



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

Preparing for an Aging Workforce

MANUFACTURING 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. For more information about the SHRM/SHRM Foundation Older Workers initiative, visit www.shrm.org/surveys and www.shrmfoundation.org.



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Table of Contents

ABOUT THIS RESEARCH REPORT	1
THE AGING WORKFORCE AND THE U.S. MANUFACTURING INDUSTRY	3
THE STATE OF OLDER WORKERS IN THE U.S. MANUFACTURING INDUSTRY	5
Proportion of Workers Age 55 and Older in the Manufacturing Industry	5
Awareness of the Changing Workforce Demographics in the Manufacturing Industry	6
Assessing the Impact of Changing Workforce Demographics	7
RECRUITING AND RETAINING OLDER WORKERS IN THE MANUFACTURING INDUSTRY	11
Recruiting Older Workers in Manufacturing	12
Retaining Older Workers in Manufacturing.....	12
CASE STUDY: MEXICHEM SPECIALTY RESINS, USA	16
SKILLS AND OLDER WORKERS	19
Capitalizing on the Value of Older Workers in Manufacturing	19
Perceived Advantages of Older Workers in Manufacturing.....	19
CONCLUSION AND IMPLICATIONS FOR MANUFACTURING HR PROFESSIONALS	27
METHODOLOGY	28
ENDNOTES	29



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. Manufacturing Industry

The U.S. Bureau of Labor Statistics (BLS) forecasts that by 2016 one-third of the U.S. labor force will be in the 50-plus age category, compared with 27% in 2007. 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 the goods-producing sectors, which include manufacturing, will see a rebound from the serious employment loss of the first decade of the 21st century caused in part by the Great Recession. Although the loss of manufacturing jobs will slow in the 2010-to-2020 time frame compared with the 2000-to-2010 time frame, employment in the manufacturing sector is still projected to fall by 73,100 between 2010 and 2020, at an annual rate of decline of 0.1%; by 2020 employment in the manufacturing sector is expected to account for approximately 11.5 million jobs.¹

According to the BLS, workers in private-sector manufacturing had the highest tenure compared with other major industries. BLS data show that workers in private-sector manufacturing had a median tenure of 5.9 years in January 2014 compared with the lowest median tenure of 2.3 years for workers in leisure and hospitality. Industry analysts attribute this difference mainly to the older age distribution of workers in manufacturing (the average age of workers in leisure and hospitality, for example, tends to skew younger demographically).² These economic and demographic factors are likely to influence the way the manufacturing 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 manufacturing industry compared with all other industries.

The State of Older Workers in the U.S. Manufacturing Industry

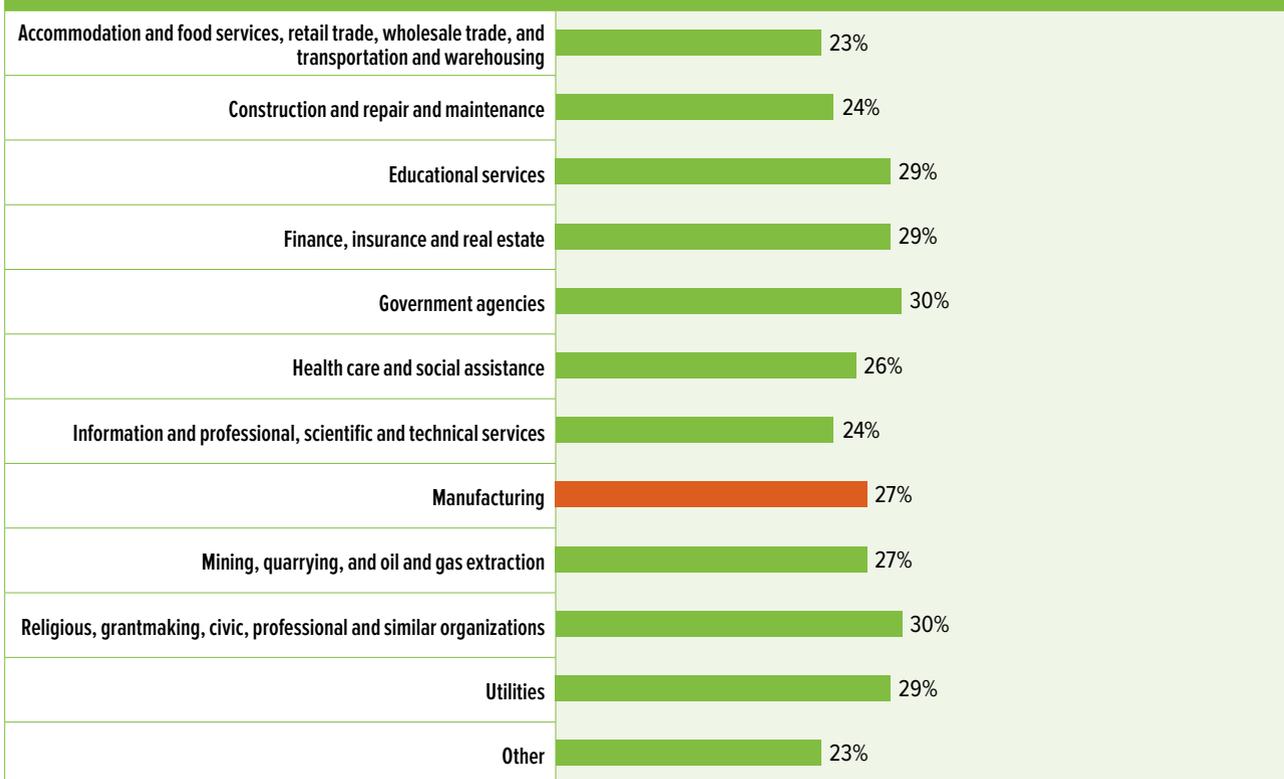
Key Findings

- What percentage of workers in the manufacturing industry are age 55 and older?** Responding manufacturing firms reported an average ratio of approximately 27% in their workforce, similar to many other industries (see Figure 1).
- Are manufacturing organizations preparing for an aging workforce?** HR professionals in manufacturing firms (8%) were less likely than HR professionals in other industries (13%) to say that 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. Conversely, HR professionals in manufacturing were more likely to say that they had implemented specific policies and practices to address this change (10% in manufacturing versus 6% in other industries). HR professionals in manufacturing firms said their firms 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” at about the same rate as HR professionals in other industries. Similarly, approximately the same percentage of HR professionals in manufacturing companies (20%) as in other industries (19%) reported that their organizations had examined their workforce and determined that no changes in their policies and practices were necessary.
- Do HR professionals in the manufacturing sector see the aging workforce as a potential problem for their industry?** Very few HR professionals in the manufacturing 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 2% in the next three to five years). However, looking further out, slightly more manufacturing HR professionals foresaw the aging workforce as a problem for their industry (11% considered it a crisis and 34% a problem in the next six to 10 years).
- Are manufacturing firms taking any steps in response to an aging workforce?** More HR professionals from manufacturing firms said their organizations were taking steps to prepare for an aging workforce compared with their counterparts in other industries. For example, 45% of HR professionals in manufacturing organizations indicated their organizations had analyzed the impact of workers age 55 and older leaving in the next one to two years compared with only 32% of HR professionals 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 Manufacturing Industry

HR professionals in the manufacturing 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: Manufacturing Industry Report (SHRM, 2015)

Awareness of the Changing Workforce Demographics in the Manufacturing Industry

HR professionals in manufacturing firms (8%) were less likely than HR professionals in other industries (13%) to indicate that 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 (versus 21% in 2012 and 14% in 2002) and were more likely to say that they had implemented specific policies and practices to address this change (10% manufacturing versus 6% other industries). Thus, HR professionals in manufacturing organizations appeared to be slightly more aware of this impending demographic shift than their counterparts in other industries. Elsewhere, manufacturing industry responses were more aligned with other industries. More than one-third of manufacturing respondents (38%) 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. However, one-fifth (20%) of manufacturing respondents reported that their organizations had examined their workforce and had determined that no changes in their policies and practices were necessary; a similar percentage (17%) of manufacturing respondents indicated their organizations were just becoming aware of the potential change in the ratio of older workers (see Figure 2).

HR professionals from manufacturing organizations were less likely to consider the potential loss of talent as a result of older workers retiring or leaving their organizations for other reasons as a problem for their industry in the next one to two years compared with other industries (37% manufacturing versus 48% other industries). Also, though more HR professionals in the manufacturing industry considered this trend a potential problem for their industry in the next one to two years compared with their peers in other industries (43% manufacturing versus 31% other industries), few said they considered it a crisis (3%). Looking further ahead into the future, organizational concerns increased. Only 25% of manufacturing HR professionals said they did not consider the potential loss of talent due to an aging workforce a problem for their industry (compared with 33% for other industries) in the next three to five years, and in the time frame of 11 to 20 years, only 19% of manufacturing HR professionals indicated the same compared with 27% of HR professionals in other industries (see Figure 3). Projecting six to 10 years out, 11% of manufacturing HR professionals considered the aging workforce to be a crisis and 34% a problem.

