

Age Stereotypes in the Workplace: Common Stereotypes, Moderators, and Future Research Directions[†]

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The authors identify, analyze, and summarize prior research from 117 research articles and books that deal with age stereotypes in the workplace. They discover and report the most prevalent and well-supported findings that have implications for human resource management. These findings are described in terms of prevalent age stereotypes that occur in work settings, evidence refuting age stereotypes, and moderators of age stereotypes. The authors provide recommendations for practice and future research.

Keywords: *age; stereotypes; employment discrimination*

There are several reasons that it is important to study workplace age stereotypes. First, the workforce is aging in the United States and in other industrial nations (Feyrer, 2007; Lieber, 2007). Thus, there is the potential that workplace age stereotypes may become more prevalent and affect more workers (Walker, 1999).

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Second, we need older employees to remain in the workforce longer to facilitate economic growth (Feyrer, 2007). When managers succumb to the influence of negative stereotypes about older workers and avoid hiring or retaining older people, they miss an opportunity to employ many of the most skilled and productive workers in the workforce (Tillsely & Taylor, 2001). We also need older workers to remain working longer to both reduce the strain on and to make financial contributions to our retirement systems (Walker, 2007). Age stereotypes could discourage older workers from remaining in the workforce (Brooke & Taylor, 2005).

Third, at this time when older workers are most needed, there is growing evidence of discrimination against older workers in terms of higher verdicts against employers (Hedge, Borman, & Lammlein, 2006; Lieber, 2007; Prewitt, 2005). This is unfortunate because employment discrimination can lead to costly litigation for employers. We need to understand how age stereotypes may be affecting age discrimination in the workplace. Nearly 40 years ago, the federal government outlawed age discrimination in the workplace (Age Discrimination in Employment Act of 1967). A primary purpose of that statute was to mitigate or eliminate the harm caused by erroneous and negative stereotypes about older workers (e.g., *General Dynamics v. Cline*, 2004). Nevertheless, stereotypes about older workers still operate as barriers to their employment opportunities (Gordon & Arvey, 2004). In fact, unlike stereotypes about race and sex, courts have recognized that age stereotypes can operate at a more subtle or unconscious level. Therefore, courts have been willing to entertain claims of age discrimination, even without direct proof of intent to discriminate, as long as it can be shown that age made a difference or played a part in managerial decisions (Krieger, 1995). When compared to race and sex discrimination, this more liberal standard could put employers at greater risk for legal liability when age stereotypes result in age discrimination in the workplace.

Yet despite the importance of this topic, there has been less focus on preventing discrimination from age stereotypes than on discrimination from race and gender stereotypes (Dennis, 1988). This is ironic because stereotypes about older workers have the potential to affect everyone as we get older, not just the members of one race or sex group (Duncan, 2001). There are potential overlaps between different types of stereotypes. Rosen, Jerdee, and Huonker (1982) found that when employers were pressured to hire more women and minorities, this increased sensitivity to affirmative action overall, and as a result, older employees also received better treatment. This suggests a possible spillover effect from activity combating one type of stereotyping to another. However, much more research is needed regarding the influence of age stereotyping itself as well as how it may interact with other types of stereotyping (Shore & Goldberg, 2005). This is particularly important as the workforce ages.

Therefore, the purpose of this article is to analyze this literature to: (a) summarize the common findings, (b) determine how age stereotypes operate in work settings, (c) categorize the various types of stereotypes, (d) show how they are often erroneous, (e) explain the mechanisms and moderators of age stereotypes in employment relationships, and (f) provide guidance for future research and practice.

Method

To analyze the literature on workplace age stereotypes, we began with a search for all relevant peer-reviewed research. We searched the PsychINFO and Business Source Complete databases, which identified nearly 7,000 potentially pertinent articles and book chapters.

These were narrowed based on relevance and quality indicators (e.g., preference was given to peer-reviewed publication outlets, and unpublished dissertations and popular press articles were excluded). This process yielded about 1,500 citations, which we then reviewed individually again for relevance by reading the titles and abstracts.

