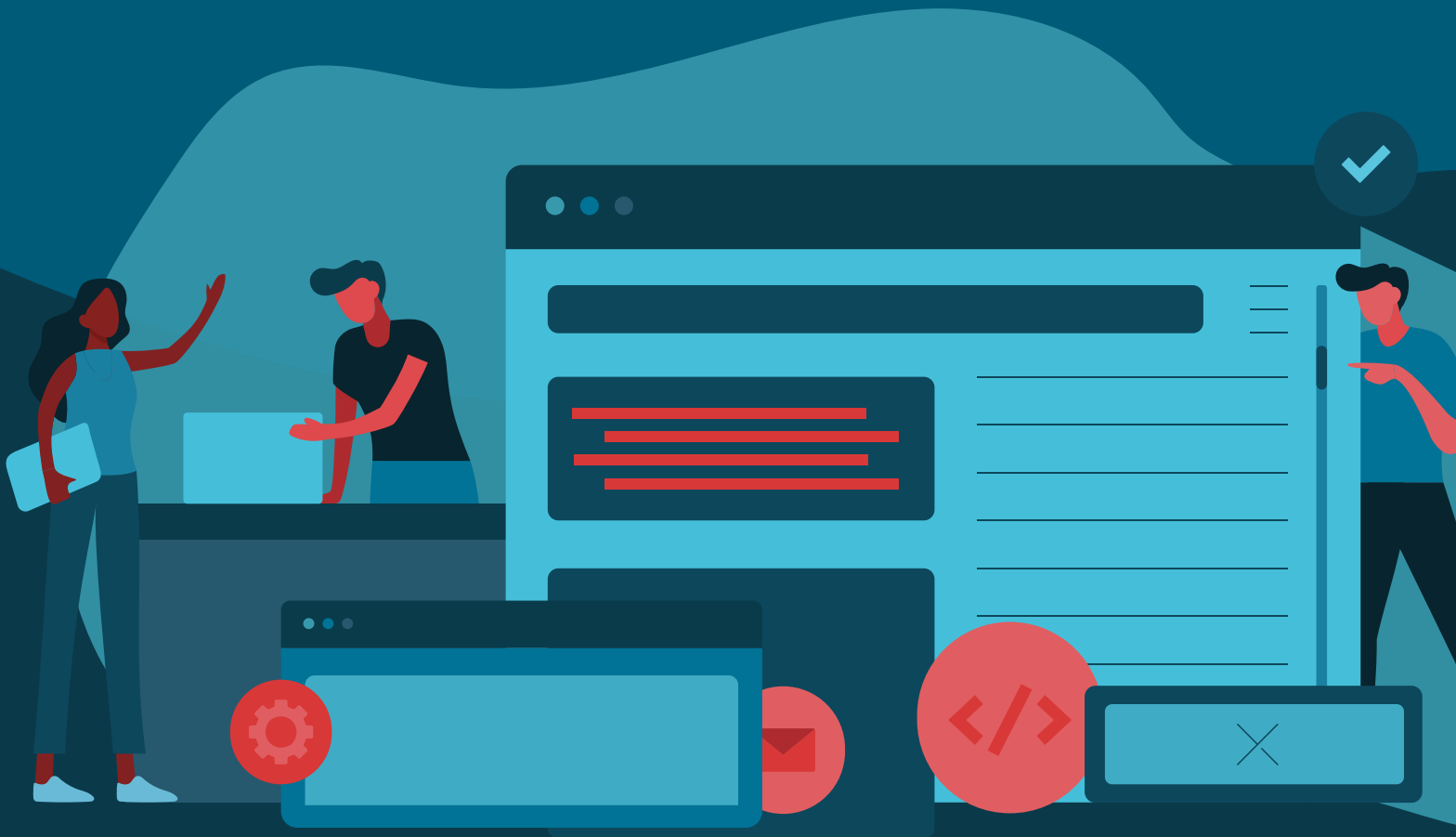


2021

# Bootcamp Trends Report

Exploring trends in the overall awareness and acceptance of bootcamp training programs in the U.S. among the general public and business leaders. Do these programs prepare individuals for technical jobs and careers?



# 2021 Bootcamp Trends Report

Awareness and Perception of Bootcamp Training Programs

**Melissa A. Venable, Ph.D.**

This report is the result of a collaborative effort of BestColleges contributors. The team included: Kelsie Brown, Reece Johnson, Andrew Rice, Jordan Stewart-Rozema, Quinn Tomlin, and Liz Zvereva.

# Table of Contents

|  |           |
|--|-----------|
| <b>Executive Summary</b>                         | <b>4</b>  |
| <b>Introduction</b>                              | <b>5</b>  |
| - Project Goals                                  |           |
| - Methodology                                    |           |
| - Definitions                                    |           |
| <b>Familiarity and Connection With Bootcamps</b> | <b>6</b>  |
| <b>Bootcamps and Employment</b>                  | <b>9</b>  |
| <b>The Future of Bootcamp Training</b>           | <b>13</b> |
| <b>Conclusion</b>                                | <b>16</b> |
| <b>Contributors</b>                              | <b>17</b> |
| <b>Data Notes</b>                                | <b>18</b> |
| <b>References</b>                                | <b>18</b> |
| <b>Appendix: Participant Demographics</b>        | <b>19</b> |

# Executive Summary

Bootcamp training is increasingly an option for learners who want to enter or advance in technical fields such as cybersecurity, data analysis, and software development. This report provides an overview of the awareness and perception of bootcamp programs in the context of jobs and careers. In July 2021, we collected feedback from 2,422 adults and 1,000 business leaders in the U.S.

## KEY FINDINGS

### Familiarity and Connection With Bootcamps

- Almost three-quarters (72%) of adults in the U.S. had heard of bootcamps, although only 8% said they knew a great deal about them.
- A vast majority of business leaders (87%) had heard of bootcamps with 58% saying they had some knowledge of bootcamp programs.
- Most Americans (74%) had no personal connection with bootcamps — they hadn't enrolled in a bootcamp program or worked at one, didn't know or work with anyone who had, and didn't have one in their local area.

### Bootcamps and Employment

- Almost one-third (30%) of adults in the U.S. viewed bootcamp training as a viable alternative to a traditional college degree when it comes to preparing someone for a successful career; similarly, 33% of business leaders felt bootcamps provide a similar amount of and/or level of training as an undergraduate degree.
- Forty-four percent of business leaders in the U.S. believed that bootcamp programs don't provide as rigorous or thorough a technical training as a college degree.

