Development of the Campus and Career Resources Inventory

Cierra M. Abellera: McNair Scholar

Dr. R. Eric Landrum: Mentor

Psychology

Abstract

The purpose of our research is to understand students' use of undergraduate psychology resources. In a national study of four universities, we evaluated seven psychology-specific resources in conjunction with student career paths. Our findings suggest that students primarily rely on faculty to get accurate information on their intended careers. Students reported student-led clubs and organizations as one of the lowest in importance to advancing student career paths. Additionally, all seven resources were average in helping students efficiently. These findings call for further research in understanding the career paths and resources available for undergraduate psychology majors to adequately support future students.

In a national survey of psychology graduates, the National Center for Science and Engineering Statistics reported the following top ten common occupations for psychology majors with a bachelor's degree are: (1) administrative (record clerks, telephone operators), (2) management-related occupations, (3) service occupations excluding health (probation officer, human services), (4) social workers, (5) top-level managers, execs, admins (CEO/COO/CFO, president, district/general manager, provost), (6) teachers and instructors (private tutors, dance, martial arts), (7) marketing and sales occupations, (8) personnel, training, and labor relations specialist, (9) accountants, auditors, and other financial specialists, (10) accounting clerks and bookkeepers (National Science Foundation, 2015). The job descriptions above provide a broad sense of careers primarily entered by psychology graduates with a bachelor's degree as their highest degree. For example, the second most common job category of management related occupations does not offer insight into specific job titles. Similarly, the category of marketing and sales occupations and others share this issue. This gap in understanding does not provide a clear idea of how much these positions or job areas are psychology specific or whether the psychology bachelor's degree is an asset or necessity to each career position.

Career exploration is a critical task during the development of young adults which is essential in leading satisfying postgraduate lives (Lee, Porfeli, & Hirschi, 2016; Skorikov, & Vondracek, 2007). Additionally, there is little available research on the effectiveness and use of resources available to psychology undergraduates and how effective students are in utilizing these resources. In my present study, self-efficacy is used interchangeably with self-efficiency as defined by an individual's belief in their ability to successfully perform behaviors necessary to execute specific behaviors or performance attainments (Bandura, 1977). The need for departmental outcomes has been well documented as necessary for the improvement of teaching psychological science and resulted in the book, *APA Guidelines for the Psychology Undergraduate Major Version 2.0* (2013). However, other resources such as well-known websites such as O*NET OnLine and CareerOneStop, books such as the *American Psychological Association (APA) Graduate Study in Psychology*, and other resources specific to campus such as a Career Center created to support undergraduates have not been explicitly evaluated by psychology students. Organizations such as the APA and Psi Chi, the international honor society in psychology, provide undergraduates with guidelines and opportunities to prepare for graduate school and the workforce, yet it is mostly unknown how useful these resources are and how frequently undergraduates utilize each resource.

In this study, I intend to close this gap and understand undergraduates' use and knowledge of psychology-related resources. The purpose of this research is to identify effective career-related resources available to undergraduate psychology students as well as assess how important these resources are according to students from a multi-site sample. The Campus and Career Resource Inventory measured students' knowledge of career-related resources that foster the pursuit of graduate school and work-force career paths.

Method

Participants

There was a total of 235 participants ($N = 235$), 144 participants attended Boise State University, 66 participants attended James Madison University, 17 participants attended Texas A&M University – Kingsville, and 8 participants attended the University of Wisconsin – Green Bay. Students were recruited via email to participate in an online survey. The survey was directed at undergraduate psychology majors and required that students must be 18 years or older to participate.

Descriptive analyses were conducted using SPSS to assess the importance of each resource in students' intended careers and to evaluate the effectiveness of each resource. Of the participants, 53% identified as female and 17% identified as male. There were 156 participants between the age range of 18 – 29 and 9 participants between the ages of 30 – 53. Twenty-two percent of participants self-identified as first-generation students. Participants also reported their current class standing in which 12.8% were freshmen, 14.9% were sophomores, 20% were juniors, and 22.6% were seniors. Participants were also asked their first pathway after receiving a bachelor's degree in psychology in which 15% reported entering the psychology workforce, 45.5% reported attending graduate school in psychology, 18.3% reported attending graduate or professional school in an area outside of psychology, and 17% were undecided at the time of the survey.

