = 4.24 *SD* = .74	*M* = 4.51 *SD* = .56	*M* = 4.33 *SD* = .82
54. Participate in global initiatives	*M* = 3.38 *SD* = 1.41	*M* = 2.88 *SD* = 1.43	*M* = 3.27 *SD* = 1.52	*M* = 3.82 *SD* = 1.36	*M* = 3.61 *SD* = 1.44
55. Conduct succession planning	*M* = 2.06 *SD* = 1.34	*M* = 2.11 *SD* = 1.39	*M* = 2.88 *SD* = 1.38	*M* = 3.75 *SD* = 1.32	*M* = 4.28 *SD* = 1.24
56. Establish a strategy to reach the organization mission	*M* = 3.21 *SD* = 1.32	*M* = 2.92 *SD* = 1.33	*M* = 3.11 *SD* = 1.00	*M* = 4.29 *SD* = .76	*M* = 4.35 *SD* = .89
57. Balance use of financial resources	*M* = 2.20 *SD* = .56	*M* = 2.58 *SD* = 1.10	*M* = 3.38 *SD* = 1.08	*M* = 3.94 *SD* = .89	*M* = 4.00 *SD* = .98
58. Mobilize employees towards completing organizational goals	*M* = 2.77 *SD* = 1.24	*M* = 2.88 *SD* = 1.21	*M* = 3.80 *SD* = .93	*M* = 4.34 *SD* = .54	*M* = 4.32 *SD* = .75
59. Balance diverse perspectives of various stakeholders	*M* = 3.55 *SD* = 1.05	*M* = 3.45 *SD* = 1.23	*M* = 3.89 *SD* = .81	*M* = 4.39 *SD* = .60	*M* = 4.15 *SD* = .88
60. Identify global trends within industry	*M* = 3.44 *SD* = 1.29	*M* = 2.59 *SD* = 1.20	*M* = 2.92 *SD* = 1.02	*M* = 3.43 *SD* = 1.17	*M* = 3.42 *SD* = 1.28
61. Maintain composure under pressure	*M* = 3.85 *SD* = 1.23	*M* = 4.41 *SD* = .75	*M* = 4.51 *SD* = .61	*M* = 4.58 *SD* = .50	*M* = 4.75 *SD* = .44
62. Work through ambiguity and uncertainty	*M* = 4.05 *SD* = 1.02	*M* = 4.40 *SD* = .68	*M* = 4.55 *SD* = .633	*M* = 4.60 *SD* = .50	*M* = 4.81 *SD* = .40
63. Allocate resources effectively	*M* = 3.29 *SD* = .99	*M* = 3.32 *SD* = 1.07	*M* = 3.91 *SD* = 1.01	*M* = 4.33 *SD* = .48	*M* = 4.27 *SD* = .92

Industry Experiences					
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers	Executive
64. Secure resources	*M* = 2.37 *SD* = 1.15	*M* = 2.81 *SD* = 1.22	*M* = 3.39 *SD* = 1.14	*M* = 4.09 *SD* = .89	*M* = 4.00 *SD* = .89
65. Demonstrate political savvy in structuring and designing projects	*M* = 3.35 *SD* = 1.09	*M* = 3.60 *SD* = 1.05	*M* = 4.13 *SD* = .89	*M* = 4.34 *SD* = .64	*M* = 4.42 *SD* = .81
66. Speak up to superiors when necessary	*M* = 3.90 *SD* = 1.02	*M* = 4.07 *SD* = .85	*M* = 4.27 *SD* = .71	*M* = 4.40 *SD* = .74	*M* = 4.50 *SD* = .72
67. Actively build networks outside the internal organization	*M* = 2.94 *SD* = 1.26	*M* = 3.12 *SD* = 1.11	*M* = 3.20 *SD* = 1.25	*M* = 3.83 *SD* = 1.08	*M* = 3.48 *SD* = 1.23
68. Serve as HR business partner	*M* = 2.65 *SD* = 1.32	*M* = 2.83 *SD* = 1.46	*M* = 2.73 *SD* = 1.37	*M* = 3.53 *SD* = 1.08	*M* = 3.38 *SD* = 1.36
69. Employ data analytics in decision making	*M* = 3.90 *SD* = 1.14	*M* = 3.84 *SD* = 1.23	*M* = 3.82 *SD* = 1.00	*M* = 3.81 *SD* = .95	*M* = 3.68 *SD* = 1.03
70. Develop key metrics for use in decision making	*M* = 3.55 *SD* = 1.15	*M* = 3.72 *SD* = 1.13	*M* = 3.89 *SD* = 1.01	*M* = 4.00 *SD* = .96	*M* = 3.92 *SD* = .81
71. Identify root cause of organizational performance issues	*M* = 3.57 *SD* = 1.29	*M* = 3.28 *SD* = 1.39	*M* = 3.77 *SD* = 1.01	*M* = 4.06 *SD* = 1.00	*M* = 4.08 *SD* = .89

Note: Means and standard deviations reported by level for all critical experiences within Industry. Individual Contributor (*n* = 12 - 21); Expert Individual Contributor (*n* = 81-105); Manager (*n* = 49 - 55); Manager of Managers (*n* = 33 - 39); Executive (n = 23 - 38). N/A analyzed as "system missing."

Government

Table B-5

Government Competencies and Where Proficiency Developed

Government Competencies					Where is Proficiency for this Competency Developed? (%)			
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers/ Executive	*Graduate School*	*On-the-job*	*Structured Training*	*N/A*
1. Attention to detail	*M* = 4.00 *SD* = .00	*M* = 4.33 *SD* = .70	*M* = 4.15 *SD* = .80	*M* = 4.11 *SD* = .93	IC: 66.7 EIC: 47.3 M: 23.1 MoM: 33.3	IC: 33.3 EIC: 45.5 M: 76.9 MoM: 44.4	IC: 0 EIC: 0 M: 0 MoM: 11.1	IC: 0 EIC: 7.3 M: 0 MoM: 11.1
2. Business acumen	*M* = 2.67 *SD* = 1.16	*M* = 3.15 *SD* = 1.05	*M* = 3.31 *SD* = 1.03	*M* = 3.88 *SD* = .64	IC: 33.3 EIC: 5.6 M: 7.7 MoM: 0	IC: 33.3 EIC: 74.1 M: 69.2 MoM: 77.8	IC: 0 EIC: 1.9 M: 0 MoM: 11.1	IC: 33.3 EIC: 18.5 M: 23.1 MoM: 11.1
3. Communication: Verbal	*M* = 4.33 *SD* = .58	*M* = 4.51 *SD* = .66	*M* = 4.31 *SD* = .63	*M* = 4.78 *SD* = .44	IC: 33.3 EIC: 40.0 M: 23.1 MoM: 44.4	IC: 66.7 EIC: 47.3 M: 69.2 MoM: 44.4	IC: 0 EIC: 7.3 M: 0 MoM: 11.1	IC: 0 EIC: 5.5 M: 7.7 MoM: 0
4. Communication: Written	*M* = 4.33 *SD* = .58	*M* = 4.62 *SD* = .53	*M* = 4.54 *SD* = .52	*M* = 4.67 *SD* = .71	IC: 66.7 EIC: 56.4 M: 46.2 MoM: 44.4	IC: 33.3 EIC: 30.9 M: 38.5 MoM: 44.4	IC: 0 EIC: 7.3 M: 7.7 MoM: 11.1	IC: 0 EIC: 5.5 M: 7.7 MoM: 0
5. Conflict management	*M* = 3.00 *SD* = 1.00	*M* = 3.18 *SD* = .95	*M* = 3.46 *SD* = .66	*M* = 3.89 *SD* = .93	IC: 33.3 EIC: 5.5 M: 0 MoM: 11.1	IC: 66.7 EIC: 65.5 M: 84.6 MoM: 66.7	IC: 0 EIC: 12.7 M: 0 MoM: 11.1	IC: 0 EIC: 16.4 M: 15.4 MoM: 11.1
6. Continuous learning	*M* = 3.67 *SD* = .58	*M* = 3.75 *SD* = .93	*M* = 3.77 *SD* = .60	*M* = 4.13 *SD* = .35	IC: 66.7 EIC: 49.1 M: 46.2 MoM: 33.3	IC: 33.3 EIC: 32.1 M: 30.8 MoM: 33.3	IC: 0 EIC: 5.7 M: 0 MoM: 11.1	IC: 0 EIC: 13.2 M: 23.1 MoM: 22.2

