Identifying the Competencies, Critical Experiences, and Career Paths of I-O Psychologists: Industry

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As the fourth article in a series on the SIOP Careers Study, this article focuses on the career paths of people working in industry, classified as: working inside an organization’s HR department, working as a consultant within one organization, or working as an I-O psychologist within one organization, where the focus is providing professional service to the employing organization. Results from the quantitative survey and the qualitative subject matter expert (SME) interviews are presented. The typical industry career path, including competencies (i.e., a skill necessary for success on the job) and critical experiences (i.e., on-the-job experiences that outline the requirements for success within a given career level), are discussed. For more information on the study’s background and methodology, refer to previous Careers Study articles within TIP (e.g., Zelin, Doverspike, Oliver, Kantrowitz, & Trusty, 2014; Zelin, Oliver, Doverspike, Chau, Bynum, & Poteet, 2015) and the project’s technical report which will be posted on the SIOP website when it becomes available.

SME Interviews

Participants

Fifteen SIOP members working within industry were interviewed. Background information was provided by 10 of the SMEs,
indicating an average of 10.2 years of experience working within industry with a range of 1–20 years. Sample job titles held by participants include: senior consultant, director, vice president, senior analytics analyst, manager of talent assessment, senior specialist, and research manager. Interviewers talked with SMEs from a wide range of organizations and positions. Workplaces captured within the interview included those where I-O psychologists could hold management positions and those where the highest position an I-O psychologist could hold was an expert individual contributor level (as positions above that level spanned a broader base than I-O psychology). In addition, members who worked in specialist or generalist roles, as well as within and external to HR departments, were interviewed.

**Methodology**

Structured interviews were conducted to identify competencies and critical experiences necessary for success. See the appendix for sample interview questions. The initial job-level structure used to examine the career paths contained five levels for competencies and critical experiences: individual contributor, expert individual contributor, manager, manager of managers, and executive.

**Results**

Interviewees indicated that there were many different career paths that an I-O psychologist in industry could take. Many paths depended on what the organization offered, and/or if I-O psychologists could move to another organization to better meet their career aspirations. Internal I-O psychologists often took one of two tracks: (a) 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 (b) 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 → expert individual contributor → manager → manager of managers → executive. However, many organizations did not employ enough I-O psychologists to have a management career ladder solely for I-O psychologists. Thus, many I-O psychologists were limited to reaching expert individual contributor or managerial levels, as many of the manager of manager and executive positions, and sometimes even managerial positions, were filled by individuals with business backgrounds and did not involve I-O-related work. In addition, especially for generalist roles, many of their direct supervisors were not I-O psychologists. These I-O psychologists were often limited to potentially becoming managers, but of-
ten 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 or 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 them performing I-O-related work rather than move them into general management positions. This occurred because once in management positions, I-O psychologists would be responsible for managing non-I-O psychologists rather than doing I-O work. Thus, unless they wanted to focus less on I-O work and branch into management, I-O psychologists tended to stay in expert individual contributor roles.

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 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 people 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 the management 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 early in their tenure, to gain broader experience. These organizations often encouraged employees to take a less-traditional career path of moving horizontally 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 often-times the same job title.

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 industry career path because they had a great deal of prior experience in a wide range of areas (e.g., selection, performance appraisal, organizational change) in various organizations. These interviewees recommended a similar path for students who wanted to make a similar move, noting that learning what worked and did not work in other companies helped in presenting new directions and ideas to their current organizations. 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 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.

One 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, depending on the organization’s needs (e.g., expertise in selection if needing to change selection processes).

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. Whereas some competencies were seen as important for all job levels (e.g., business acumen; political savvy), 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 broader functions. 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 to include multiple sectors within I-O or HR positions (e.g., projects spanning both selection and compensation).

**Careers Study Survey**

**Methodology**

Graduate students from the University of Akron’s Center for Organizational Research (COR) used the interview results to compile a master list of competencies and critical experiences essential to working within Industry. All survey respondents rated the same competencies and critical experiences to facilitate comparisons across levels (e.g., self-identified individual contributors rated the same set of competences as other participants who self-identified into different job levels).

**Participants**

A total of 351 industry I-O psychologists completed the survey. Average age of the participants was 41.07 years ($SD = 11.0$), and slightly more than half of the participants were women (56%). The majority of participants self-identified their ethnicity
as White (86.7%), with the next highest participation group being Asian/Pacific Islander (6.1%). Three participants indicated that they had previously worked within a consulting firm, and one indicated that they previously worked within academia. Only 2.1% of participants noted having top-secret, government-issued security clearances. A few participants had additional certifications or licensures, most commonly through the Society for Human Resource Management. Approximately 65.8% of participants indicated receiving a PhD, and 34.2% received a master’s degree.