This review for relevance revealed several significant areas of literature that are not the main focus of the present review. First, there is an extensive body of basic psychological research that focuses on how age stereotypes develop and become activated from a cognitive psychology point of view. Only a small part of that research was included in this review because the primary focus of our research was the implications of these stereotypes for outcomes in work settings rather than fundamental cognitive processes. Second, another area of literature deals with the mental and physical capability changes that occur with aging. Only the literature dealing with changes in work behavior is discussed herein.

Articles and books that appeared potentially relevant were read, and in this process, many additional relevant articles were identified by cross-referencing. In total, 117 relevant articles and books on age stereotyping and related topics were reviewed and summarized.

Table 1 identifies the research findings that are commonly observed in several studies (common findings) and provides the extensive literature citations for each. Citations that both support and do not support the common findings are included in an effort to depict the research literature accurately. As with most areas of research, some results are mixed, but the common findings identified below reflect the preponderance of the research results. Rather than list or report the findings of single studies, we focused on common findings across several studies. A summary of the prior research leading up to each of these common findings is discussed below, and the common findings are shown at the end of each section. The studies discussed are illustrative of the key findings, but Table 1 is provided as a resource for readers who are interested in the entire list of studies supporting the common findings.

Types of Age Stereotypes

Workplace age stereotypes are beliefs and expectations about workers based on their age (Hamilton & Sherman, 1994). Often stereotypes are negative, inaccurate, or distorted opinions about people based on their membership in a particular group (Fiske & Neuberg, 1990). They may be based on hearsay, preconceived ideas, or unfounded assumptions and incorrectly infer that all members of that group are the same (Fiske & Taylor, 1991). Stereotypes are different from prejudice, which is more affective or attitudinal, and different from discrimination, which is more behavioral (Fiske, 1998, 2004; Nelson, 2002). For example, managers can hold negative stereotypes about older workers that are subtle or unconscious, yet these may affect how they think about their workers. The result can be discrimination against older workers when they are not hired, are not selected for training, or are targeted for layoffs. Thus, although the influence may be subtle, the cause may be age stereotypes and the effect, discrimination. Several different types of stereotypes have been identified in the literature. We label these stereotypes and discuss the related research literature below. We found that most stereotypes ascribe negative characteristics to older workers.

Table 1
Common Findings in the Age Stereotyping Research Literature

Common Finding	Supportive Citations
<p>1. Poor Performance Stereotype</p> <p>There is a stereotype that older workers have lower ability, are less motivated, and are less productive than younger workers.</p>	<p>Abraham & Hansson (1995) Ali & Davies (2003) Crew (1984) Cuddy & Fiske (2002) Dedrick & Dobbins (1991) Duncan (2001) Finkelstein & Burke (1998) Finkelstein, Burke, & Raju (1995) Gordon & Arvey (2004) Gordon, Rozelle, & Baxter (1988) Hansson, DeKokkoek, Neece & Patterson (1997) Hedge, Borman, & Lammlein (2006) Kite, Stockdale, Whitley, & Johnson (2005) Lawrence (1998) Levin (1988) Levine (1988) McCann & Giles (2002) Perry, Kulik, & Bourhis (1996) Reio, Sanders-Rejo, & Reio (1999) Rosen (1978) Rosen & Jerdee (1976a, 1988) Saks & Waldman (1998) Shore, Cleveland, & Goldberg (2003) Singer (1986)</p>
<p>2. Refuting the Poor Performance Stereotype:</p> <p><i>General Tendencies</i></p> <p>There is little evidence that job performance declines as employees get older. Performance often improves with age, and when declines are found, they tend to be small.</p>	<p>Abraham & Hansson (1995) Ali & Davies (2003) Avolio & Waldman (1987, 1990) Avolio, Waldman, & McDaniel (1990) Broadbridge (2001) Czaja & Sharit (1993, 1998) Cuddy & Fiske (2002) Ferris & King (1992) Hansson, DeKoekkoek, Neece & Patterson (1997) Kubeck, Delp, Haslet, & McDaniel (1996) Levine (1988) Liden, Stilwell, & Ferris (1996) McCann & Giles (2002) McEvoy & Cascio (1989) Prenda & Stahl (2001) Reio, Sanders-Rejo, & Reio (1999) Rosen & Jerdee (1988) Saks & Waldman (1998) Salthouse (1984) Schooler, Mulatu, & Oates (1999) Sparrow & Davies (1988) Truett (2001) Vecchio (1993) Waldman & Avolio (1986)</p>