### The Future of Bootcamp Training

- Almost half (48%) of all business leaders surveyed, and 56% of those from tech companies and organizations that hire for tech roles, said that bootcamps will play a pivotal role in meeting future workforce training needs.

# Introduction

The demand for skilled technology workers is growing. A 2019 study found that 24% of all openings posted online were for information technology jobs, and that the majority of these jobs were in non-tech industries (Markow et al., 2019). This demand may lead to increased need for training providers.

Bootcamp programs provide one alternative to a traditional college education for those entering technical fields. They also serve as a source of continued skill development for those already working in tech roles. The number of bootcamp graduates has steadily increased since 2013 (Wong, 2019).

This report presents BestColleges' inaugural research on bootcamp programs. It is part of our [broader initiative](#) to identify and share trends related to higher education and career planning in the U.S. These findings provide insights about the general awareness and perception of bootcamps for job training, and they may prove useful to bootcamp providers and prospective bootcamp learners alike.

## PROJECT GOALS

Our goals were to explore three primary questions related to the awareness and perception of bootcamp programs as a source of training and career preparation for technical jobs, such as software developer.

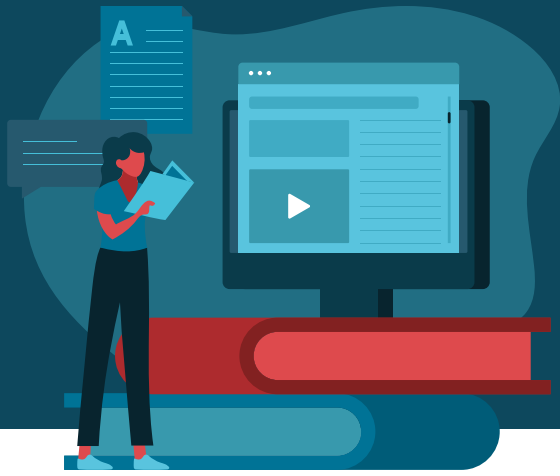
- How familiar is the general American public with bootcamp programs?
- What experiences do businesses and organizations have with bootcamp programs?
- What are the perceptions of bootcamp programs and bootcamp graduates in the context of jobs and careers?

## METHODOLOGY

BestColleges commissioned YouGov to conduct two online surveys. The first survey included 2,422 adult respondents — 18 years of age and older — from among the general public in the U.S., with interviews taking place from June 30 to July 2, 2021. The second survey gathered input from 1,000 business leaders (i.e., heads of teams, groups, or small organizations and above) in the U.S. from July 8-12, 2021. All participants in the business leader survey represented private, for-profit companies. All figures, unless otherwise stated, are from YouGov PLC. Both datasets have been weighted and are representative of their respective populations.

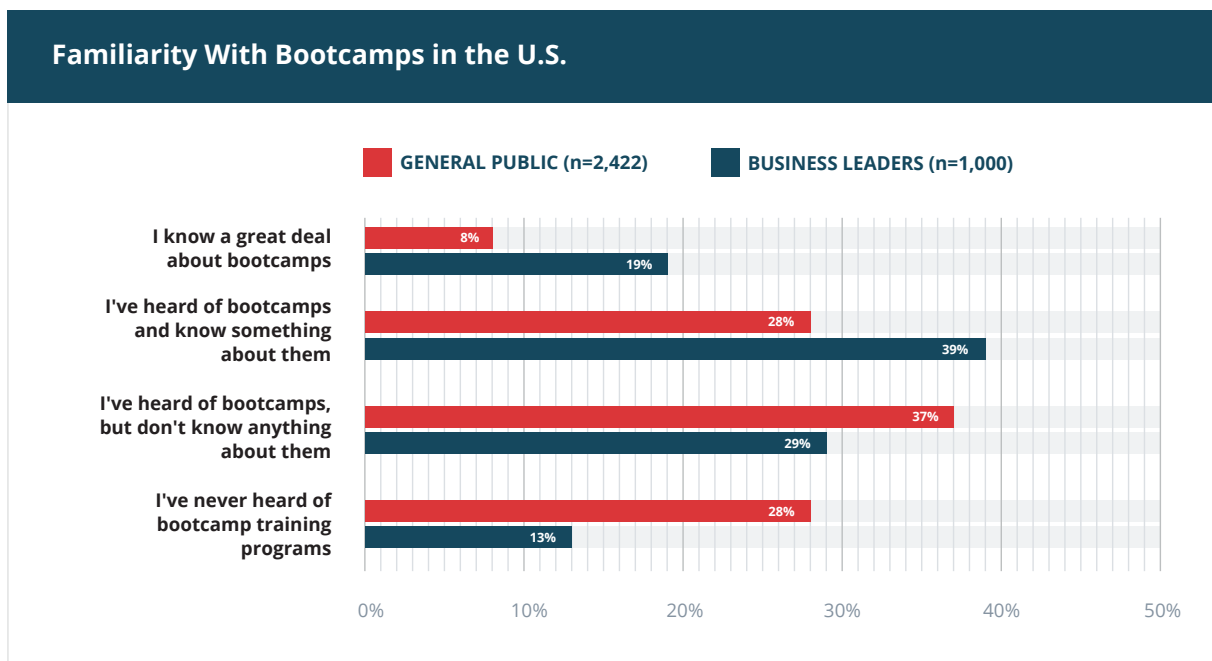
## DEFINITIONS

For the purposes of this study, *bootcamps* were defined as *short, intensive training programs designed to prepare students for employment in technical roles in computer sciences and information technology fields, such as cybersecurity, data analysis, and software development.*



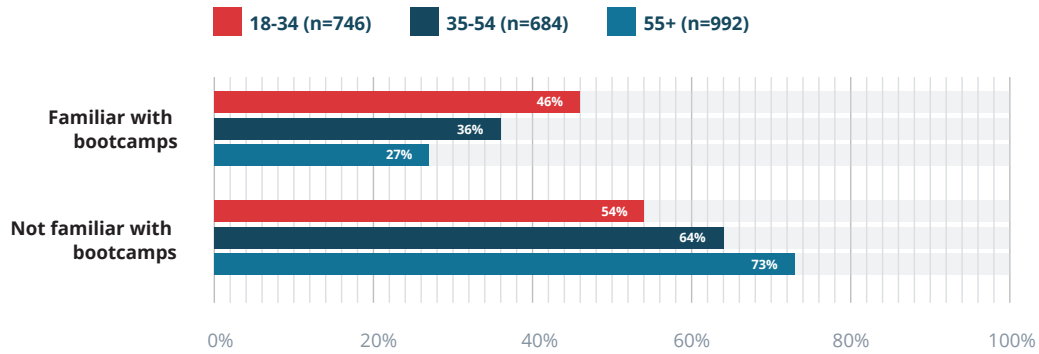
# Familiarity and Connection With Bootcamps

Almost three-quarters (72%) of Americans had heard of bootcamp training programs, although only 8% said they knew a great deal about them. Business leaders displayed somewhat higher awareness of bootcamps than the general public, with almost two in 10 (19%) saying they knew a lot about them and only 13% saying they had never heard of them.