The newly revived debate on skills shortages and rising recruiting difficulty as the economy has improved has often referred to talent shortages in the manufacturing industry. The manufacturing industry is also often the focus of political debate on the state of the economy because it has traditionally been seen as a source of well-

paying jobs for employees with middle-range skill levels and without a college degree. These may be a few reasons why HR professionals in the manufacturing industry seemed slightly more aware of the potential impact the aging workforce could have on their industry compared with their peers in other industries.

Another factor could be that HR professionals in manufacturing 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 organization (as opposed to their industry overall), significantly fewer HR professionals in the manufacturing industry reported that it was not a problem for their organizations in the one-to-two-year,

three-to-five-year and six-to-10-year time frames compared with other industries (see Figure 4).

Assessing the Impact of Changing Workforce Demographics

Areas where there is a lack of concern may be due in part to missing information around precisely when and how these changes will take effect within a given industry or organization. Although more manufacturing respondents indicated their organizations had analyzed the impact of workers age 55 and older leaving their organizations in all time frames measured, a majority had not conducted this analysis for any time frame (55%-76%) (see Figure 5).

FIGURE 2 | How Manufacturing Organizations Are Preparing for an Aging Workforce Compared with Other Industries

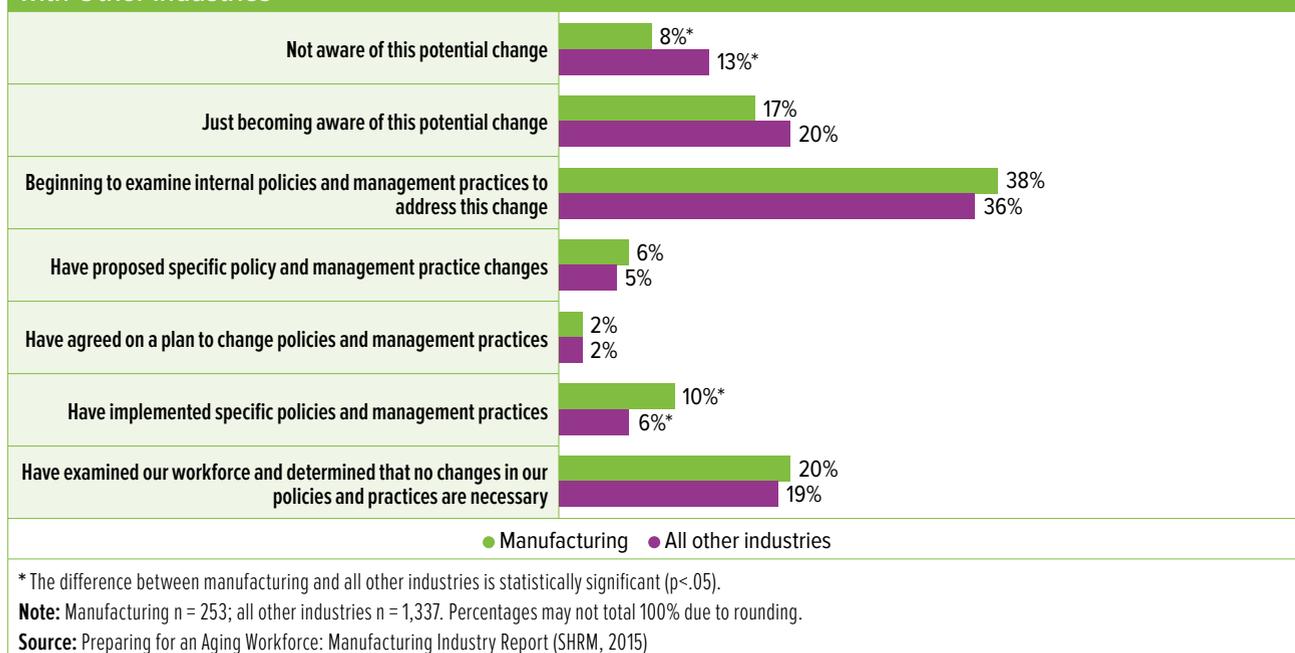
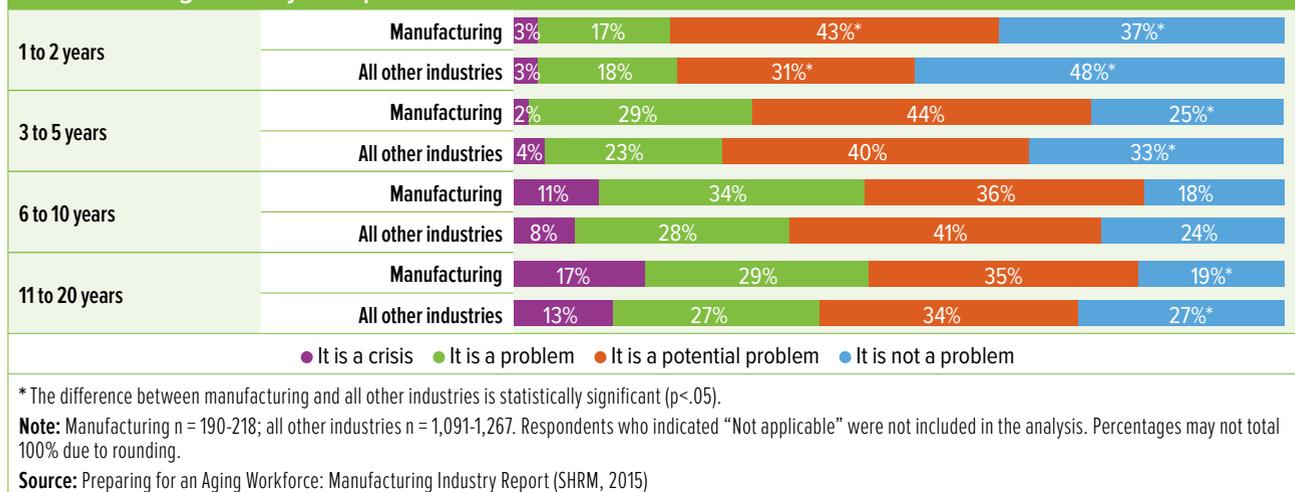


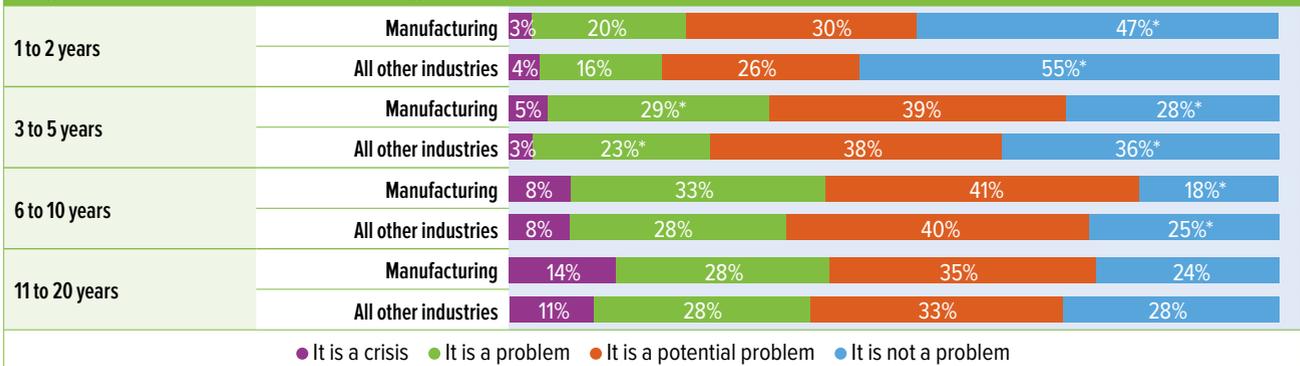
FIGURE 3 | Perceived Impact of the Potential Loss of Talent Due to an Aging Workforce on the Manufacturing Industry Compared with Other Industries



Similarly, significantly more manufacturing HR professionals indicated their organizations had identified their future workforce needs in the one-to-two (67% versus 56%) and three-to-five (51% versus 42%) year time frames compared with organizations in other industries. However, only 24% of manufacturing organizations had identified their needs beyond six years (see Figure 6). HR professionals in the manufacturing 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 (64%), and significantly more manufacturing organizations had taken this step for the one-to-two-year, three-to-five-year and six-to-10-year time frames compared with organizations in other industries (see Figure 7).

Overall, the findings suggest that although many organizations may not be fully aware of the various ways this demographic shift will influence their organization, manufacturing organizations appear to be more aware of these changes than their counterparts in other industries and are taking more steps to prepare for this shift.

