

The Acceptability of Online Degrees Earned as a Credential for Obtaining Employment

by

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Abstract

A national survey of hiring executives was conducted to assess the acceptability of a job applicant's qualifications for employment that included a degree earned solely online or one that included a significant amount of online coursework. The questionnaire was sent in response to job advertisements posted in newspapers in eight major metropolitan areas throughout the United States. It described three hypothetical applicants: One earned a degree through a "traditional" institution; a second obtained the degree solely online from a "virtual" institution, and a third by "mixed" online and traditional coursework. The question addressed by this study is whether a job applicant who has earned a bachelor's degree entirely or partially online has the same chance of being hired as one whose degree was completed through traditional coursework. The findings appear to indicate rather clearly that they are not.

Keywords: distance education, acceptability, online degrees, employment, hiring managers.

Background

The steady expansion of online education has created considerable controversy regarding the quality of the instruction, educational outcome, the reputation of the providing institution, and regulatory policies used to evaluate and manage these important resources. Increasing demand for well-educated workers in the private sector has helped to fuel the steady rise of for-profit programs and enrollments in online degree programs. This upward trend is likely to continue because the demand for employees with a college degree is projected to rise significantly during the decade ahead, particularly in managerial, computer engineering and accounting occupations. In fact, job growth in occupations that require a bachelor's degree is projected to rise by 20 percent by 2008 – the highest rate for all degree types in the workforce (Bureau of Labor Statistics, 1999, 2004).

The demand for job applicants with degrees has been so intense that most traditional universities have established some form of distance education in their curricula – both for cost-cutting reasons and for ease of student access. For example, 89 percent of public, four-year colleges now offer at least one course online, and more than 50 percent of those courses are delivered asynchronously. For most of the institutions offering distance education programs, increased student access is a major goal (Beker, Horn & Carroll, 2003). Such access is regarded by many as one of the most positive aspects of distance education (Grenzky & Maitland, 2001). However, online education has not been without criticism and growing pains. Numerous debates have arisen concerning the credibility, quality and consequences of these programs in higher education.

Online education is often provided by “virtual” institutions that have no campus, classrooms, or labs. Those who advertise such online programs often claim that they are sure

routes to employment, career advancement, raises in pay and other job-related rewards.

Increased access and convenience appears to account for enrollments as high as 2.4 million undergraduate students in the 90,000 college-level, credit-granting courses available online.

These students seek out such courses for a variety of reasons. Many are adult learners who lack access to traditional institutions, but who seek to gain professional training or degrees that will enhance their chances of employment (Beker et al., 2003). For example, working women with children are attracted to online programs because of the flexibility such programs provide.

Military personnel on active duty in distant locations also seek access to distance education programs.

The major focus of this research is not on the educational merits or quality of such instruction, but on the *acceptability* of degrees earned online, or even partially online, by those who make hiring decisions in business and industries. Specifically, the question addressed in this paper is whether a job applicant who holds a bachelor's degree that has been completed via distance learning has *the same chance of being hired* as a person whose degree has been completed through traditional on-campus coursework. To answer this question, hiring managers who evaluate job applicants in small and medium-sized businesses were contacted and asked to participate in a survey. They were asked if a degree earned by an applicant solely by completing online courses – or one earned by completing a significant portion of the requirements via online classes – is *equally acceptable* as a criterion for employment, compared to a traditional degree.

Debates about Online Education

There are literally hundreds of studies that examine whether the educational outcomes of online programs match or exceed those of “traditional” instruction in the delivery of content (Russell, 1999). Many critics maintain that there are significant differences and the quality of education via online study is clearly inferior. Other researchers claim the opposite and insist that

knowledge acquired by online distance learning is equal to, or even superior to, that obtained in traditional settings (Joy & Garcia, 2000). These arguments center on such issues as the degree of personal contact with instructors (Gagne & Shepard, 2001) and the importance of face-to-face interaction with other students (Cadieux, 2002). Missing such socialization in online learning is said to be a serious limitation.