Additional findings indicate a connection between the age of study participants and their awareness of bootcamps. In our general public survey, those who were familiar with bootcamps (i.e., those who had heard of bootcamps and knew something or a great deal about them) tended to be younger than those who were unfamiliar with them (i.e., those who had never heard of bootcamps or had heard of them but didn't know anything about them).

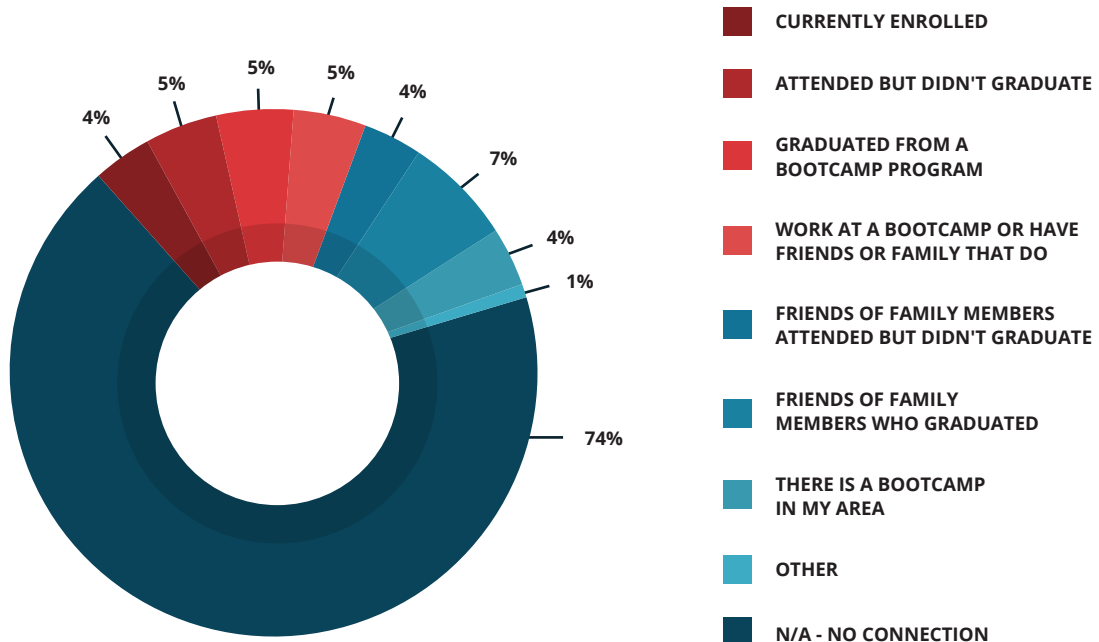
### Age and Familiarity - General Public



There may be widespread awareness of bootcamp training, but an overwhelming majority (74%) of the general public respondents said they did not have a personal connection to, or experience with, bootcamp programs.

### Personal Connection With Bootcamps

General Public (n=2,422)





## BESTCOLLEGES INSIGHT

### Conduct Targeted Outreach

While many people are aware of bootcamp training for technical skills and jobs, most don't have any experience with this kind of training or know anyone who does. There is significant potential here for bootcamps to reach a broader audience. Marketing to younger adults, who may already have some knowledge of these programs, could create a pathway from high school into in-demand and potentially lucrative employment. Older adults, who may not be as familiar with bootcamps, may be another target audience — especially those considering a career change and/or those interested in acquiring skills that can lead to remote work options.

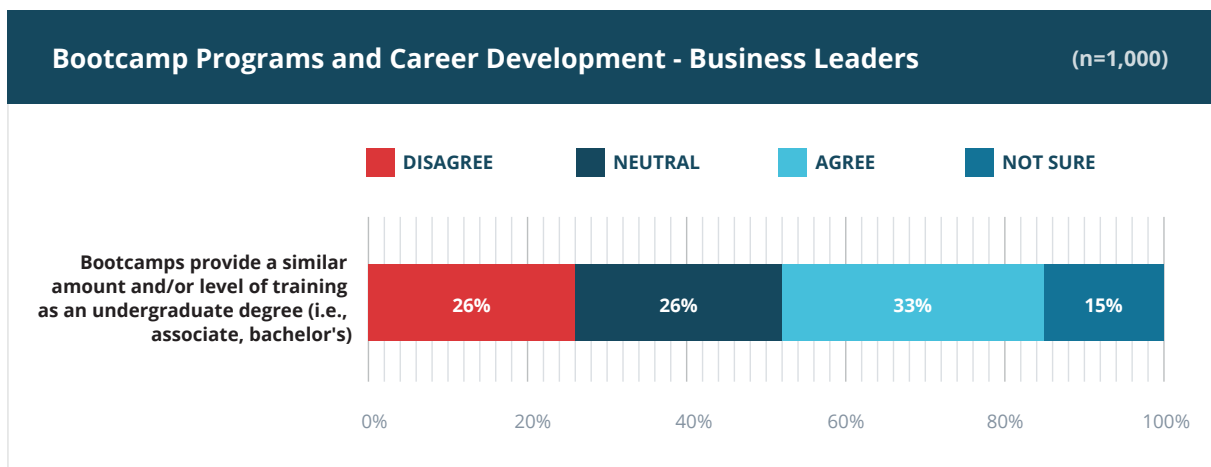
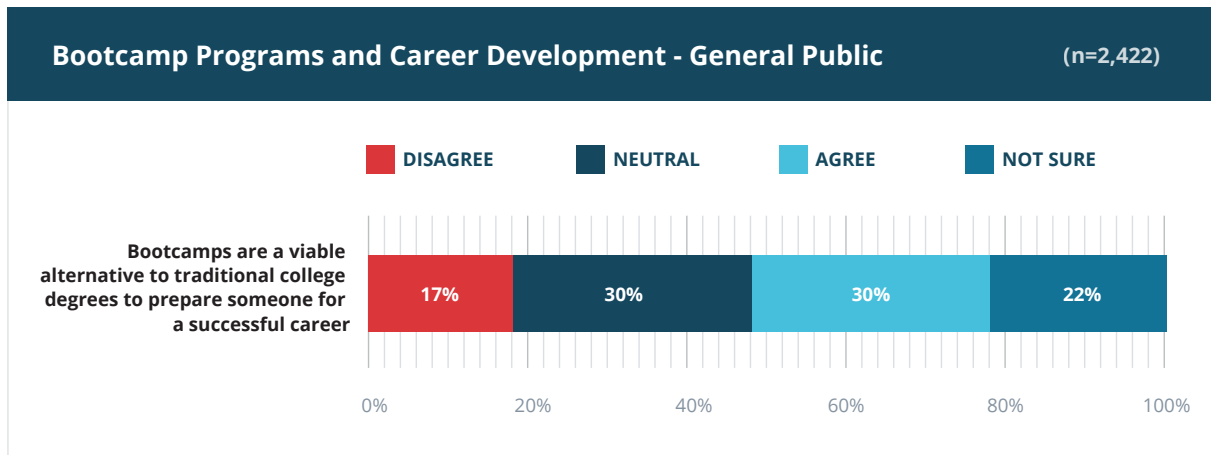