FIGURE 4 | Perceived Impact of the Potential Loss of Talent Due to an Aging Workforce on Manufacturing Organizations Compared with Organizations in Other Industries

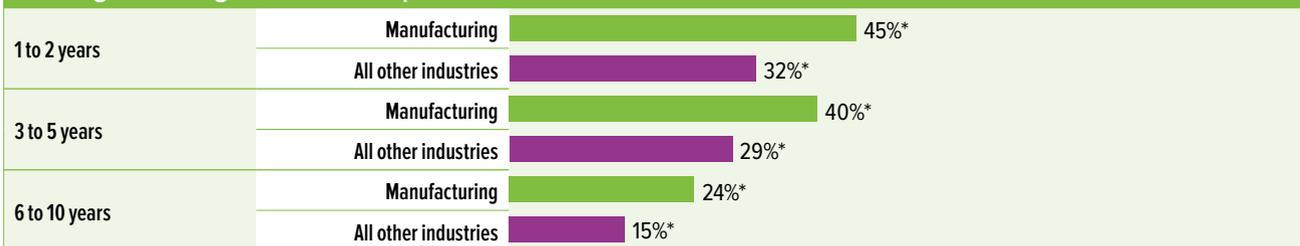


* The difference between manufacturing and all other industries is statistically significant (p<.05).

Note: Manufacturing n = 217-259; all other industries n = 1,162-1,403. 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: Manufacturing Industry Report (SHRM, 2015)

FIGURE 5 | Manufacturing Organizations That Have Analyzed the Impact of Workers Age 55 and Older Leaving Their Organization Compared with Other Industries

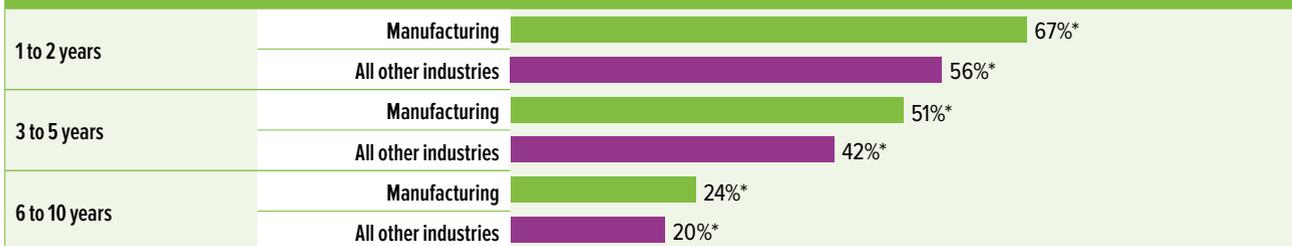


* The difference between manufacturing and all other industries is statistically significant (p<.05).

Note: Manufacturing n = 221-246; all other industries n = 1,222-1,284.

Source: Preparing for an Aging Workforce: Manufacturing Industry Report (SHRM, 2015)

FIGURE 6 | Manufacturing Organizations That Have Identified Future Workforce Needs Compared with Other Industries

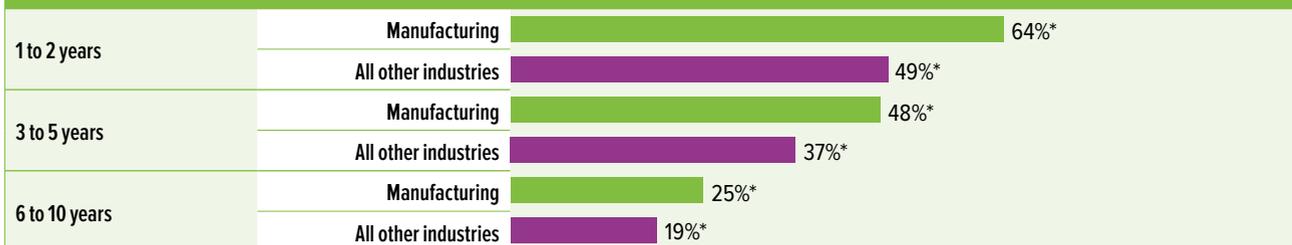


* The difference between manufacturing and all other industries is statistically significant (p<.05).

Note: Manufacturing n = 226-251; all other industries n = 1,201-1,311.

Source: Preparing for an Aging Workforce: Manufacturing Industry Report (SHRM, 2015)

FIGURE 7 | Manufacturing Organizations That Have Identified Their Potential Skills Gaps Compared with Other Industries



* The difference between manufacturing and all other industries is statistically significant (p<.05).

Note: Manufacturing n = 224-248; all other industries n = 1,195-1,293.

Source: Preparing for an Aging Workforce: Manufacturing Industry Report (SHRM, 2015)

Recruiting and Retaining Older Workers in the Manufacturing Industry

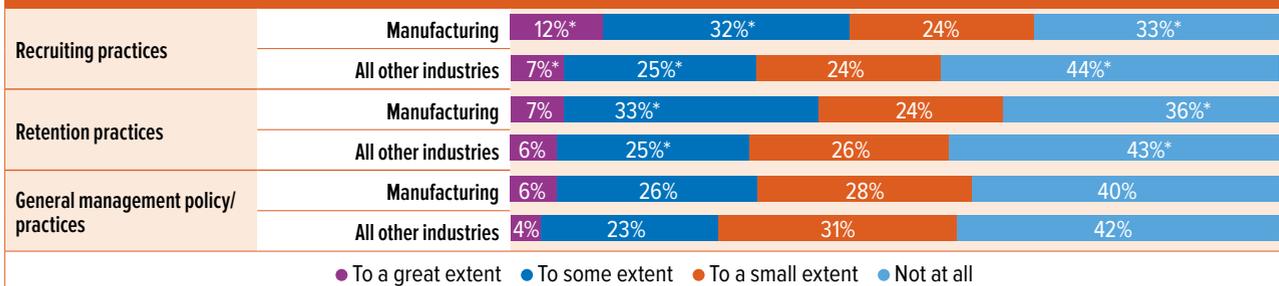
Key Findings

- Has the aging workforce prompted changes in recruiting and retention practices in the manufacturing industry?** HR professionals in the manufacturing industry were more likely to report that the aging workforce had prompted changes in their recruiting and retention practices to at least some extent compared with HR professionals in other industries (see Figure 8); they were not, however, significantly more likely to report that it had prompted changes in their general management practices.
- Do manufacturing organizations track impending retirements?** Manufacturing organizations were significantly more likely to track impending retirements of their workers in the short (one to two years) to medium term (three to five years) than other industries (see Figure 9).
- Do manufacturing organizations have formal strategies for attracting and retaining older workers?** Very few manufacturing organizations said their firms had formal strategies for either retaining (4%) or recruiting (2%) older workers (see Figure 10).
- What methods are used to recruit older workers in the manufacturing industry?** Employee referrals were the most common method of recruiting older workers in the manufacturing industry and other industries (32%). However, more than one-half (58%) of manufacturing 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 management or recruiting and retention practices in preparation for these shifts; however, the responding HR professionals in manufacturing were less likely than HR professionals in other industries to report that their organizations were not making any changes to recruiting and retention practices (see Figure 8).

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

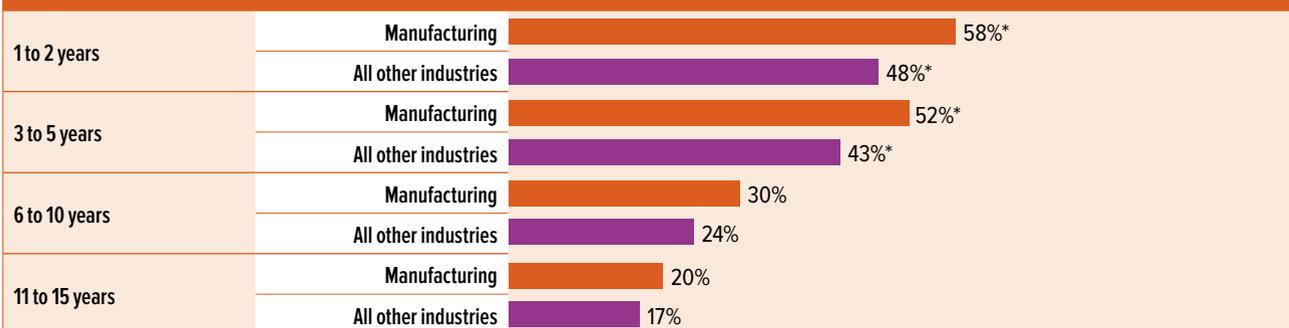


* The difference between manufacturing and all other industries is statistically significant (p<.05).

Note: Manufacturing n = 269-270; all other industries n = 1,431-1,442. 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: Manufacturing Industry Report (SHRM, 2015)

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



* The difference between manufacturing and all other industries is statistically significant (p<.05).

Note: Manufacturing n = 262-272; all other industries n = 1,410-1,453. Percentages do not total 100% due to multiple response options.

Source: Preparing for an Aging Workforce: Manufacturing Industry Report (SHRM, 2015)

Manufacturing organizations were also more likely to track impending retirements in both the short (one to two years) and medium term (three to five years) compared with other industries (see Figure 9). However, only one-fifth (20%) of manufacturing companies tracked impending retirements 11 to 15 years out (see Figure 9).

