



A RESEARCH REPORT BY THE SOCIETY FOR HUMAN RESOURCE MANAGEMENT (SHRM)

# Preparing for an Aging Workforce

OIL, GAS AND MINING INDUSTRY REPORT



Funded by



ALFRED P. SLOAN  
FOUNDATION

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Founded in 1948, the Society for Human Resource Management (SHRM) is the world's largest HR membership organization devoted to human resource management. Representing more than 275,000 members in over 160 countries, the Society is the leading provider of resources to serve the needs of HR professionals and advance the professional practice of human resource management. SHRM has more than 575 affiliated chapters within the United States and subsidiary offices in China, India and United Arab Emirates. Visit us at [shrm.org](http://shrm.org). For more information about the SHRM/SHRM Foundation Older Workers initiative, visit [www.shrm.org/surveys](http://www.shrm.org/surveys) and [www.shrmfoundation.org](http://www.shrmfoundation.org).



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# About This Research Report

SHRM and the SHRM Foundation have launched a national initiative to highlight the value of older workers and to identify—through original research—best practices for employing an aging workforce. This three-year initiative is generously underwritten by a grant from the Alfred P. Sloan Foundation.

The overall purpose of this research is to:

- Investigate the current demographics of organizations and their views on how the demographic breakdown of their workforces is likely to change in the future in both their organizations and their industries.
- Determine what, if any, actions organizations are taking to prepare for an aging workforce, including recruiting and retention strategies to specifically target older workers.
- Identify the skills and experience HR professionals value in older workers.

## Definition

For the purpose of this survey, “older workers” were defined as employees 55 years of age or older.



# The Aging Workforce and the U.S. Oil, Gas and Mining Industry

The U.S. Bureau of Labor Statistics (BLS) forecasts that by 2022 more than one-quarter of the U.S. labor force will be in the 55-plus age category, compared with roughly one-fifth in 2012. The percentage of retired Baby Boomers has nearly doubled since 2010, when the U.S. Census Bureau found that 10% of Baby Boomers were retired. Each industry will be affected by this shift in different ways, driven by current demographics, education trends and industry growth.

The BLS projects that some goods-producing sectors, which include oil, gas and mining, will see steady growth in employment during the 2012-to-2022 time frame. The mining sector—classified by the BLS as including establishments that extract crude oil, gases and ores, for example—will see an average job growth of 1.4 percent each year between 2012 and 2022, the fifth-highest rate of growth among industry sectors. That total does not include millions of other jobs connected to the processing, delivery and sale of the products produced by the mining industry. By 2022, employment in the mining sector alone is expected to account for nearly 1 million jobs.<sup>1</sup>

According to the BLS, workers in mining, quarrying, and oil and gas extraction had a median tenure of 4.0 years in January 2014, slightly less than the all-industries median of 4.6 years but significantly higher than the lowest median tenure of 2.3 years for workers in leisure and hospitality.<sup>2</sup> This difference can be attributed mainly to the older age distribution of workers in oil, gas and mining, with a medium age of 41.5 (the average age of workers in leisure and hospitality, for example, tends to skew younger demographically).<sup>3</sup>

These economic and demographic factors are likely to influence the way the oil, gas and mining industry responds to the challenges and opportunities of an aging workforce.

As part of the SHRM and the SHRM Foundation three-year initiative supported by a grant from the Alfred P. Sloan Foundation, SHRM Research conducted a survey of HR professionals to learn more about how different industries are preparing for an aging workforce. The survey examined the current demographics of industries and organizations as well as respondents' views on how the demographic breakdown of their workforce is likely to change in the future. The survey was organized into three parts:

- The State of Older Workers in U.S. Organizations.
- Recruitment and Retention of Older Workers.
- Basic and Applied Skills of Older Workers.

This report is an overview of the survey findings on the oil, gas and mining industry compared with all other industries.



# The State of Older Workers in the U.S. Oil, Gas and Mining Industry

## Key Findings

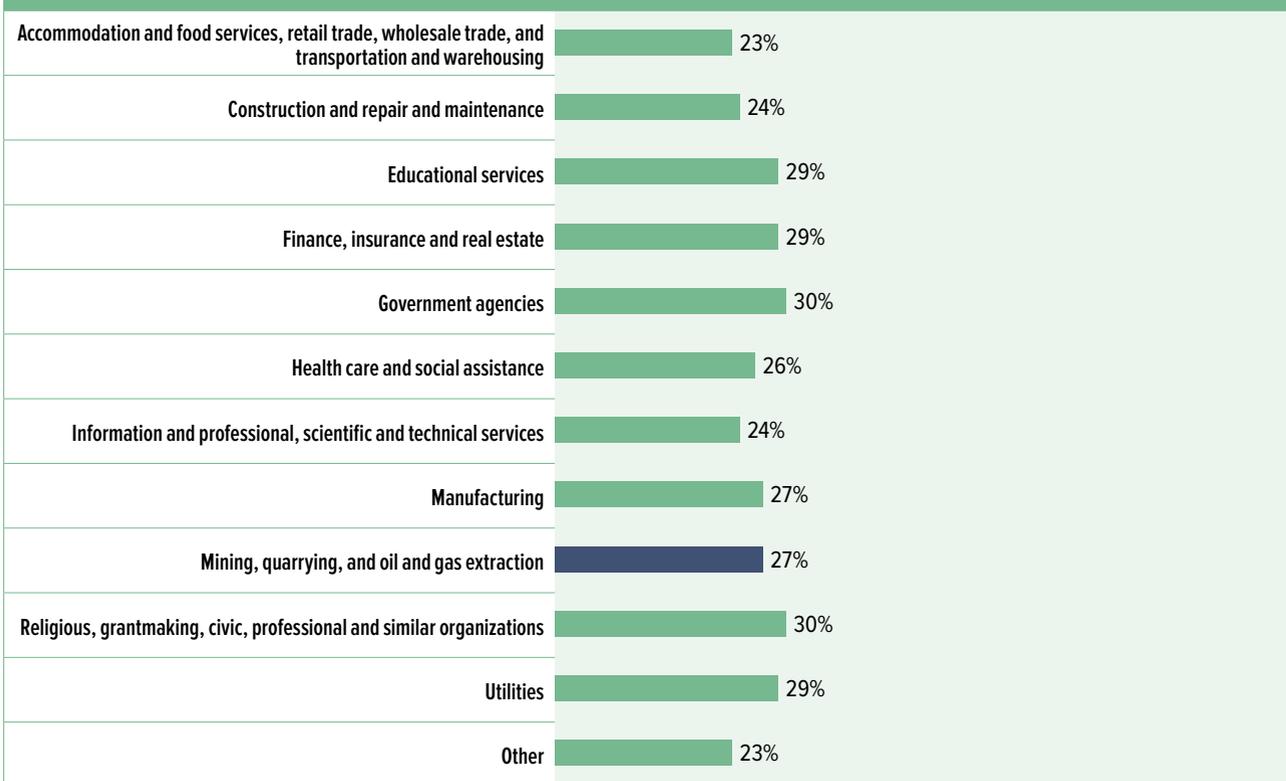
- What percentage of workers in the oil, gas and mining industry are age 55 and older?** Responding oil, gas and mining firms reported approximately one-quarter (27%) in their workforce is age 55 or older, similar to many other industries (see Figure 1).
- Are oil, gas and mining organizations preparing for an aging workforce?** About one-fifth (17%) of HR professionals in oil, gas and mining firms said they were not aware that the proportion of older workers was increasing and that older workers were projected to make up approximately 26% of the labor force by the year 2022, compared with 21% in 2012 and 14% in 2002. Similar to other industries, about one-third (31%) of HR professionals in the oil, gas and mining industry indicated their organizations had begun to examine internal policies and practices to address this change; almost one-fifth (17%) reported that their organizations had examined their workforces and determined that no changes in their policies and practices were necessary.
- Do HR professionals in the oil, gas and mining sector see the aging workforce as a potential problem for their industry?** Very few HR professionals in the oil, gas and mining sector believed the impact of the potential loss of talent due to retirement of workers was considered an immediate crisis for their industry (3% in the next one to two years and 5% in the next three to five years). However, looking further out, many more oil, gas and mining HR professionals foresaw the aging workforce as a problem for their industry (35% considered it a crisis and 22% a problem in the next 11 to 20 years). HR professionals in the oil, gas and mining industry were also significantly more likely to see the aging workforce as a problem in six to 10 years than HR professionals in other industries (43% compared with 28% in other industries); they were also significantly more likely to indicate it would become a crisis in the next 11 to 20 years (35% compared with 13%).
- Are oil, gas and mining firms taking any steps in response to an aging workforce?** One-half (50%) of HR professionals from oil, gas and mining firms said their organizations were analyzing the impact of workers age 55 and older leaving their organizations in the next one to two years. Three-quarters (75%) indicated their organizations were identifying their future workforce needs in the next one to two years, significantly more than other industries (57%). HR professionals in the oil, gas and mining industry were also more likely than HR professionals in other industries to indicate their organizations were identifying their future workforce needs (35% compared with 20% in other industries), and identifying their potential skills gaps in the next six to 10 years (35% compared with 20% in other industries).

The first part of the Preparing for an Aging Workforce Survey explored the proportion of older workers in various industries, how aware HR professionals in these industries are of the impending demographic shift toward an older workforce and what, if any, actions organizations are taking to prepare for this shift.