# Bootcamps and Employment

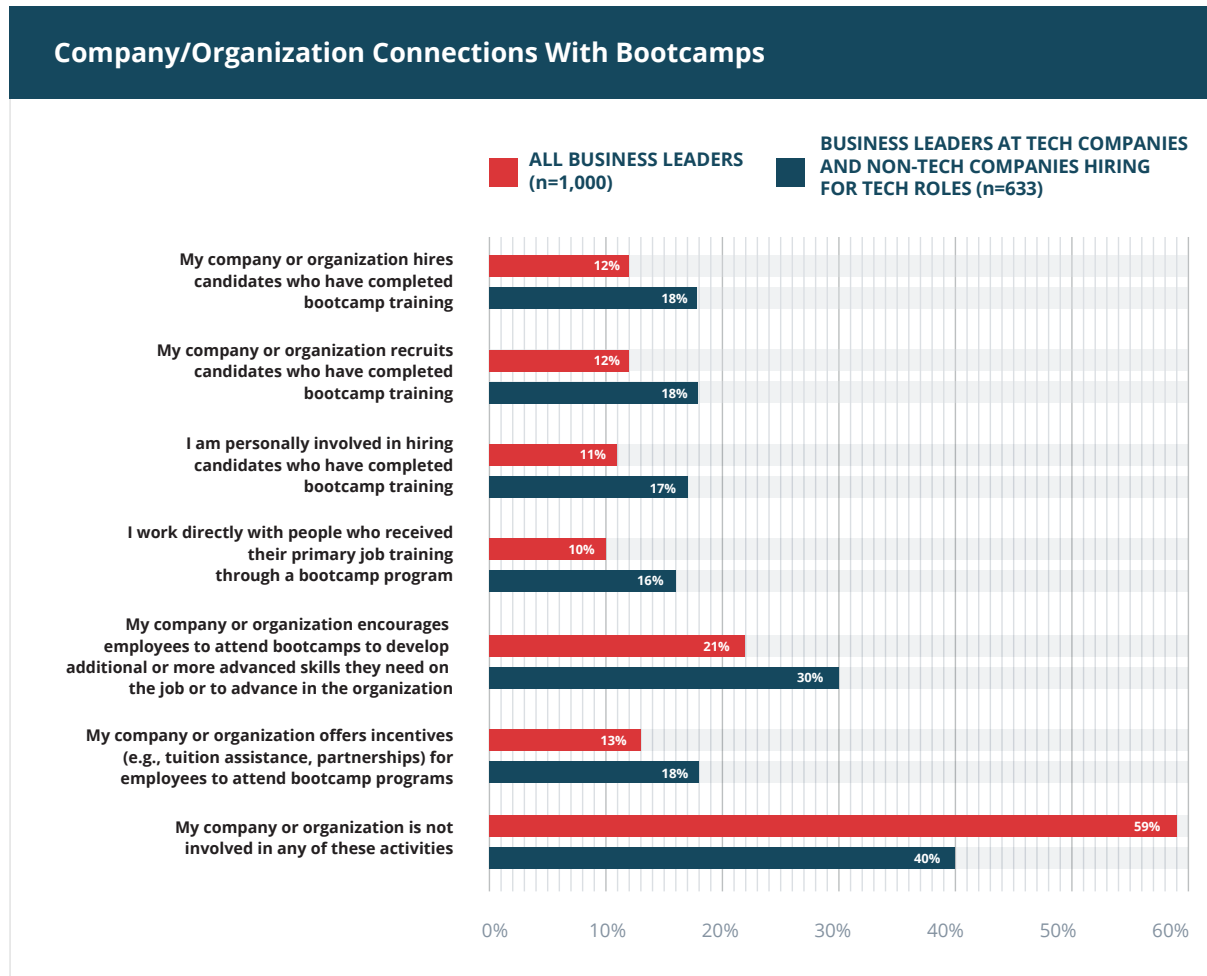
Unlike most colleges and universities, bootcamp programs are typically not accredited. However, they can provide robust learning opportunities that lead to employment opportunities (BestColleges, 2021). This study identified general perceptions of bootcamps for job skills training, as well as how people think they compare to traditional college programs as a way for students to reach their career goals.

Overall, 30% of Americans agreed that *bootcamps are a viable alternative to traditional college degrees to prepare someone for a career*, while 33% of business leaders said *bootcamps provide a similar amount and/or level of training as an undergraduate degree*.