Similar to other industries, very few manufacturing organizations reported they have a formal strategy for retaining (4%) or recruiting (2%) older workers, as shown in Figure 10.

Recruiting Older Workers in Manufacturing

HR professionals 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 networking (22%) and employment agencies (19%). Differences in recruiting methods between the manufacturing industry and other industries included the use of agencies—employment agencies (19% manufacturing versus 10% other industries) and temporary firms (16% versus 10%)—and recruitment through local senior citizen community groups (1% versus 3%) (see Figure 11).

HR professionals in manufacturing organizations were significantly more likely than their peers in other industries to indicate that it was extremely difficult/difficult to recruit exempt older workers (22% manufacturing versus 16% other industries); similarly, 15% of manufacturing firm respondents reported that it is easy/extremely easy

to recruit exempt older workers (compared with 23% of other industry respondents). For nonexempt older workers, fewer HR professionals in manufacturing organizations than in other industries indicated they found it easy/extremely easy to recruit older workers (17% manufacturing versus 25% other industries) (see Figure 12).

Manufacturing firms were also significantly more likely than firms in other industries to find it extremely difficult/difficult to recruit older workers who were qualified to fill their skilled labor positions (31% manufacturing versus 23% other industries); the same was true for filling positions at the executive level (33% manufacturing versus 23% other industries) (see Figure 13).

Retaining Older Workers in Manufacturing

Looking specifically at the retention of older workers, there were no significant differences between manufacturing organizations and other industries. Few manufacturing organizations found it difficult/extremely difficult to retain either exempt (9%) or nonexempt (10%) older workers; about two-fifths indicated it was easy/extremely easy to retain exempt (45%) and nonexempt older workers (42%) (see Figure 14).

Given the overall pattern of differences found between the manufacturing industry and other industries, manufacturing companies may have some unique challenges relating to factors that make it difficult to retain their older workers (e.g., inability to offer flexibility in work location) (see Table 1). Because manufacturing firms appear to be slightly more aware of the issue of the aging workforce and are at the leading edge of taking at least some steps to address these changes, this industry may be among the first to take even more steps 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.

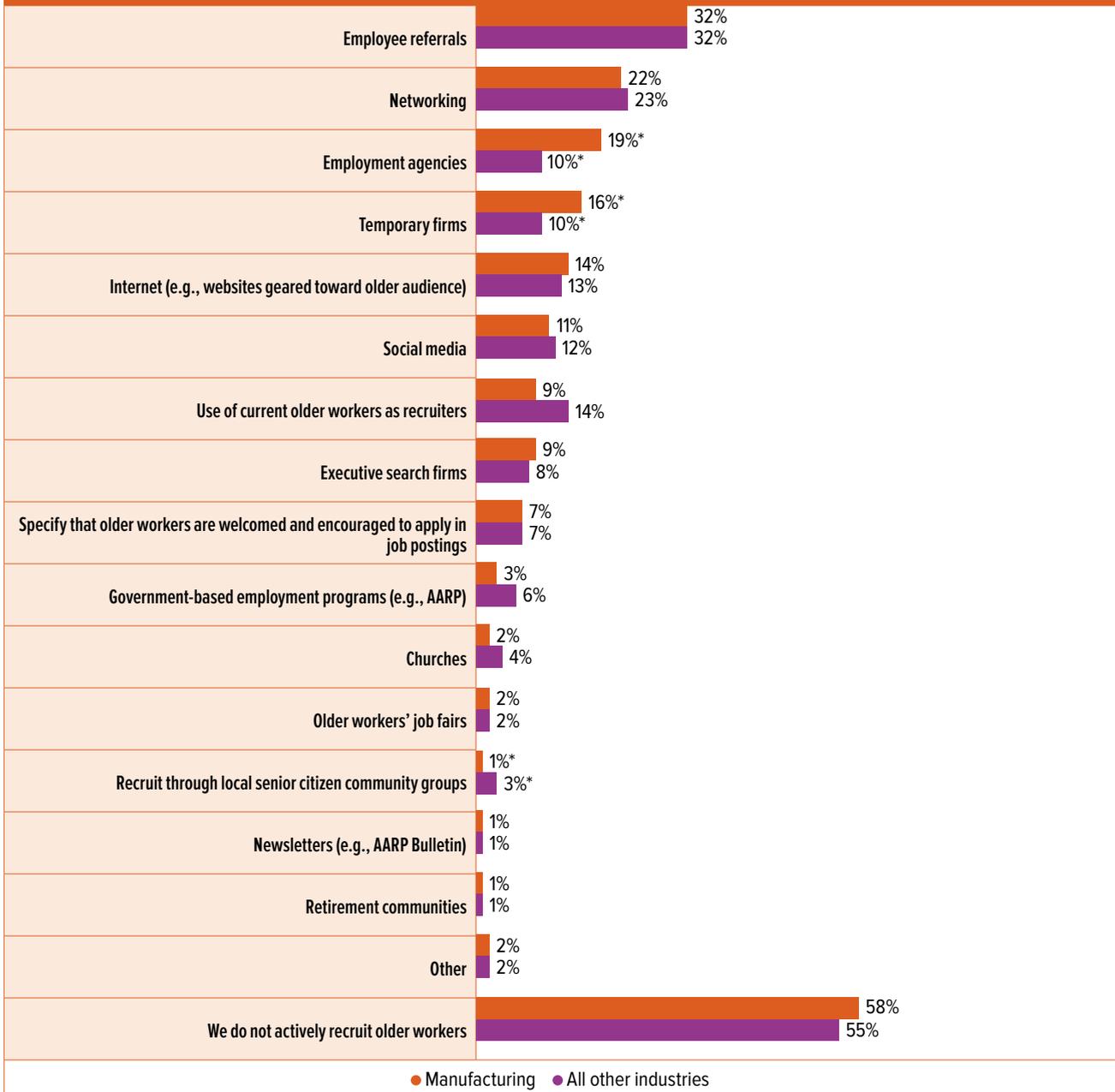
FIGURE 10 | Organizations That Have a Formal Strategy for Retaining and Recruiting Older Workers



Note: Manufacturing n = 268-269; all other industries n = 1,438.

Source: Preparing for an Aging Workforce: Manufacturing Industry Report (SHRM, 2015)

FIGURE 11 | Methods Used by Manufacturing Companies to Recruit Older Workers Compared with Other Industries

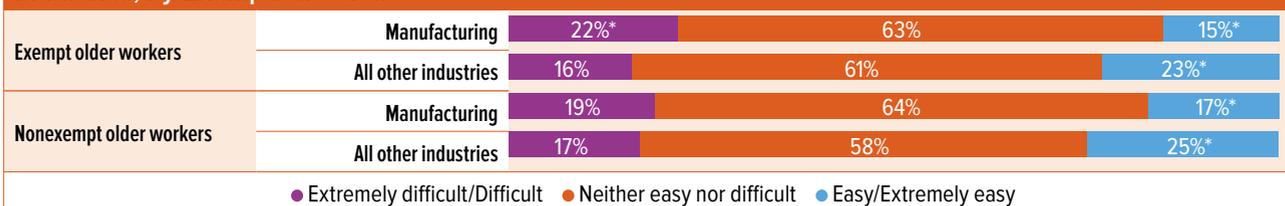


* The difference between manufacturing and all other industries is statistically significant (p<.05).

Note: Manufacturing n = 179; all other industries n = 804. 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: Manufacturing Industry Report (SHRM, 2015)

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

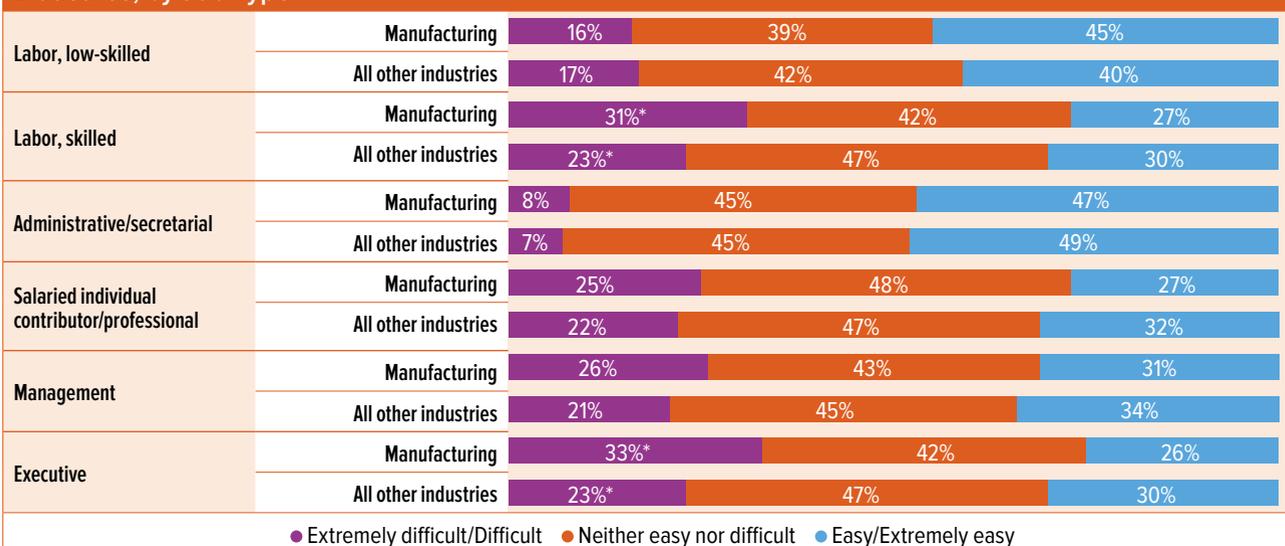


* The difference between manufacturing and all other industries is statistically significant (p<.05).