Government Competencies					Where is Proficiency for this Competency Developed? (%)			
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers/ Executive	*Graduate School*	*On-the-job*	*Structured Training*	*N/A*
7. Creativity	*M* = 3.00 *SD* = .00	*M* = 3.42 *SD* = .85	*M* = 3.62 *SD* = .65	*M* = 3.89 *SD* = .78	IC: 33.3 EIC: 28.3 M: 23.1 MoM: 11.1	IC: 33.3 EIC: 47.2 M: 53.8 MoM: 55.6	IC: 0 EIC: 0 M: 0 MoM: 0	IC: 33.3 EIC: 24.5 M: 23.1 MoM: 33.3
8. Critical thinking	*M* = 4.33 *SD* = .58	*M* = 4.45 *SD* = .74	*M* = 4.62 *SD* = .51	*M* = 4.78 *SD* = .44	IC: 66.7 EIC: 59.3 M: 61.5 MoM: 55.6	IC: 33.3 EIC: 31.5 M: 38.5 MoM: 22.2	IC: 0 EIC: 1.9 M: 0 MoM: 0	IC: 0 EIC: 7.4 M: 0 MoM: 22.2
9. Customer service	*M* = 4.33 *SD* = 1.16	*M* = 3.75 *SD* = 1.16	*M* = 4.23 *SD* = .83	*M* = 4.33 *SD* = .71	IC: 0 EIC: 0 M: 0 MoM: 0	IC: 100 EIC: 87.3 M: 100 MoM: 100	IC: 0 EIC: 3.6 M: 0 MoM: 0	IC: 0 EIC: 9.1 M: 0 MoM: 0
10. Data analysis	*M* = 4.00 *SD* = 1.41	*M* = 4.15 *SD* = .89	*M* = 3.77 *SD* = .93	*M* = 3.22 *SD* = .97	IC: 100 EIC: 85.5 M: 84.6 MoM: 100	IC: 0 EIC: 12.7 M: 7.7 MoM: 0	IC: 0 EIC: 1.8 M: 7.7 MoM: 0	IC: 0 EIC: 0 M: 0 MoM: 0
11. Decision making	*M* = 3.67 *SD* = .58	*M* = 4.02 *SD* = .79	*M* = 4.46 *SD* = .52	*M* = 4.56 *SD* = .73	IC: 33.3 EIC: 20.4 M: 0 MoM: 0	IC: 66.7 EIC: 70.4 M: 84.6 MoM: 77.8	IC: 0 EIC: 0 M: 7.7 MoM: 0	IC: 0 EIC: 9.3 M: 7.7 MoM: 22.2
12. Empathy	*M* = 2.33 *SD* = .58	*M* = 2.95 *SD* = .97	*M* = 3.31 *SD* = .75	*M* = 3.44 *SD* = .88	IC: 0 EIC: 9.3 M: 15.4 MoM: 22.2	IC: 33.3 EIC: 46.3 M: 61.5 MoM: 33.3	IC: 0 EIC: 0 M: 0 MoM: 0	IC: 66.7 EIC: 44.4 M: 23.1 MoM: 44.4
13. Ethical behavior	*M* = 4.33 *SD* = 1.16	*M* = 4.71 *SD* = .50	*M* = 4.77 *SD* = .44	*M* = 4.56 *SD* = .73	IC: 33.3 EIC: 42.6 M: 23.1 MoM: 22.2	IC: 33.3 EIC: 35.2 M: 46.2 MoM: 33.3	IC: 0 EIC: 3.7 M: 15.4 MoM: 33.3	IC: 33.3 EIC: 18.5 M: 15.4 MoM: 11.1
14. Financial Accountability	*M* = 2.67 *SD* = 2.08	*M* = 2.85 *SD* = 1.20	*M* = 3.31 *SD* = 1.32	*M* = 3.56 *SD* = 1.01	IC: 0 EIC: 1.8 M: 0 MoM: 11.1	IC: 33.3 EIC: 58.2 M: 46.2 MoM: 77.8	IC: 0 EIC: 10.9 M: 15.4 MoM: 11.1	IC: 66.7 EIC: 29.1 M: 38.5 MoM: 0

Government Competencies					Where is Proficiency for this Competency Developed? (%)			
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers/ Executive	*Graduate School*	*On-the-job*	*Structured Training*	*N/A*
15. Financial acumen	*M* = 2.00 *SD* = 1.00	*M* = 2.35 *SD* = 1.02	*M* = 3.00 *SD* = 1.00	*M* = 3.33 *SD* = .87	IC: 33.3 EIC: 0 M: 0 MoM: 22.2	IC: 0 EIC: 65.5 M: 61.5 MoM: 55.6	IC: 0 EIC: 7.3 M: 7.7 MoM: 11.1	IC: 66.7 EIC: 27.3 M: 30.8 MoM: 11.1
16. Flexibility	*M* = 3.67 *SD* = .58	*M* = 4.09 *SD* = .76	*M* = 4.08 *SD* = .49	*M* = 4.00 *SD* = .76	IC: 33.3 EIC: 29.6 M: 16.7 MoM: 33.3	IC: 33.3 EIC: 53.7 M: 83.3 MoM: 44.4	IC: 0 EIC: 1.9 M: 0 MoM: 0	IC: 33.3 EIC: 14.8 M: 0 MoM: 22.2
17. Independence	*M* = 3.33 *SD* = .58	*M* = 4.02 *SD* = .78	*M* = 4.17 *SD* = .58	*M* = 3.89 *SD* = 1.05	IC: 0 EIC: 48.1 M: 23.1 MoM: 44.4	IC: 33.3 EIC: 33.3 M: 61.5 MoM: 22.2	IC: 0 EIC: 0 M: 0 MoM: 0	IC: 66.7 EIC: 18.5 M: 15.4 MoM: 33.3
18. Influencing others	*M* = 3.33 *SD* = .58	*M* = 4.09 *SD* = .80	*M* = 4.08 *SD* = .28	*M* = 4.22 *SD* = .83	IC: 0 EIC: 12.7 M: 0 MoM: 22.2	IC: 33.3 EIC: 72.7 M: 100 MoM: 55.6	IC: 0 EIC: 5.5 M: 0 MoM: 0	IC: 66.7 EIC: 9.1 M: 0 MoM: 22.2
19. Integrity	*M* = 4.33 *SD* = 1.16	*M* = 4.73 *SD* = .50	*M* = 4.85 *SD* = .38	*M* = 4.67 *SD* = .71	IC: 0 EIC: 29.6 M: 23.1 MoM: 33.3	IC: 66.7 EIC: 38.9 M: 53.8 MoM: 33.3	IC: 0 EIC: 0 M: 0 MoM: 0	IC: 33.3 EIC: 31.5 M: 23.1 MoM: 33.3
20. Interpersonal skills	*M* = 4.33 *SD* = .58	*M* = 4.31 *SD* = .69	*M* = 4.23 *SD* = .60	*M* = 4.44 *SD* = .73	IC: 0 EIC: 18.9 M: 7.7 MoM: 11.1	IC: 66.7 EIC: 60.4 M: 69.2 MoM: 44.4	IC: 0 EIC: 1.9 M: 0 MoM: 11.1	IC: 33.3 EIC: 18.9 M: 23.1 MoM: 33.3
21. Knowledge of Federal guidelines on employee selection	*M* = 2.67 *SD* = .58	*M* = 3.48 *SD* = 1.50	*M* =3.77 *SD* = 1.09	*M* = 4.00 *SD* = 1.12	IC: 100 EIC: 41.5 M: 84.6 MoM: 22.2	IC: 0 EIC: 43.4 M: 0 MoM: 55.6	IC: 0 EIC: 5.7 M: 7.7 MoM: 22.2	IC: 0 EIC: 9.4 M: 7.7 MoM: 0
22. Knowledge of internal workings of the State or Federal government	*M* = 4.00 *SD* = 1.00	*M* = 3.41 *SD* = 1.33	*M* = 3.54 *SD* = 1.20	*M* = 4.22 *SD* = .67	IC: 66.7 EIC: 1.9 M: 0 MoM: 0	IC: 33.3 EIC: 80.8 M: 61.5 MoM: 66.7	IC: 0 EIC: 11.5 M: 15.4 MoM: 33.3	IC: 0 EIC: 5.8 M: 23.1 MoM: 0

