

Alumni Perceptions of Workforce Readiness

R. Eric Landrum
Boise State University

Paul I. Hettich
DePaul University

Abby Wilner
JBL Associates

We surveyed psychology alumni (N = 78) about (a) their preparedness and competency on 54 areas of workforce readiness, (b) changes since graduation on 33 adjectives describing emotional states and personality qualities, and (c) suggestions for universities about how to provide opportunities that enhance workforce success. Among the highest rated qualities expected in the workplace were self-discipline and responsibility, and among the greatest changes in emotional qualities were increased confidence, independence, and maturity. Respondents also provided revealing open-ended suggestions for improving workplace readiness and success. We discuss these results in light of recent, national attention to workforce readiness, the American Psychological Association's (APA) Guidelines for the Undergraduate Psychology Major (APA, 2007), and future steps for psychology educators to help current students make the transition to successful alumni.

Of the 88,134 bachelor's degree recipients who graduated during 2005–2006 with a major in psychology (Snyder, Dillow, & Hoffman, 2008), approximately 25% continued to psychology graduate programs (American Psychological Association Center for Workforce Studies, 2008). Assuming some others entered other professional programs and a minority did not enter the workforce full time, it seems safe to conclude that approximately 60,000 psychology graduates attempted to enter the workforce. Career planning courses, conference presentations, and books provide valuable information about career options, skills, and entry strategies, but alumni perceptions of behavioral and emotional qualities that influence workplace readiness are often missing from these resources.

Understanding the skills and abilities necessary for success is important for both institutions of higher education and their future graduates, because “American workers must now be capable of learning new skills and adapting their abilities as jobs are redefined and typically expanded by the economic and organizational models of the times” (Nash & Korte, 1997, p. 79). The importance of workplace skills is echoed in two recent, major national reports: the Conference Board report on workforce readiness (Casner-Lotto & Barrington, 2006) and the Spellings Report on Higher Education (U.S. Department of Education, 2006). Many employers are clear about workforce competencies desired, both on a broad level (National Association of Colleges and Employers [NACE], 2007) and on a more psychology-specific level (Landrum & Harrold, 2003). Furthermore, the need for adaptability to changes in the workplace was underscored by Peterson (1995), who stated that “most people entering the work force today will have three to five careers and eight to ten jobs” (p. xiv). The Bureau of Labor Statistics (2008) reported in a recent longitudinal study that individuals born between 1957 and 1964 held, on average, 10.8 jobs from ages 18 to 42.

Yet, college graduates and employers are expressing dissatisfaction with the job competences of new graduates (Casner-Lotto & Barrington, 2006; Coplin, 2004; U.S. Department of Education, 2006; Wood, 2004), which one author labeled “worklife unreadiness” (Levine, 2005, p. B11). Alumni surveys can be a valuable source of information about the work skills and habits of college graduates. Borden and Rajecski (2000) asked alumni to rate themselves on workplace

preparedness, job prospects, and relatedness of their employment to their undergraduate major and found that psychology alumni rated themselves relatively low on preparedness and relatedness. However, these studies did not query alumni about their changes on emotional or personality dimensions.

We surveyed alumni from a large Western university to ascertain their opinions about the importance of various workplace tasks and behaviors, to gauge changes in emotional qualities since graduation, and to elicit specific recommendations to help colleges and universities facilitate workplace transitions. Specifically, we focused on the following questions:

1. To what extent do graduates perceive they were prepared for the workforce in terms of specific skills, qualities, and behaviors?
2. To what extent do graduates' perceptions of emotional and personality descriptors change over time after graduation?
3. What suggestions can alumni offer to colleges and universities to help impart to students those qualities and skills deemed most important in the workplace?