Note: Manufacturing n = 273; all other industries n = 1,459.

Source: Preparing for an Aging Workforce: Manufacturing Industry Report (SHRM, 2015)

FIGURE 13 | Ease or Difficulty in Recruiting Qualified Older Workers in Manufacturing Compared with Other Industries, by Job Type

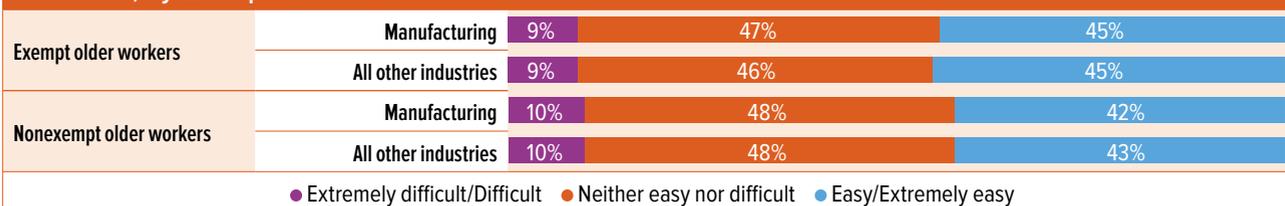


* The difference between manufacturing and all other industries is statistically significant (p<.05).

Note: Manufacturing n = 166-236; all other industries n = 802-1,297. Respondents who indicated “Not applicable” were not included in this analysis. Percentages may not total 100% due to rounding.

Source: Preparing for an Aging Workforce: Manufacturing Industry Report (SHRM, 2015)

FIGURE 14 | Ease or Difficulty in Retaining Older Workers in Manufacturing Compared with Other Industries, by Exemption Status



Note: Manufacturing n = 270; all other industries n = 1,439.

Source: Preparing for an Aging Workforce: Manufacturing Industry Report (SHRM, 2015)

TABLE 1 | Factors That Contribute to Difficulties in Retaining Older Workers

My organization is unable to offer . . .	Manufacturing	All Other Industries
Flexibility in work location (e.g., working from home, satellite offices)	58%	46%
Career flexibility (e.g., reduced responsibilities, job change/occupation shift)	39%	45%
Work hour flexibility (e.g., reduced hours, job-sharing, phased retirement, part-year employment)	42%	46%
Work schedule flexibility (e.g., changing starting and ending times periodically, compressed workweek)	53%	42%
Flexibility in type of employment (e.g., consultant work, temporary work)	36%	39%
Benefits attractive to older workers (e.g., different health care benefits, wellness benefits)	47%	32%
Other	8%	16%

Note: Manufacturing n = 36; all other industries n = 189. Only respondents who indicated it is “Difficult” or “Extremely difficult” for their organization to retain older workers compared with other workers were asked this question. Percentages do not total 100% due to multiple response options.

Source: Preparing for an Aging Workforce: Manufacturing Industry Report (SHRM, 2015)

CASE STUDY: Mexichem Specialty Resins, USA

A balanced combination of internal training and external recruiting has helped one U.S. company effectively manage and benefit from the older demographic in its workforce.

Mexichem Specialty Resins, USA is a wholly owned subsidiary of Mexichem, a global chemical/petrochemical interest and one of the largest companies based in Mexico. Mexichem's parent company conducts most of its business in Central and South America, but the U.S. division is growing, and talent management has become a top priority for the organization.

The U.S. division of Mexichem has roughly 200 employees in three locations, and more than 40% of its employees fall into the "older workers" category of age 55 and older. "It's a sizable part of our workforce," said Brock Blinn, senior human resource manager for Mexichem Specialty Resins, USA. "We have many people with long terms of service here, and we have very low turnover. People who join us tend to stay with us." Mexichem's U.S. manufacturing facilities were built mostly in the 1950s and 1960s by previous ownership groups, and it is not uncommon to find employees who were around for the early years of those operations. Many workers currently on staff have more than 40 years of service.

The company has a fairly small sales group in the United States, for instance, but "virtually all of that team" is in the 55-plus age group, according to Blinn.

"We've been looking at this for the past two or three years. Part of our strategy has put us back in the market to recruit people with the skills we need, but we have also developed people internally and beefed up our training and development." Manufacturing firms like Mexichem, in particular, have at times had problems filling open positions in the post-recession economy. Blinn noted that the company has struggled recently to find new workers for its maintenance teams that take care of its equipment and facilities. In response, Mexichem began a new training initiative that brings in properly skilled workers from the outside whenever possible, but the company also enhances the skills of Mexichem's existing employees.

"We do a fair amount of cross-training, in order to prepare people for future openings in the maintenance department," said Blinn. "We have quite a few people who perform basic labor for us, but we started training them for operator roles, at least on a temporary basis. That way, when you have an opening, you at least have somebody who can fill in temporarily, and it helps to control costs. And many times, you can fill that job from within." In other departments, initiatives involving older workers have not been as difficult to carry out and have just become a matter of effective recruiting. For the sales team, Mexichem has hired one young trainee who has learned about the business "directly from the guys who have been doing it for us all these years," said Blinn. Mexichem will use the mentoring approach on the sales team going forward as well. The goal is to manage a highly skilled labor force at all levels of the organization to maintain continuity in its operations for the long term. "From my perspective, as well as the leadership team's, training and development is an investment in our people," Blinn said. "Mexichem's presence in the United States is not big at this point in time, but we want to grow in the future. And this will be an important part of that growth." Having a high concentration of older workers is not necessarily viewed as a hindrance at Mexichem, but the company has acknowledged that a plan must be in place to adapt to the organization's current demographics.

"The older workforce as a whole is more stable," Blinn said. "You don't have the same levels of absenteeism as you do in other parts of the workforce, and you obviously have that experience, which is very helpful. When you combine that with the continued training on new skills, you generally get a very good result. And that makes your company successful."



Skills and Older Workers

Key Findings

- **Do manufacturing organizations capitalize on and incorporate the experience of older workers?**

More than three-fifths (61%) of manufacturing respondents indicated that their organizations attempted to capitalize on and incorporate the experience of older workers to some or a great extent. Similar to HR professionals in other industries, few (15%) reported that their organizations did not capitalize on and incorporate the experience of older workers at all.

- **What basic and applied skills do manufacturing organizations value in their older workers?** HR professionals in manufacturing organizations reported they valued the more extensive work experience (79%), stronger work ethic (73%), and greater maturity and professionalism (68%) of older workers—similar to other industries. However, HR professionals in the manufacturing industry were less likely to indicate they valued older workers' basic skills of writing and speaking in English than HR professionals in other industries. HR professionals in the manufacturing industry were more likely to report they valued the technical, mathematics and science skills of older workers than their peers

in other industries (see Figure 17). They also valued older workers' applied skills in professionalism and work ethics (56%). However, HR professionals in manufacturing were less likely than their counterparts in other industries to value the applied skills of leadership and written communications (see Figure 18).

- **How are manufacturing organizations transferring the knowledge of older workers?** HR professionals in manufacturing firms were more likely than their counterparts in other industries to say their organizations had increased training and cross-training efforts (53% versus 40% in other industries), developed succession plans (39% versus 32%), increased recruiting efforts to replace retiring employees (20% versus 14%), and increased automated processes (e.g., use of robotics) (13% versus 6%). Another promising indication of the manufacturing industry's awareness of the increasing age of the workforce is that HR professionals in manufacturing were less likely to indicate their organizations had not taken any steps to transfer the knowledge of older workers compared with other industries (25% versus 36%).

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 Manufacturing

As shown in Figure 15, HR professionals in manufacturing companies said their organizations were making the most of the skills and experience of older workers to about the

same extent as organizations in other industries; 21% said they did so to a great extent, and 40% said they did so to some extent. Only 15% 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 Manufacturing

HR professionals in manufacturing organizations indicated they valued older workers' work experience (79%), work ethic (73%), and maturity and professionalism (68%)—similar to their peers in other industries. HR

professionals in manufacturing organizations were less likely than HR professionals in other industries to report the following as advantages of older workers: higher loyalty, stronger applied skills, institutional knowledge of long-term workers at their organization, established networks of contacts and clients, adding to diversity of thought/approach to team projects, and higher productivity (see Figure 16).