## Proportion of Workers Age 55 and Older in the Oil, Gas and Mining Industry

HR professionals in the oil, gas and mining sector reported that just over one-quarter (27%) of their workforce fell into the older worker category, similar to many other industries (see Figure 1).

**FIGURE 1 | Percentage of Older Workers, by Industry**



**Note:** Except for the “Other” group, the accommodation and food services, retail trade, wholesale trade, and transportation and warehousing industry employs significantly fewer older workers than the other industries.

**Source:** Preparing for an Aging Workforce: Oil, Gas and Mining Industry Report (SHRM, 2015)

**Awareness of the Changing Workforce Demographics in the Oil, Gas and Mining Industry**

About one-fifth (17%) of HR professionals in oil, gas and mining firms indicated they were not aware that the proportion of older workers was increasing, and that older workers were projected to make up approximately 26% of the labor force by the year 2022, a significant increase from 21% in 2012 and 14% in 2002. Similar to other industries, about one-third (31%) indicated their organizations were preparing for the projected increase in the proportion of older workers in the labor force by beginning to examine internal policies and management practices to address this change; almost one-fifth (17%) reported that their organizations had examined their workforces and determined that no changes in their policies and practices were necessary (see Figure 2).

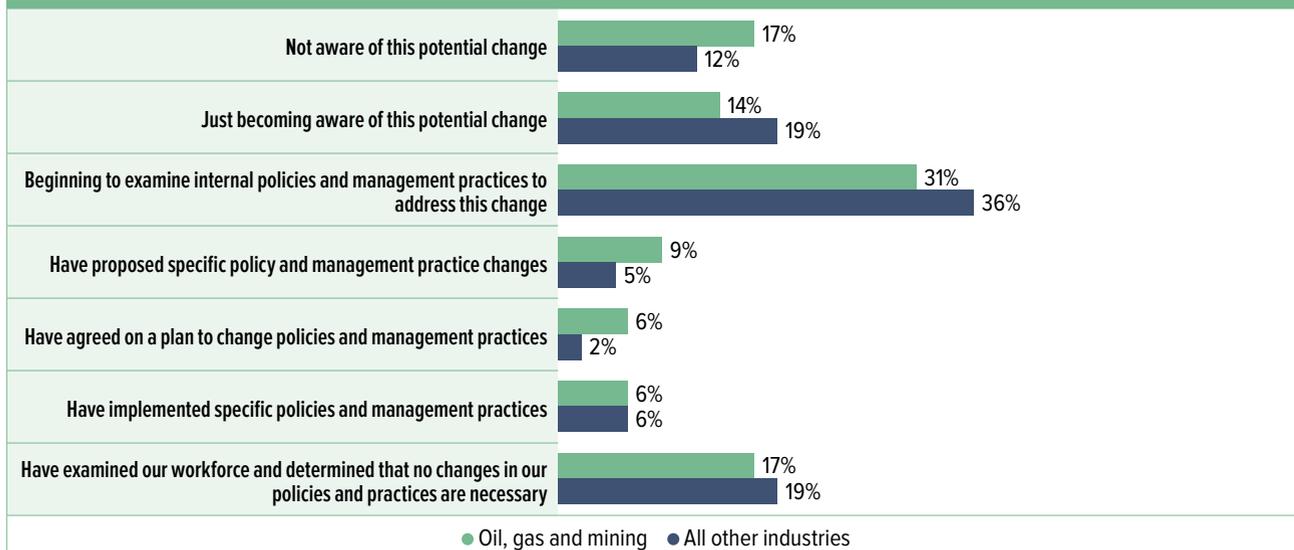
When considering the potential loss of talent resulting from older workers retiring or leaving their organizations, one-third (33%) of HR professionals in oil, gas and mining indicated it was not a problem for their industry during the next one to two years. More than two-fifths (43%) of oil, gas and mining HR professionals said they considered the potential loss of talent due to an aging workforce a problem for their industry in the next six to 10 years, representing a significant difference from other industries (28%) (see Figure 3). Projecting 11 to 20 years out, significantly more oil, gas and mining HR profession-

als considered the aging workforce to be a crisis for their industry compared with other industries (35% compared with 13% in other industries).

The debate on skills shortages and rising recruiting difficulty as the economy has improved has often referred to talent shortages in the goods-producing industries. The oil, gas and mining industry has traditionally been a source of well-paying jobs for employees with middle-range skill levels and without a college degree. This may be why HR professionals in the oil, gas and mining industry are taking steps to address these demographic changes at a higher rate than other industries.

Another factor could be that HR professionals in oil, gas and mining can already look at their own organizations’ workforces and see potential trouble brewing. When looking at the effect the aging workforce is expected to have on their specific organizations (as opposed to their industry overall), more HR professionals in the oil, gas and mining industry reported that it was a crisis for their organizations in the 11-to-20-year time frame compared with other industries (26% compared with 11% in other industries; see Figure 4).

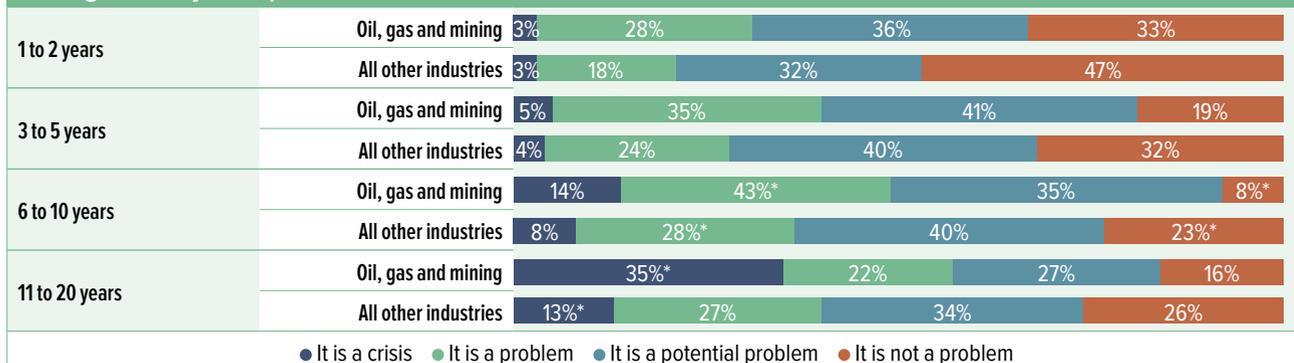
**FIGURE 2 | How Oil, Gas and Mining Organizations Are Preparing for an Aging Workforce Compared with Other Industries**



**Note:** Oil, gas and mining n = 35; all other industries n = 1,555. Percentages may not total 100% due to rounding.

**Source:** Preparing for an Aging Workforce: Oil, Gas and Mining Industry Report (SHRM, 2015)

**FIGURE 3 | Perceived Impact of the Potential Loss of Talent Due to an Aging Workforce on the Oil, Gas and Mining Industry Compared with Other Industries**



\*The difference between oil, gas and mining and all other industries is statistically significant (p<.05).

**Note:** Oil, gas and mining n = 36-37; all other industries n = 1,244-1,448. Respondents who indicated "Not applicable" were not included in the analysis. Percentages may not total 100% due to rounding.

**Source:** Preparing for an Aging Workforce: Oil, Gas and Mining Industry Report (SHRM, 2015)

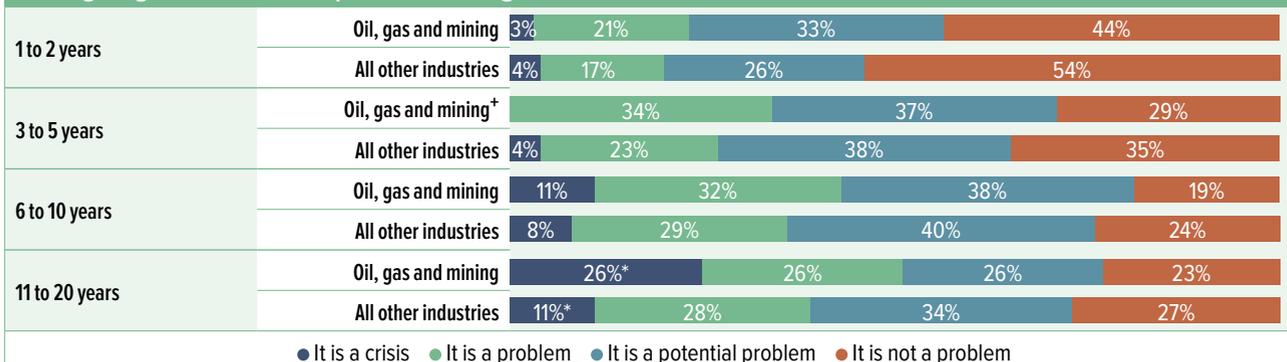
### Assessing the Impact of Changing Workforce Demographics

Significantly more oil, gas and mining HR professionals indicated their organizations had identified their future workforce needs in the one-to-two-year (75% versus 57%) and six-to-10-year (35% versus 20%) time frames compared with organizations in other industries (see Figure 6). HR professionals in the oil, gas and mining industry also appeared to be more aware of the potential skills gaps they could soon be facing: The majority said their organizations had identified their potential skills gaps

in the one-to-two-year time frame (65%), and more oil, gas and mining organizations had taken this step for the six-to-10-year time frame compared with organizations in other industries (35% versus 20%) (See Figure 7).