Method

Participants

We mailed surveys to one third of all Boise State University Department of Psychology alumni (randomly selected) with addresses on record ($N = 306$). Using first-class mail, 10 undeliverable surveys were returned, yielding a valid sample frame of 296 respondents. We received 78 usable responses (response rate = 26.4%). Participants ranged in age from 21 to 70 years old ($M = 38.2$, $SD = 12.1$), with 23.3% men and 76.7% women (5 respondents did not indicate sex). The vast majority of respondents were White (90.7%). On average, respondents had been with their current employer 4.99 years ($SD = 4.9$, range = 0–22 years). When asked how many years since receiving their bachelor's degree, the average time was 10.2 years ($SD = 8.7$, range = 0–34 years). Respondents reported their average income as \$50,654 ($SD = 40,261$).

Materials

Section I of our survey presented 54 different areas of work readiness derived from consultation with content experts and by examining the work readiness dimen-

sions presented by Evers, Rush, and Berdrow (1998), the National Academy of Sciences (1984), and the Council of Chief State School Officers (1995)—see Table 1 for the workforce readiness items used. For each item, respondents rated (a) the perceived level of preparedness expected in the workplace, (b) their own perceived level of preparedness at graduation, and (c) their perceived level of current competence; each assessment used a scale of 1 = *low*, 2 = *medium*, and 3 = *high*. Section II of the survey asked respondents to review the 54 evaluative items presented in Section I and rank the top 10 skills or qualities with respect to perceived importance for success in the workplace. For each item selected we asked participants to provide an example of an activity in college that helped or would help achieve competence in the area selected. Section III presented respondents with 33 adjectives that describe emotions and personality traits from the Adjective Check List (Gough & Heilbrun, 1983). For each adjective (e.g., self-centered) we asked participants to complete the sentence “Compared to when I received my undergraduate degree, I now feel — self-centered,” with the possible responses of 1 (*more*), -1 (*less*), or 0 (*no change*).

Procedure

We mailed the survey instrument, a cover letter, and a self-addressed business-reply envelope via first-class mail. As per our local institutional review board approval process, completion and return of the survey indicated consent. We mailed packets in December 2004 and asked for responses within 6 weeks.

Results and Discussion

In this section, we present the results of our analyses, including our interpretation of the outcomes. We chose this approach for the sake of clarity and divided our results into the following sections: (a) perceptions of workforce readiness, (b) perceptions of changes regarding emotional and personality characteristics, and (c) concrete suggestions from alumni to colleges and universities on how to better prepare graduates for the workforce.

Perceptions of Workforce Readiness: Skills, Tasks, Behaviors

Table 1 provides the means and standard deviations for each of the items scoring 2.5 or higher on expected