There were also significant differences between the perceived strongest basic skills of older workers according to HR professionals in the manufacturing industry compared with their peers in other industries. Though writing in English was the top basic skill attributed to older workers in manufacturing as well as in other industries, only 31% of HR professionals in the manufacturing industry reported it is as one of two strongest basic skills held by older workers compared with 48% of HR professionals from other industries; they were also less likely to report spoken English as one of the two strongest basic skills of older workers than HR professionals in other industries (15% versus 21%). HR professionals in manufacturing were more likely to perceive that older workers had stronger technical skills (23%) than other workers compared with their peers in other industries (11%); they were also more likely to cite mathematics (20% versus 12%) and science (5% versus 3%) as two of the strongest basic skills held by older workers (see Figure 17).

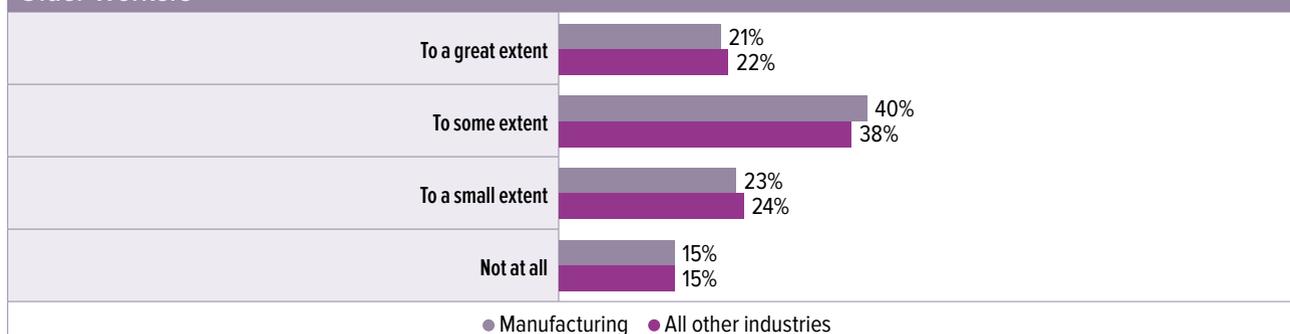
Similar to their peers in other industries, HR professionals in manufacturing firms reported they valued the applied skills of professionalism/work ethic (56%). There were few significant differences between the manufacturing industry and other industries in terms of the most valued applied skills of older workers—slightly fewer manufacturing HR professionals rated leadership (17% versus 22%) and written communications (6% versus 11%) of older workers as the strongest applied skills of older workers compared with HR professionals in other industries (see Figure 18). A slightly higher percentage of HR professionals in manufacturing organizations reported creativity/innovation as one of the two strongest applied skills of older workers (2% versus 1%).

HR professionals in manufacturing firms were more likely to indicate their organizations had increased training and cross-training efforts (53% versus 40%), developed succession plans (39% versus 32%), increased recruiting efforts to replace retiring employees (20% versus 14%), and increased automatic processes (e.g., use of robotics) (13% versus 6%) compared with their counterparts in other industries. However, HR professionals in manufacturing firms were less likely to indicate their organizations had offered flexible work arrangements (e.g., job-sharing, telework) (6% versus 15%) to attract a broader range of applicants (see Figure 19).

When it comes to strategizing how to transfer knowledge from older to younger workers, manufacturing firms appear to be somewhat ahead of the curve. HR professionals in the manufacturing industry were more likely than HR professionals in other industries to indicate their organizations were using training and/or cross-training programs (66% versus 52%), job shadowing (33% versus 25%), skills transition plans (18% versus 13%) and apprenticeship programs (15% versus 7%) to transfer knowledge from older workers to younger workers (see Figure 20).

As manufacturing organizations seek to make the most of their mature workforces through the transfer of skills and knowledge to workers in other generations, it will be imperative that younger workers be receptive to learning from older workers. The good news is that the vast majority of respondents from the manufacturing industry reported that employees in their organization were receptive to working with older workers (93%), learning from older workers (94%) and being mentored by an older worker(s) (91%) to some or a great extent. Almost none (1%-2%) of the respondents indicated that employees in their organization were not at all receptive to working with, learning from and being mentored by older workers. This, along with the steps many manufacturing organizations are taking to capitalize on the knowledge and skills of older workers, is a positive sign that there is an overall awareness of the value of learning from older workers.

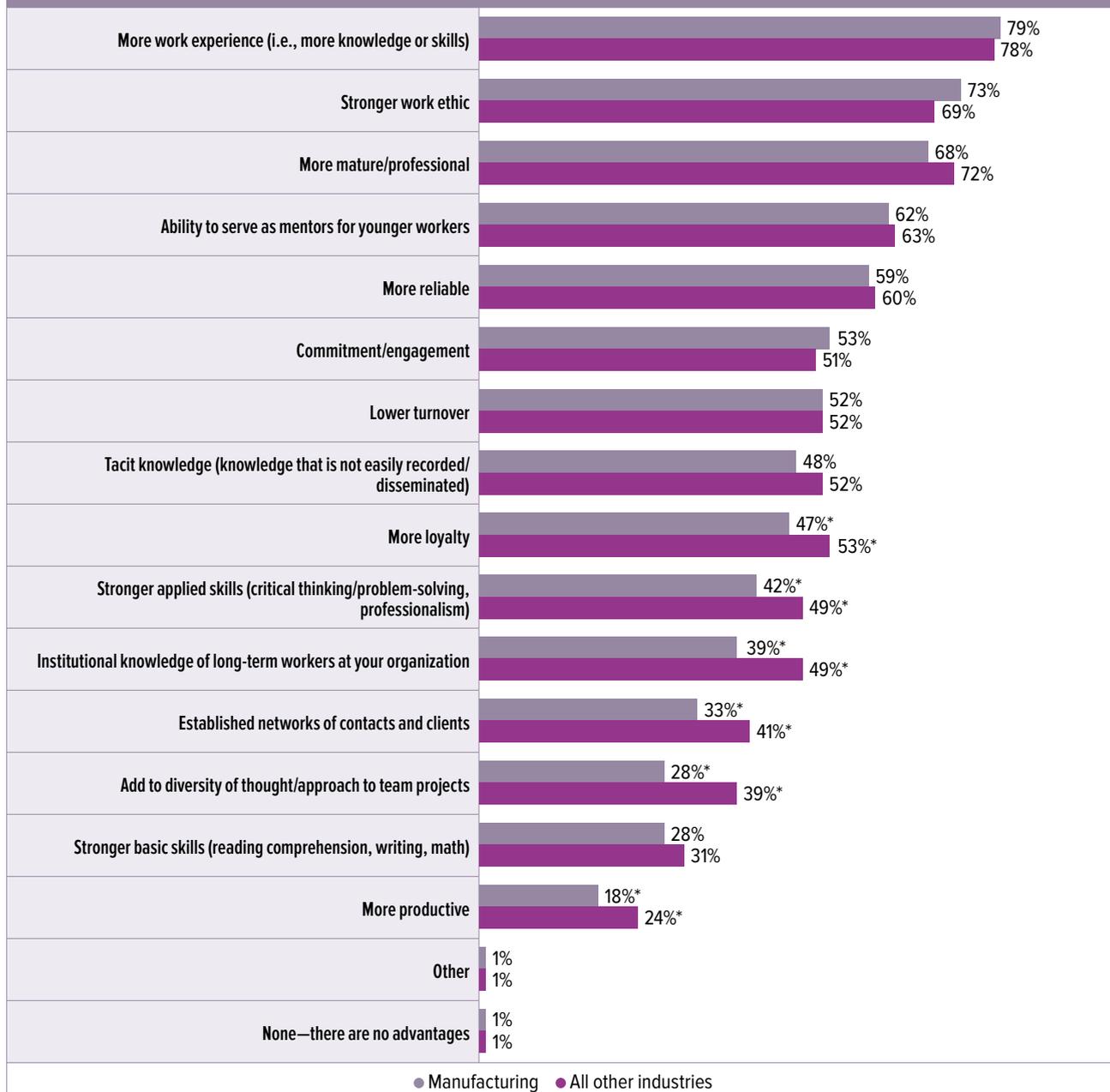
FIGURE 15 | Extent to Which Organizations Attempt to Capitalize on and Incorporate the Experience of Older Workers



Note: Manufacturing n = 267; all other industries n = 1,426.