Overall, the findings suggest that although some organizations may not be fully aware of the various ways this demographic shift will influence them, other oil, gas and mining organizations are cognizant of these changes and are taking steps to prepare for this shift.

**FIGURE 4 | Perceived Impact of the Potential Loss of Talent Due to an Aging Workforce on Oil, Gas and Mining Organizations Compared with Organizations in Other Industries**



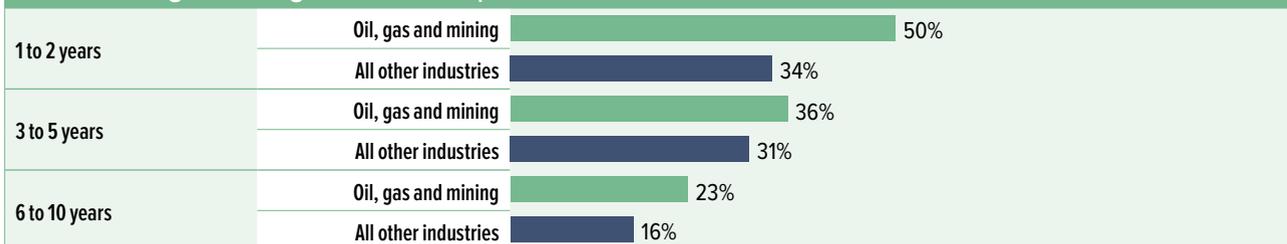
<sup>+</sup>0% responded "It is a crisis."

\*The difference between oil, gas and mining and all other industries is statistically significant (p<.05).

**Note:** Oil, gas and mining n = 35-39; all other industries n = 1,344-1,624. Respondents who indicated "Not applicable" were not included in the analysis. Percentages may not total 100% due to rounding.

**Source:** Preparing for an Aging Workforce: Oil, Gas and Mining Industry Report (SHRM, 2015)

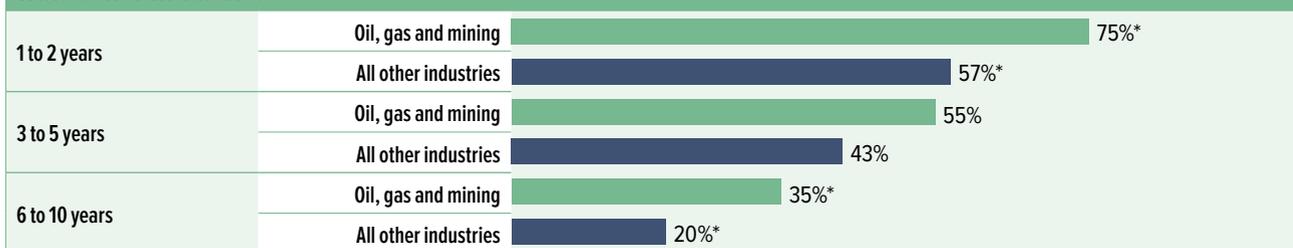
**FIGURE 5 | Oil, Gas and Mining Organizations That Have Analyzed the Impact of Workers Age 55 and Older Leaving Their Organization Compared with Other Industries**



**Note:** Oil, gas and mining n = 31-34; all other industries n = 1,412-1,496.

**Source:** Preparing for an Aging Workforce: Oil, Gas and Mining Industry Report (SHRM, 2015)

**FIGURE 6 | Oil, Gas and Mining Organizations That Have Identified Future Workforce Needs Compared with Other Industries**

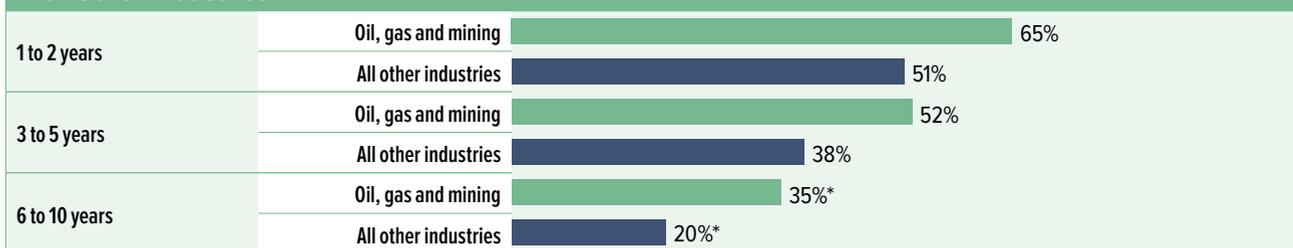


\*The difference between oil, gas and mining and all other industries is statistically significant (p<.05).

**Note:** Oil, gas and mining n = 31-36; all other industries n = 1,396-1,526.

**Source:** Preparing for an Aging Workforce: Oil, Gas and Mining Industry Report (SHRM, 2015)

**FIGURE 7 | Oil, Gas and Mining Organizations That Have Identified Their Potential Skills Gaps Compared with Other Industries**



\*The difference between oil, gas and mining and all other industries is statistically significant (p<.05).

**Note:** Oil, gas and mining n = 31-34; all other industries n = 1,388-1,507.

**Source:** Preparing for an Aging Workforce: Oil, Gas and Mining Industry Report (SHRM, 2015)



# Recruiting and Retaining Older Workers in the U.S. Oil, Gas and Mining Industry

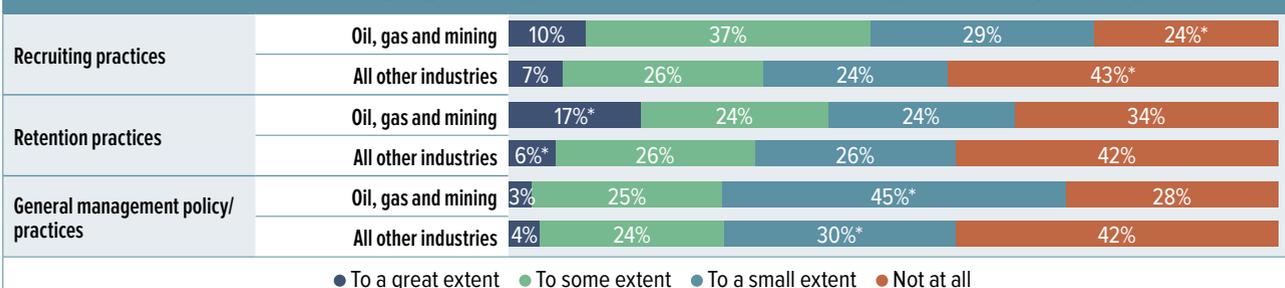
## Key Findings

- Has the aging workforce prompted changes in recruiting and retention practices in the oil, gas and mining industry?** HR professionals in the oil, gas and mining industry were more likely to report that the aging workforce had prompted changes in their recruiting practices to at least a small extent compared with HR professionals in other industries (76% compared with 57% in other industries) (see Figure 8). They were also significantly more likely to report that it had prompted changes to their retention practices to a great extent and general management policy/practices to a small extent.
- Do oil, gas and mining organizations track impending retirements?** Although not statistically significant, there was a pattern of oil, gas and mining organizations being more likely to indicate their organizations tracked impending retirements of their workers in the short, medium and long terms compared with other industries (see Figure 9).
- Do oil, gas and mining organizations have formal strategies for attracting and retaining older workers?** Similar to other industries, very few oil, gas and mining organizations said their firms had formal strategies for either retaining (10%) or recruiting (5%) older workers (see Figure 10).
- What methods are used to recruit older workers in the oil, gas and mining industry?** Employee referrals were the most common method of recruiting older workers in the oil, gas and mining industry and other industries (32%). However, HR professionals in the oil, gas and mining industry were significantly less likely to indicate they used networking as a method of recruiting older workers than HR professionals in other industries (6% compared with 24% in other industries). More than one-half (52%) of respondents from oil, gas and mining firms said they did not actively recruit older workers (see Figure 11).

With many organizations appearing to be relatively unconcerned about the impact of demographic changes on their workforces and the potential impending loss of a large number of their most experienced workers, it is not surprising that many responding HR professionals said their organizations were not making changes to their recruiting practices in preparation for these shifts. However, the responding HR professionals in oil, gas and mining were significantly less likely than HR professionals in other industries to report that their organizations were not making any changes at all to recruiting practices (see Figure 8).

Although not significantly different, oil, gas and mining organizations seemed more likely to track impending retirements in the short- (one to two years), medium- (three to five years) and long-term (six to 10 years and 11 to 15 years) time frames compared with other industries (see Figure 9). Similar to other industries, very few oil, gas and mining organizations reported they had a formal strategy for retaining (10%) or recruiting (5%) older workers, as shown in Figure 10.