Table 1. Overall Means and Standard Deviations for Workforce Readiness Items

Workforce Readiness Items	Level of Preparedness Expected in the Workplace		My Level of Preparedness at Graduation		My Level of Competence Currently	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
	Possess self-discipline, including punctual attendance and dependability	2.93	0.24	2.60	0.61	2.80
Act responsibly and conscientiously	2.89	0.30	2.68	0.52	2.93	0.24
Work well with others	2.85	0.39	2.44	0.59	2.82	0.38
Meet the needs of others, such as clients or customers	2.81	0.48	2.26	0.71	2.85	0.39
Set priorities and allocate time efficiently to meet deadlines	2.80	0.40	2.35	0.64	2.72	0.45
Identify, prioritize, and solve problems	2.78	0.47	2.14	0.63	2.69	0.46
Make defensible and appropriate decisions	2.78	0.44	2.25	0.66	2.67	0.49
Possess the ability to work without supervision	2.78	0.47	2.65	0.55	2.92	0.27
Work independently	2.78	0.44	2.62	0.53	2.96	0.19
Manage several tasks at once	2.75	0.43	2.40	0.65	2.77	0.41
Adapt to change	2.73	0.49	2.32	0.68	2.60	0.56
Function effectively in stressful situations	2.73	0.49	2.10	0.64	2.64	0.55
Gather information efficiently	2.72	0.55	2.55	0.66	2.72	0.45
Handle conflict maturely	2.72	0.50	2.22	0.70	2.68	0.52
Write formal reports, business correspondence, informal notes, and memos	2.72	0.50	2.22	0.74	2.70	0.48
Present information verbally to others	2.71	0.48	2.18	0.71	2.74	0.43
Teach and learn from others on the job	2.70	0.51	2.38	0.69	2.85	0.35
Appreciate the need for organization, supervision, policies, and procedures	2.69	0.56	2.42	0.64	2.82	0.38
Demonstrate initiative, motivation, and perseverance	2.69	0.58	2.48	0.59	2.76	0.48
Receive and use both positive and negative feedback	2.67	0.57	2.21	0.67	2.63	0.53
Contribute ideas as well as answers regarding problems	2.66	0.57	2.17	0.64	2.72	0.45
Respect for the opinions, customs, and individual differences of others	2.66	0.57	2.44	0.68	2.28	0.76
Motivate oneself to function at optimal levels of performance	2.65	0.53	2.38	0.69	2.72	0.45
Demonstrate loyalty to the organization and its goals	2.64	0.62	2.21	0.70	2.66	0.53
Possess a positive attitude toward work	2.64	0.58	2.44	0.66	2.72	0.45
Organize information in a logical and coherent manner	2.63	0.58	2.54	0.57	2.70	0.45
Participate effectively in discussions	2.63	0.58	2.21	0.70	2.61	0.54
Regulate your emotions effectively	2.61	0.61	2.01	0.66	2.55	0.57
Respond appropriately to constructive criticism	2.60	0.56	2.00	0.69	2.47	0.57
Work to help achieve organizational goals	2.58	0.59	2.05	0.77	2.66	0.50
Apply the rules of correct spelling, punctuation, and capitalization	2.57	0.68	2.81	0.42	2.86	0.34
Provide leadership and followership as appropriate	2.57	0.59	2.18	0.70	2.63	0.48
Understand how the work flows through the system	2.56	0.55	1.90	0.75	2.56	0.52
Consider and evaluate alternative solutions, weighing their risks and benefits	2.54	0.59	2.06	0.66	2.58	0.52
Give direction and guidance to others if applicable	2.52	0.66	1.82	0.77	2.64	0.53
Assist in continuous improvement	2.50	0.60	2.22	0.76	2.67	0.49
Possess the ability to work with supervision	2.50	0.66	2.43	0.59	2.64	0.50

Note. Items in this table are sorted based on the first column mean rating of "level of preparedness expected in the workplace." *Ns* range from 69 to 76. Respondents rated the importance of each item in each category using 1 = *low*, 2 = *medium*, and 3 = *high*.

readiness in the workplace for each of the three dimensions that we assessed (level of preparedness in the workplace and at graduation and current level of competence). Respondents rated these items using a scale of 1 (*low*), 2 (*medium*), and 3 (*high*), and Table 1 is sorted in descending order based on respondents' over-

all level of preparedness expected in the workplace. The top 10 items, as rated on level of preparedness expected in the workplace, were as follows:

1. Possess self-discipline, including punctual attendance and dependability.

2. Act responsibly and conscientiously.
3. Work well with others.
4. Meet the needs of others, such as clients or customers.
5. Set priorities and allocate time efficiently to meet deadlines.
6. Identify, prioritize, and solve problems.
7. Make defensible and appropriate decisions.
8. Possess the ability to work without supervision.
9. Work independently.
10. Manage several tasks at once.

These areas of work readiness, as rated by alumni respondents, correspond well with the characteristics desired by employers (Landrum & Harrold, 2003; NACE, 2007; Sinclair, 1997). These characteristics include listening skills, ability to work as part of a team, getting along with others, desire and willingness to learn, willingness to learn new skills, focus on customers or clients, interpersonal relationship skills, adaptability to changing situations, ability to suggest solutions to problems, and problem-solving ability (Landrum & Harrold, 2003).