Government Competencies					Where is Proficiency for this Competency Developed? (%)			
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers/ Executive	*Graduate School*	*On-the-job*	*Structured Training*	*N/A*
23. Knowledge of principles, procedures, and techniques for test validation	*M* = 2.67 *SD* = .58	*M* = 3.65 *SD* = 1.40	*M* = 3.92 *SD* = 1.23	*M* = 3.78 *SD* = .97	IC: 100 EIC: 90.9 M: 84.6 MoM: 100	IC: 0 EIC: 5.5 M: 7.7 MoM: 0	IC: 0 EIC: 1.8 M: 7.7 MoM: 0	IC: 0 EIC: 1.8 M: 0 MoM: 0
24. Knowledge of test theory as it pertains to personnel testing	*M* = 2.67 *SD* = .58	*M* = 3.41 *SD* = 1.47	*M* = 4.00 *SD* = 1.00	*M* = 3.44 *SD* = 1.24	IC: 100 EIC: 83.6 M: 100 MoM: 100	IC: 0 EIC: 10.9 M: 0 MoM: 0	IC: 0 EIC: 1.8 M: 0 MoM: 0	IC: 0 EIC: 3.6 M: 0 MoM: 0
25. Knowledge of various tests and measurements available for selection	*M* = 2.67 *SD* = .58	*M* = 3.44 *SD* = 1.42	*M* = 3.46 *SD* = 1.33	*M* = 3.00 *SD* = 1.41	IC: 100 EIC: 70.9 M: 69.2 MoM: 77.8	IC: 0 EIC: 18.2 M: 23.1 MoM: 22.2	IC: 0 EIC: 3.6 M: 7.7 MoM: 0	IC: 0 EIC: 7.3 M: 0 MoM: 0
26. Leadership	*M* = 2.67 *SD* = .58	*M* = 3.52 *SD* = .99	*M* = 3.69 *SD* = .63	*M* = 4.22 *SD* = 1.09	IC: 66.7 EIC: 29.1 M: 38.5 MoM: 22.2	IC: 0 EIC: 49.1 M: 46.2 MoM: 55.6	IC: 0 EIC: 7.3 M: 7.7 MoM: 11.1	IC: 33.3 EIC: 14.5 M: 7.7 MoM: 11.1
27. Listening skills	*M* = 4.33 *SD* = .58	*M* = 4.15 *SD* = .77	*M* = 4.08 *SD* = .64	*M* = 4.22 *SD* = .83	IC: 0 EIC: 24.5 M: 15.4 MoM: 22.2	IC: 66.7 EIC: 52.8 M: 69.2 MoM: 44.4	IC: 0 EIC: 1.9 M: 7.7 MoM: 0	IC: 33.3 EIC: 20.8 M: 7.7 MoM: 33.3
28. Mentoring	*M* = 1.67 *SD* = .58	*M* = 2.98 *SD* = 1.03	*M* = 3.83 *SD* = .72	*M* = 3.67 *SD* = 1.00	IC: 0 EIC: 10.9 M: 15.4 MoM: 0	IC: 33.3 EIC: 67.3 M: 69.2 MoM: 44.4	IC: 0 EIC: 1.8 M: 7.7 MoM: 33.3	IC: 66.7 EIC: 20.0 M: 7.7 MoM: 22.2
29. Networking	*M* = 4.00 *SD* = .00	*M* = 3.47 *SD* = 1.05	*M* = 3.46 *SD* = .97	*M* = 4.13 *SD* = .64	IC: 0 EIC: 18.2 M: 23.1 MoM: 22.2	IC: 66.7 EIC: 70.9 M: 69.2 MoM: 55.6	IC: 0 EIC: 0 M: 0 MoM: 11.1	IC: 33.3 EIC: 10.9 M: 7.7 MoM: 11.1
30. Organization	*M* = 3.00 *SD* = .00	*M* = 3.79 *SD* = .84	*M* = 3.69 *SD* = .48	*M* = 3.89 *SD* = .33	IC: 0 EIC: 35.8 M: 23.1 MoM: 33.3	IC: 66.7 EIC: 52.8 M: 61.5 MoM: 55.6	IC: 0 EIC: 0 M: 7.7 MoM: 0	IC: 33.3 EIC: 11.3 M: 7.7 MoM: 11.1

Government Competencies					Where is Proficiency for this Competency Developed? (%)			
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers/ Executive	*Graduate School*	*On-the-job*	*Structured Training*	*N/A*
31. Organization skills	*M* = 3.00 *SD* = .00	*M* = 3.85 *SD* = .79	*M* = 4.08 *SD* = .49	*M* = 4.00 *SD* = .71	IC: 0 EIC: 32.1 M: 23.1 MoM: 11.1	IC: 66.7 EIC: 56.6 M: 76.9 MoM: 66.7	IC: 0 EIC: 0 M: 0 MoM: 11.1	IC: 33.3 EIC: 11.3 M: 0 MoM: 11.1
32. Political savvy	*M* = 2.67 *SD* = 1.53	*M* = 3.81 *SD* = .95	*M* = 3.69 *SD* = .63	*M* = 4.33 *SD* = .87	IC: 0 EIC: 7.3 M: 0 MoM: 11.1	IC: 66.7 EIC: 81.8 M: 92.3 MoM: 66.7	IC: 0 EIC: 1.8 M: 0 MoM: 11.1	IC: 33.3 EIC: 9.1 M: 7.7 MoM: 11.1
33. Presentation skills	*M* = 3.33 *SD* = .58	*M* = 4.26 *SD* = .87	*M* = 4.15 *SD* = .56	*M* = 4.56 *SD* = .73	IC: 0 EIC: 51.9 M: 46.2 MoM: 33.3	IC: 33.3 EIC: 42.6 M: 53.8 MoM: 33.3	IC: 0 EIC: 5.6 M: 0 MoM: 33.3	IC: 66.7 EIC: 0 M: 0 MoM: 0
34. Problem solving	*M* = 4.00 *SD* =.00	*M* = 4.37 *SD* = .77	*M* = 4.69 *SD* = .48	*M* = 4.78 *SD* = .44	IC: 0 EIC: 48.1 M: 38.5 MoM: 55.6	IC: 33.3 EIC: 38.9 M: 61.5 MoM: 33.3	IC: 0 EIC: 5.6 M: 0 MoM: 0	IC: 66.7 EIC: 7.4 M: 0 MoM: 11.1
35. Results driven	*M* = 3.67 *SD* = .58	*M* = 4.07 *SD* = .80	*M* = 4.31 *SD* = .63	*M* = 4.11 *SD* = 1.05	IC: 0 EIC: 27.8 M: 15.4 MoM: 0	IC: 33.3 EIC: 59.3 M: 84.6 MoM: 66.7	IC: 0 EIC: 1.9 M: 0 MoM: 0	IC: 66.7 EIC: 11.1 M: 0 MoM: 33.3
36. Risk management	*M* = 2.67 *SD* = 1.53	*M* = 3.09 *SD* = 1.14	*M* = 3.54 *SD* = .66	*M* = 3.67 *SD* = .87	IC: 0 EIC: 3.6 M: 0 MoM: 0	IC: 66.7 EIC: 63.6 M: 84.6 MoM: 44.4	IC: 0 EIC: 5.5 M: 7.7 MoM: 44.4	IC: 33.3 EIC: 27.3 M: 7.7 MoM: 11.1
37. Strategic leadership	*M* = 2.33 *SD* = .58	*M* = 2.94 *SD* = 1.14	*M* = 3.69 *SD* = .95	*M* = 4.00 *SD* = 1.00	IC: 33.3 EIC: 13.0 M: 0 MoM: 11.1	IC: 0 EIC: 64.8 M: 83.3 MoM: 55.6	IC: 0 EIC: 1.9 M: 16.7 MoM: 11.1	IC: 66.7 EIC: 20.4 M: 0 MoM: 22.2
38. Strategic thinking	*M* = 2.67 *SD* = .58	*M* = 3.72 *SD* = .94	*M* = 4.08 *SD* = .76	*M* = 4.56 *SD* = .73	IC: 33.3 EIC: 20.0 M: 0 MoM: 11.1	IC: 0 EIC: 63.6 M: 92.3 MoM: 55.6	IC: 0 EIC: 1.8 M: 7.7 MoM: 11.1	IC: 66.7 EIC: 14.5 M: 0 MoM: 22.2