(continued)

Table 1 (continued)

Common Finding	Supportive Citations
<p>3. Refuting the Poor Performance Stereotype: <i>Individual Differences</i> Employee age is less important to job performance than individual skill and health. There are much greater differences in job performance within age groups than between age groups.</p>	<p>Ali & Davies (2003) Baum (1983-1984) Bultena & Powers (1978) Chasteen, Schwarz, & Park (2002) Cleveland & Shore (1992) Connor, Walsh, Litzelman, & Alvarez (1978) Hansson, DeKoekkoek, Neece, & Patterson (1997) Sparrow & Davies (1988)</p>
<p>4. Resistance to Change Stereotype There is a stereotype that older workers are harder to train, less adaptable, less flexible, and more resistant to change. As a result, older workers will provide a lower return on investments such as training.</p>	<p>Broadbridge (2001) Capowski (1994) Chiu, Chan, Snape, & Redman (2001) Cuddy & Fiske (2002) Dennis (1988) Hansson, DeKoekkoek, Neece, & Patterson (1997) Hedge, Borman, & Lammlein (2006) Kite & Johnson (1988) MacNeil, Ramos, & Magafas (1996) McGoldrick & Arrowsmith (2001) Rosen (1978) Rosen & Jerdee (1976a, 1976b, 1988, 1989) Sterns & Alexander (1988) Weiss & Maurer (2004)</p>
<p>5. Lower Ability to Learn Stereotype There is a stereotype that older workers will have a lower ability to learn and therefore have less potential for development.</p>	<p>Avolio & Barrett (1987) Brooke & Taylor (2005) Dedrick & Dobbins (1991) Duncan (2001) Finkelstein, Burke, & Raju (1995) Raza & Carpenter (1987) Rosen (1978) Rosen & Jerdee (1976a, 1976b, 1977, 1989) Sterns & Doverspike (1987) Wrenn & Maurer (2004)</p>
<p>6. Shorter Tenure Stereotype There is a stereotype that older workers will have shorter job tenure and therefore will provide fewer years in which the employer can reap the benefits of training investments.</p>	<p>Greller (1999) Hedge, Borman, & Lammlein (2006) Hutchens (1993)</p>
<p>7. Refuting the Shorter Tenure Stereotype Older workers usually do not give lower returns on investments, such as training, because older workers are less likely to quit, and the payback from such investments tends to come in the short term.</p>	<p>Broadbridge (2001) Hansson, DeKoekkoek, Neece, & Patterson (1997) Hedge, Borman, & Lammlein (2006) Levine (1988) Sterns & Doverspike (1987)</p>
<p>8. More Costly Stereotype There is a stereotype that older workers are more costly because they have higher wages, use benefits more, and are closer to retirement.</p>	<p>Capowski (1994) Faley, Kleiman, & Lengnick-Hall (1984) Finkelstein & Burke (1998) Finkelstein, Higgins & Clancy (2000) Hedge, Borman, & Lammlein (2006) Hutchens (1993) Kite & Johnson (1988)</p>

(continued)

Table 1 (continued)