Campus and Career Resource Inventory

The Career and Campus Resource Inventory includes seven different types of resources including the following: department, faculty, campus career center, O*NET OnLine, CareerOneStop, *APA Graduate Study in Psychology*, and student psychology clubs/organizations (e.g., Psi Chi and Psi Beta). The chosen resources were included using the criteria: a) available and accessible to psychology undergraduates, b) provided insight into a psychology-specific career or graduate school opportunities. In this 53-item survey, resources assessed are meant to provide an illustrative understanding and not necessarily comprehensive approach to the career-paths and psychology-specific resources used by psychology undergraduates.

The students were first asked two general questions about their intended pathway after obtaining their bachelor's degree and if they believed they would obtain their degree in psychology. All three career specific resources (e.g., *APA Graduate Study in Psychology*, O*NET OnLine, and CareerOneStop) were evaluated using the same set of questions and format. Beginning with the *APA Graduate Study in Psychology*, students received the resource name and an image of the resource. Additionally, all students reported if they knew this resource existed, and if they answered yes, they moved on to the next question. If the participants answered no, they were forwarded to the following resource. The next question asked if the students used the resource before after having known it existed and then reported an estimated amount of time spent in hours using the resource. Then, in a Likert-Type scale of strongly disagree to strongly agree, students were asked their agreement on a statement that the resource helped think about and advance career goals. Participants were also asked to rate their agreement with a statement about believing they were efficient in utilizing the resource.

In the second set of questions, students provided insight on four different resources: the department, faculty, their campus Career Center, and student psychology clubs and organizations. Following a similar pattern, students were asked in a close-ended question if they believed the resource helped advance their career goals. In the same scale as used in assessing the first three resources, students were asked to report how much they agree with the statements of how valuable the resource is in advancing their career paths and their self-efficiency in using the resource. Then, in an open-ended question, students were asked to explain how the resource could be more effective in advancing their career paths. These series of questions repeated for all four campus-specific resources. Participants were then asked to rank all seven resources in a list with one being the most important informational resource and seven being the least important informational resource. After ranking each resource, students reported in open-ended questions what their most informational and influential resources are in advancing their intended career paths. Additionally, students were asked to report what their intended career path was. Demographic information was asked of the participants last and included information on age, gender, ethnicity and race, first-generation student status, and class standing.

Results

The *APA Graduate Study in Psychology* was the least known resource as 14.7% of students reported knowing the resource existed, and of that percentage, 51.5% reported using the resource. O*NET Online was the most well-known resource with 41.2% of students knowing the resource existed, and 78% of those students reported using the resource. CareerOneStop had the least number of students that reported using the resource at 32.5%. However, 18.3% of the participants knew the resource existed. Please refer to Figures 1 – 3.

Participants were asked to estimate the amount of time spent on each resource in hours. Students reported spending the most time on using the *APA Graduate Study in Psychology* book (M = 8.33, SD = 12.35). Students reported spending the least amount of time on CareerOneStop (M = 3.12, SD = 2.8). Additionally, the average time for O*NET Online was 3.84 hours (M = 3.84, SD = 6.50).

Self-efficiency of each resource was evaluated using a 5-point Likert-type scale from 1 = strongly disagree to 5 = strongly agree. Regarding student efficiency in utilizing the resource, students rated their efficiency highest using the *APA Graduate Study in Psychology* resource (M = 3.67, SD = 1.05) and rated lower efficiency when using O*NET Online (M = 3.56, SD = .86) and CareerOneStop (M = 3.54, SD = .7). Refer to Figures 1 – 3 for a complete diagram of each resource analysis. Students rated their self-efficiency higher with faculty (M = 3.49, SD = 1.0) and students rated their lowest self-efficacy in accessing student psychology clubs and organizations (M = 3.10, SD = 1.0). Students self-efficiency of accessing their department (M = 3.23, SD = 1.0) and their Career Center (M = 3.26, SD = 1.0) are consistent in the pattern of having similar averaged ratings throughout the survey. Please refer to Table 1 for the above information.

On average, students rated the *APA Graduate Study in Psychology* highest when asked how helpful the resource was in advancing their career paths (M = 3.88, SD = .81). CareerOneStop had the lowest average in advancing students' career paths (M = 3.62, SD = .7) and O*NET Online was neither the most or least helpful in advancing students' career paths (M = 3.79, SD = .74). Refer to Figures 1 – 3 for a complete diagram of each resource analysis.