**FIGURE 8 | Extent the Increasing Age of Organization’s Workforce Has Begun to Prompt Changes in . . .**

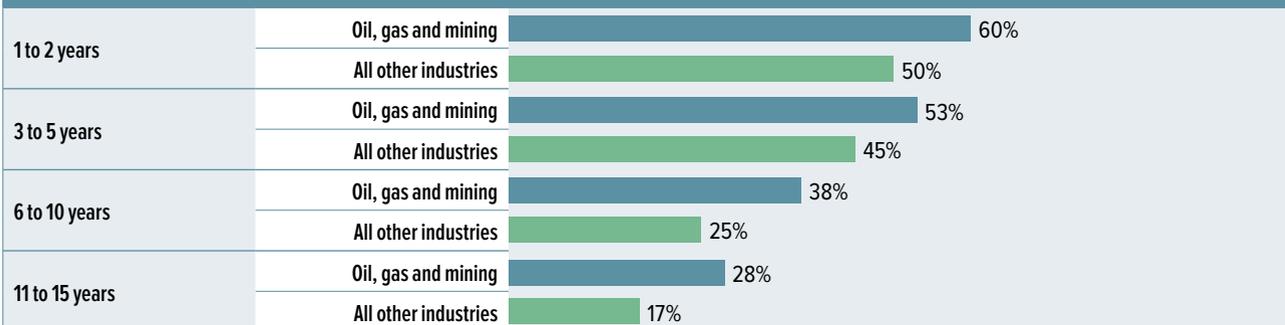


\*The difference between oil, gas and mining and all other industries is statistically significant (p<.05).

**Note:** Oil, gas and mining n = 40-41; all other industries n = 1,660-1,670. Respondents who indicated “Not applicable” were not included in the analysis. Percentages may not total 100% due to rounding.

**Source:** Preparing for an Aging Workforce: Oil, Gas and Mining Industry Report (SHRM, 2015)

**FIGURE 9 | Organizations That Track the Percentage of Workers in Organizations Eligible to Retire in the Next . . .**



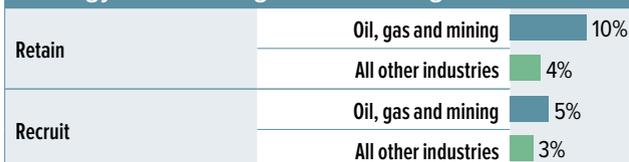
**Note:** Oil, gas and mining n = 39-40; all other industries n = 1,633-1,685.

**Source:** Preparing for an Aging Workforce: Oil, Gas and Mining Industry Report (SHRM, 2015)

### Recruiting Older Workers in the Oil, Gas and Mining Industry

HR professionals in oil, gas and mining whose organizations recruit older workers said that employee referrals were the most common method of recruiting these workers (32% used this method), the same percentage as in other industries. This was followed by use of current older workers as recruiters (23%) and use of executive search firms (16%). However, this industry was significantly less likely to use networking as a method of recruiting older workers than other industries (6% compared with 24% in other industries) (see Figure 11).

**FIGURE 10 | Organizations That Have a Formal Strategy for Retaining and Recruiting Older Workers**



**Note:** Oil, gas and mining n = 40; all other industries n = 1,666-1,667.

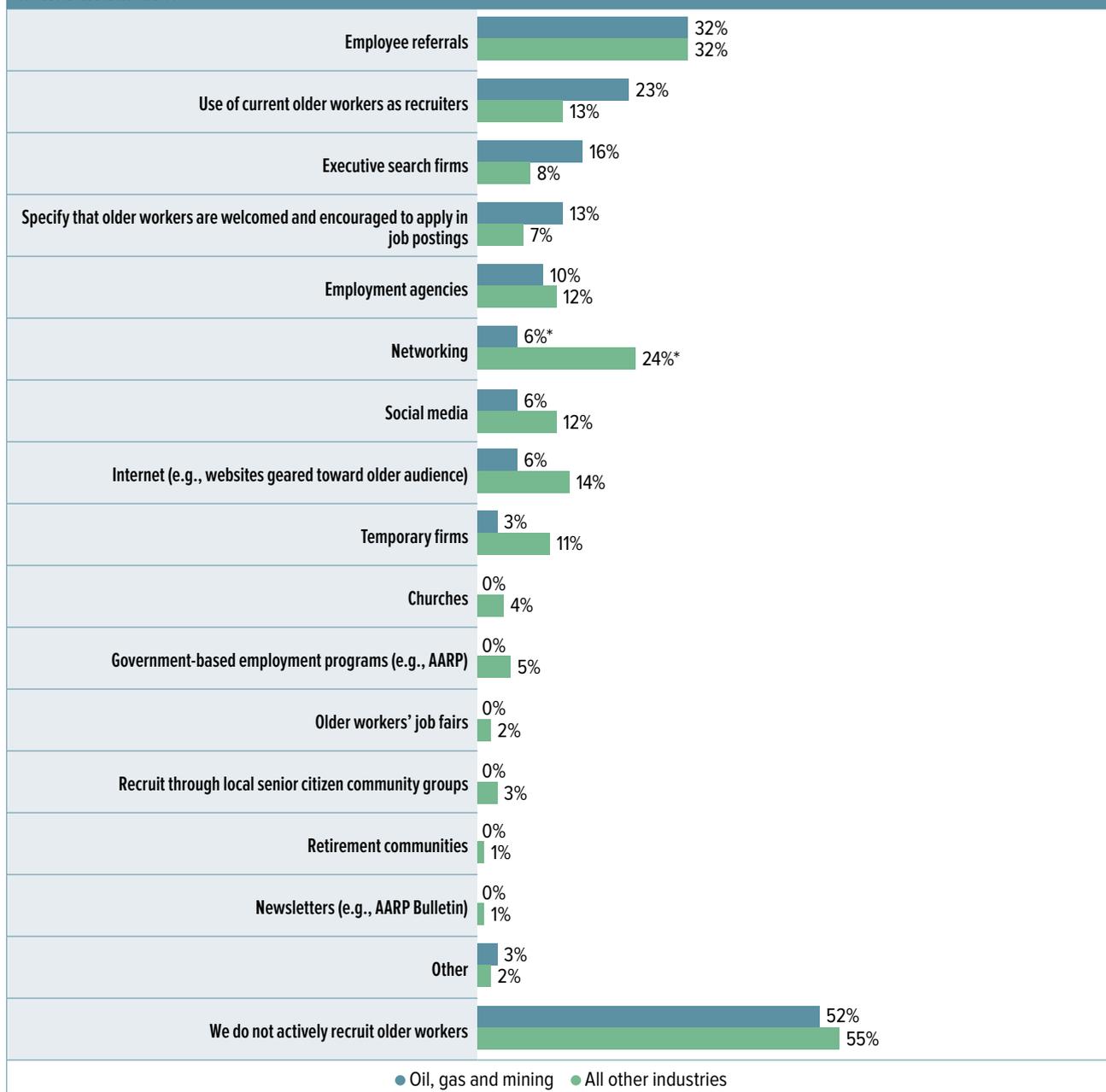
**Source:** Preparing for an Aging Workforce: Oil, Gas and Mining Industry Report (SHRM, 2015)

### Retaining Older Workers in the Oil, Gas and Mining Industry

Significantly more HR professionals in oil, gas and mining found it difficult or extremely difficult to retain exempt older workers and to retain nonexempt older workers compared with other industries (20% compared with 9% in other industries and 24% compared with 9% in other industries, respectively) (see Figure 14).

Because oil, gas and mining firms appear to be slightly more aware of the issue of the aging workforce and are taking at least some steps to address these changes, this industry may need to take further action to promote the kind of flexibility that will help retain older workers. However, there are some retention barriers, such as flexibility in work location, that are likely to remain in place for the foreseeable future.

**FIGURE 11 | Methods Used by Oil, Gas and Mining Companies to Recruit Older Workers Compared with Other Industries**

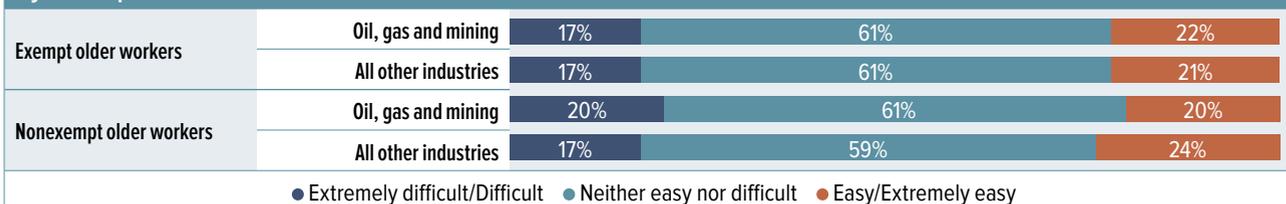


\*The difference between oil, gas and mining and all other industries is statistically significant (p<.05).

**Note:** Oil, gas and mining n = 31; all other industries n = 952. Only respondents who indicated that the increasing age of their organizations' workforce has prompted change in their recruiting practices were asked this question. Percentages do not total 100% due to multiple response options.