Perceived Changes in Emotional and Personality Qualities

The overall means and standard deviations to the emotional and personality descriptors that compared feelings at graduation with current feelings appear in Table 2 where $-1 = \text{less}$, $0 = \text{no change}$, and $+1 = \text{more}$. Descriptors with a positive mean indicated that alumni now feel more of the adjective (e.g., assertive, confident, conscientious) compared to when they graduated. Table 2 is sorted with means from high to low. Thus, considering the top and bottom five responses, alumni reported highest scores for being more confident, more independent, more mature, more assertive, and more valued. In contrast (the lowest scores), respondents reported feeling less defensive, less dissatisfied, less sad, less resentful, and less shy.

Gender differences. We tested for gender differences on workforce readiness and emotional identity items. Previous research (Quereshi, 1988) has examined gender differences in alumni surveys, so we used t tests to examine differences between men and women. Of the 162 possible differences for workforce readiness items (54 items answered on three dimensions: preparedness expected in the workforce, preparedness at graduation, and current competency), only 8 significant differences emerged. There were no differences

Table 2. Overall Means and Standard Deviations for Emotional and Personality Qualities Items Presented in Descending Order

Emotional Descriptors	Overall M	SD
Confident	0.86	0.44
Independent	0.85	0.42
Mature	0.85	0.39
Assertive	0.74	0.54
Valued	0.61	0.63
Adaptable	0.55	0.76
Tactful	0.54	0.64
Thorough	0.54	0.70
Tolerant	0.50	0.72
Responsible	0.49	0.72
Tired	0.40	0.77
Thoughtful	0.38	0.76
Happy	0.36	0.75
Organized	0.36	0.74
Tough	0.34	0.76
Enthusiastic	0.32	0.76
Conscientious	0.29	0.77
Hurried	0.28	0.81
Reliable	0.26	0.75
Stressed	0.21	0.84
Opinionated	0.16	0.80
Optimistic	0.08	0.85
Imaginative	0.02	0.77
Isolated	-0.12	0.75
Idealistic	-0.16	0.74
Lonely	-0.22	0.69
Rigid	-0.32	0.70
Self-centered	-0.32	0.64
Defensive	-0.37	0.67
Dissatisfied	-0.40	0.68
Sad	-0.40	0.54
Resentful	-0.45	0.55
Shy	-0.53	0.52

Notes. N s vary from 72 to 73, depending on the number of respondents per question. Respondents completed the statement "Compared to when I received my undergraduate degree, I now feel more, less, or no change —," where the blank represents the descriptor. Responses were scored using a scale of $-1 = \text{less}$, $0 = \text{no change}$, and $+1 = \text{more}$.

between men and women on the perceptions of preparedness expected in the workplace.

When asked about preparedness at graduation, the following significant differences emerged: Women ($M = 2.54$, $SD = 0.66$) rated importance higher than men ($M = 2.11$, $SD = 0.69$) for the item "respect for the opinions, customs, and individual differences of others," $t(70) = 2.30$, $p = .024$, $d = 0.63$. Women ($M = 2.74$, $SD = 0.51$) rated importance higher than men ($M = 2.17$, $SD = 0.72$) for the item "possess self-discipline, including punctual attendance and

dependability," $t(70) = 3.58, p = .001, d = 0.91$. Women ($M = 2.72, SD = 0.52$) rated importance higher than men ($M = 2.35, SD = 0.60$) for the item "possess the ability to work without supervision," $t(70) = 2.47, p = .016, d = 0.65$. Women ($M = 2.80, SD = 0.44$) rated importance higher than men ($M = 2.41, SD = 0.50$) for the item "act responsibly and conscientiously," $t(70) = 3.03, p = .003, d = 0.82$. Women ($M = 2.30, SD = 0.69$) rated importance higher than men ($M = 1.88, SD = 0.78$) for the item "take steps to achieve career goals," $t(70) = 2.15, p = .034, d = .57$. Women ($M = 2.27, SD = 0.68$) rated importance higher than men ($M = 1.82, SD = 0.80$) for the item "monitor progress toward goals," $t(69) = 2.28, p = .025, d = 0.60$. Women ($M = 2.88, SD = 0.31$) rated importance higher than men ($M = 2.58, SD = 0.61$) for the item "apply the rules of correct spelling, punctuation, and capitalization," $t(68) = 2.61, p = .011, d = 0.62$. There was only one significant difference on the dimension current level of competency: Men ($M = 2.70, SD = 0.58$) rated importance higher than women ($M = 2.30, SD = 0.69$) for the item "understand simple probability and statistics," $t(68) = -2.15, p = .035, d = 0.62$. Interestingly, at graduation if there was a difference in importance ratings, it was always in the direction of women reporting an item as more important than men. When asked about current levels of competency, however, all of the differences from the time of graduation were gone, and the only difference remaining was that men believed understanding statistics and probability is more important than women. It is important to note that in all the differences that emerged, these are differences between men's and women's importance ratings of each dimension, and not actual performance in the areas of workforce readiness.