More recently, research has begun to focus on a different issue – the question of the acceptability to various “gatekeepers” of degrees that have been earned online. For example, in a national survey, DeFleur and Adams (2004) found that deans and program directors who decide on student admissions to graduate programs were extremely reluctant to accept new students with bachelor’s degrees earned online. Indeed, only 7% of administrators in the public institutions studied and about 11% in private institutions indicated that they would be willing to consider admission for such an applicant. In another national study these researchers found that academic search committee members who screen applicants for faculty appointments are likewise unwilling to accept applicants with doctoral degrees earned online. In fact, only one respondent was willing to recommend an applicant with a degree earned totally online for a position within his or her institution (Adams & DeFleur, 2005).

Discussions about distance education have been made more complex by accounts of diploma mills and fake degrees (Wilner & Lee, 2002). In addition, low completion rates and other failures in distance education have continued to make “quality” central to this debate (Carnevale, 2002a). Other problems include aggressive advertising tactics that many for-profit institutions use to attract students (Blumenstyk, 2005) and significant ethical problems associated with false advertising (Carnevale, 2002b; Koolan & Smith, 2003; Bartlett & Smallwood, 2004b). Many of these problems in the distance education industry have made national news, resulting in a loss of credibility even for properly accredited online institutions and traditional universities

that offer online programs. It should be noted, however, that at least some students who are enrolled in distance education classes in fully accredited institutions report that they are “equally satisfied” or “more satisfied” with online classes compared to their traditional classes (Beker et al., 2003).

Distance education has been more successful in corporate than academic settings. A number of corporations have promoted online education for training and continuing education as part of their human resource practices. Other research has indicated that certain types of online degrees have gained acceptance in corporations (Learnframe, 2000). In these cases, the reputation of the institution granting the degree makes a significant difference in whether the degree is perceived as acceptable (Vault, Inc., 2001). Distance education advocates may reasonably point out that a degree earned from a fully recognized and accredited university does not draw the same level of skepticism that a degree from an institution with no accreditation. Most subject to criticism are those “virtual” institutions that have no campus, classrooms, labs, etc., and where all instruction takes place online.

The Confusing Issue of “Accreditation”

In its traditional meaning, “accreditation” is a voluntary certification system whereby an established non-profit “accrediting agency” evaluates programs offered by an educational institution to determine whether the instruction offered meets specific requirements. If all of the standards used by such an agency are met, the educational institution is “accredited” – that is, it is regarded as having demonstrated educational integrity. Today, there are a large number of agencies that perform this service by evaluating a wide variety of factors including library holdings, faculty qualifications and curricular objectives. Some accrediting agencies have existed for a long time. Others have been developed recently by online institutions for their purposes.

Although accreditation is still considered voluntary, peer-reviewed accreditation became critical for educational institutions in the post World War II era. One reason was the introduction of the GI bill, which included a federal requirement that GI benefits would only apply for colleges holding *state* accreditation (Leef & Burris, 2003). After the passage of the Higher Education Act in 1965 (and 1992), certification by a federally-recognized regional accrediting agency or by an established professional organization became a prerequisite for universities wanting to participate in Title IV federal financial aid programs (Stedman, 2003).

The accreditation concept strives to ensure instructional quality and to prevent fraudulent use of federal money by certifying that participating universities adhere to specific guidelines and standards. However, such forms of accreditation do not necessarily apply to distance-education programs. Moreover, there is no set of evaluation guidelines that uniformly apply to the accrediting process and the standards are inconsistent among the 65 federally recognized accrediting agencies that conduct reviews (Levine & Sun, 2002). For example, some agencies may evaluate online courses during an accreditation review while others may not take these classes into account until they reach half of the institution's course offerings (Asby, 2004).

The complexities, confusion and inconsistencies in this system have created opportunities for many institutions to operate without accreditation, or to obtain accreditation through unrecognized agencies (Smallwood, 2004; Carr & Foster, 2001). As noted, some virtual institutions have set up their own accreditation procedures and agencies. Institutions "accredited" in this alternative way grant degrees that are not acceptable as criteria of academic achievement in traditional university graduate school applications (DeFleur & Adams, 2004). Moreover, once understood, many believe that degrees accredited in this way will ultimately fall far short of the job-market value promised at the time of enrollment (Blumenstyk, 2005). Recent efforts to stop these non-traditional accreditation practices have led to tough legislation on the state-level,

ranging from mandating additional accreditation requirements to barring the use of unaccredited degrees on job applications in at least three states (Bartlett & Smallwood, 2004a).