**Source:** Preparing for an Aging Workforce: Oil, Gas and Mining Industry Report (SHRM, 2015)

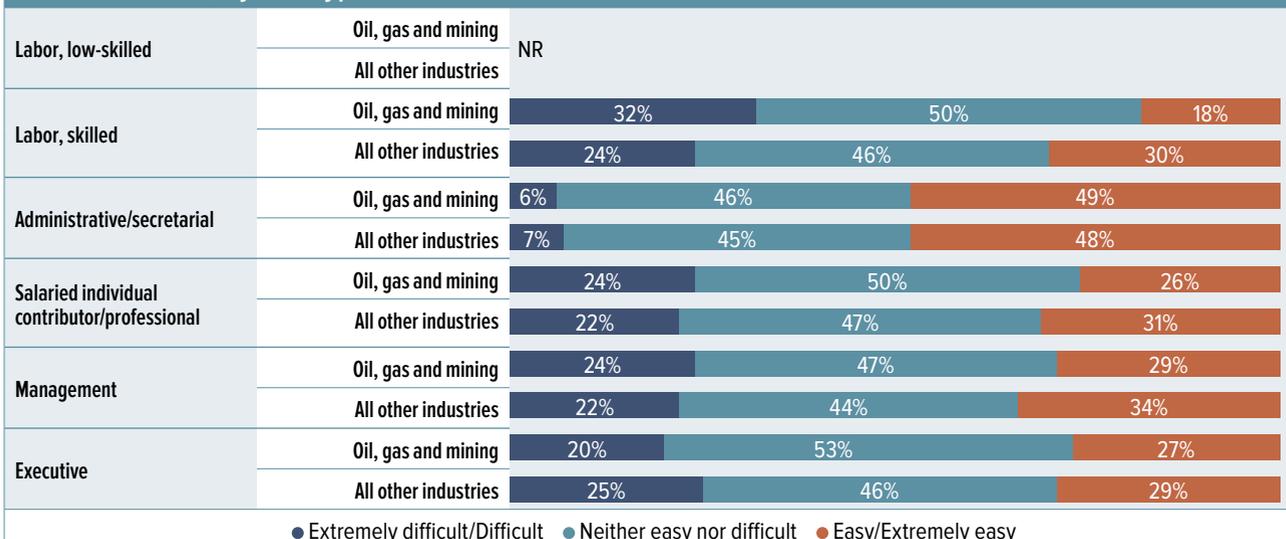
**FIGURE 12 | Ease or Difficulty in Recruiting Qualified Older Workers Compared with Other Industries, by Exemption Status**



**Note:** Oil, gas and mining n = 41; all other industries n = 1,668-1,681. Percentages may not total 100% due to rounding.

**Source:** Preparing for an Aging Workforce: Oil, Gas and Mining Industry Report (SHRM, 2015)

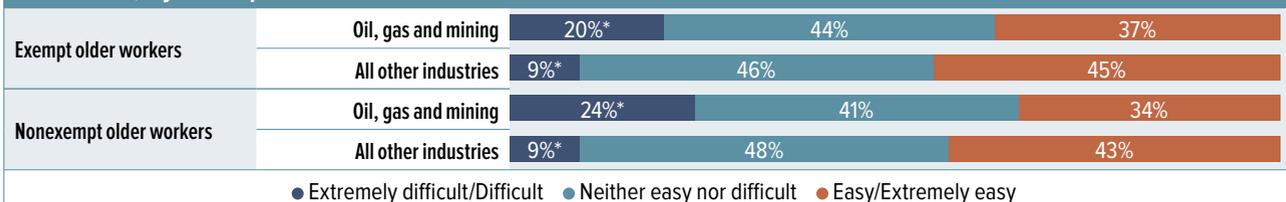
**FIGURE 13 | Ease or Difficulty in Recruiting Qualified Older Workers in Oil, Gas and Mining Compared with Other Industries, by Job Type**



**Note:** Oil, gas and mining n = 30-38; all other industries n = 1,209-1,495. Respondents who indicated “Not applicable” were not included in this analysis. Percentages may not total 100% due to rounding. NR = Not reportable due to low sample size (n <30).

**Source:** Preparing for an Aging Workforce: Oil, Gas and Mining Industry Report (SHRM, 2015)

**FIGURE 14 | Ease or Difficulty in Retaining Older Workers in Oil, Gas and Mining Compared with Other Industries, by Exemption Status**



\*The difference between oil, gas and mining and all other industries is statistically significant (p<.05).

**Note:** Oil, gas and mining n = 41; all other industries n = 1,668-1,691. Percentages may not total 100% due to rounding.

**Source:** Preparing for an Aging Workforce: Oil, Gas and Mining Industry Report (SHRM, 2015)



## CASE STUDY: Energy Education Center

They call it the big “crew change” in the oil and gas industry. Hundreds of thousands of workers in this sector are quickly approaching their retirement eligibility, and there is a veritable chasm of average age and skill levels between those industry veterans and the younger cohort waiting to take their place.

This pending demographic shift comes at a time when the industry has already been wracked by decreased demand and depressed oil prices, which have resulted in scores of layoffs at employers around the United States. And the crew change will only exacerbate the loss of seasoned talent—a 2015 estimate from Austin, Tex.-based consultant Drillinginfo says that 50% of the industry’s workforce will be eligible to retire within the next 10 years.

With this in mind, two of oil and gas industry groups are trying to develop the next generation of workers and perhaps share with them some of the vast knowledge that has been gained by older workers. The Houston-based Energy Education Center, a cooperative effort managed by the Independent Petroleum Association of America (IPAA) and the Petroleum Equipment and Services Association (PESA), has a mission to expose as many high school students as possible to the benefits of a career in the oil and gas industry.

It started in 2006 with a program at one Houston high school, where the course work is integrated with the school’s standard curriculum. In 2015, the Energy Education Center had five “academies” operating at schools in Houston and Fort Worth with 1,200 students participating. Program officials expect enrollment to jump to 1,400 students in 2016.

“In a nutshell, it’s a deep workforce development initiative,” said Anne Ford, executive director for the Energy Education Center. “Oil and gas is heavy with older workers. With the academies, it’s not that we’re trying to push students into the industry. They may very well decide that this is not for them. But we’re just trying to show them the opportunities that are available.”

Among the program’s participants are an all-girls high school—where the Energy Education Center has established the nation’s first all-girls engineering/geoscience program at the high school level, Ford said—and another high school in Houston that is devoted entirely to energy studies. Some of the center’s efforts include a series of lectures from young and tenured professionals in the oil and gas sector, who talk with students about technical aspects of the industry and career opportunities. There are also competitions among the participating schools in which students learn to run their own oil and gas companies via an interactive computer simulation program.

The Energy Education Center also provides various orientations, summer camps and field trips, but the “capstone component” is an externship program, Ford said. Top students from the center’s academies are trained in interview preparation, resume writing, workforce behavior and professional conduct. The externship also includes a job shadowing program in the summer at a local employer.

“We find that when they have that experience, we see tremendous personal growth,” Ford said. “Whether they’re interested in electrical engineering, chemical engineering, geology, or something else, they’re able to narrow down what they really want to do.”

IPAA and PESA officials also incorporate higher education into the center's operations. They established an alumni network in which high school graduates periodically gather with employers and representatives of the program's five participating universities to learn about internship and employment opportunities.

"Our first group of students finished college this past May," Ford said. "There was only one high school in our program when these students got involved, so it's hard to track the success rate at the moment. That's why we put together the alumni network. Companies want to stay in contact with these students, they've invested in them. It's tremendously gratifying to see the development of these young people."

With the wave of retirements coming in the industry, Ford said efforts must be increased to support programs like the Energy Education Center, along with related mentoring initiatives for younger workers in the private sector.

"We're blending high school with college and industry," Ford said. "This is not easy, it takes a lot of resources and commitments. But we feel there aren't enough of these types of programs today."



# Skills and Older Workers

## Key Findings

- Do oil, gas and mining organizations capitalize on and incorporate the experience of older workers?** More than one-half (55%) of oil, gas and mining respondents indicated that their organizations attempted to capitalize on and incorporate the experience of older workers to some extent, significantly higher than 38% in all other industries. Similar to other industries, few (10%) reported that their organizations did not capitalize on and incorporate the experience of older workers at all.
- What basic and applied skills do oil, gas and mining organizations value in their older workers?** HR professionals in oil, gas and mining organizations were most likely to report they valued older workers' more extensive work experience (85%), stronger work ethic (80%) and ability to serve as mentors for younger workers (75%) (see Figure 16). Oil, gas and mining industry respondents were significantly more likely to indicate they valued older workers' tacit knowledge than respondents
- in other industries (75% compared with 51% in other industries). HR professionals in the oil, gas and mining industry were also significantly more likely to report they valued the technical skills (33% compared with 12% in other industries) and creativity/innovation (8% compared with 1% in other industries) of older workers than their peers in other industries (see Figures 17 and 18). Conversely, they were significantly less likely to value older workers' English writing skills (25% compared with 45% in other industries).
- How are oil, gas and mining organizations preparing for potential skills gaps as a result of the loss of older workers?** HR professionals in oil, gas and mining firms were significantly more likely than their counterparts in other industries to say their organizations had developed succession plans to prepare for potential skills gaps as a result of the loss of older workers (60% compared with 32% in other industries) (see Figure 19).

The final section of the survey looked at how organizations capitalize on the skills and experience of older workers, the basic and applied skills they value in this worker demographic, and what efforts, if any, they are making to transfer the skills and knowledge of older workers to the rest of their workforce.

### Capitalizing on the Value of Older Workers in the Oil, Gas and Mining Industry

As shown in Figure 15, the majority (73%) of oil, gas and mining respondents indicated that their organizations attempted to capitalize on and incorporate the experience of older workers to at least some extent, with a significantly higher percentage indicating they had done so to some extent compared with other industries (55% compared with 38% in other industries). Similar to other industries, only 10% said their organizations did not at

all attempt to capitalize on and incorporate the skills and experience of older workers.

### Perceived Advantages of Older Workers in the Oil, Gas and Mining Industry

HR professionals in oil, gas and mining organizations were most likely to indicate they valued older workers' work experience (85%), work ethic (80%) and their ability to serve as mentors for younger workers (75%). HR professionals in oil, gas and mining organizations were significantly more likely than HR professionals in other industries to say that one of the main advantages of older workers is their tacit knowledge, or knowledge that is not easily recorded or disseminated (75% versus 51%) (see Figure 16).