Common Finding	Supportive Citations
<p>9. More Dependable Stereotype A common stereotype is that older employees are more stable, dependable, honest, trustworthy, loyal, committed to the job, and less likely to miss work or turnover quickly.</p>	<p>Levine (1988) McGoldrick & Arrowsmith (2001) Miller, Kaspin, & Schuster (1990) Nelson (2002) Ostroff & Atwater (2003) Britton & Thomas (1973) Broadbridge (2001) Chiu, Chan, Snape, & Redman (2001) Crew (1984) Cuddy & Fiske (2002) Finkelstein, Burke, & Raju (1995) Gibson, Zerbe, & Franken (1993) Hedge, Borman, & Lammlein (2006) Levine (1988) MacNeil, Ramos, & Magafas (1996) McGoldrick & Arrowsmith (2001) Rosen & Jerdee (1976a) Weiss & Maurer (2004)</p>
<p>10. Age stereotypes have been shown to influence the outcomes of employment-related decisions in a variety of settings, for example, lower ratings in interviews and performance appraisals.</p>	<p>Arrowsmith & McGoldrick (1996) Arvey, Miller, Gould, & Burch (1987) Avolio & Barrett (1987) Braithwaite, Gibson & Holman (1985-1986) Britton & Thomas (1973) Brooke & Taylor (2005) Capowski (1994) Chiu, Chan, Snape, & Redman (2001) Clapham & Fulford (1997) Cleveland & Shore (1992) Cleveland, Festa, & Montgomery (1988) Connor, Walsh, Litzelman, & Alvarez (1978) Crew (1984) Cuddy & Fiske (2002) Dennis (1988) Drehmer, Carlucci, Bordieri, & Pincus (1992) Duncan (2001) The Economist (1996) Erber, Caiola & Pupo (1994) Faley, Kleiman, & Lengnick-Hall (1984) Ferris, Yates, Gilmore, & Rowland (1985) Finkelstein & Burke (1998) Finkelstein, Burke, & Raju (1995) Finkelstein, Higgins, & Clancy (2000) Fusilier & Hitt (1983) Gibson, Zerbe, & Franken (1993) Glover & Branine (2001) Gordon & Arvey (2004) Gordon, Rozelle, & Baxter (1988) Haefner (1977) Hansson, DeKoekkoek, Neece, & Patterson (1997)</p>

(continued)

Table 1 (continued)

Common Finding	Supportive Citations
11. Older employees may hold the same age stereotypes as younger employees and are likely to employ those stereotypes in decision making. The effects of these stereotypes diminish only when they identify with older workers as their in-group.	<p>Hedge, Borman, & Lammlein (2006) Hutchens (1993) Kite & Johnson (1988) Kite, Stockdale, Whitley, & Johnson (2005) Kite & Wagner (2002) Lawrence (1998) Lee & Clemons (1985) Levine (1988) Lin, Dobbins, & Farh (1992) Locke-Connor & Walsh (1980) Lucas (1995) McCann & Giles (2002) McEvoy & Cascio (1989) McGoldrick & Arrowsmith (2001) Osborne & McCann (2004) Miller, Kaspin, & Schuster (1990) Parsons & Mayne (2001) Pasupathi & Lockenhoff (2002) Perry & Bourhis (1998) Perry, Kulik, & Bourhis (1996) Prenda & Stahl (2001) Raza & Carpenter (1987) Reio, Sanders-Rejo & Reio (1999) Rosen (1978) Rosen & Jerdee (1976a, 1976b, 1977, 1988) Rosen, Jerdee, & Lunn (1981) Rupp, Vodanovich, & Crede (2005) Saks & Waldman (1998) Schwab & Heneman (1978) Shore & Bleicken (1991) Shore, Cleveland, & Goldberg (2003) Singer (1986) Singer & Sewell (1989) Sterns & Alexander (1988) Taylor (2001) Truett (2001) Waldman & Avolio (1986) Wrenn & Maurer (2004) Baum (1983-1984) Brewer & Lui (1984) Bultena & Powers (1978) Celejewski & Dion (1998) Chasteen (2005) Chasteen, Schwarz, & Park (2002) Finkelstein & Burke (1998) Finkelstein, Higgins, & Clancy (2000) Kite, Stockdale, Whitley, & Johnson (2005) Liden, Stilwell, & Ferris (1996) Shore, Cleveland, & Goldberg (2003) Spears, Doosje, & Ellemers (1997)</p>

(continued)

Table 1 (continued)