Again, it is important to emphasize that the issue of *acceptability* is not the same as those concerning the *merits* of distance learning. The project reported here does not address the quality of learning or of accreditation specifically, although these are factors that are important in understanding the acceptability of online degrees. This project focuses instead on whether obtaining a degree totally or even partially online will result in equal employment opportunities for those who receive them. Formally stated, then, the research question is whether hiring managers consider the merits of a degree earned *online* (or even *partially online*) as equal to or less acceptable than a degree earned in a traditional university as a credential for obtaining employment in their organization.

Method

The authors realized that the population of hiring managers would be difficult to reach. The initial step was to collect contact information from position announcements posted by businesses in selected Sunday newspapers for a nine month period. "Help wanted" sections were collected from newspapers that have the largest circulation in eight major metropolitan areas: Atlanta, Boston, Chicago, Houston, Miami, Los Angeles, San Francisco, and Washington D.C. A job announcement was included in a database if the announcement met two criteria: 1) a college degree was required of applicants, and 2) a mailing address for the organization was provided. A total of 1,285 such announcements were identified. A letter was sent to each address explaining the goals of the study and identifying the researchers. The letter requested that the recipient return a postcard that was included with the letter, indicating the name of the hiring decision-maker and his or her willingness to participate. A total of 685 postcards were returned. The

questionnaire was sent to each of these individuals. However, 12 were returned by the post office; leaving 673 participants.

Finally, a total of 283 questionnaires were returned to the researchers. Several were discarded as unusable, leaving 269 completed questionnaires. While clearly falling short of the requirements for a classic probability sample, the views of these 269 hiring managers were considered to be a useful source for gaining initial insights into the acceptability of the college degree earned through online coursework.

Because the questionnaire asked who should or should not be hired and why, the authors did not expect that the survey would be enthusiastically welcomed. Corporate policies normally require that hiring practices, discussions of applicants, criteria for employment and hiring decisions are kept confidential. In addition, there are legal issues to be considered. Because of these constraints, many declined to participate, although repeated attempts by phone, e-mail and surface mail were made to promote participation. Some who refused simply indicated that their company's hiring policies are totally confidential, even though assurance was given that their participation would be treated with total anonymity and confidentiality.

The questionnaire presented three applicants who were described as having a college degree. Each was described as identical with respect to other important qualifications often used in hiring decisions (prior work experience, job history, personal recommendations). That is, the candidate's favorable qualifications were the same *except* for the academic environment in which their degree was earned. On the questionnaire the respondent was asked to indicate, by marking a check box, which one applicant in a given pair (i.e. Candidate A or B; Candidate A or C) he or she "would be most likely to recommend" to be hired. The applicant with the traditional degree (applicant A) was present in both such choices, with applicant B and applicant C being the

second option in the other two choices respectively. More specifically, the three candidates were described as follows:

Table 1 about here

After selecting one applicant in each of the pairs, the respondent was asked to choose one of the three descriptions listed in the questionnaire that “best expressed his or her *main reason* for selecting that applicant.” Specifically, these were (a) that he or she has reservations about recommending an applicant whose degree was awarded in part or entirely online; (b) that an applicant’s degree, whether awarded by a traditional or an online virtual university, would not be an issue; and (c) another consideration. Each of these categories was followed by adequate space for written comments that could be used to explain further the basis for the respondents’ selections.

Results

For the most part, the newspaper job advertisements were seeking managers or entry-level employees in such fields as accounting, business, engineering and information technology. Also included were position announcements from social services, health and medicine, government and manufacturing. The top ten fields represented in this study are listed in Table 2.

The majority (51%) of the hiring managers who responded to the questionnaire were over age 45; 24% were between the ages of 35-44, and 17% were between the ages of 25-34 (7.5% did not indicate age). In addition, the respondents worked for businesses that employed from 5 to 17,000 employees (median = 300).

Table 2 about here

In addition, the majority of the respondents (93 percent) offered a considerable number of detailed comments concerning their views of the different types of degrees. These provided a basis for a qualitative analysis that extended the understanding of the views of these gatekeepers.

Quantitative Findings

As discussed, the respondents were asked to choose one from a pair of candidates that he or she felt would be the one recommend to be hired. The results from these paired comparisons were very clear. For example, in the first pairing, when the respondents were asked to choose between an applicant with a *traditional degree* and one with an *online degree*, 96 percent (258 managers) indicated they would choose the candidate with the traditional degree for employment in their organization. Only four percent (11 respondents) selected the candidate with the online degree.