In terms of the perceived strongest basic skills of older workers, technical skills (33%) and writing in English (25%) were frequently cited by HR professionals in the oil, gas and mining industry, with HR professionals in this industry being more likely than their peers in other industries to indicate technical skills were a valued basic skill of older workers (33% compared with 12% in other industries), and less likely to indicate older workers' English writing skills were a valued basic skill (25% compared with 45% in other industries) (see Figure 17).

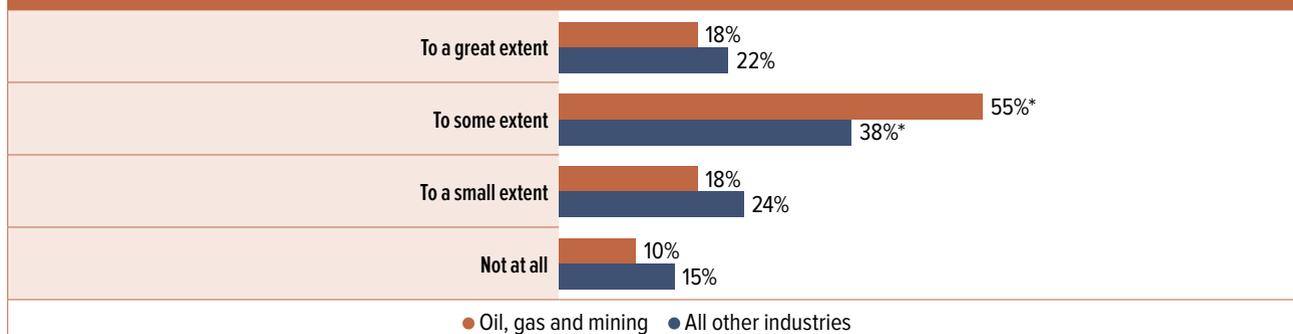
Similar to their peers in other industries, more than one-half (53%) of HR professionals in oil, gas and mining firms reported they valued the applied skills of professionalism/work ethic. In general, HR professionals from the oil, gas and mining industry were similar to their peers in other industries in terms of the applied skills they valued in older workers, except for creativity/innovation, which was more frequently cited as a valued applied skill by oil, gas and mining HR professionals (8% compared with 1% in other industries) (see Figure 18).

In terms of preparing for the impact of the aging workforce by addressing potential skills gaps as the result of the loss of older workers, HR professionals in oil, gas and mining firms were significantly more likely to indicate their organizations had developed succession plans than

HR professionals in other industries (60% compared with 32% in other industries) (see Figure 19). Three-fifths (60%) of HR professionals in the oil, gas and mining industry said their organizations were using training or cross-training programs to transfer knowledge from older workers to younger workers, and they were significantly more likely to use apprenticeship programs compared with other industries (18% compared with 8% in other industries; see Figure 20).

As the oil, gas and mining industry prepares for an aging workforce, it is important that workers are receptive to working with, learning from and being mentored by older workers. In the oil, gas and mining industry, more than one-half of respondents indicated employees in their organizations were receptive to working with older workers (63%), learning from older workers (58%) and being mentored by older workers (53%) to a great extent. None (0%) of the respondents in the oil, gas and mining industry indicated that employees in their organizations were not at all receptive to working with, learning from and being mentored by older workers, as shown in Figure 21. This is a very positive sign that there is an overall awareness of the value of learning from older workers within the industry.

**FIGURE 15 | Extent to Which Organizations Attempt to Capitalize on and Incorporate the Experience of Older Workers**

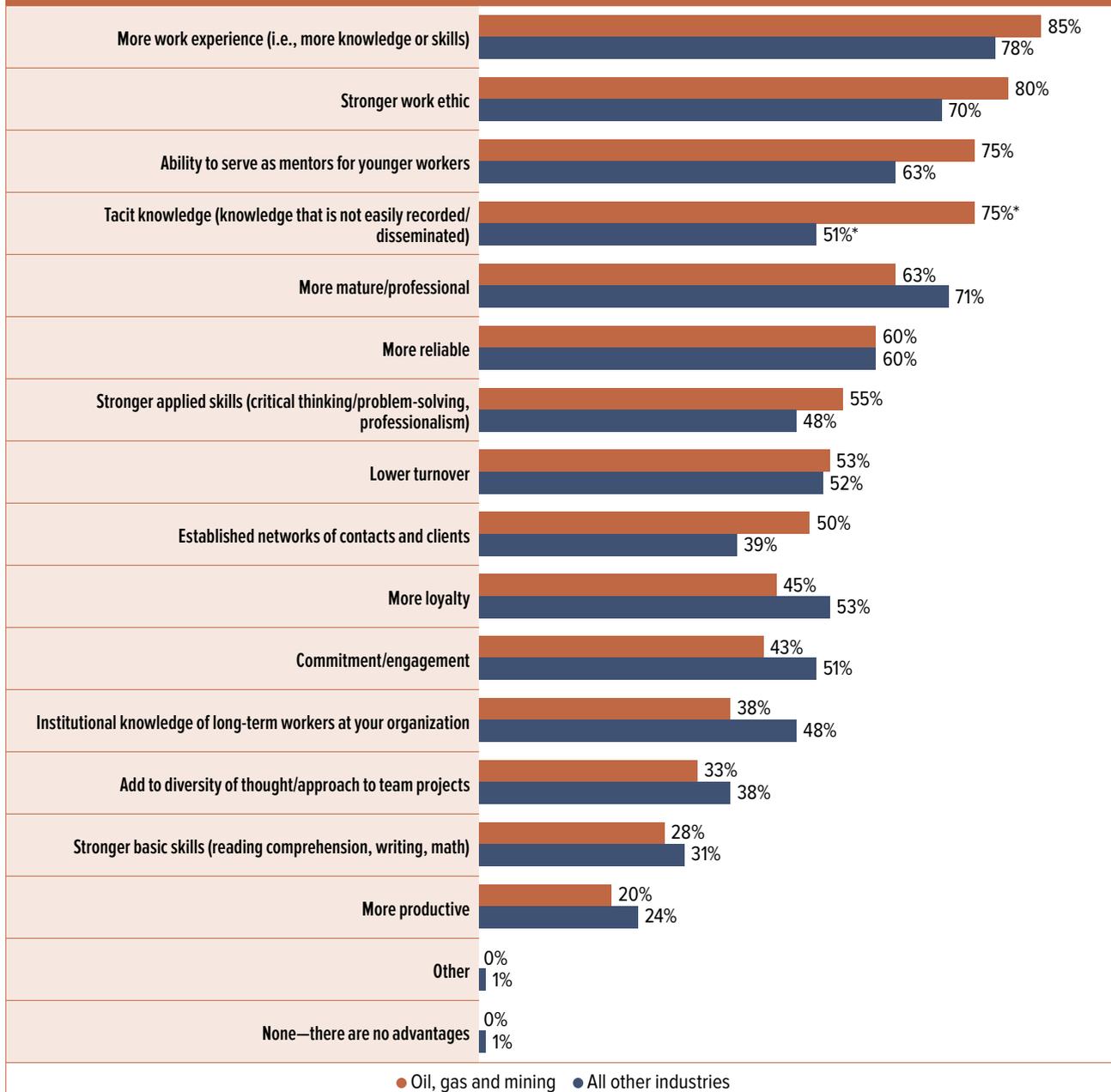


\*The difference between oil, gas and mining and all other industries is statistically significant (p<.05).