Source: Preparing for an Aging Workforce: Manufacturing Industry Report (SHRM, 2015)

FIGURE 16 | Main Advantages of Older Workers Compared with Other Workers[^]



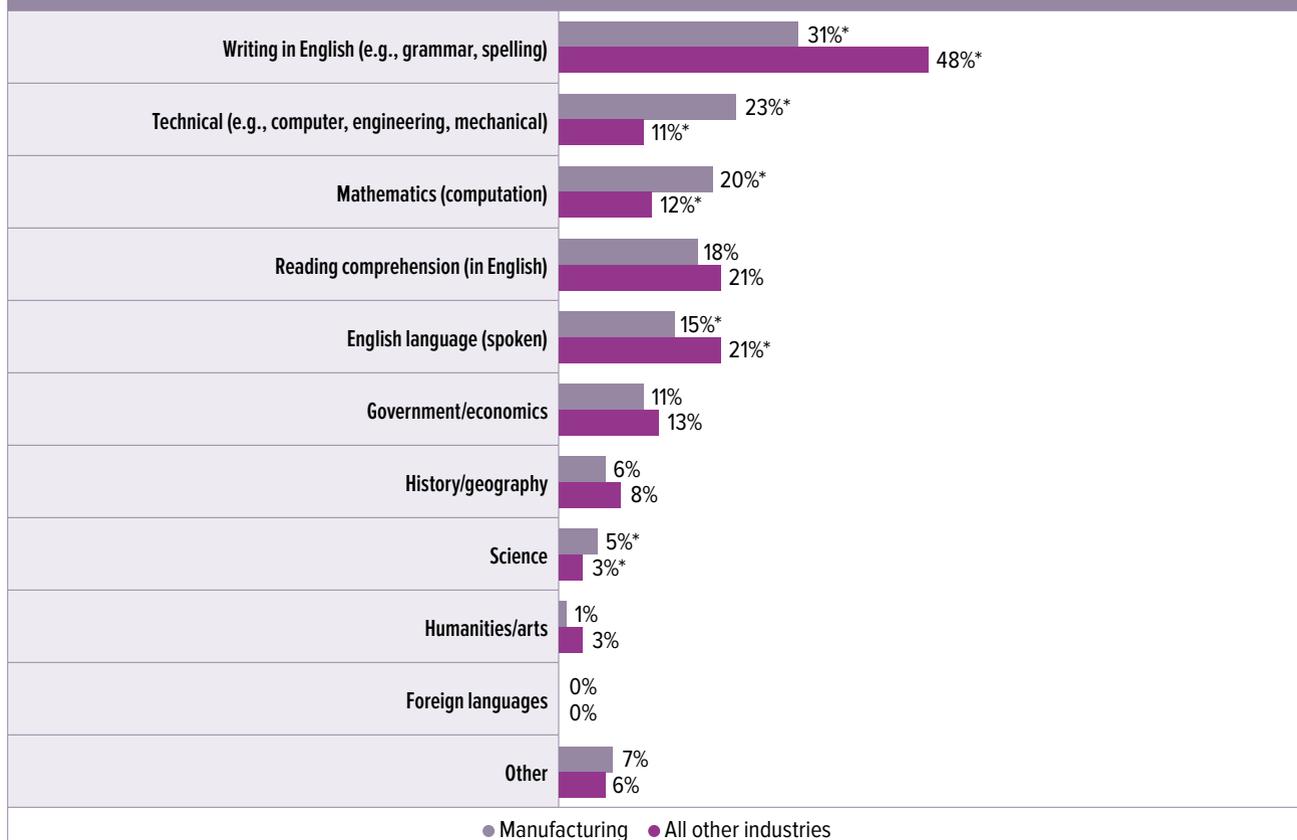
[^] Survey question was worded as follows: “In your professional opinion, what are the main advantages workers age 55 and older bring to your organization compared with other workers? (Check all that apply)”

* The difference between manufacturing and all other industries is statistically significant (p<.05).

Note: Manufacturing n = 271; all other industries = 1,437. Percentages do not total 100% due to multiple response options.

Source: Preparing for an Aging Workforce: Manufacturing Industry Report (SHRM, 2015)

FIGURE 17 | Strongest Basic Skills Held by Workers Age 55 and Older Compared with Other Workers[^]



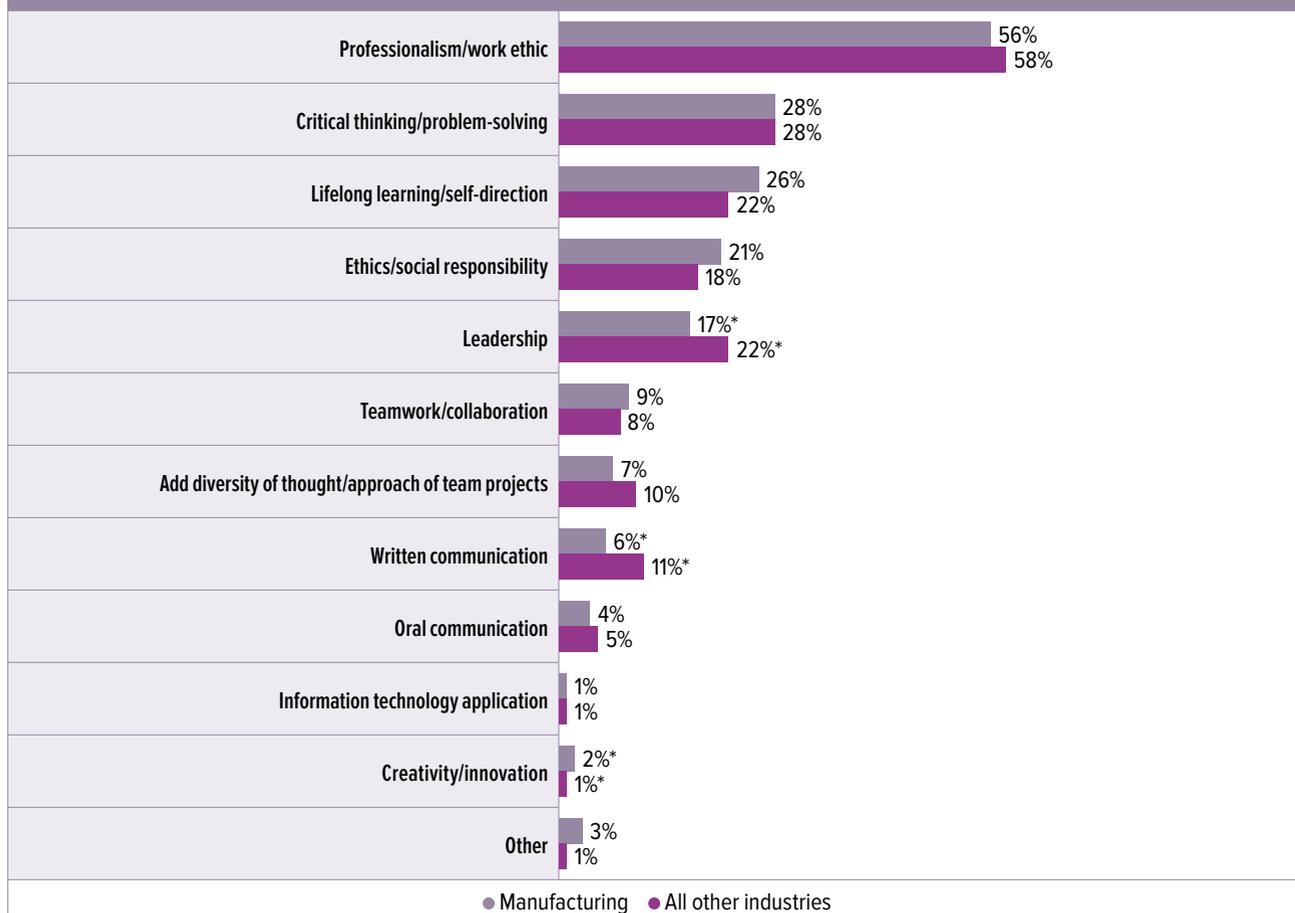
[^] Survey question was worded as follows: “In your professional opinion, what are the strongest basic skills held by workers age 55 and older compared with other workers? (Check the top two choices)”

* The difference between manufacturing and all other industries is statistically significant (p<.05).

Note: Manufacturing n = 271; all other industries = 1,437. Percentages do not total 100% due to multiple response options.