Regarding the emotional descriptors, there was only one significant difference: Men ($M = 0.68, SD = 0.47$) reported becoming more conscientious since graduation than women ($M = 0.19, SD = 0.79$), $t(70) = -2.34, p = .022, d = 0.74$. One explanation would be that women were already conscientious at graduation, and men increased in this area over time.

Alumni Suggestions for Improving the Workforce Readiness

After respondents rated the 54 workforce readiness items using a *high-medium-low* scale on three dimensions, we asked respondents to review those 54 items and rank order the 10 most important items in an open-ended portion of the survey. Then, for each of the 10

ranked items, we asked for the kinds of activities in college that help or would help achieve competence in each of the areas. Using the mean of the ranks as the indicator for those skills or qualities most important for success in the workplace, the top 10 items (as reported in open-ended fashion) appear in Table 3. Only 4 of these top 10 workforce readiness items reported in the open-ended portion of the survey corresponded with the top 10 ranked items when respondents rated the level of preparedness expected in the workplace. However, this apparent discrepancy is most likely due to the different nature of the questions. For the closed-ended items, respondents rated level of preparedness expected in the workplace. This aspect of preparedness, however, is indeed different from the open-ended task, which asked respondents to list and rate the skills and abilities most important for success in the workplace.

Of particular use are the suggestions for college-level activities to help impart the skills and qualities most important for success in the workplace. We present an abridged sample of these suggestions in Table 3. Interestingly, the overall pattern that seemed to emerge from these open-ended comments is that professors should have higher expectations for classroom performance and timeliness, expect more work from students (especially group work and research projects), and offer classes targeted at the transitions that alumni eventually face. Respondents also mentioned the importance of opportunities such as honors courses, research assistantships, and becoming involved in the community, as well as forming mentoring relationships with faculty members. In many of the open-ended responses, respondents indicated the need for more accountability for students, including being on time for class, professors not accepting late work, conforming to due dates, consequences for low attendance and absenteeism, and encouragement for students to do more than the bare minimum. Respondents also suggested a number of specific topics or classes that psychology departments should offer, including courses on conflict management, listening, self-esteem, motivation, political savvy, and organizational skills. These topics are reminiscent of the literature on transitions from college to career (Hettich & Helkowski, 2005) and might help resolve some of the challenges faced by recent graduates experiencing the quarterlife effect, whereby graduates transitioning to the workplace experience feelings of anxiety, uncertainty, and inner turmoil as they attempt to navigate a new work environment for which they might feel unprepared (Robbins & Wilner, 2001).

Table 3. Open-Ended Responses: Top Ten Skills or Qualities Most Important for Success in the Workplace With Suggestions for College-Level Activities to Achieve Competence