**Note:** Oil, gas and mining n = 40; all other industries n = 1,653. Percentages may not total 100% due to rounding.

**Source:** Preparing for an Aging Workforce: Oil, Gas and Mining Industry Report (SHRM, 2015)

**FIGURE 16 | Main Advantages of Older Workers Compared with Other Workers<sup>^</sup>**



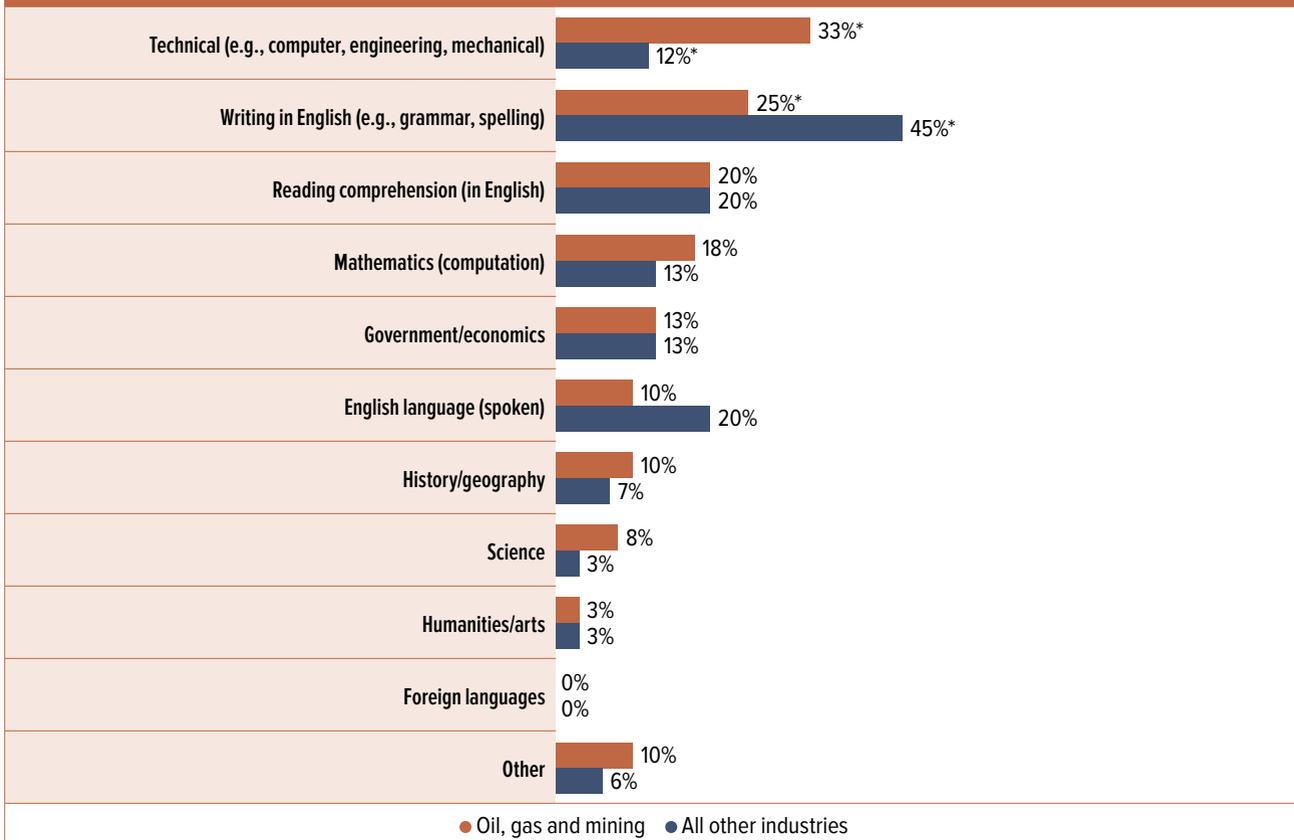
<sup>^</sup>Survey question was worded as follows: “In your professional opinion, what are the main advantages workers age 55 and older bring to your organization compared with other workers? (Check all that apply)”

\*The difference between oil, gas and mining and all other industries is statistically significant (p<.05).

**Note:** Oil, gas and mining n = 40; all other industries = 1,668. Percentages do not total 100% due to multiple response options.

**Source:** Preparing for an Aging Workforce: Oil, Gas and Mining Industry Report (SHRM, 2015)

**FIGURE 17 | Strongest Basic Skills Held by Workers Age 55 and Older Compared with Other Workers<sup>^</sup>**



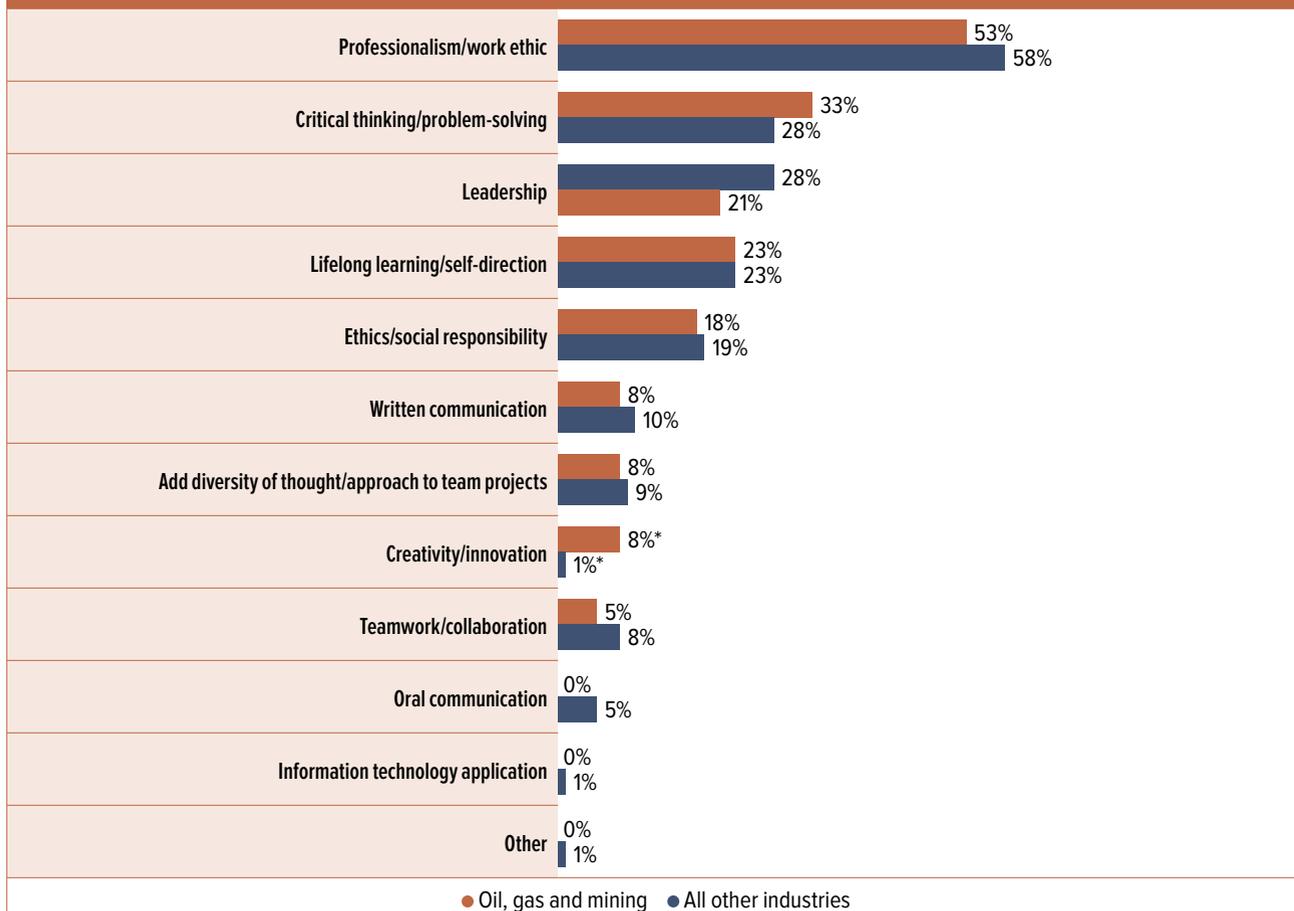
<sup>^</sup>Survey question was worded as follows: “In your professional opinion, what are the strongest basic skills held by workers age 55 and older compared with other workers? (Check the top two choices)”

\*The difference between oil, gas and mining and all other industries is statistically significant (p<.05).

**Note:** Oil, gas and mining n = 40; all other industries = 1,668. Percentages do not total 100% due to multiple response options.

**Source:** Preparing for an Aging Workforce: Oil, Gas and Mining Industry Report (SHRM, 2015)

**FIGURE 18 | Strongest Applied Skills Held by Workers Age 55 and Older Compared with Other Workers<sup>^</sup>**



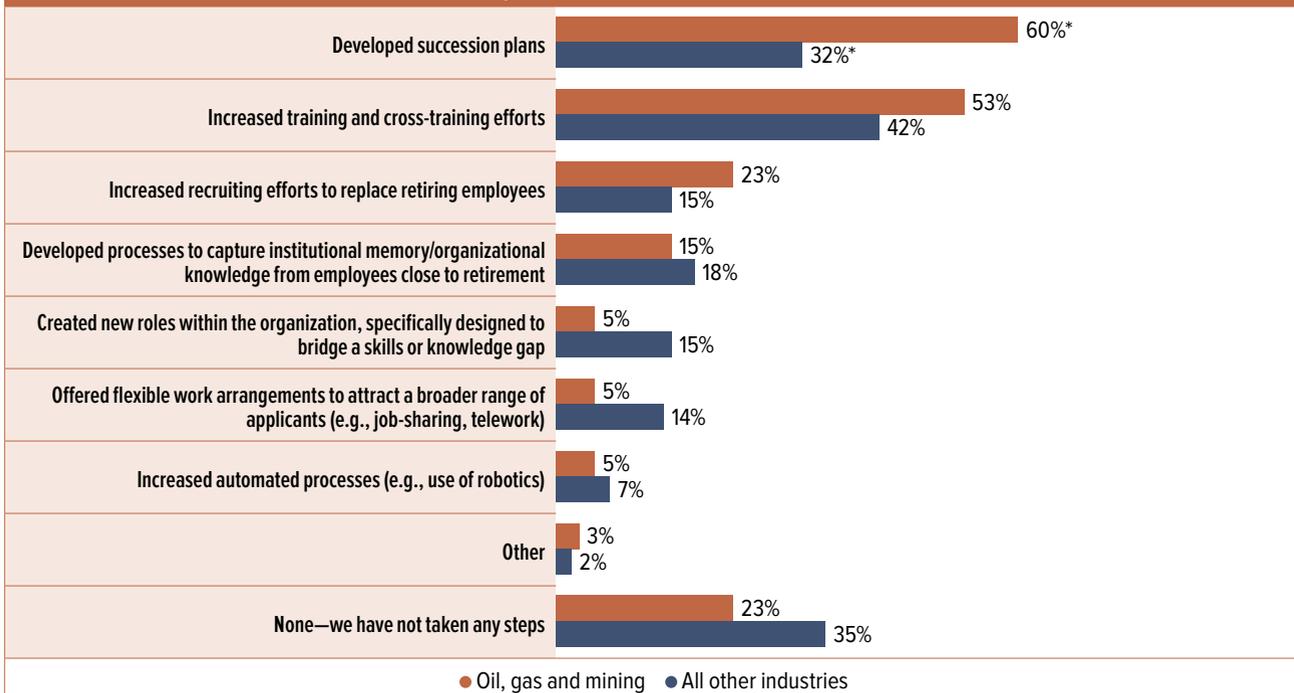
<sup>^</sup>Survey question was worded as follows: “In your professional opinion, what are the strongest applied skills held by workers age 55 and older compared with other workers? (Check the top two choices)”

\*The difference between oil, gas and mining and all other industries is statistically significant (p<.05).