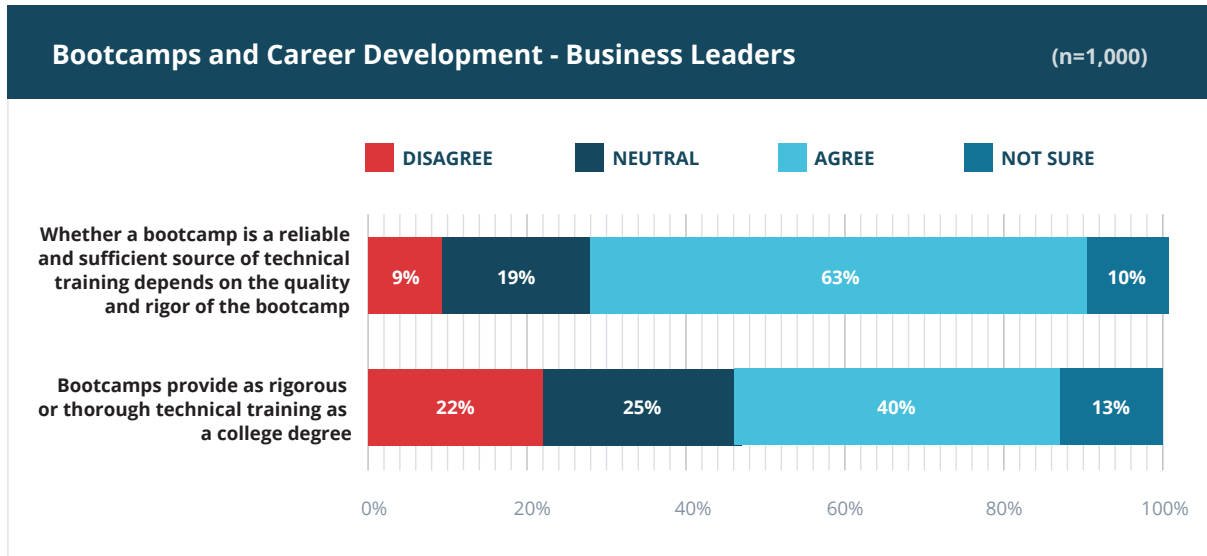


Despite the favorable perceptions of many respondents, most of the companies and organizations represented by business leader survey participants (59%) indicated that their companies were not involved in hiring or recruiting bootcamp graduates. However, roughly one in five (21%) business leaders said that their organization encourages employees to pursue bootcamp training to further develop the skills they need on the job or to advance.

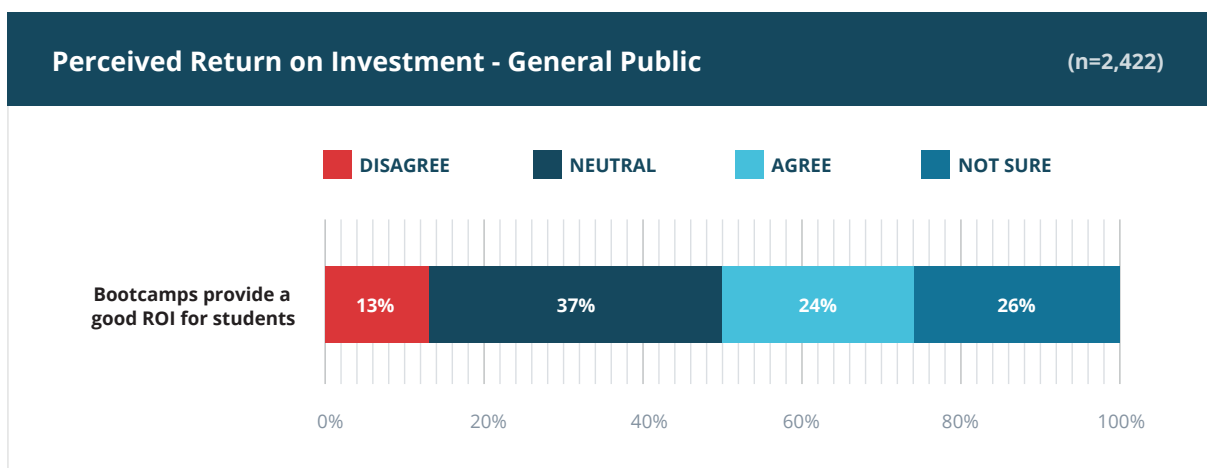
These numbers are higher when we look more specifically at survey participants from tech companies or companies that hire for tech roles. Almost one-third (30%) of this smaller group said that they encourage bootcamp training for employees.



A majority (63%) of all business leaders surveyed understood that the quality and rigor of bootcamp programs can vary, and that these factors are part of whether a bootcamp is a reliable source of training. And only 40% said that bootcamp programs are as rigorous or thorough as a college degree.



While many providers are known for the career services they provide to students (Lee, 2019) and the technical jobs these programs prepare students for are often high paying (White, 2020), a majority of Americans (63%) reported being *neutral* or *not sure* about the potential return on investment (ROI) of bootcamp training.





## BESTCOLLEGES INSIGHT

### Align Courses With Quality Standards and Industry Demand

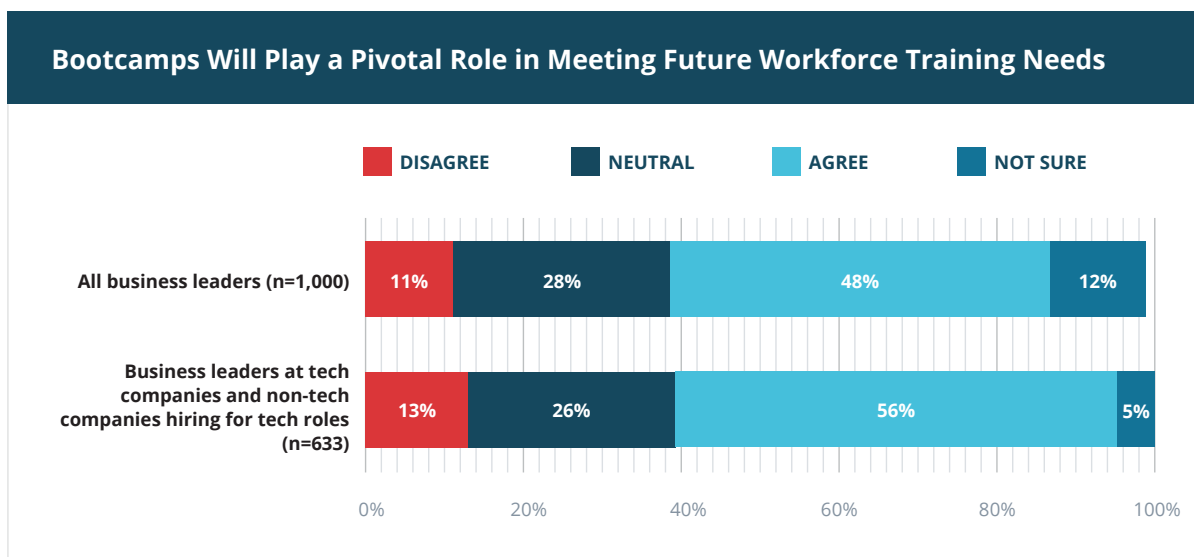
Prospective bootcamp students should ask the hard questions about quality standards and employment outcomes when comparing programs. Likewise, bootcamp providers may be able to increase the quality and reputation of their programs by closely aligning curricula and assessments with specific employers' needs. There may also be benefits for providers and potential students in looking beyond bootcamps as entry-level preparation to a source of supplemental training and ongoing professional development for those already working in roles that require technology skills.