Government Competencies					Where is Proficiency for this Competency Developed? (%)			
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers/ Executive	*Graduate School*	*On-the-job*	*Structured Training*	*N/A*
39. Stress management	*M* = 2.33 *SD* = .58	*M* = 3.17 *SD* = 1.08	*M* = 3.31 *SD* = .63	*M* = 3.56 *SD* = 1.13	IC: 66.7 EIC: 34.0 M: 23.1 MoM: 22.2	IC: 0 EIC: 39.6 M: 46.2 MoM: 22.2	IC: 0 EIC: 5.7 M: 7.7 MoM: 22.2	IC: 33.3 EIC: 20.8 M: 23.1 MoM: 33.3
40. Succession planning	*M* = 2.33 *SD* = 1.53	*M* = 2.33 *SD* = 1.23	*M* = 3.00 *SD* = .82	*M* = 3.67 *SD* = 1.23	IC: 33.3 EIC: 21.8 M: 7.7 MoM: 22.2	IC: 66.7 EIC: 49.1 M: 46.2 MoM: 55.6	IC: 0 EIC: 3.6 M: 7.7 MoM: 11.1	IC: 0 EIC: 25.5 M: 38.5 MoM: 11.1
41. Teamwork	*M* = 3.33 *SD* = .58	*M* = 3.78 *SD* = 1.02	*M* = 3.85 *SD* = .80	*M* = 4.22 *SD* = .67	IC: 33.3 EIC: 38.2 M: 38.5 MoM: 11.1	IC: 33.3 EIC: 50.9 M: 61.5 MoM: 88.9	IC: 0 EIC: 1.8 M: 0 MoM: 0	IC: 33.3 EIC: 9.1 M: 0 MoM: 0
42. Time management	*M* = 3.33 *SD* = .58	*M* = 4.08 *SD* = .81	*M* = 4.23 *SD* = .60	*M* = 4.00 *SD* = .87	IC: 0 EIC: 51.9 M: 23.1 MoM: 22.2	IC: 66.7 EIC: 40.7 M: 69.2 MoM: 77.8	IC: 0 EIC: 1.9 M: 0 MoM: 0	IC: 33.3 EIC: 5.6 M: 7.7 MoM: 0
43. Workforce planning	*M* = 3.00 *SD* = 1.00	*M* = 2.61 *SD* = 1.12	*M* = 3.09 *SD* = .86	*M* = 3.38 *SD* = 1.51	IC: 0 EIC: 18.2 M: 0 MoM: 11.1	IC: 33.3 EIC: 54.5 M: 61.5 MoM: 55.6	IC: 0 EIC: 1.8 M: 15.4 MoM: 11.1	IC: 66.7 EIC: 25.5 M: 23.1 MoM: 22.2

Note: Individual Contributor (*n* = 2-3); Expert Individual Contributor (*n* = 52-55); Manager (*n* = 12-13); Manager of Managers/Executive (*n* = 8-9). For the section of where members indicated they developed the competencies, the provided percentages were determined within level, not across levels. The "Where is Proficiency for this Competency Developed?" for MoM includes *both* MoM and Executive responses.

Table B-6

Government Critical Experiences

Government Experiences				
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers/ Executive
1. Use different types of analytical software (e.g., SPSS, Mplus, SAS)	*M* = 3.33 *SD* = 1.16	*M* = 3.65 *SD* = 1.39	*M* = 3.23 *SD* = .83	*M* = 2.44 *SD* = 1.33
2. Use different types of analytical methods (e.g., Structural Equation Modeling, Hierarchical Linear Modeling, Multiple Regression, ANOVAs)	*M* = 2.67 *SD* = 1.53	*M* = 3.23 *SD* = 1.53	*M* = 2.62 *SD* = 1.12	*M* = 2.44 *SD* = 1.33
3. Write technical reports	*M* = 4.00 *SD* = 1.73	*M* = 4.04 *SD* = 1.20	*M* = 3.69 *SD* = 1.18	*M* = 3.33 *SD* = 1.41
4. Deliver presentations to customers	*M* = 3.67 *SD* = 1.53	*M* = 4.44 *SD* = .95	*M* = 4.15 *SD* = .80	*M* = 4.44 *SD* = .73
5. Present research at professional meetings and conferences	*M* = 1.67 *SD* = .58	*M* = 2.94 *SD* = 1.06	*M* = 3.25 *SD* = 1.14	*M* = 2.89 *SD* = 1.05
6. Follow timelines and budgets on project work	*M* = 4.50 *SD* = .71	*M* = 4.26 *SD* = .92	*M* = 4.23 *SD* = .73	*M* = 4.33 *SD* = .87
7. Work on a breadth of projects with different types of customers and on multiple teams	*M* = 3.67 *SD* = 1.16	*M* = 4.11 *SD* = .93	*M* = 4.15 *SD* = .80	*M* = 4.33 *SD* = .71
8. Create and administer own projects from start to finish	*M* = 4.33 *SD* = .58	*M* = 4.44 *SD* = .63	*M* = 4.15 *SD* = .80	*M* = 4.11 *SD* = .93
9. Demonstrate that project work adds value to the organization	*M* = 4.00 *SD* = .00	*M* = 4.22 *SD* = .92	*M* = 4.38 *SD* = .65	*M* = 4.44 *SD* = .73
10. Become a part of a task force and/or committees	*M* = 4.00 *SD* = 1.00	*M* = 3.28 *SD* = 1.09	*M* = 4.00 *SD* = .58	*M* = 4.00 *SD* = .71
11. Actively build networks with others	*M* = 3.33 *SD* = 1.16	*M* = 3.70 *SD* = 1.01	*M* = 3.69 *SD* = .86	*M* = 4.00 *SD* = .76

Government Experiences				
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers/ Executive
12. Work with customers or stakeholders who are not local	*M* = 4.00 *SD* = .00	*M* = 3.74 *SD* = 1.13	*M* = 3.18 *SD* = 1.47	*M* = 3.78 *SD* = .67
13. Manage multiple projects and/or working with one specific, long-term client	*M* = 3.67 *SD* = .58	*M* = 4.11 *SD* = 1.01	*M* = 4.23 *SD* = .83	*M* = 4.22 *SD* = .83
14. Complete highly complex projects that include a wide range of skills necessary (e.g., analytical skills, knowledge of various methodologies)	*M* = 3.00 *SD* = 1.00	*M* = 4.49 *SD* = .70	*M* = 4.15 *SD* = .80	*M* = 4.44 *SD* = .53
15. Manage budgets for a portfolio of projects	*M* = 3.50 *SD* = .71	*M* = 2.57 *SD* = 1.33	*M* = 3.31 *SD* = 1.18	*M* = 4.22 *SD* = .97
16. Conduct administrative duties	*M* = 2.33 *SD* = .58	*M* = 2.94 *SD* = .99	*M* = 3.62 *SD* = 1.04	*M* = 3.56 *SD* = 1.24
17. Develop strategy for the organization	*M* = 2.00 *SD* = .00	*M* = 2.82 *SD* = 1.33	*M* = 3.77 *SD* = .93	*M* = 4.33 *SD* = .71
18. Develop or edit selection instruments	*M* = 2.67 *SD* = .58	*M* = 3.49 *SD* = 1.59	*M* = 3.42 *SD* = 1.56	*M* = 3.44 *SD* = 1.42
19. Teach others how to use selection instruments	*M* = 2.33 *SD* = .58	*M* = 3.21 *SD* = 1.60	*M* = 3.42 *SD* = 1.44	*M* = 3.56 *SD* = 1.42
20. Prepare instructions for scoring examinations	*M* = 1.67 *SD* = .58	*M* = 2.88 *SD* = 1.61	*M* = 2.75 *SD* = 1.14	*M* = 3.00 *SD* = 1.66
21. Proofread test materials written by others	*M* = 1.33 *SD* = .58	*M* = 3.06 *SD* = 1.65	*M* = 3.25 *SD* = 1.42	*M* = 3.78 *SD* = 1.64
22. Recommend scoring methods and standards for employment tests	*M* = 1.67 *SD* = .58	*M* = 3.21 *SD* = 1.69	*M* = 3.17 *SD* = 1.40	*M* = 3.78 *SD* = 1.64
23. Testify in court (e.g., defending validity of selection instrument)	*M* = 1.00 *SD* = .00	*M* = 2.12 *SD* = 1.32	*M* = 1.90 *SD* = 1.37	*M* = 2.75 *SD* = 1.91
24. Serve as a subject matter expert in a given area.	*M* = 3.00 *SD* = 1.41	*M* = 3.96 *SD* = 1.25	*M* = 4.00 *SD* = 1.21	*M* = 3.75 *SD* = 1.04