Source: Preparing for an Aging Workforce: Manufacturing Industry Report (SHRM, 2015)

FIGURE 18 | Strongest Applied Skills Held by Workers Age 55 and Older Compared with Other Workers[^]



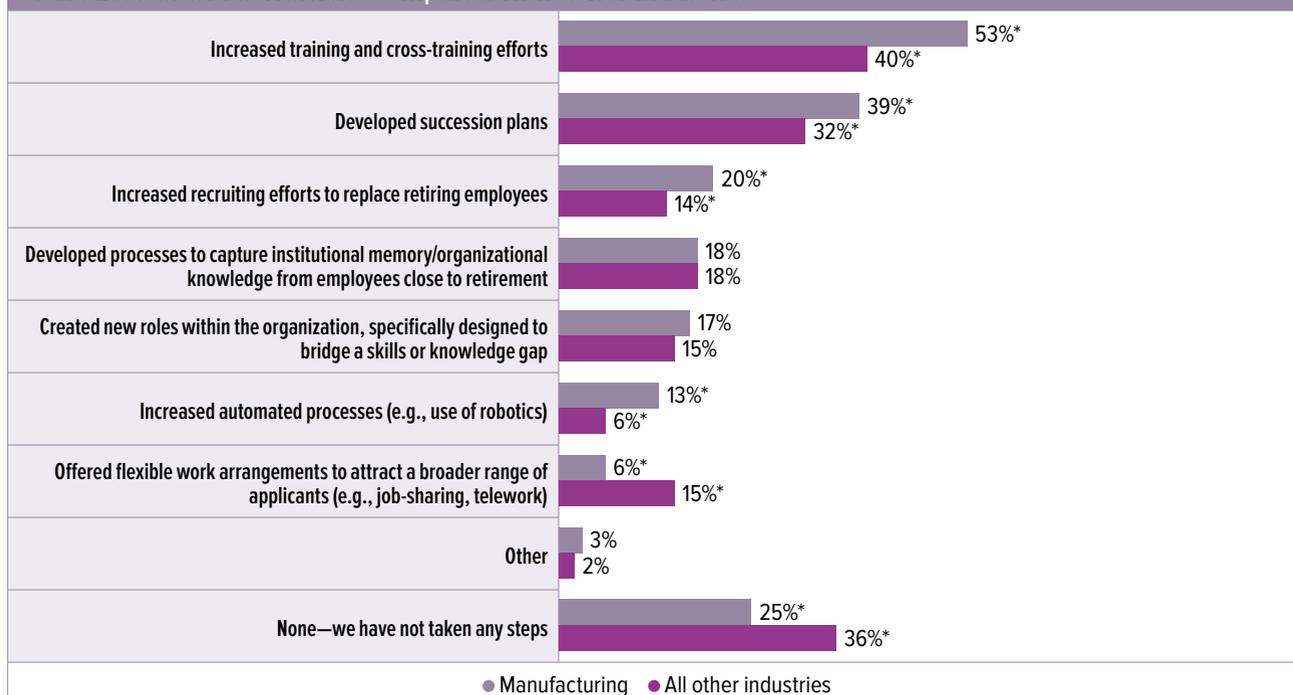
[^] Survey question was worded as follows: “In your professional opinion, what are the strongest applied skills held by workers age 55 and older compared with other workers? (Check the top two choices)”

* The difference between manufacturing and all other industries is statistically significant (p<.05).

Note: Manufacturing n = 271; all other industries = 1,437. Percentages do not total 100% due to multiple response options.

Source: Preparing for an Aging Workforce: Manufacturing Industry Report (SHRM, 2015)

FIGURE 19 | Steps Manufacturing Organizations Have Taken to Prepare for Potential Skills Gaps as a Result of the Loss of Older Workers Compared with Other Industries

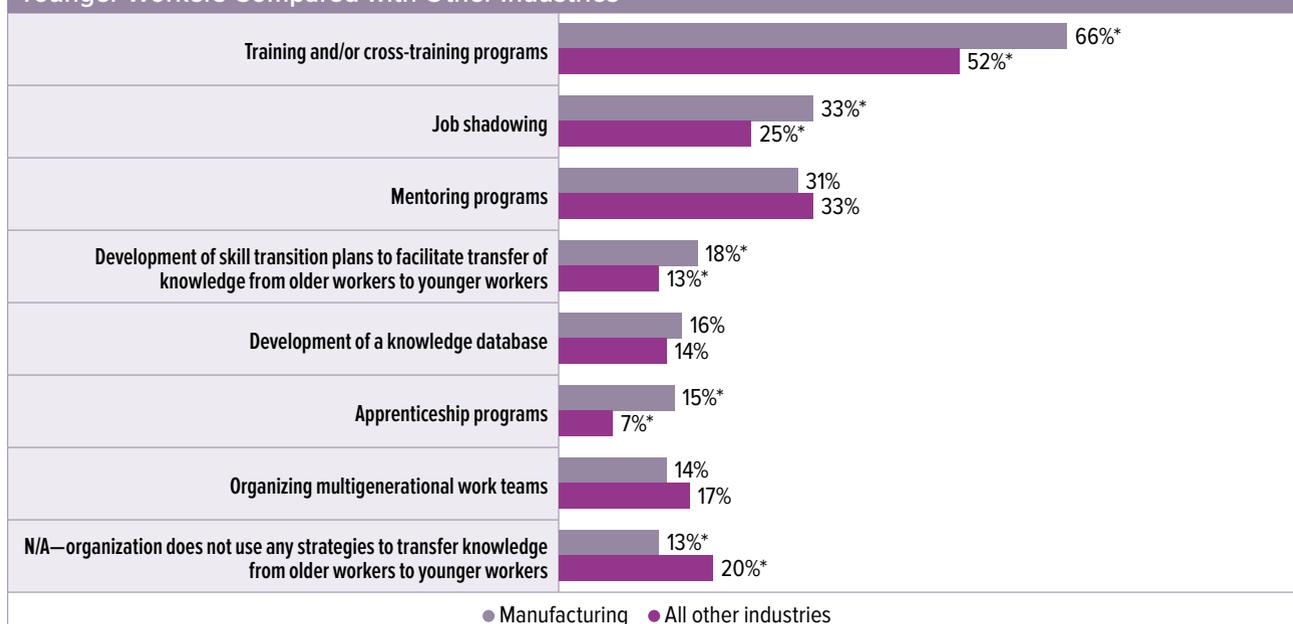


* The difference between manufacturing and all other industries is statistically significant (p<.05).

Note: Manufacturing n = 271; all other industries n = 1,436. Percentages do not total 100% due to multiple response options.

Source: Preparing for an Aging Workforce: Manufacturing Industry Report (SHRM, 2015)

FIGURE 20 | Strategies Manufacturing Organizations Use to Transfer Knowledge from Older Workers to Younger Workers Compared with Other Industries

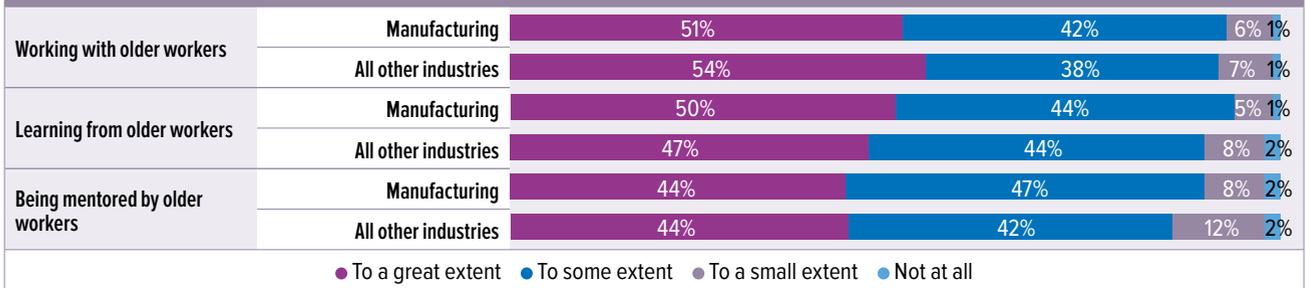


* The difference between manufacturing and all other industries is statistically significant (p<.05).

Note: Manufacturing n = 270; all other industries n = 1,436. Percentages do not total 100% due to multiple response options.

Source: Preparing for an Aging Workforce: Manufacturing Industry Report (SHRM, 2015)

FIGURE 21 | Receptiveness of Manufacturing Employees Related to Older Workers Compared with Other Industries



* The difference between manufacturing and all other industries is statistically significant (p<.05).

Note: Manufacturing n = 268; all other industries n = 1,412-1,423. Percentages may not total 100% due to rounding.

Source: Preparing for an Aging Workforce: Manufacturing Industry Report (SHRM, 2015)



Conclusion and Implications for Manufacturing HR Professionals

Just like their counterparts in other industries, HR professionals in the manufacturing industry will 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 there are some indications that HR professionals in manufacturing firms are among the "early adopters" of practices and strategies that both assess how their worker demographics are aging and capitalize on the skills and experience of their mature workforces, they must continue to build on these steps if they are to truly help their organizations thrive in the long term. Their first step in this endeavor will be to continue to learn as much as they can about how these demographic shifts are likely to affect their industry and their organization. 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, often as trainers, teachers and mentors for younger employees.

HR professionals in manufacturing 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 manufacturing 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 manufacturing 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

- ¹ Henderson, R. (2012, January). Employment outlook: 2010-2020: Industry employment and output projections to 2020. *Monthly Labor Review*. Retrieved from <http://www.bls.gov/opub/mlr/2012/01/art4full.pdf>.
- ² Bureau of Labor Statistics (2014, September 18). Employee tenure summary. *Economic News Release*. Retrieved from <http://www.bls.gov/news.release/tenure.nr0.htm>.

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