We evaluated the following campus-related resources for helpfulness in advancing student career paths, importance to overall career advancement, and students' efficiency in utilizing each resource. In helping advance career paths, 75.3% of students reported yes to faculty, 57% reported yes to the department as a resource, 38.3% reported yes to their on-campus Career Center, and 26.8% reported yes to student psychology clubs/organizations. Students' rated each resource on the importance of their overall career advancement on a 4-type scale from 1 = not at all important to 4 = extremely important. The averages for each resource remain within 2 – 3 suggesting a neutral response of importance to overall career advancement. Students reported the faculty as the most helpful resource (M = 2.94, SD = .82) when compared to campus-related sources such as the department (M = 2.62, SD = .82) and the Career Center (M = 2.62, SD = .87). The least helpful resource to overall career advancement was student psychology clubs/organizations (M = 2.42, SD = .84).

Students then ranked each resource in importance as an informational source that encourages thought on career planning. In terms of frequency, participants most commonly reported the faculty as the most critical resource in helping students advance their career paths at a total of 77 times followed by the *APA Graduate Study in Psychology*, department, Career Center, O*NET OnLine, student clubs/organizations, and CareerOneStop. In a second analysis of the ranking of resources, the overall averages yielded slightly different results. Although faculty were most often ranked as the most critical resource in advancing career paths, the department was second instead of third, followed by Career Center, *APA Graduate Study in Psychology*, O*NET OnLine, CareerOneStop, and student psychology clubs/organizations (refer to Table 2).

Discussion

In creating the Campus and Career Resource Inventory, psychology and career focused resources were compiled to understand which resources students used to advance their career goals. Our findings suggest that there is a gap in resources for psychology majors, which leads to the lack of research evaluating career outcomes for students that hold a bachelor's degree in psychology as their highest degree. The resources that were assessed in the present study bring attention to the effectiveness of the current resources available.

The O*NET Online was the most known resource among the students that participated in the study. A possible explanation for why O*NET Online this occurred is that most survey respondents were Boise State University students in which O*NET OnLine is formally introduced to all undergraduate psychology students through an introductory course and could be a potential explanation for O*NET OnLine being the most known

resource. On average, students reported that these resources were about average in helping them advance their career paths and consistently reported lower efficiency in using the resources. Additionally, students were asked to provide feedback on each resource and what could be improved; this qualitative data will be analyzed and compared in a separate study.

Limitations of the Campus and Career Resource Inventory are that it illustratively evaluates resources for psychology undergraduates. To have a comprehensive understanding of psychology specific career resources, future studies should include resources such as professional mentorship, other organizations such as the Association for Psychological Science (APS), and networking experiences, including research or organizational conferences. Additionally, to assess helpfulness in future studies using this inventory, campus-related resources should be measured on a scale instead of asking participants to respond either "yes" or "no" to the item. However, the Campus and Career Resource Inventory was created to be adaptable to a variety of resources and could apply to other disciplines.

The faculty was the most crucial informational resource in frequency and average followed by the department and Career Center as reported by students' averaged evaluations. Implications of this finding call for further research to explore what factors lead to successful career advancement outcomes in undergraduate students. Surprisingly, student psychology clubs and organizations were one of the least essential informational sources in advancing students career paths. Variation in student psychology club and organization participation could depend on factors including active organizations on their campus, which could vary in support and resources at each institution and vary independently as not all participants were eligible or participated in organizations such as Psi Chi and Psi Beta. Additionally, all seven resources are near average in helpfulness and importance to advancing their career paths. There is a need for improved assistance in planning future career paths with undergraduate psychology students, as access to accurate and supportive resources during career development is critical.

References

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Appendix A

Tables

Table 1

	Department	Faculty	Career Center	Student Psychology Clubs/Organizations
Helping you advance (% yes)	57	75.3	38.3	26.8
Importance to overall career advancement*	2.62 (.82)	2.94 (.82)	2.62 (.87)	2.42 (.84)
Made the most of my interactions**	3.23 (1.0)	3.49 (1.0)	3.26 (1.0)	3.10 (1.0)