Government Experiences				
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers/ Executive
25. Apply professional & technical knowledge in selection & licensing problems	*M* = 1.50 *SD* = .71	*M* = 3.05 *SD* = 1.68	*M* = 2.83 *SD* = 1.59	*M* = 3.56 *SD* = 1.81
26. Create strategic plans	*M* = 1.33 *SD* = .58	*M* = 2.91 *SD* = 1.38	*M* = 3.69 *SD* = 1.18	*M* = 4.11 *SD* = 1.05
27. Maintain a budget for specific department	*M* = 3.00 *SD* = .00	*M* = 2.00 *SD* = 1.18	*M* = 3.42 *SD* = 1.38	*M* = 3.89 *SD* = 1.27
28. Manage performance of subordinates	*M* = 1.50 *SD* = .71	*M* = 1.79 *SD* = 1.02	*M* = 4.54 *SD* = .52	*M* = 4.44 *SD* = .88
29. Provide developmental opportunities to subordinates	*M* = 1.00 *SD* = .00	*M* = 2.22 *SD* = 1.33	*M* = 4.42 *SD* = .52	*M* = 4.22 *SD* = .83
30. Use creativity in designing new projects	*M* = 3.33 *SD* = 1.53	*M* = 3.62 *SD* = 1.20	*M* = 4.00 *SD* = .71	*M* = 4.22 *SD* = .83
31. Monitor work to ensure it adheres to Federal law, regulations, and policies	*M* = 4.00 *SD* = 1.73	*M* = 4.17 *SD* = 1.15	*M* = 4.23 *SD* = .60	*M* = 4.67 *SD* = .50
32. Communicate with people outside of current branch, agency, or organization	*M* = 5.00 *SD* = .00	*M* = 4.15 *SD* = .94	*M* = 4.00 *SD* = .91	*M* = 4.56 *SD* = .73
33. Lead project teams	*M* = 4.33 *SD* = .58	*M* = 3.71 *SD* = 1.24	*M* = 4.46 *SD* = .66	*M* = 4.44 *SD* = .73
34. Personally complete special assignments from an Executive	*M* = 3.33 *SD* = .58	*M* = 3.67 *SD* = 1.31	*M* = 4.00 *SD* = .91	*M* = 4.56 *SD* = .73
35. Complete high visibility assignments	*M* = 4.00 *SD* = 1.00	*M* = 4.21 *SD* = .85	*M* = 4.23 *SD* = .73	*M* = 4.44 *SD* = .53
36. Manage available resources	*M* = 4.00 *SD* = .00	*M* = 3.71 *SD* = 1.04	*M* = 4.23 *SD* = .73	*M* = 4.44 *SD* = .53
37. Use research and methodology skills to add value to diverse array of customers	*M* = 2.67 *SD* = 1.16	*M* = 3.86 *SD* = 1.14	*M* = 3.85 *SD* = .99	*M* = 4.22 *SD* = .83

Government Experiences				
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers/ Executive
38. Plan and evaluate proposals	*M* = 2.67 *SD* = 1.53	*M* = 3.54 *SD* = 1.17	*M* = 3.92 *SD* = 1.00	*M* = 3.44 *SD* = 1.24
39. Deliver effective briefings to senior management and/or customers	*M* = 3.67 *SD* = .58	*M* = 4.31 *SD* = 1.03	*M* = 4.31 *SD* = .86	*M* = 4.44 *SD* = 1.01
40. Keep up to date with literature in specialty area(s)	*M* = 2.33 *SD* = .58	*M* = 4.04 *SD* = .96	*M* = 3.69 *SD* = .75	*M* = 3.44 *SD* = .88
41. Conduct succession planning	*M* = 2.00 *SD* = 1.41	*M* = 2.10 *SD* = 1.22	*M* = 2.69 *SD* = 1.11	*M* = 3.33 *SD* = 1.12
42. Partner with others in the organization	*M* = 4.00 *SD* = 1.00	*M* = 4.08 *SD* = .92	*M* = 4.00 *SD* = .82	*M* = 4.78 *SD* = .41
43. Develop and maintain a budget for multiple areas	*M* = 2.50 *SD* = .71	*M* = 1.88 *SD* = 1.10	*M* = 2.92 *SD* = 1.08	*M* = 3.56 *SD* = 1.01
44. Oversee work to ensure meeting Federal law, regulations, and policies	*M* = 3.00 *SD* = 2.00	*M* = 3.73 *SD* = 1.30	*M* = 3.38 *SD* = .65	*M* = 4.56 *SD* = .73
45. Serve as a representative of the organization to both Executive level employees and the general public	*M* = 3.00 *SD* = 1.00	*M* = 3.40 *SD* = 1.42	*M* = 3.67 *SD* = .78	*M* = 4.22 *SD* = .97
46. Make decisions in a timely manner that will benefit the organization	*M* = 3.00 *SD* = 1.00	*M* = 3.94 *SD* = .99	*M* = 4.31 *SD* = .48	*M* = 4.56 *SD* = .88
47. Participate in continuing education on successful management techniques	*M* = 2.00 *SD* = 1.00	*M* = 2.74 *SD* = 1.36	*M* = 2.91 *SD* = 1.04	*M* = 3.22 *SD* = 1.56
48. Demonstrate political savvy in structuring and designing projects	*M* = 2.67 *SD* = 1.16	*M* = 3.67 *SD* = 1.06	*M* = 3.92 *SD* = .49	*M* = 4.44 *SD* = .53
49. Serve on special committees/work groups with employees of other government organizations	*M* = 3.33 *SD* = 1.16	*M* = 3.04 *SD* = 1.24	*M* = 3.54 *SD* = 1.20	*M* = 3.89 *SD* = 1.05
50. Develop knowledge and familiarity with multiple areas in the organization	*M* = 4.00 *SD* = .00	*M* = 3.90 *SD* = 1.15	*M* = 4.23 *SD* = .44	*M* = 4.33 *SD* = .71

Government Experiences				
	Individual Contributor	Expert Individual Contributor	Manager	Manager of Managers/ Executive
51. Lead multiple projects	*M* = 3.33 *SD* = .58	*M* = 4.00 *SD* = .86	*M* = 4.33 *SD* = .49	*M* = 4.44 *SD* = .53
52. Testify in court (e.g., defending validity of selection system)	*N* = 1	*M* = 2.19 *SD* = 1.43	*M* = 1.89 *SD* = 1.36	*M* = 3.00 *SD* = 1.87
53. Make decisions in a timely manner that will benefit the organization with an emphasis on long-term planning and overall organizational benefit	*M* = 3.33 *SD* = 1.53	*M* = 3.60 *SD* = 1.07	*M* = 4.08 *SD* = .52	*M* = 3.67 *SD* = 1.32
54. Manage and develop broad-based human capital initiatives (e.g., initiatives for the organization)	*M* = 3.67 *SD* = .58	*M* = 2.82 *SD* = 1.42	*M* = 3.27 *SD* = 1.27	*M* = 3.67 *SD* = 1.41
55. Understand psychometric principles and their implication for Federal service	*M* = 2.50 *SD* = .71	*M* = 3.64 *SD* = 1.54	*M* = 3.10 *SD* = 1.10	*M* = 3.44 *SD* = 1.67
56. Develop and/or contribute to Federal laws and regulations regarding human capital policy	*N* = 1	*M* = 2.18 *SD* = 1.39	*M* = 2.13 *SD* = 1.25	*M* = 3.78 *SD* = 2.17
57. Represent the department in depositions and testimonies to Congressional committees	*N* = 1	*M* = 1.72 *SD* = 1.11	*M* = 1.88 *SD* = 1.36	*M* = 3.22 *SD* = 2.11
58. Lead subject matter expert (SME) meetings	*M* = 4.00 *SD* = .00	*M* = 3.90 *SD* = 1.25	*M* = 3.83 *SD* = 1.03	*M* = 3.78 *SD* = 1.20
59. Represent department in depositions and testimony	*N* = 1	*M* = 2.09 *SD* = 1.33	*M* = 2.67 *SD* = 1.80	*M* = 3.33 *SD* = 1.94
60. Empower employees or colleagues	*M* = 2.67 *SD* = 1.16	*M* = 3.00 *SD* = 1.13	*M* = 4.08 *SD* = .64	*M* = 4.33 *SD* = .87
61. Engage employees or colleagues	*M* = 2.67 *SD* = 1.16	*M* = 3.67 *SD* = 1.13	*M* = 3.92 *SD* = .52	*M* = 4.78 *SD* = .44

Note: Individual Contributor (*n* = 1-3); Expert Individual Contributor (*n* = 32-54); Manager (*n* = 8-13); Manager of Managers/Executive (*n* = 7-9). N/A analyzed as "system missing."