Mean Importance Ranking	Skill or Quality	College-Level Activities Suggested
1 ($M = 2.74$)	Work well with others	<ul style="list-style-type: none"> • Group projects • Group projects that are representative of the workplace • Group work
2 ($M = 3.80$)	Manage several tasks at once	<ul style="list-style-type: none"> • Taking several classes and doing activities • Different classes with different deadlines, school activities, study groups • Having several classes at once • Being on time for class and doing the reading
3 ($M = 4.00$)	Possess self-discipline, including punctual attendance and dependability	<ul style="list-style-type: none"> • No late work accepted • Conforming to due dates, limiting absenteeism • Core classes in major field
4 ($M = 4.23$)	Apply knowledge from formal educational experience	<ul style="list-style-type: none"> • Conceptual questions on tests or exams • Role-plays are nice, but they're not real; be able to relate to real-world experiences better
5 ($M = 4.33$)	Demonstrate self-motivated learning	<ul style="list-style-type: none"> • Encourage students to develop personal interests; not to be swayed by politics • Do more than you have to; don't just worry about the grade; look for ways to improve, for yourself • The professor introduces the topic; encouraging interest in his or her presentation almost like showing a person how to do something
6 ($M = 4.45$)	Motivate oneself to function at optimal levels of performance	<ul style="list-style-type: none"> • Classes on self-esteem, self-drive; using the organization to meet personal vision • Get into a mentoring relationship with a professor; challenge yourself with hard classes • Set a level of qualities for student to write a paper or report (scale system/rubric)
7 ($M = 4.64$)	Write formal reports, business correspondence, informal notes, and memos	<ul style="list-style-type: none"> • Honors project—research project, write paper, defend paper, submit for publication • Incorporate writing projects into every class and course • Write and practice writing; take a technical writing class. Research methods is a very important class
8 ($M = 4.69$)	Possess the ability to work without supervision	<ul style="list-style-type: none"> • Most work in class was independent • Doing hard-core library research • Group activity where students educate each other • Involvement in activities, organizations, and groups
9 ($M = 4.86$)	Demonstrate highly developed social skills	<ul style="list-style-type: none"> • Provide personal feedback to professors; writing and presenting report findings to groups • Classes on political savvy and organizational survival skills
10 ($M = 4.88$)	Demonstrate initiative, motivation, and perseverance	<ul style="list-style-type: none"> • Research and class work provided opportunities to demonstrate these • Class projects, papers, class presentations • Anyone who graduates has this

Note. To be included in the table, college-level activities listed were reported by at least 15% of respondents providing open-ended responses ($n = 64$). Means represent the average rank order of the item as provided by respondents.

The careful examination of workforce readiness is particularly timely. The Spellings Report released from the U.S. Department of Education (2006) specifically addressed workforce readiness. Not only did this report state that “employers complain that many college graduates are not prepared for the workplace and lack the new set of skills necessary for successful employment and continuous career development” (p. 12), but the report also called on the higher education system to give U.S. citizens the workplace skills necessary for adapting to a rapidly changing economy. In a survey of employers published by The Conference Board (Casner-Lotto & Barrington, 2006), the most important skills were (a) professionalism and work ethic, (b) oral and written communications, (c) teamwork and collaboration, and (d) critical thinking and problem solving. Further, these authors identified areas of deficiency in 4-year college graduates, including written communication, writing in English, and leadership.

We believe the data from our study reflect a critical link between what students learn and what employers expect from graduates. To what extent can psychology faculty respond to the Spellings and Conference Board reports and contribute to improving the level of student preparedness? The recent *APA Guidelines for the Undergraduate Psychology Major* (APA, 2007) provide a framework for linking the psychology curriculum to workplace skills. The *Guidelines* describe a set of optimal expectations expressed as 10 goals and several diverse learning outcomes regarding student performance at the completion of a baccalaureate degree in psychology. Definitions of each goal, their organization into two categories, and specific learning outcomes associated with each goal can be found in the *Guidelines*. The 10 goals include the knowledge base of psychology, research methods in psychology, critical thinking skills in psychology, application of psychology, values in psychology, information and technological literacy, communication skills, sociocultural and international awareness, personal development, and career planning and development.