*This item was rated on a 4-point scale from 1 = *not at all important* to 4 = *extremely important*.
**This item was rated on a 5-point Likert-type scale from 1 = *strongly disagree* to 5 = *strongly agree*.
Campus resources were evaluated for helpfulness in advancing students' career paths by answering yes or no. Importance and relevance of the resource to students' advancement of their career paths were rated on a 4-point scale, and self-efficiency in accessing the resource was evaluated using a 5-point Likert-type scale.
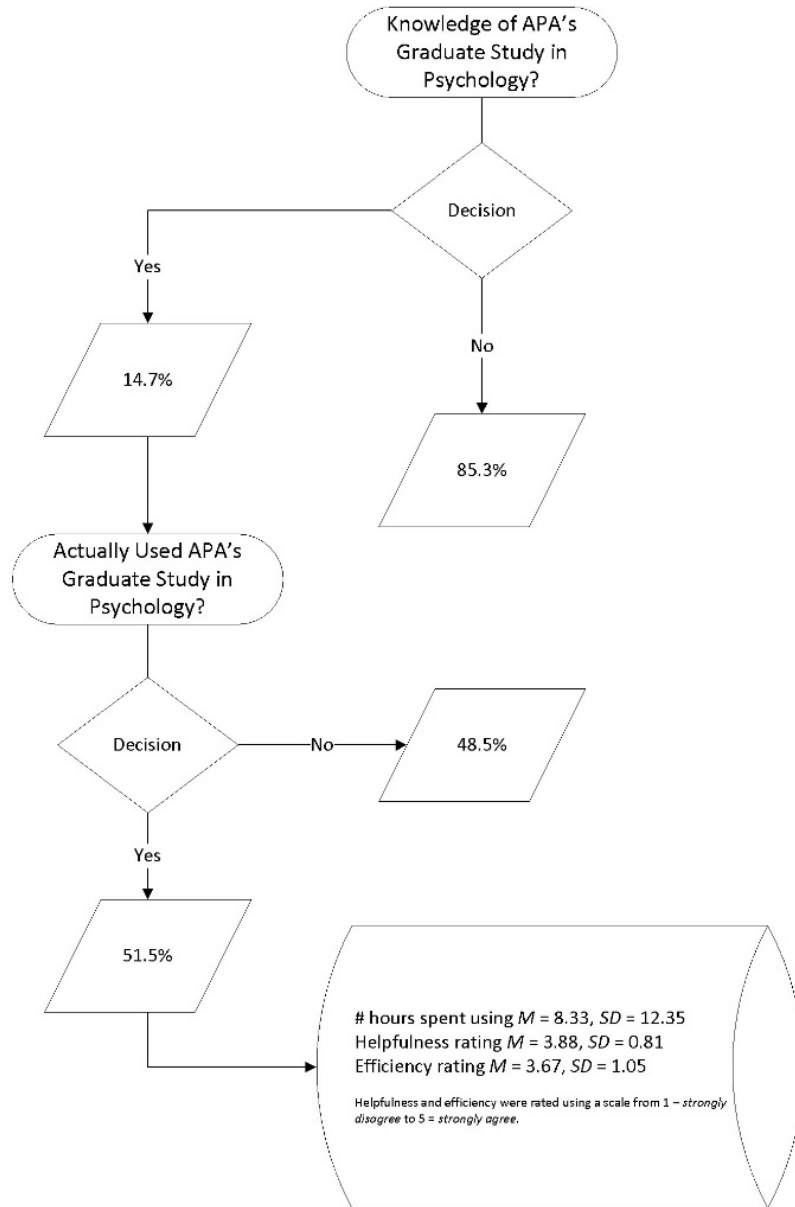
Table 2

	Faculty	*APA Graduate Studies in Psychology*	Department	Career Center	O*NET OnLine	Student Psychology Clubs/ Organizations	CareerOneStop
Frequency	77	21	20	19	14	5	3
Average	2.18	3.14	4.01	4.01	4.40	5.12	5.14