In the second pairing, the respondents were asked to choose either an applicant with a *traditional degree* or an applicant with *half of the course work completed online*. Here, the answers were less dramatic, but still very clear. That is, 75 percent (201 respondents) indicated that they would prefer the applicant with a traditional degree. About 4 percent of the respondents did not answer this question, but some of these choose to provide detailed written comments instead. The remaining 19 percent (51 respondents) selected the candidate with the mix of traditional and online coursework.

Figure 1 goes here

The preferences of the respondents are depicted in Figure 1. There appear to be obvious differences in these response patterns. However, to decide whether the results could be explained as a result of chance, a binomial test was used. This provided a measure as to whether the answers were given randomly in each set of choices. The binomial test assumes that, if the responses were made randomly, there would be an equal chance for either candidate to be selected (as in a coin flip). The test, then, compares the expected chance outcome of 50 percent for each candidate (if the type of degree was not important) and the actual percents that were selected within each pair. If the actual percentages differ greatly from the 50/50 model, the

explanation that the choices represent a chance distribution must be rejected (Siegal, 1956). The results from this procedure were clear. The probability that the results represent a chance distribution is $p < .001^1$. In other words, the results show virtually no possibility that the choices resulted from chance selections.

After selecting a candidate, each respondent was asked to indicate his or her *main reason* for the preference. Again, the respondents were instructed to mark a check box next to one of the listed statements that best expressed their opinion for their selection. Additional space was provided for comments and further explanation.

When asked to explain if the type of degree is an important consideration when weighing the qualifications of an applicant, 72 percent of the respondents (204 individuals) answered yes. In addition, 65 percent (151 individuals) indicated that a degree earned with a *mix of courses* would be an important consideration. Very clearly, then, the nature of the degree was the main consideration for the respondents.

Table 3 about here

A related issue is the policy of many employers to encourage their personnel to pursue additional education. Many do this by providing tuition as an important benefit. Among those studied, 73 percent (199 respondents), indicated that tuition remission was a benefit paid to employees who take work-related courses. However, 28 percent of these respondents also stated that their companies will not pay for courses taken online. Furthermore, many of these participants indicated that not only are online courses excluded from tuition remission, but also that online courses *do not count toward promotion or pay increases*.

Qualitative Findings

A content analysis of the written comments provided by the respondents was conducted to understand the nature of those remarks in context, and to examine their written answers for

evidence of over-riding concerns. To accomplish this analysis, the written comments were first organized into categories and analyzed for thematic (or contextual) uses of keywords and phrases. This was accomplished with CATPAC, a qualitative research tool capable of creating frequencies, relationships and displays of complex text associations (Woelfel & Stoyanoff, 1993). The computer generated frequency lists and relationship tables provide a robust and unbiased method to identify key categories and phrases that are used to guide an in-depth thematic analysis. In this way, keywords that appear most frequently are used to interpret recurring thematic categories (Gay, 1992). These can provide insights that go beyond the check mark answers made among the categorical selections provided in the questionnaire (Schumacher & McMillian, 1993).

Most of the written comments came from two sections of the questionnaire. As Table 4 indicates, 111 individuals provided a written response to the first question. But by far, the bulk of the comments were written at the end of the questionnaire. The following table shows the number of respondents who wrote comments for question one and additional comments at the end, as well as the number of words written.

Table 4 about here

There were two significant areas of interest in this content analysis. The first was why such a large percentage of people (96 percent) did not find the applicant with a virtual degree as acceptable as one with traditional coursework. The second area of interest was to discover whether comments would help explain why 30 percent of the respondents found the applicant with a mix of coursework “more acceptable” than the person with degree earned completely online.

To assess these issues, categories were developed by grouping together the 25 most frequently occurring keywords. By far, *accreditation* was the most frequently used keyword and

was designated as a category. The importance of other key words was more difficult to distinguish clearly from the computer-generated lists. However, a combined context of less frequently used key words was used to form other categories. The categories, by importance (keyword frequency) are *interaction*,² *quality*, *reputation*, *skills and experience*.