**Note:** Oil, gas and mining n = 40; all other industries = 1,668. Percentages do not total 100% due to multiple response options.

**Source:** Preparing for an Aging Workforce: Oil, Gas and Mining Industry Report (SHRM, 2015)

**FIGURE 19 | Steps Oil, Gas and Mining Organizations Have Taken to Prepare for Potential Skills Gaps as a Result of the Loss of Older Workers Compared with Other Industries**

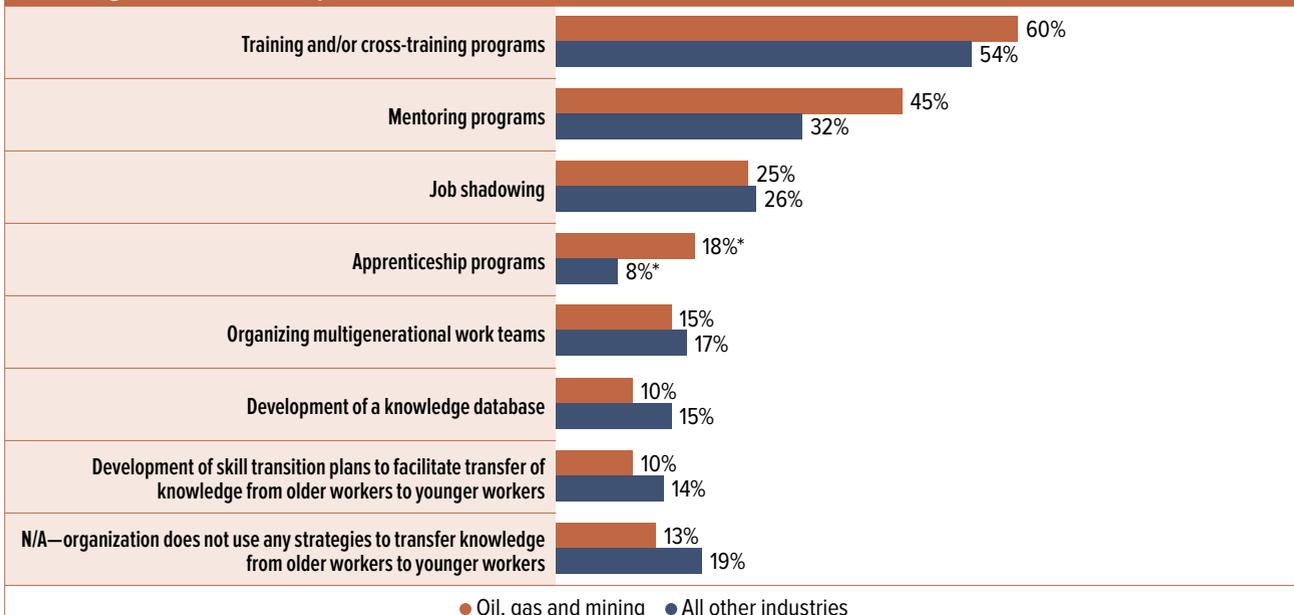


\*The difference between oil, gas and mining and all other industries is statistically significant ( $p < .05$ ).

**Note:** Oil, gas and mining  $n = 40$ ; all other industries  $n = 1,667$ . Percentages do not total 100% due to multiple response options.

**Source:** Preparing for an Aging Workforce: Oil, Gas and Mining Industry Report (SHRM, 2015)

**FIGURE 20 | Strategies Oil, Gas and Mining Organizations Use to Transfer Knowledge from Older Workers to Younger Workers Compared with Other Industries**

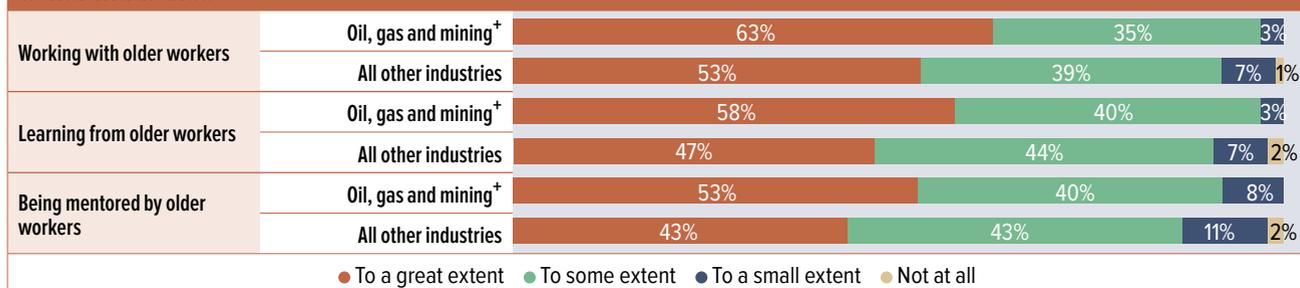


\*The difference between oil, gas and mining and all other industries is statistically significant ( $p < .05$ ).

**Note:** Oil, gas and mining  $n = 40$ ; all other industries  $n = 1,666$ . Percentages do not total 100% due to multiple response options.

**Source:** Preparing for an Aging Workforce: Oil, Gas and Mining Industry Report (SHRM, 2015)

**FIGURE 21 | Receptiveness of Oil, Gas and Mining Employees Related to Older Workers Compared with Other Industries**



<sup>+</sup>0% responded "Not at all."

**Note:** Oil, gas and mining n = 40; all other industries n = 1,640-1,651. Percentages may not total 100% due to rounding.

**Source:** Preparing for an Aging Workforce: Oil, Gas and Mining Industry Report (SHRM, 2015)



# Conclusion and Implications for Oil, Gas and Mining HR Professionals

HR professionals in the oil, gas and mining industry must be at the forefront of their organizations' efforts to meet the challenges and opportunities that will accompany the aging of their workforces and to fully use the valuable skills and experience of their older workers. Although some HR professionals in oil, gas and mining firms said that they were not aware of this ongoing demographic change, others indicated they were taking steps to address this trend through training, mentoring and apprenticeship programs, which can be effective tools for the retention of institutional knowledge and the development of the next generation of the workforce. Some may also want to implement programs such as phased retirement and flexible working practices that encourage their most productive and valued older workers to delay retirement and stay in the workforce longer, to support the aforementioned workforce development programs.

HR professionals in oil, gas and mining can help their organizations build a culture that supports and engages workers of all ages. A strong organizational culture that clearly shows how workers of all ages are respected and valued will reap lasting benefits. And because they are in many ways at the forefront of preparing for an aging workforce, HR professionals in the oil, gas and mining industry can also use their experience to act as valuable resources to their HR peers in other industries who may be less aware of these impending changes and the strategies needed to address them.

# Methodology

The SHRM Preparing for an Aging Workforce Survey, conducted by the Society for Human Resource Management and supported by a grant from the Alfred P. Sloan Foundation, collected responses from 1,913 HR professionals. The purpose of this research was to a) investigate the current demographics of organizations and respondents' views on how the demographic breakdown of their workforces is likely to change in the future in both their organizations and their industries; b) determine what, if any, actions organizations are taking to prepare for an aging workforce, including recruiting and retention strategies to specifically target older workers; and c) identify the skills and experience HR professionals value in older workers. Statistically significant differences ( $p < .05$ ) between oil, gas and mining and all other industries, when applicable, are noted throughout the report.

An e-mail including a link to the online survey was sent to 18,000 randomly selected SHRM members from private-sector and nonprofit organizations and 2,000 randomly selected SHRM members from government agencies. The survey was fielded from May through July 2014. During the data collection period, several e-mail reminders were sent, and a small incentive was offered to increase the response rate. Of the 20,000 e-mail invitations, 19,308 were successfully delivered, and 1,913 HR professionals responded, yielding a 10% response rate and a +/- 2% margin of error.

# Endnotes

- <sup>1</sup> U.S. Bureau of Labor Statistics. (2013, December 19). Employment by major industry sector, 2002, 2012, and projected 2022. Retrieved from <http://www.bls.gov/news.release/ecopro.t03.htm>
- <sup>2</sup> U.S. Bureau of Labor Statistics. (2014, September 18). Employee tenure summary. Retrieved from <http://www.bls.gov/news.release/tenure.t05.htm>
- <sup>3</sup> U.S. Bureau of Labor Statistics. (2014, April 25). Employed persons by detailed industry and age, 2013 annual averages. *Current Population Survey (CPS)*. Retrieved from [http://www.bls.gov/cps/industry\\_age.htm](http://www.bls.gov/cps/industry_age.htm)

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