**Results**

After reviewing the both the qualitative and quantitative results, we determined that the Industry career path model was accurately represented using the five initial job levels separated into two routes: expert individual contributor or managerial. Some individuals chose to move across multiple organizations in order to achieve their career goals. Others were placed into a career track based upon the needs and structure of their organization. For instance, some organizations did not have the opportunity for an I-O psychologist to move into a management track as such a track focused on a larger breadth of material than just I-O.

**Competencies**

The top-10 competencies necessary for success within each of the five job levels and the top-five competencies aggregated across all levels are presented in Tables 1 and 2, respectively. Mean importance ratings, standard deviations, and information about the career stage in which the competencies were learned can be found in the project’s technical report, which will be posted on the SIOP website when it becomes available.

Participants rated many of the competencies as important across all levels of the Industry sector, with most competencies 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 1, many of the competencies shared across all or

![Figure 1. Industry career path.](image-url)
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-10 competencies between job levels, for example, data analysis, presentation skills, and communication (written) were ranked within the top 10 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 10 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.

A further examination into the entire set of 62 rated competencies (available in the technical report) noted some interesting trends. Specifically, for individual-level po-
sitions, no ratings of importance exceeded 4.50, compared to five for manager of managers and six for executives. In addition, 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 not ranked within the top 10. Overall, these findings suggest that movement into management positions may require a broader range of competencies for job success.

Participants showed an interesting trend when noting where the proficiency for the competency developed. Individual contributors noted that they learned certain competencies to a large degree in graduate school. However, participants in management positions were more likely to learn the same competencies on the job rather than in graduate school. Accountability, achievement orientation, and collaboration represent a few of the competencies where this trend was found. Across most or all levels, some competencies (e.g., decision making, executing strategy, financial acumen) were learned primarily on the job or in structured training and some competencies (e.g., data analysis, knowledge of affirmative action/adverse impact/diversity/inclusion, I-O content knowledge) were learned primarily in graduate school. However, in general, the data indicate that the higher one progresses through levels, the greater the degree of learning from on-the-job experience compared to structured training or formal education.

**Critical Experiences**

The top-10 critical experiences for success in Industry at each level and the top-five critical experiences for success across all levels are presented in Tables 3 and 4, respectively. All means and standard deviations of each of the experiences by level can be found in the project’s technical report which will be posted on the SIOP website when it becomes available.

A review of Table 3 indicates that some experiences ranked highly for all job levels; specifically, create relationships with various organizational stakeholders, work through ambiguity and uncertainty, and manage relationships and networks with others in the organization. Although relative rank and/or importance ratings differed across job levels, results indicate that no matter the job level, these are important critical experiences for industry I-O psychologists.

On the other hand, some critical experiences varied by job level. For example, being able to work independently with minimal supervision was within the top 10 for individual contributor and expert individual contributor levels but not managerial levels. Likewise, maintain high visibility with executives was ranked highly by executives yet not in the top 10 for the other job levels. Serving as a subject matter expert was a
Table 3

Top Ten Critical Experiences for Each Level Within Industry

<table>
<thead>
<tr>
<th>Individual Contributor</th>
<th>Expert Individual Contributor</th>
<th>Top Critical Experiences</th>
<th>Manager of Managers</th>
<th>Executive</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Execute and deliver on results⁴</td>
<td>1. Serve as a subject matter expert in a given area*C</td>
<td>1. Earn and maintain trust of leadership team⁵</td>
<td>1. Complete high visibility assignments⁶</td>
<td></td>
</tr>
<tr>
<td>2. Work independently with minimal supervision⁷</td>
<td>2. Execute and deliver on results⁸</td>
<td>2. Manage relationships and networks with others in the organization⁹</td>
<td>2. Earn and maintain trust of leadership team⁵</td>
<td></td>
</tr>
<tr>
<td>3. Create relationships with various organizational stakeholders⁴</td>
<td>3. Work independently with minimal supervision¹⁰</td>
<td>3. Execute and deliver on results⁸</td>
<td>3. Work through ambiguity and uncertainty³</td>
<td></td>
</tr>
<tr>
<td>4. Manage relationships and networks with others in the organization¹¹</td>
<td>4. Earn and maintain trust of leadership team⁵</td>
<td>4. Create relationships with various organizational stakeholders¹²</td>
<td>4. Manage relationships and networks with others in the organization¹³</td>
<td></td>
</tr>
<tr>
<td>5. Facilitate meetings with stakeholders in the organization</td>
<td>5. Collaborate with people from different teams on various projects¹⁴</td>
<td>5. Manage large portions of projects ¹⁵</td>
<td>5. Deliver presentations to stakeholders in the organization¹⁶</td>
<td></td>
</tr>
<tr>
<td>7. Deliver presentations to stakeholders in the organization¹⁷</td>
<td>7. Work through ambiguity and uncertainty⁳</td>
<td>7. Collaborate with people from different teams on various projects¹⁸</td>
<td>7. Deliver presentations to stakeholders in the organization¹⁴</td>
<td></td>
</tr>
<tr>
<td>8. Work through ambiguity and uncertainty⁴</td>
<td>8. Create relationships with various organizational stakeholders¹⁴</td>
<td>8. Complete high visibility assignments¹⁷</td>
<td>8. Maintain high visibility with executives ¹⁸</td>
<td></td>
</tr>
<tr>
<td>7. Demonstrate ability to effectively handle ambiguous situations⁴</td>
<td>10. Lead people through change</td>
<td>10. Demonstrate ability to effectively handle ambiguous situations⁴</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: * 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 4