As noted, accreditation was mentioned most frequently and is an indication that this issue is very important. At least some mentioned that the *accrediting agency* is an important consideration. In most cases, however, there was no reference indicating a clear understanding as to what type of agency might issue the accreditation, so it was not possible to discern whether the hiring managers understood the concept or would know which agencies are widely recognized as legitimate. A number of the managers did indicate that without research on their part, it was not always possible to recognize whether a degree had been properly earned in this sense. Indeed, no simple way does exist by which hiring managers can assess the nature and quality of the institution granting the degree, or the agency that has accredited that institution. Obviously, with distance learning and online degrees on the increase, such an evaluation procedure is urgently needed.

The theme of *interaction and classroom experiences* surfaced as the most troubling aspect of online coursework. The comments that addressed interaction were longer and in some ways more passionate than those pertaining to other categories, and were more diverse in context.³ Such comments focused on the value of discussing and sharing ideas in a classroom environment. Examples are:

The academic experience requires interaction between students, professors, and local businesses. The internet, even when properly authenticated and accredited, creates a “sterile” learning environment. Opportunities to circumvent traditional learning methods (interaction, role play, quizzing) create opportunities for less honest individuals to increase their credentials.

In my opinion a lot more than just the coursework is gained from classroom instruction; feedback, interaction with others, participation, public speaking etc. It is my belief that this is lost through on-line learning.

Personal interaction between instructors and students presents a more real world approach to learning. There are no jobs in this organization that are completed over the Internet only.

Students lose team experience and the ability to learn from each other. Part of learning is interaction with peers and teachers. These skills are extremely useful in my work environment and I would prefer candidates who have them.

Reputation and quality, the third category, included numerous comments that the issue was not whether the degree was earned online or in a traditional sense, but whether the online courses were taken with an institution with a reputation of quality. In those cases, many respondents indicated that a degree that included online courses from a known, “traditional” university was more equivalent (in terms of acceptability) to a traditional degree. Regardless, many of these comments also mentioned that online credits should be limited to courses other than those considered “core.” For example, in some cases, online coursework was perceived to be a plus so long as the number of courses was limited, or they were used to maintain a certification. These comments were found in reference to question 2 (Table 3), which asked if a degree with a mix of courses was an important consideration.

In my organization or any for the most part, I think a GED online is just as good as one in the classroom. I believe it’s the reputation of the school that the degree was obtained from.

My perception is that virtual degrees are not as rigorous as a traditional degree.

I would be more comfortable if there were a mix of internet “virtual” and in class “traditional” training. I would prefer a greater amount spent on traditional.

Some on-line instruction is not objectionable, perhaps up to 25% of total and not more than 25% of core courses.

There were also concerns expressed about the quality of online classes, particularly with regard to interpersonal experiences and the skills that emerge from group discussions and teamwork. The category *skills and experience* referred to interaction with professors and peers, and the skills obtained in this way during classroom instruction. Many comments pointed to factors other than the degree as being important to employers. In about half of the comments, job-related skills were mentioned as being equally important as a degree to an employer, or in some cases even more important. These comments pointed to other aspects of the hiring process such as a review of prior experience in a personal interview. A few of the clarifications on these points indicated that an online degree might not be as acceptable for managerial-level positions. Respondents from the engineering or health professions indicated that classroom-based “hands on” experience was critical to proper training. The most important finding here was that online degrees may not be as acceptable for new graduates, but in time, experience is what matters more.

School experiences add for the value of education. Broad experiences prepare folks for life. Traditional classroom experience requires more skills & disciplines required in the work place.

I believe any degree on a resume looks about the same. It may help people at entry level (internet degree or traditional) in the beginning, however the other skills and knowledge gained from the classroom environment will soon show as a deficiency once promotions begin to be considered. You can't replace the classroom experience with a computer at home. Many other elements are missing.

Experience outweighs how a college degree is earned. Non-experienced to 5 years experience, how the degree is earned is important (traditional degree is preferred) more than 5 years experience and how the degree is earned is less important.

Overall, the comments support the quantitative findings. Hiring managers indicated clearly that a traditional degree is more acceptable, and that a degree earned online was of limited value for job applicants. About a third of the respondents indicated that an applicant with a mix of coursework was “more acceptable” than an online-only one – and the comments seemed to indicate that job-related experience was important as a career progresses.