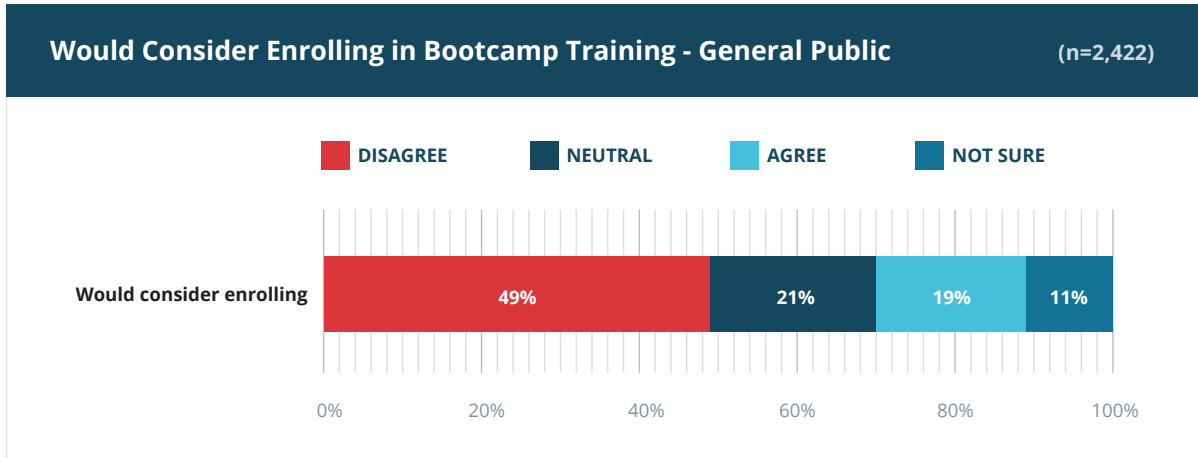
# The Future of Bootcamp Training

The Consumer Technology Association’s annual survey recently found that 80% of its members predicted a need for more employees with tech skills over the next five years (2020). And 72% said they planned to hire for these skills “regardless of education level” (Consumer Technology Association, 2020, p. 3).

Nearly half (48%) of all business leaders responding to our survey agreed that bootcamps will be an important part of meeting the training needs for the future workforce. That number is higher (56%) for those from tech companies and non-tech organizations that currently hire for tech roles.



As the demand for technical skills increases, many employers may look to bootcamp providers for recruiting or training needs in the coming years. However, almost half of Americans (49%) indicated that they would not consider enrolling in a bootcamp. Additionally, about one-third (32%) were *neutral* or *not sure* about becoming a bootcamp student at the time of our survey.





## BESTCOLLEGES INSIGHT

### Collaborate and Convey Value

As the demand for technical skills increases across industries, more employers are likely to look beyond only college graduates in their recruiting and hiring efforts. Alternative training opportunities, such as those found through bootcamp providers, are positioned to prepare people for technical jobs. However, this training path is not yet accepted by most Americans. Collaboration among employers and bootcamps may serve to fill the acceptance gap and encourage prospective learners to consider enrollment.

# Conclusion

Bootcamps are poised to fill a critical need in the workforce, teaching workers important technical skills that are required across companies and industries. While employers and the general public are aware of bootcamp training opportunities, bootcamps still aren't widely accepted or considered by potential students. Bridging the gap between awareness and enrollment will be required to meet future demand.

## Conduct Targeted Outreach

While many people are aware of bootcamp training for technical skills and jobs, most don't have any experience with this kind of training or know anyone who does. There is significant potential here for bootcamps to reach a broader audience. Marketing to younger adults, who may already have some knowledge of these programs, could create a pathway from high school into in-demand and potentially lucrative employment. Older adults, who may not be as familiar with bootcamps, may be another target audience — especially those considering a career change and/or those interested in acquiring skills that can lead to remote work options.

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# Contributors



## About Melissa Venable

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*Melissa A. Venable, Ph.D., is an education advisor for BestColleges. In this role, she leads an annual survey research initiative reporting trends in online education, student demographics, and college student career planning. Melissa is an adjunct faculty member and course designer at Saint Leo University and a certified career coach with a background in career development services. She earned her doctorate in instructional technology at the University of South Florida where her research interests focused on distance education and career services for online students.*

## About BestColleges

BestColleges empowers students to make smarter educational decisions and find schools that best fit their needs through proprietary research, user-friendly guides, and hundreds of unique college rankings. As a trusted education advisor, BestColleges also provides a wide array of college planning, financial aid, and career resources to help students realize life goals and overcome educational challenges as they prepare for careers after college.

## Bootcamps by BestColleges

BestColleges recognizes that a traditional four-year degree is not the best fit for every student. We launched Bootcamps by BestColleges to connect students and professionals with alternative education paths to advance their career. Through bootcamp profiles, prospective student guides, and career information, we help those who want to enter or advance in the tech industry find the information they need to achieve their goals.

# Data Notes

1. Percentages reported in this document have been rounded, resulting in some totals adding up to just under or over 100.
2. Several charts and descriptions present results for questions in which survey participants could select more than one response.
3. Data are self-reported.