Students ranked each resource in importance on a scale of 1 – 7 with 1 being the most informational resource in assisting students with their intended career paths. The frequency of the amount of times each resource was ranked as the most important is displayed in the above table along with their averaged ranking as the most important resource.
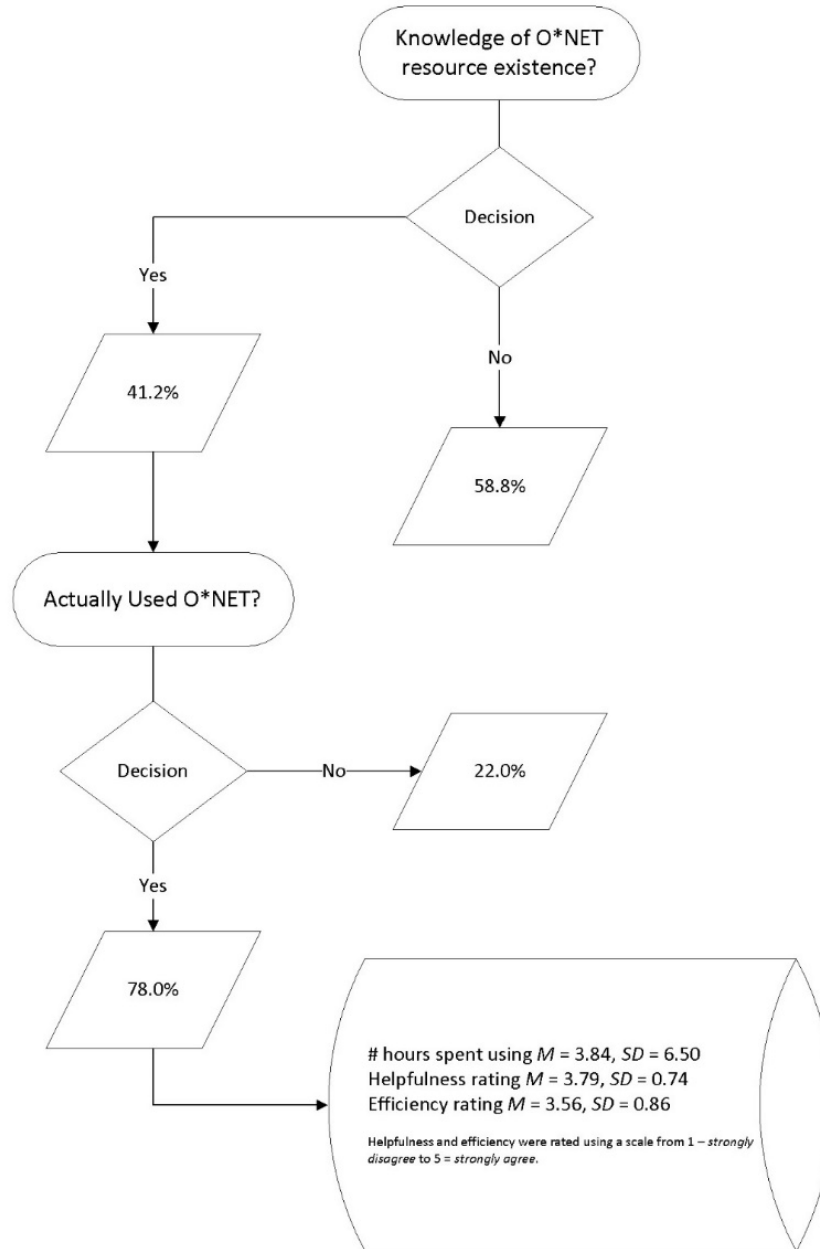
Appendix B

Figures

Figure 1.

Knowledge of APA's
Graduate Study in
Psychology?

Decision

Yes

14.7%

No

85.3%

Actually Used APA's
Graduate Study in
Psychology?

Decision —No→ 48.5%

Yes

51.5%

hours spent using $M = 8.33$, $SD = 12.35$
Helpfulness rating $M = 3.88$, $SD = 0.81$
Efficiency rating $M = 3.67$, $SD = 1.05$