We acknowledge the difficulty in articulating unambiguous meanings for the descriptions of these goals and comparing them to our brief survey items. However, when we informally compared the top 10 expected level of preparedness items (see Table 1) and the top 10 skills and qualities leading to success (see Table 3) to the *Guidelines*' 10 learning goals, we reached three conclusions. First, the vast majority of the workforce readiness items reflect Goal 9: Personal Development (“Students will develop insight into their own and other’s behavior and mental processes and ap-

ply effective strategies for self-management and self-improvement”). Second, Goal 3 (Critical Thinking Skills in Psychology), Goal 4 (Application of Psychology), Goal 5 (Values in Psychology), Goal 7 (Communication Skills), and Goal 10 (Career Planning and Development) are also reflected in Tables 1 and 3, but to a lesser degree than Goal 9. Third, perhaps the reasons that Goal 1 (Knowledge Base of Psychology), Goal 2 (Research Methods in Psychology), Goal 6 (Information and Technological Literacy), and Goal 8 (Sociocultural and International Awareness) are not represented in the survey’s top 10 items are the absence of items related to these specific topics and the breadth of careers represented in our sample. Further research using a survey instrument with different items and different samples might reveal different patterns of responses. In general, more work needs to be done that focuses educators’ efforts in turning the 10 goals into achievements for psychology students.

From an employer’s perspective, our informal comparisons of the *Guidelines* with the data of Tables 1 and 3 suggest that instructors should inform students of the importance (for classroom as well as workplace success) of such behaviors as self-discipline, acting responsibly, teamwork, setting priorities, and working independently, and hold students accountable for these behaviors as they relate to the course. It might seem counterintuitive that both teamwork and independence are valued, but on reflection, it is not uncommon to at times work on your own, whereas at other times you work as part of a team. In addition, we believe that emotional and personality descriptors (see Table 2) such as confidence, independence, maturity, adaptability, and responsibility contribute to the attainment of Goal 9. Several of the readiness items and emotional or personality descriptors play an important role in helping students achieve other goals contained in the *Guidelines* (e.g., the confidence a student feels after mastering complex abstract concepts or solving a statistics problem; the independence experienced when a student designs and executes a research study; the assertiveness a student displays in a course that requires student participation and group projects). In short, students can strengthen the skill sets employers seek and develop the emotions and personality characteristics that contribute to workplace success in their course work (while mastering course content), internships, part-time jobs, cocurricular activities, and other venues. Continued research could further define the links between appropriate college and workplace behaviors and identify methods for promoting and applying these behaviors in a university’s many opportunities for learning.

An additional perspective that links college to the workplace using the data of this study distinguishes between the programs and courses described in a university catalog (the overt curriculum) and the attitudes, skills, and behaviors students reflect in their day-to-day activities (the covert curriculum). The covert curriculum refers to “those numerous, routine, skill-related activities, behaviors, and attitudes that are transacted inside and outside of the classroom that collectively reflect a student’s overall work orientation and habits” (Hettich, 1998, p. 390). Examples of the covert curriculum include listening attentively, submitting assignments on time, managing time and stress, accepting responsibility for one’s actions, and seeking feedback. Such behaviors might be covertly reflected in a final grade, but they exert a powerful educational effect on students during and after college. Many students are probably unaware that their everyday habits, attitudes, and skills become parents (to borrow an analogy from Freud) to the baccalaureate’s orientation to work. Appleby (2001) viewed such behaviors as lifelong learning skills; he cited numerous examples of the covert curriculum including many that are very similar to those cited by the survey respondents: working as a productive member of a team; behaving in a responsible, punctual, mature, and respectful manner; demonstrating critical thinking skills; managing stress and conflict successfully; interacting successfully with a wide variety of people; accepting responsibility for one’s behavior and attitudes; and writing in a particular style. The data from this survey support the notion that mastery of the covert curriculum, like the attainment of Goal 9 (Personal Development) of the *Guidelines*, represents an essential component of a student’s success in college, the workplace, and life in general. If the behaviors and attitudes exemplified in our data, the covert curriculum, and the *Guidelines*’ Goal 9 are as critical to success as we maintain, they should have a prominent and explicit role in discussions of teacher expectations regarding course syllabi, assignments, and classroom norms. From the perspective of workplace preparedness, we believe the covert curriculum might be as important or sometimes more important in some work environments than the overt curriculum.