Academia

Table B-7

Academia Competencies and Where Proficiency Developed

Academic Competencies				Where is Proficiency for this Competency Developed? (%)			
	Individual Contributor	Expert Individual Contributor	Manager/ Manager of Managers/ Executive	*Graduate School*	*On-the-job*	*Structured Training*	*N/A*
1. Adaptability	*M* = 3.79 *SD* = .79	*M* = 3.85 *SD* = .80	*M* = 4.16 *SD* = .78	IC = 32.3 EIC = 19.5 M = 7.1	IC = 46.9 EIC = 62.7 M = 71.4	IC = .4 EIC = .8 M = 0	IC = 20.5 EIC = 16.9 M = 21.4
2. Administrative skills	*M* = 3.16 *SD* = .78	*M* = 3.22 *SD* = .90	*M* = 4.21 *SD* = .73	IC = 15.9 EIC = 6.0 M = 96.4	IC = 71.2 EIC = 86.3 M = 0	IC = .4 EIC = 1.7 M = 3.6	IC = 12.4 EIC = 6.0 M = 0
3. Attention to detail	*M* = 4.06 *SD* = .78	*M* = 4.02 *SD* = .83	*M* = 4.23 *SD* = .57	IC = 49.8 EIC = 49.1 M = 50.0	IC = 28.5 EIC = 37.1 M = 39.3	IC = 0 EIC = .9 M = 0	IC = 21.7 EIC = 12.9 M = 10.7
4. Broader understanding of university or organization	*M* = 3.24 *SD* = .83	*M* = 3.44 *SD* = .98	*M* = 4.19 *SD* = .75	IC = 6.3 EIC = 4.3 M = 92.9	IC = 87 EIC = 89.7 M = 0	IC = 1.8 EIC = .9 M = 7.1	IC = 4.9 EIC = 5.2 M = 0
5. Business acumen	*M* = 2.79 *SD* = .94	*M* = 2.85 *SD* = .99	*M* = 3.13 *SD* = .73	IC = 10.8 EIC = 8.6 M = 3.6	IC = 56.3 EIC = 67.2 M = 82.1	IC = 2.3 EIC = 0 M = 0	IC = 30.6 EIC = 24.1 M = 14.3
6. Collaboration	*M* = 3.91 *SD* = .85	*M* = 3.95 *SD* = .88	*M* = 4.24 *SD* = .79	IC = 58.5 EIC = 39.3 M = 42.9	IC = 33.5 EIC = 54.7 M = 50.0	IC = 0 EIC = 2.6 M = 0	IC = 8.0 EIC = 3.4 M = 7.1

Academic Competencies				Where is Proficiency for this Competency Developed? (%)			
	Individual Contributor	Expert Individual Contributor	Manager/ Manager of Managers/ Executive	*Graduate School*	*On-the-job*	*Structured Training*	*N/A*
7. Communication: Verbal	*M* = 4.63 *SD* = .59	*M* = 4.70 *SD* = .51	*M* = 4.55 *SD* = .57	IC = 59.8 EIC = 53.0 M = 53.6	IC = 29.5 EIC = 37.6 M = 35.7	IC = 1.3 EIC = 4.3 M = 0	IC = 9.4 EIC = 5.1 M = 10.7
8. Communication: Written	*M* = 4.79 *SD* = .48	*M* = 4.81 *SD* = 5.03	*M* = 4.42 *SD* = .72	IC = 79.0 EIC = 73.3 M = 75.0	IC = 15.6 EIC = 22.4 M = 21.4	IC = .9 EIC = 3.4 M = 0	IC = 4.5 EIC = .9 M = 3.6
9. Compassion	*M* = 3.23 *SD* = .94	*M* = 3.29 *SD* = 3.29	*M* = 3.55 *SD* = .89	IC = 16.4 EIC = 8.9 M = 3.6	IC = 33.8 EIC = 51.8 M = 42.9	IC = 0 EIC = 2.7 M = 3.6	IC = 49.8 EIC = 36.6 M = 50.0
10. Conflict resolution	*M* = 3.07 *SD* = .82	*M* = 3.14 *SD* = .84	*M* = 3.69 *SD* = .70	IC = 16.0 EIC = 12.1 M = 26.9	IC = 54.3 EIC = 66.4 M = 57.7	IC = 2.7 EIC = 4.3 M = 3.8	IC = 26.9 EIC = 17.2 M = 11.5
11. Creative thinking	*M* = 4.12 *SD* = .80	*M* = 4.30 *SD* = .77	*M* = 3.86 *SD* = .74	IC = 48.9 EIC = 46.6 M = 39.3	IC = 25.6 EIC = 34.5 M = 35.7	IC = .9 EIC = .9 M = 7.1	IC = 24.7 EIC = 18.1 M = 17.9
12. Disciplinary competence	*M* = 4.15 *SD* = 1.06	*M* = 4.24 *SD* = 1.00	*M* = 3.33 *SD* = .88	IC = 62.0 EIC = 69.8 M = 67.9	IC = 26.4 EIC = 19.8 M = 28.6	IC = 1.4 EIC = .9 M = 0	IC = 10.2 EIC = 9.5 M = 3.6
13. Empathy	*M* = 3.17 *SD* = .94	*M* = 3.29 *SD* = .88	*M* = 3.52 *SD* = .72	IC = 14.6 EIC = 14.2 M = 7.4	IC = 33.8 EIC = 44.2 M = 48.1	IC = .9 EIC = 2.7 M = 0	IC = 50.7 EIC = 38.9 M = 44.4
14. Energy	*M* = 4.02 *SD* = .76	*M* = 4.11 *SD* = .75	*M* = 4.19 *SD* = .70	IC = 21.0 EIC = 23.7 M = 22.2	IC = 26.0 EIC = 31.6 M = 29.6	IC = 0 EIC = .9 M = 3.7	IC = 53.0 EIC = 43.9 M = 44.4

Academic Competencies				Where is Proficiency for this Competency Developed? (%)			
	Individual Contributor	Expert Individual Contributor	Manager/ Manager of Managers/ Executive	*Graduate School*	*On-the-job*	*Structured Training*	*N/A*
15. Enthusiasm	*M* = 3.75 *SD* = .83	*M* = 3.83 *SD* = .78	*M* = 3.48 *SD* = .79	IC = 24.5 EIC = 26.8 M = 20.7	IC = 27.7 EIC = 34.8 M = 27.6	IC = 0 EIC = .9 M = 3.4	IC = 47.7 EIC = 37.5 M = 48.3
16. Ethical behavior	*M* = 4.40 *SD* = .76	*M* = 4.56 *SD* = .73	*M* = 4.62 *SD* = .62	IC = 56.1 EIC = 49.1 M = 27.6	IC = 19.0 EIC = 27.7 M = 31.0	IC = 3.6 EIC = 1.8 M = 6.9	IC = 21.3 EIC = 21.4 M = 34.5
17. Fairness	*M* = 4.11 *SD* = .82	*M* = 4.21 *SD* = .86	*M* = 4.60 *SD* = .56	IC = 32.7 EIC = 21.1 M = 11.1	IC = 35.5 EIC = 50.0 M = 48.1	IC = 0 EIC = 0 M = 3.7	IC = 31.8 EIC = 28.9 M = 37.0
18. Financial acumen	*M* = 2.23 *SD* = .86	*M* = 2.54 *SD* = 1.01	*M* = 3.23 *SD* = .68	IC = 6.4 EIC = 6.1 M = 10.0	IC = 41.6 EIC = 43.9 M = 70.0	IC = 2.7 EIC = 5.3 M = 3.3	IC = 49.3 EIC = 44.7 M = 16.7
19. Forward thinking	*M* = 3.53 *SD* = .91	*M* = 3.75 *SD* = .87	*M* = 3.83 *SD* = .71	IC = 39.7 EIC = 22.8 M = 20.0	IC = 32.9 EIC = 50.9 M = 56.7	IC = .5 EIC = .9 M = 6.7	IC = 26.9 EIC = 25.4 M = 16.7
20. Fundraising ability	*M* = 2.07 *SD* = 1.10	*M* = 2.14 *SD* = 1.15	*M* = 2.20 *SD* = .89	IC = 5.1 EIC = 3.6 M = 3.3	IC = 39.6 EIC = 47.3 M = 56.7	IC = 4.6 EIC = .9 M = 6.7	IC = 50.7 EIC = 48.2 M = 33.3
21. Integrity	*M* = 4.41 *SD* = .71	*M* = 4.56 *SD* = .72	*M* = 4.77 *SD* = .50	IC = 41.4 EIC = 25.9 M = 17.2	IC = 20.5 EIC = 32.1 M = 24.1	IC = 0 EIC = .9 M = 3.4	IC = 38.1 EIC = 41.1 M = 55.2
22. Leadership	*M* = 3.56 *SD* = .90	*M* = 3.67 *SD* = .92	*M* = 4.47 *SD* = .73	IC = 28.0 EIC = 9.6 M = 10.0	IC = 51.4 EIC = 73.9 M = 56.7	IC = 2.8 EIC = 4.3 M = 10.0	IC = 17.9 EIC = 12.2 M = 23.3