Helpfulness and efficiency were rated using a scale from 1 – *strongly disagree* to 5 = *strongly agree*.
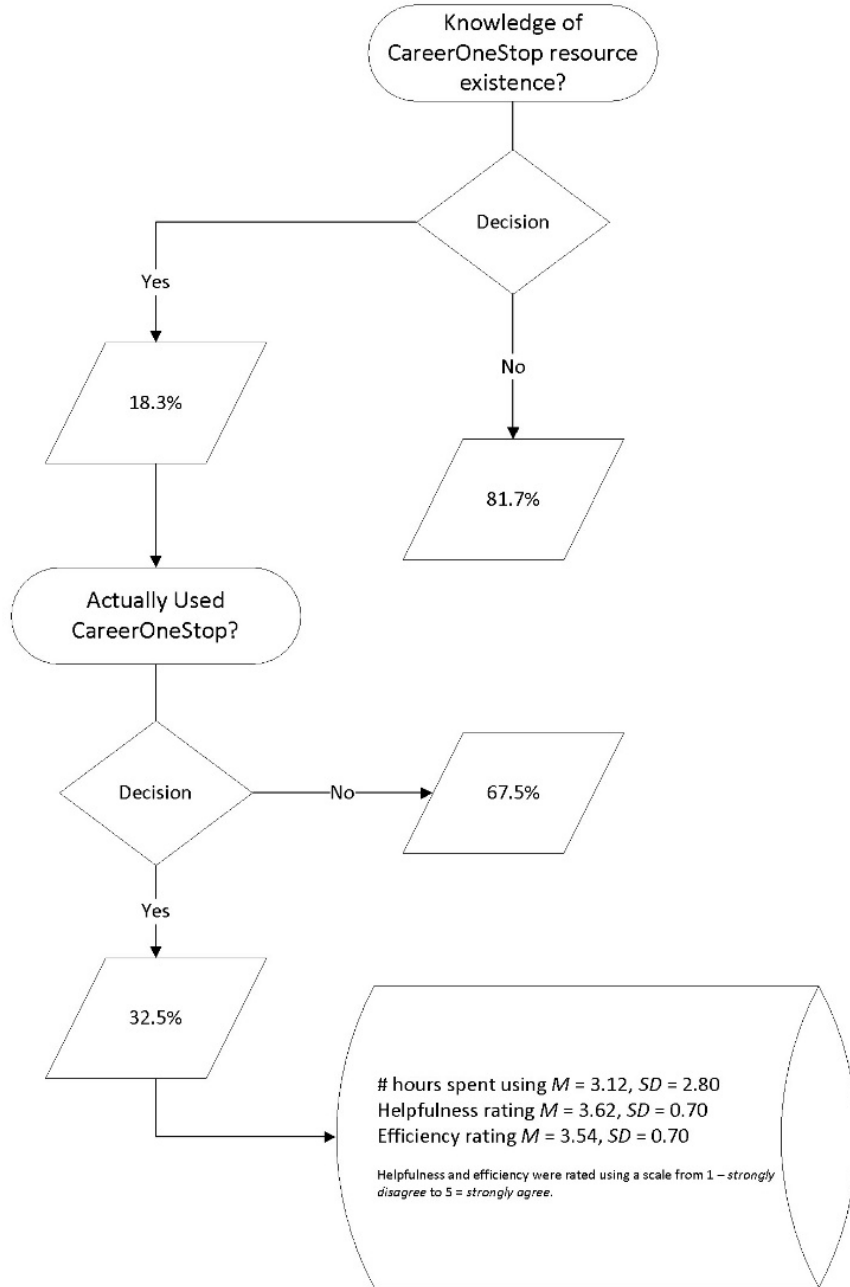
*This item was rated on a 5-point Likert-type scale from 1 = *strongly disagree* to 5 = *strongly agree*.
The above diagram displays the *APA Graduate Study in Psychology* survey results per item. Participants were first asked if they knew the resource existed, and if they answered yes, they continued to the remaining items, and if no, they were advanced to evaluate the next resource.

Figure 2

Knowledge of O*NET
resource existence?

Decision

Yes

41.2%

No

58.8%

Actually Used O*NET?

Decision —No— 22.0%

Yes

78.0%

hours spent using $M = 3.84$, $SD = 6.50$
Helpfulness rating $M = 3.79$, $SD = 0.74$
Efficiency rating $M = 3.56$, $SD = 0.86$

Helpfulness and efficiency were rated using a scale from 1 – *strongly disagree* to 5 = *strongly agree*.

*This item was rated on a 5-point Likert-type scale from 1 = *strongly disagree* to 5 = *strongly agree*.
The above diagram displays the O*NET OnLine survey results per item. Participants were first asked if they knew the resource existed, and if they answered yes, they continued to the remaining items, and if no, they were advanced to evaluate the next resource.

Figure 3.

Knowledge of CareerOneStop resource existence?

Decision

Yes

18.3%

No

81.7%

Actually Used CareerOneStop?

Decision —No→ 67.5%

Yes

32.5%

hours spent using M = 3.12, SD = 2.80
Helpfulness rating M = 3.62, SD = 0.70
Efficiency rating M = 3.54, SD = 0.70

Helpfulness and efficiency were rated using a scale from 1 – *strongly disagree* to 5 = *strongly agree*.

*This item was rated on a 5-point Likert-type scale from 1 = *strongly disagree* to 5 = *strongly agree*.
The above diagram displays the CareerOneStop survey results per item. Participants were first asked if they knew the resource existed, and if they answered yes, they continued to the remaining items, and if no, they were advanced to evaluate the next resource.