This study is just one approach to addressing the issues and the importance of workforce readiness and the transition from college to the workplace. Although this study shows promise, psychology educators must broaden our approach in our study of these issues. For instance, our study is based on a relatively small sample; larger, more representative samples are desirable to allow more accurate generalizations and recommenda-

tions. For example, the range of respondents includes both recent graduates (some nontraditionally aged) as well as older alumni—individuals who graduated some years ago might not be as likely to recall their feelings and skill levels at the time of graduation. Psychology educators should also strive to implement curricular and extracurricular opportunities that enhance the readiness of graduates because of financial, emotional, professional, and personal challenges faced during this transitional phase in one’s life—as well as implications for employers and the economy.

Implications and Recommendations

Areas of work readiness. The top 10 important skills and behaviors expected in the workplace are also required for success in college whether they are articulated directly or indirectly in a course syllabus or assignment or whether they are practiced in the classroom, a campus organization, residence hall, or job. Psychology educators can improve students’ readiness when discussing skills in our classrooms, internships, advising sessions, career panels (especially those that include psychology department bachelor’s-level alumni), and other activities that help students identify situations in which they can practice and monitor these behaviors.

Alumni suggestion. Similarly, when students complain about high performance standards, deadlines, accountability, and workload in their curricular and cocurricular activities, educators could communicate alumni suggestions and the importance they occupy in workplace success. When psychology educators link expectations of students to those of the workplace, we take accountability to a higher level: the accountability of students to faculty and subsequently to the workplace, and the accountability of faculty to students and the workplace.

Changes in emotional and personality dimensions. Just as students must develop those skills and qualities required in the workplace, so too should students recognize that the kinds of emotional and personality changes reported by alumni are also an essential component of their education. Psychology as the science of behavior and mental processes is in the unique position of offering a body of knowledge that forms a foundation for understanding and reaching emotional maturity.

Additional recommendations. Based on the open-ended responses from Table 3 and our experience, we offer the following recommendations. Psychology educators should encourage students to (a) participate in internships, service learning, and cocurricular activities; (b) spend a semester abroad or participate in immersion trips that expand their understanding of other people and their cultures; (c) critically examine part-time jobs for the ways in which the job can strengthen the kinds of skills and behaviors deemed important in Tables 1 through 3; (d) enroll in courses that promote the body of knowledge and organizational aspect of the workplace such as industrial/organizational behavior, management, economics, interpersonal and group skills, leadership, technology, and technical writing; and (e) meet regularly with the university's career planning center throughout one's undergraduate career.

Teachers can promote workplace readiness by explaining course expectations on the first day of class that include specific classroom-related attitudes and behaviors and their importance in the workplace. For example, when students seek additional time on an assignment or a "make-up" assignment, the instructor could ask if such a request would be granted if they held a full-time job. To students who seek excessively specific instructions, a teacher could point out that in the workplace employers expect employees to deal with ambiguous situations independently with minimal supervision. Our recommendations for improving preparedness do not require much additional time or materials. They depend primarily on an instructor's willingness to help students explore the ways in which higher education can prepare them for satisfaction in career and life endeavors. Some of the resources that can assist students and faculty in this exploration include Hettich (2010), Landrum (2009), Landrum and Davis (2007), Morgan and Korschgen (2009), and Wilner and Stocker (2005).

The transition from college to workplace is one of the most anticipated, exciting, and important events for bachelor's-level graduates. Alumni surveys such as this one can offer important insights and suggestions regarding the skills employers expect of new graduates and the changes in emotions and personality qualities graduates might experience. The data derived from this study and the perspectives offered by the *Guidelines* and the covert curriculum provide frameworks for teachers to improve workplace preparedness. This study is one small step in helping teachers articulate the information students need to enhance their readiness for the challenges and rewards of the workplace.

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Note

Send correspondence, including requests for a complete version of the alumni survey used, to R. Eric Landrum, Department of Psychology MS 1715, Boise State University, Boise, ID 83725-1715; e-mail: elandru@boisestate.edu.

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