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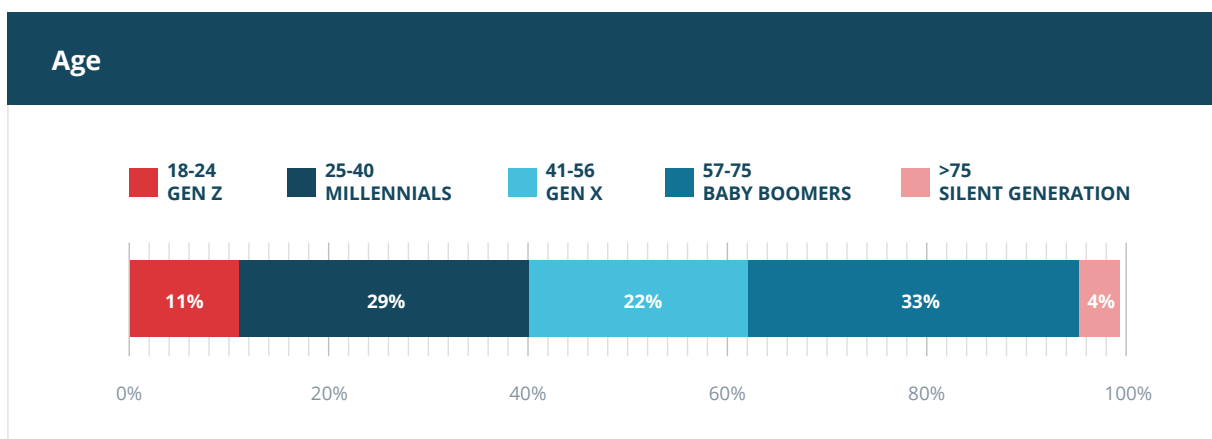
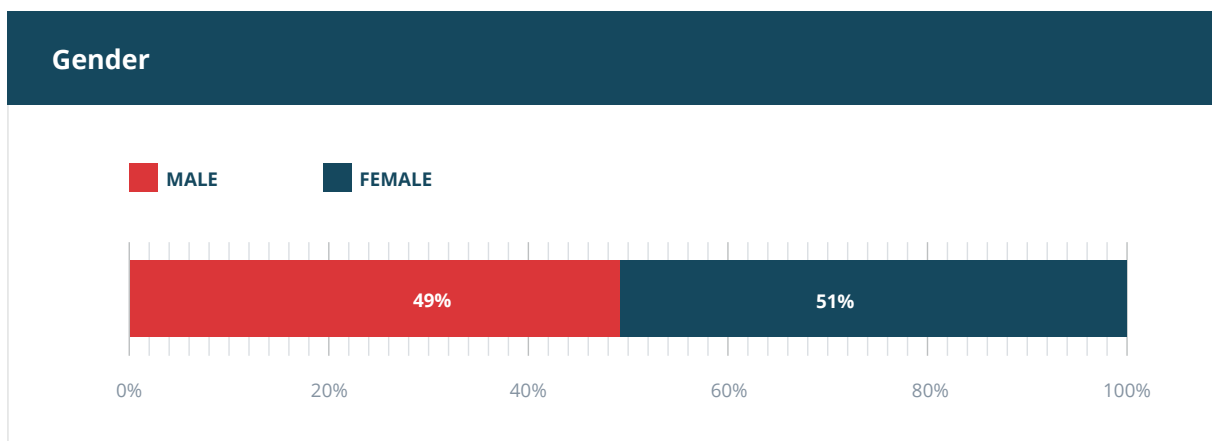
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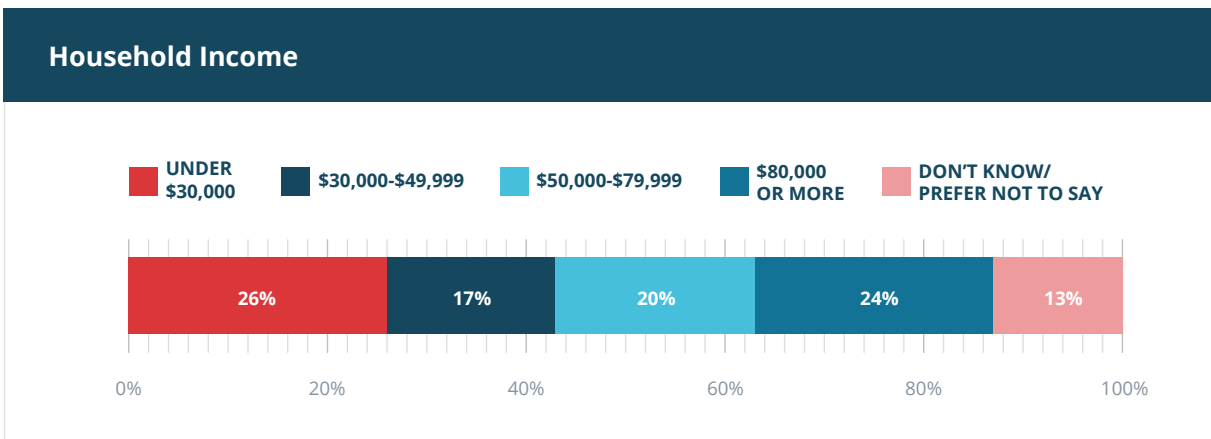
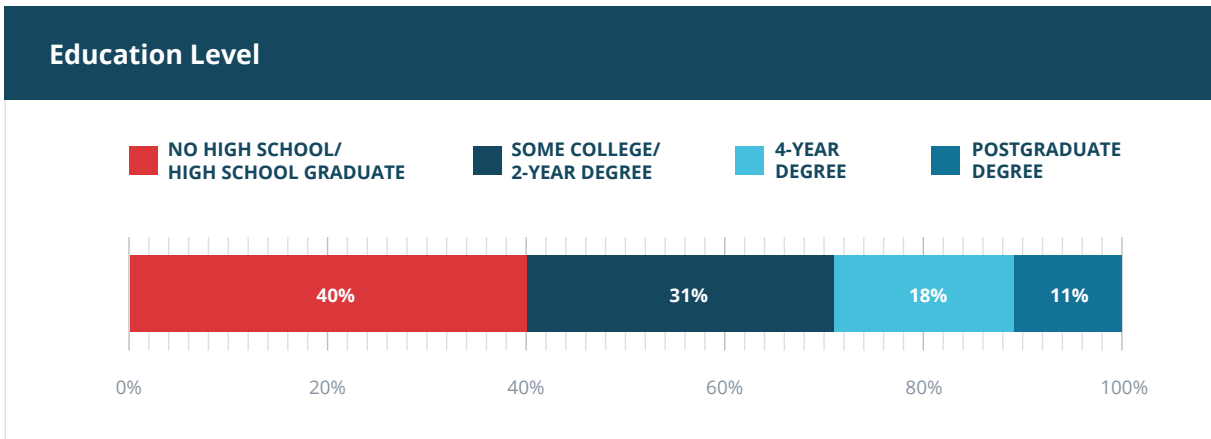
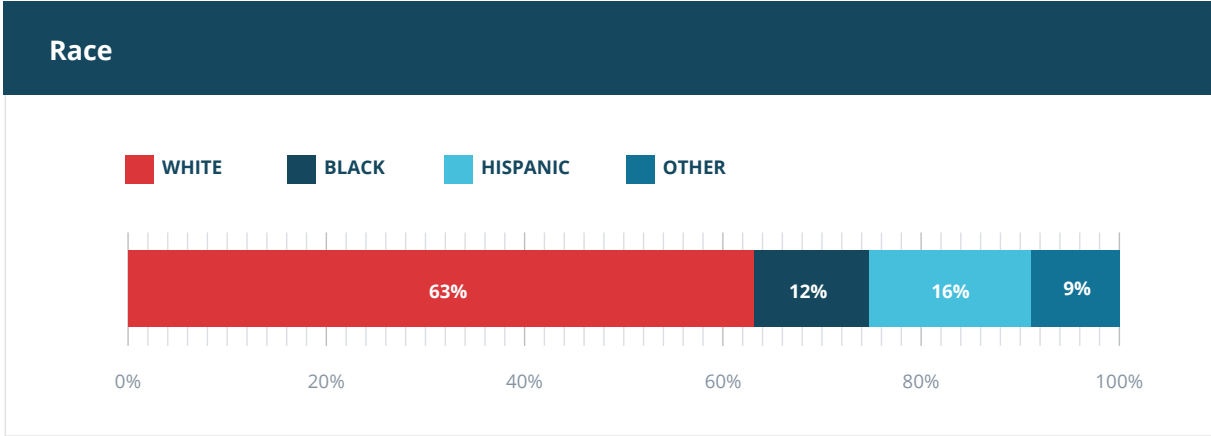
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# Appendix: Participant Demographics