Top Five Industry Critical Experiences Across Levels

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

Top 10 critical experience for only expert individual contributor and manager levels, reflecting the degree to which these groups are likely to leverage their expertise.

Similar to the competency results, only one critical experience (i.e., execute and deliver on results) for individual contributors was rated at or above a 4.50 level. However, all 10 of the manager of managers and executive-level critical experiences for success were rated above a 4.50 level. This trend could be due to what we learned during the interviews; specifically, as industry I-O psychologists could work in different tracks/roles, different critical experiences may be important depending on the job into which one is hired. For instance, if one was hired in as a selection specialist, the critical experiences necessary for success would be different than if one was hired into an HR position working with compensation. However, once people get to manager of managers and executive-level roles, their experiences for success would be similar because they operate at a broader scope (e.g., oversee internal consultants in selection, training, and performance appraisal). However, as we did not ask about individuals’ specific role, these potential reasons should be further investigated.
Final Career Path Models and Future Directions

The SME interviews and Career Study Survey results indicated that industry careers are best captured in five overarching levels: individual contributor, expert individual contributor, manager, manager of managers, and executive. As mentioned often within the SME interviews, the track in which one is placed within their organization is often dependent upon how many people with I-O degrees are employed and the responsibilities across management positions. Some SMEs reported switching organizations often as their organizations did not have the desired career path openings. Others stayed with their organization for longer periods because they enjoyed being the only, or one of a few, I-O psychologists.

Many of the top-10 rated competencies were the same across all or most job levels, with relatively few mean differences. The few top-rated competencies that differed across job levels tended to logically reflect the nature of the work (e.g., executives requiring strategic thinking and executing strategy, individual contributors requiring data analysis skills). However, it was noted that a broader number of competencies became important the higher the job level, suggesting that when an individual contributor is career planning for higher level positions, gaining breadth of experience across a greater number of competencies may be more important than acquiring depth of experience in the competencies shared across levels.

In terms of how and where these competencies are developed, results indicated that learning for most competencies took place on the job for all job levels. Competencies where graduate school tended to provide most learning tended to be more technical in nature. The job-level differences that occurred tended to follow the pattern of individual contributors learning more from graduate school than on the job experience. Structured training, comparatively, had little impact on the learning of competencies. There might be more opportunities for graduate schools and/or structured training to have a greater role in developing a range of skills that are currently learned primarily on the job, for example, adaptability, business acumen, and decision making. Given the importance of experience for development, employers and graduate programs could continue to find meaningful assignments for its practitioners/applied-oriented students.

Results also point to specific types of career experiences that employers, professional organizations, and/or graduate schools could provide to help develop industry practitioners. Some experiences, such as creating relationships with stakeholders, could start early and be used throughout one’s career span, whereas other experiences that were less important for individual contributor and expert individual contributor roles (e.g., mentor and coach subordinates, manage projects through delegation of work, maintain high visibility with executives) could be leveraged to prepare I-O psychologists for higher-level positions.
Finally, these results can help I-O psychologists determine whether an industry sector role is an appropriate fit for their competencies and work interests. The results may also help employees within industry to chart their potential career moves by allowing them to examine the type of work performed, critical experiences at different levels, and the competencies required for success.

We recognize that the current study highlights the basic career path of I-O psychologists working within an industry; future research may want to expand on the present study by evaluating career path moves specifically within organizations that do (and do not) have managerial positions that incorporate I-O responsibilities. Furthermore, investigating more fully the differences in competencies and critical experiences necessary for success for generalist versus specialist Industry roles would be beneficial for employee development.

Note

The authors would like to recognize and thank the efforts of previous committee members who contributed to this effort, including but not limited to Michael Trusty and Tracy Kantrowitz.

References