Academic Competencies				Where is Proficiency for this Competency Developed? (%)			
	Individual Contributor	Expert Individual Contributor	Manager/ Manager of Managers/ Executive	*Graduate School*	*On-the-job*	*Structured Training*	*N/A*
23. Organization	*M* = 3.93 *SD* = .77	*M* = 3.90 *SD* = .79	*M* = 4.17 *SD* = .65	IC = 46.4 EIC = 35.7 M = 37.9	IC = 36.4 EIC = 48.7 M = 41.4	IC = .9 EIC = 2.6 M = 0	IC = 16.4 EIC = 13.0 M = 20.7
24. Persuasion	*M* = 3.47 *SD* = .88	*M* = 3.56 *SD* = .93	*M* = 3.97 *SD* = .72	IC = 21.8 EIC = 15.8 M = 20.0	IC = 51.9 EIC = 61.4 M = 53.3	IC = .9 EIC = 2.6 M = 0	IC = 25.5 EIC = 20.2 M = 26.7
25. Political acumen	*M* = 3.13 *SD* = .92	*M* = 3.22 *SD* = .99	*M* = 3.93 *SD* = .64	IC = 11.0 EIC = 4.3 M = 0	IC = 66.5 EIC = 80.9 M = 83.3	IC = 0 EIC = .9 M = 3.3	IC = 22.5 EIC = 13.9 M = 13.3
26. Research ability	*M* = 4.65 *SD* = .65	*M* = 4.58 *SD* = .77	*M* = 3.66 *SD* = .97	IC = 90.5 EIC = 88.7 M = 96.7	IC = 7.2 EIC = 9.6 M = 0	IC = .9 EIC = 0 M = 0	IC = 1.4 EIC = 1.7 M = 3.3
27. Self-monitoring	*M* = 3.88 *SD* = .93	*M* = 3.74 *SD* = .99	*M* = 3.93 *SD* = .79	IC = 37.3 EIC = 24.6 M = 27.6	IC = 29.0 EIC = 36.0 M = 34.5	IC = .5 EIC = 1.8 M = 0	IC = 33.2 EIC = 37.7 M = 37.9
28. Teaching ability	*M* = 4.38 *SD* = .81	*M* = 4.25 *SD* = .86	*M* = 3.67 *SD* = .92	IC = 43.2 EIC = 35.7 M = 36.7	IC = 52.3 EIC = 59.1 M = 50.0	IC = 2.7 EIC = 3.5 M = 6.7	IC = 1.8 EIC = 1.7 M = 6.7
29. Teamwork	*M* = 3.53 *SD* = .87	*M* = 3.63 *SD* = .84	*M* = 4.03 *SD* = .77	IC = 51.6 EIC = 31.1 M = 24.1	IC = 31.5 EIC = 57.1 M = 58.6	IC = 0 EIC = 0 M = 0	IC = 16.9 EIC = 11.6 M = 17.2
30. Trustworthiness	*M* = 4.06 *SD* = .84	*M* = 4.34 *SD* = .77	*M* = 4.55 *SD* = .57	IC = 27.2 EIC = 18.3 M = 10.7	IC = 26.3 EIC = 39.4 M = 39.3	IC = 0 EIC = .9 M = 3.6	IC = 46.5 EIC = 41.3 M = 46.4

Academic Competencies				Where is Proficiency for this Competency Developed? (%)			
	Individual Contributor	Expert Individual Contributor	Manager/ Manager of Managers/ Executive	*Graduate School*	*On-the-job*	*Structured Training*	*N/A*
31. Understand what tests do and when appropriate	*M* = 3.79 *SD* = 1.07	*M* = 3.46 *SD* = 1.15	*M* = 2.77 *SD* = 1.10	IC = EIC = M =	IC = EIC = M =	IC = EIC = M =	IC = EIC = M =

Note: Means and standard deviations reported by level for all competencies within Academia. Proficiency development for each competency is also included. Individual Contributor (*n* = 232 – 237); Expert Individual Contributor (*n* = 121 – 128); Manager/ Manager of Managers/ Executive (*n* = 29 – 31). Where developed percentages are determined within level, not across levels. Percentages could not be found in data set for the competency "Understand what tests do and when appropriate."

Table B-8

Academia Critical Experiences

Academic Experiences			
	Individual Contributor	Expert Individual Contributor	Manager/ Manager of Managers/ Executive
1. Use different types of analytical software (e.g., SPSS, Mplus, SAS)	*M* = 4.17 *SD* = .92	*M* = 3.79 *SD* = 1.17	*M* = 3.20 *SD* = 1.22
2. Use different types of analytical methods (e.g., Structural Equation Modeling, Hierarchical Linear Modeling, Multiple Regression, ANOVAs)	*M* = 4.19 *SD* = .96	*M* = 3.92 *SD* = 1.03	*M* = 3.17 *SD* = 1.09
3. Advocate for the College	*M* = 2.77 *SD* = 1.04	*M* = 2.80 *SD* = 1.19	*M* = 3.70 *SD* = .88
4. Understand impact of legislative decisions on university strategy and decisions	*M* = 2.52 *SD* = .96	*M* = 2.45 *SD* = 1.14	*M* = 3.37 *SD* = 1.00
5. Become familiar with university strategy and goals	*M* = 2.99 *SD* = .89	*M* = 3.01 *SD* = 1.08	*M* = 3.90 *SD* = 1.00
6. Provide service to the Department	*M* = 3.71 *SD* = .85	*M* = 3.72 *SD* = .93	*M* = 4.57 *SD* = .57
7. Provide service to the University	*M* = 3.28 *SD* = .97	*M* = 3.33 *SD* = .96	*M* = 4.23 *SD* = .86
8. Provide service to the College	*M* = 3.37 *SD* = .96	*M* = 3.40 *SD* = .99	*M* = 4.50 *SD* = .64
9. Provide national service (e.g., SIOP, AOM) in area of expertise	*M* = 3.07 *SD* = .97	*M* = 3.09 *SD* = 1.04	*M* = 2.86 *SD* = .99
10. Manage the successful completion of thesis and/or dissertations of student advisees	*M* = 3.86 *SD* = 1.25	*M* = 4.13 *SD* = 1.15	*M* = 3.70 *SD* = 1.17

Academic Experiences			
	Individual Contributor	Expert Individual Contributor	Manager/ Manager of Managers/ Executive
11. Publish articles in field of expertise	*M* = 4.55 *SD* = .85	*M* = 4.48 *SD* = .79	*M* = 3.83 *SD* = 1.04
12. Become recognized in field of expertise	*M* = 4.06 *SD* = 1.07	*M* = 4.11 *SD* = 1.06	*M* = 3.60 *SD* = 1.25
13. Receive favorable evaluations from students	*M* = 4.08 *SD* = .811	*M* = 3.84 *SD* = .94	*M* = 3.68 *SD* = 1.22
14. Balance research, teaching, and service effectively	*M* = 4.48 *SD* = 7.3	*M* = 4.35 *SD* = .87	*M* = 4.10 *SD* = 1.27
15. Write grants for research projects	*M* = 3.24 *SD* = 1.27	*M* = 2.84 *SD* = 1.27	*M* = 2.75 *SD* = 1.04
16. Receive grants for research projects	*M* = 3.07 *SD* = 1.16	*M* = 2.75 *SD* = 1.09	*M* = 2.59 *SD* = 1.01
17. Demonstrate effective administration for successful department operation	*M* = 2.66 *SD* =1.08	*M* = 2.98 *SD* = 1.20	*M* = 4.62 *SD* = .49
18. Manage performance of department faculty	*M* = 1.99 *SD* = 1.08	*M* = 2.32 *SD* = 1.11	*M* = 4.29 *SD* = .98
19. Advocate for department within the broader College and/or University	*M* = 2.54 *SD* = 1.31	*M* = 2.87 *SD* = 1.21	*M* = 4.41 *SD* = .78
20. Maintain departmental accreditation	*M* = 2.72 *SD* = 1.35	*M* = 2.50 *SD* = 1.38	*M* = 3.91 *SD* = 1.34
21. Act as a successful liaison between faculty and administration	*M* = 2.18 *SD* = 1.17	*M* = 2.52 *SD* = 1.26	*M* = 4.34 *SD* = .77
22. Chair University-wide committees	*M* = 2.24 *SD* = 1.08	*M* = 2.48 *SD* = 1.13	*M* = 3.38 *SD* = 1.08
23. Work with other departments across campus	*M* = 2.71 *SD* = 1.07	*M* = 2.87 *SD* = 1.06	*M* = 3.90 *SD* = .94