A variety of smaller themes peppered the comments. For example, a few respondents believed that taking an online course indicates skill with technology, while others expressed concern over students taking advantage of the technology and not doing their own work. However, these comments surfaced only in the second hiring pairing (traditional vs. combination) where 50% of the coursework was completed online.

Limitations of the Study

In addition to the sampling issues discussed earlier, there were limitations to this study that should be addressed in future research. For example, the respondents were asked to choose between the different degrees without any information about the specific method, instructional design, or the reputation of the institution offering the degree program. Obviously, such information may influence how people react to an online degree. The findings from this study, then, can be regarded as providing only preliminary results to a significant but understudied problem.

Discussion

Overall, the findings suggest strongly that degrees earned online are by no means as acceptable as traditional degrees, and that they can be regarded as suspect when used as a credential in a hiring situation. Indeed, recent graduates who apply for jobs without much work experience may find that having an online degree on their resume translates into having little

chance of being hired. Further, an applicant's chances would not improve very much if a sizable part of their course work in a traditional setting had been completed online – unless the online university was selected with great care.

These results signal rather clearly that caution should be used when paying for and attempting online coursework. Although the present results do not fully explain the processes that are at work when hiring officials evaluate the credentials of people who seek employment, they do imply that degrees earned online are often viewed with suspicion and skepticism at the present time. Furthermore, many distance learning institutions advertise the merits of their programs on television and the Internet, openly implying that their degrees will be accepted as credentials for employment or advancement in the workplace. However, if employers continue to question the value of online degrees, important ethical and perhaps legal challenges may be raised in the future.

No claim is made that the findings presented above are conclusive or that they introduce any new theory to model or explain the complex processes that influence the acceptability of online degrees. However, these results – along with those of the other two studies of “acceptability” noted earlier (DeFleur & Adams, 2004; Adams & DeFleur, 2005) – speak loudly of the need for further research to expand our understanding of the comparative standing and acceptability of these three types of degrees. Such information on the “market-value” of non-traditional degrees is obviously needed. The acceptability of course work and degrees earned online poses important questions that are not currently being addressed by the complex debates that are taking place about distance learning.

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Notes

1. The binomial test showed that the selection differences in Figure 1 were attributable to random chance much less frequently. For example, the likelihood of a virtual degree being selected over a traditional degree by chance is less than $.01^{-14}$.
2. This category also included face-to-face, classroom and experience. The keywords were grouped (in each of the categories) and used to formulate a 'combined context' based on the relationship of these words to the themes.

Tables and Figures

Table 1. Candidate descriptions

(Choices 1& 2)

Applicant A has the necessary degree. The degree was awarded by a college or university where 100 percent of the applicant’s courses were completed via *traditional classroom and lab* instruction.

(Choice 1)

Applicant B has the necessary degree. The degree was awarded by a “virtual university.” This university does not have a campus, classrooms, labs or library, and 100 percent of the applicant’s courses were taken *online over the Internet*.

(Choice 2)

Applicant B has the necessary degree. The degree was awarded by a college or university, where *50 percent* of the applicant’s courses were taken *online over the Internet*, and the other *50 percent* were completed via *traditional classroom and lab* instruction.

Table 2. Number of responses from the top 11 business sectors

32	Social services
30	Health and medicine
28	Government
25	Manufacturing and product development
19	Finance
16	Accounting
16	Education
16	Information technologies
13	Engineering
11	News and entertainment
11	Research and consulting

Table 3. Summary of checkbox answers

Question	AGREE	DISAGREE	OTHER
1. The type of college or university (<i>virtual vs. traditional</i>) from which the applicant obtained his or her degree would be of no importance as a hiring criterion in our organization.	16 %	72%	12%
2. The mix of <i>online vs. traditional courses</i> taken by the applicant to complete the degree would be of little importance in our organization.	30%	56%	14%
3. I have some reservations about the <i>quality</i> of a degree earned with a mix of traditional and online instruction.	56 %	30%	13% *

*Note: 1 percent did not check a box on this question and chose to provide a detailed written explanation instead.

Table 4. Number of respondents for comments and word count

Comments	N	Word count
Question one	111	1,910
Additional comments	120	5,194

Figure 1. Percent who replied YES to “I would be most likely to recommend hiring this applicant.”