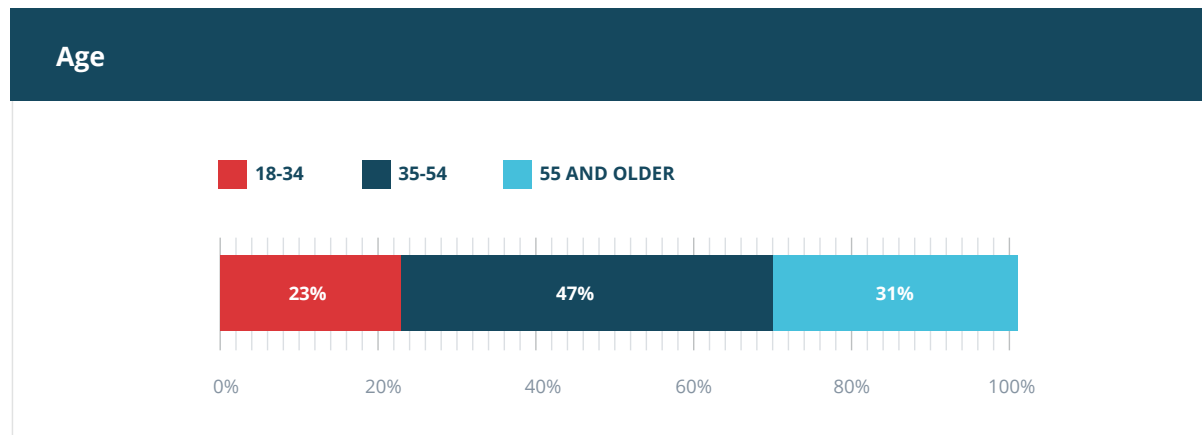
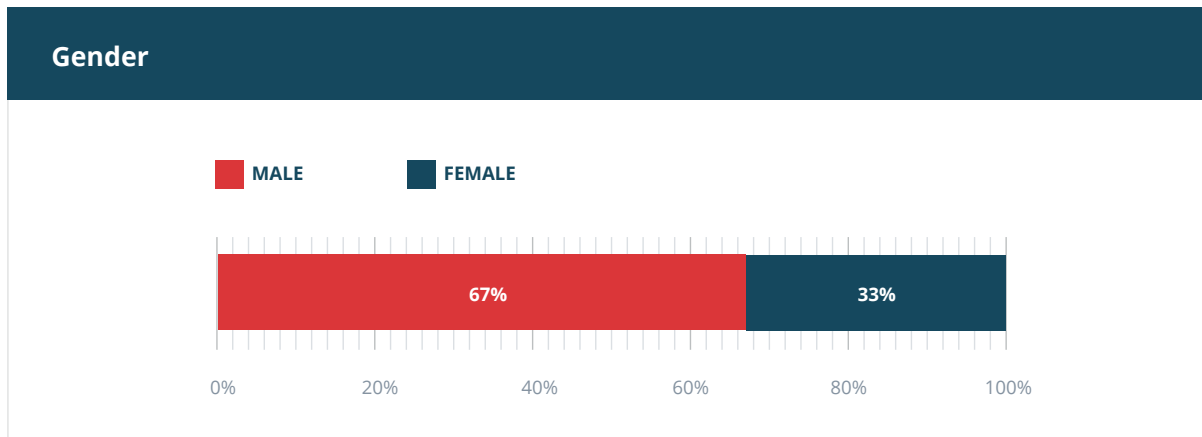
**General U.S. Population Survey Participants (n=2,422)**  
Data Collection - YouGov, June-July 2021



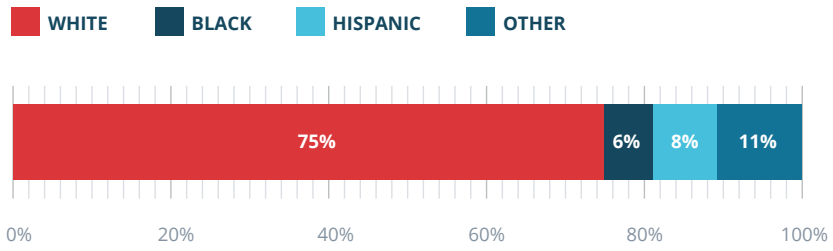


**Business Leader Survey Participants (n=1,000)**

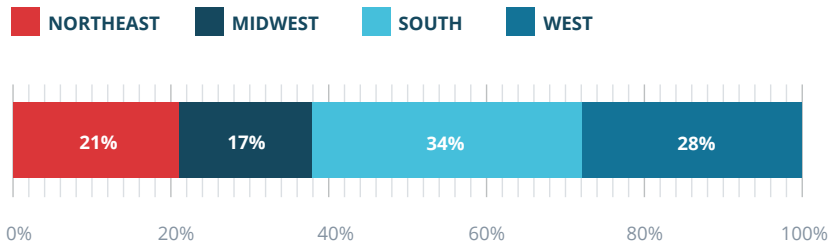
Data Collection - YouGov, July 2021



## Race






## Region



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