Academic Experiences			
	Individual Contributor	Expert Individual Contributor	Manager/ Manager of Managers/ Executive
24. Maintain successful running of department (e.g., classes offered; department respected across campus)	*M* = 2.55 *SD* = 1.29	*M* = 2.82 *SD* = 1.42	*M* = 4.54 *SD* = .79
25. Bring in outside revenue for the program (e.g., through direct department donations)	*M* = 1.96 *SD* = 1.10	*M* = 2.08 *SD* = 1.08	*M* = 2.50 *SD* = 1.26
26. Advocate for research funds at college/university level	*M* = 2.27 *SD* = 1.15	*M* = 2.29 *SD* = 1.07	*M* = 2.96 *SD* = 1.32
27. Create, follow, and distribute departmental funds within budget	*M* = 1.96 *SD* = 1.05	*M* = 2.20 *SD* = 1.20	*M* = 4.17 *SD* = .93
28. Maintain faculty qualifications to teach	*M* = 2.84 *SD* = 1.52	*M* = 3.01 *SD* = 1.43	*M* = 3.68 *SD* = .95
29. Maintain a global view of the College/University's goals	*M* = 2.63 *SD* = 1.12	*M* = 2.94 *SD* = 1.19	*M* = 3.97 *SD* = .94
30. Conduct performance reviews for faculty	*M* = 2.01 *SD* = 1.14	*M* = 2.57 *SD* = 1.43	*M* = 4.00 *SD* = 1.28
31. Set salaries and create requirements for salary raises	*M* = 1.34 *SD* = .77	*M* = 1.77 *SD* = 1.03	*M* = 3.27 *SD* = 1.34
32. Preside over tenure and promotion decisions	*M* = 2.18 *SD* = 1.26	*M* = 3.20 *SD* = 1.30	*M* = 3.89 *SD* = 1.26
33. Develop new programs that will help promote the University (e.g., creating a new minor program)	*M* = 2.44 *SD* = 1.13	*M* = 2.86 *SD* = 1.21	*M* = 3.68 *SD* = .98
34. Ensure that global education and study abroad programs meet university requirements for credit	*M* = 1.87 *SD* = 1.09	*M* = 2.10 *SD* = 1.18	*M* = 2.85 *SD* = 1.26
35. Raise academic standard of college	*M* = 2.85 *SD* = 1.13	*M* = 3.04 *SD* = 1.25	*M* = 3.71 *SD* = .90
36. Obtain external funding from alumni and other potential donors	*M* = 1.83 *SD* = .95	*M* = 2.10 *SD* = 1.00	*M* = 2.48 *SD* = 1.12

Academic Experiences			
	Individual Contributor	Expert Individual Contributor	Manager/ Manager of Managers/ Executive
37. Allocate budgets to colleges and programs to meet individual needs	*M* = 1.39 *SD* = .71	*M* = 1.68 *SD* = .95	*M* = 3.00 *SD* = 1.30
38. Maintain college accreditation	*M* = 2.29 *SD* = 1.32	*M* = 2.42 *SD* = 1.34	*M* = 3.50 *SD* = 1.41
39. Build networks with those in similar positions at other universities	*M* = 2.79 *SD* = 1.19	*M* = 3.10 *SD* = 1.19	*M* = 3.17 *SD* = 1.17
40. Manage enrollment statistics	*M* = 1.81 *SD* = 1.13	*M* = 2.00 *SD* = 1.10	*M* = 3.48 *SD* = 1.05
41. Devise new strategies to attract students	*M* = 2.49 *SD* = 1.17	*M* = 2.46 *SD* = 1.19	*M* = 3.61 *SD* = 1.17
42. Maintain relationship with Board of Trustees and Board of Directors	*M* = 1.65 *SD* = .96	*M* = 1.70 *SD* = .96	*M* = 2.48 *SD* = 1.40
43. Manage performance of employees	*M* = 1.85 *SD* = 1.05	*M* = 2.34 *SD* = 1.28	*M* = 4.28 *SD* = .75
44. Provide academic leadership for the University	*M* = 2.21 *SD* = 1.12	*M* = 2.89 *SD* = 1.36	*M* = 4.00 *SD* = .98
45. Ensure that college programs are under review periodically to meet and exceed national standards	*M* = 2.19 *SD* = 1.21	*M* = 2.46 *SD* = 1.38	*M* = 3.74 *SD* = 1.01
46. Question existing programs that are no longer useful to the university	*M* = 2.07 *SD* = 1.01	*M* = 2.20 *SD* = 1.21	*M* = 3.25 *SD* = 1.23
47. Serve as a change agent for the University	*M* = 2.25 *SD* = 1.07	*M* = 2.41 *SD* = 1.11	*M* = 3.58 *SD* = .99
48. Maintain a public presence	*M* = 2.46 *SD* = 1.07	*M* = 3.00 *SD* = 1.13	*M* = 3.46 *SD* = .95
49. Ensure financial soundness of the University	*M* = 1.73 *SD* = 1.07	*M* = 1.83 *SD* = 1.00	*M* = 2.90 *SD* = 1.09

Academic Experiences			
	Individual Contributor	Expert Individual Contributor	Manager/ Manager of Managers/ Executive
50. Work effectively with union representatives	*M* = 1.54 *SD* = .87	*M* = 1.70 *SD* = 1.13	*M* = 1.81 *SD* = 1.38
51. Develop a broad range of knowledge of academics, including need for research	*M* = 3.19 *SD* = 1.32	*M* = 3.58 *SD* = 1.19	*M* = 3.63 *SD* = .82
52. Make decisions based on many competing interests	*M* = 3.11 *SD* = 1.28	*M* = 3.26 *SD* = 1.26	*M* = 4.37 *SD* = .79
53. Set goals to achieve vision of the University	*M* = 2.37 *SD* = 1.14	*M* = 2.54 *SD* = 1.26	*M* = 3.76 *SD* = 1.13
54. Obtain external funding from outside sources	*M* = 2.77 *SD* = 1.32	*M* = 2.53 *SD* = 1.32	*M* = 2.48 *SD* = 1.38
55. Give training and skill development workshops	*M* = 2.37 *SD* = 1.14	*M* = 2.33 *SD* = 1.25	*M* = 2.52 *SD* = 1.09
56. Give national and international talks to academic audiences	*M* = 3.46 *SD* = 1.24	*M* = 3.80 *SD* = 1.17	*M* = 3.04 *SD* = 1.28
57. Give national and international talks to non-academic audiences	*M* = 2.46 *SD* = 1.01	*M* = 2.55 *SD* = 1.09	*M* = 2.62 *SD* = .85
58. Give workshops that provide training and skills	*M* = 2.36 *SD* = 1.03	*M* = 2.55 *SD* = 1.09	*M* = 2.54 *SD* = .95
59. Mentor students	*M* = 4.28 *SD* = .82	*M* = 4.46 *SD* = .84	*M* = 3.81 *SD* = 1.18
60. Mentor new professors	*M* = 3.10 *SD* = 1.03	*M* = 3.91 *SD* = .96	*M* = 4.18 *SD* = .86
61. Collaborate with researchers in different disciplines within the University	*M* = 2.87 *SD* = 1.03	*M* = 3.03 *SD* = .99	*M* = 2.83 *SD* = 1.13
62. Develop new lectures and/or classes	*M* = 3.94 *SD* = .99	*M* = 3.94 *SD* = 1.00	*M* = 3.35 *SD* = 1.16

Academic Experiences			
	Individual Contributor	Expert Individual Contributor	Manager/ Manager of Managers/ Executive
63. Deliver engaging lectures	*M* = 4.29 *SD* = .85	*M* = 4.30 *SD* = .76	*M* = 3.58 *SD* = 1.14
64. Effectively manage class discussions, creating assignments, tests, quizzes, or papers, and grading course work	*M* = 4.41 *SD* = .78	*M* = 4.33 *SD* = .90	*M* = 3.73 *SD* = 1.12
65. Design and conduct studies	*M* = 4.51 *SD* = .86	*M* = 4.50 *SD* = .86	*M* = 3.88 *SD* = .95
66. Provide career advice and other professional guidance to students	*M* = 3.97 *SD* = .88	*M* = 4.19 *SD* = .93	*M* = 3.74 *SD* = 1.26
67. Provide research experiences to students	*M* = 3.99 *SD* = .96	*M* = 4.14 *SD* = 1.08	*M* = 3.85 *SD* = 1.03
68. Review or edit for journals	*M* = 3.66 *SD* = 1.01	*M* = 3.82 *SD* = 1.06	*M* = 2.75 *SD* = 1.11

Note: Means and standard deviations reported by level for all critical experiences within Academia. Individual Contributor (*n* = 112 - 229); Expert Individual Contributor (*n* = 79 - 123); Manager/Manager of Managers/Executive (*n* = 16 - 30). N/A analyzed as "system missing."