Common Finding	Supportive Citations
12. The effects of age stereotypes on employment decisions tend to be reduced when job-relevant information is available and considered.	Erber, Caiola, & Pupo (1994) Faley, Kleiman, & Lengnick-Hall (1984) Finkelstein, Burke, & Raju (1995) Gordon & Arvey (2004) Hedge, Borman, & Lammlein (2006) Kite & Johnson (1988) Kite, Stockdale, Whitley, & Johnson (2005) Lin, Dobbins, & Farh (1992) Perry & Finkelstein (1999) Saks & Waldman (1998) Singer & Sewell (1989) Walker (1999)
13. Age stereotypes have been shown to be more influential when the perceived "correct age" of a person holding (or applying for) a particular job does not match the candidate's (or incumbent's) age. That is, there is sometimes a perception that certain jobs should be held by employees of a certain age.	Broadbridge (2001) Cleveland, Festa, & Montgomery (1988) Cleveland & Hollman (1990) Cleveland & Shore (1992) Finkelstein, Burke, & Raju (1995) Gordon & Arvey (1986, 2004) Hedge, Borman, & Lammlein (2006) Lawrence (1998) McEvoy & Cascio (1989) McGoldrick & Arrowsmith (2001) Ostroff & Atwater (2003) Pasupathi & Lockenhoff (2002) Perry & Bourhis (1998) Perry & Finkelstein (1999) Perry, Kulik, & Bourhis (1996) Shore & Goldberg (2005) Singer (1986) Singer & Sewell (1989) Vecchio (1993) Waldman & Avolio (1986)
14. Age stereotypes are particularly strong in certain industries, such as finance, insurance, retail, and information technology/computing.	Arrowsmith & McGoldrick (1996) Broadbridge (2001) Lucas (1995) McGoldrick & Arrowsmith (2001) Perry & Finkelstein (1999)

Poor Performance Stereotype

There is a stereotype that older workers are expected to have lower job performance than younger workers (Cuddy & Fiske, 2002; Gordon & Arvey, 2004; Hedge et al., 2006). There are several explanations for the existence of this stereotype. People often think that older workers have lower ability (mental or physical), are less able to handle stress, or are less competent, and therefore, their job performance is lower (Duncan, 2001; Kite, Stockdale,

Whitley, & Johnson, 2005; McCain & Giles, 2002; Rosen & Jerdee, 1976a). In part, this stereotype may exist because traits that are commonly associated with older people are considered less desirable than traits associated with the young (Cuddy & Fiske, 2002). Another possible explanation for this stereotype is that poor performance by older people is more commonly attributed to stable factors that are unlikely to change (Dedrick & Dobbins, 1991).

Common Finding 1: There is a stereotype that older workers have lower ability, are less motivated, and are less productive than younger employees.

Refuting the Poor Performance Stereotype: Job Performance Does Not Decline With Age

However, despite the prevalence of the stereotype about older worker poor job performance, extensive research shows very little evidence that job performance declines as employees age (e.g., Ferris & King, 1992; Reio, Sanders-Rejo, & Reio, 1999). In fact, performance often improves with age, and when declines are found, they tend to be small (Rosen & Jerdee, 1988). Admittedly, there is some evidence of a negative correlation between employee age and supervisor evaluations of employee job performance (Clapham & Fulford, 1997; Truett, 2001). This is more common in certain jobs, such as computer-related tasks and training performance (e.g., Czaja & Sharit, 1993; Kubeck, Delp, Haslet, & McDaniel, 1996). However, this may be the result of Common Finding 13, wherein certain jobs, including information technology jobs, were considered inappropriate for older workers. Yet, when other personal factors (e.g., experience and interest) and job performance factors (e.g., quality and quantity) are accounted for, the negative correlations are often no longer significant (e.g., Czaja & Sharit, 1998; Prenda & Stahl, 2001; Salthouse, 1984). Even though younger employees may be faster than older employees at certain computer-related tasks, they are not more accurate (Prenda & Stahl, 2001). Thus, when multiple aspects of job performance are taken into account, older workers can be just as productive as younger workers (Prenda & Stahl, 2001).

In addition, although some meta-analytic evidence suggests that there is no relationship between age and performance (McEvoy & Cascio, 1989), other meta-analytic evidence shows that job performance actually increases with age when measured by productivity and peer evaluations, although it decreases with age when measured by supervisor evaluations of job performance (Waldman & Avolio, 1986). Yet the impact of the method of measuring job performance on the relationship between age and performance is still an open question, given that later research has found that performance evaluations of actual employees show that using both subjective and objective measures, older workers are rated higher (Liden, Stilwell, & Ferris, 1996).

Several studies report a positive correlation between job tenure and performance (e.g., Ali & Davies, 2003). A study of 24,219 individuals across several different occupations found that both age and job tenure are positively correlated with job performance and that job tenure is a better predictor of job performance than age (Avolio, Waldman, & McDaniel, 1990).

Some research indicates that there may be small decrements in cognitive functioning associated with increased age (Avolio & Waldman, 1990). Yet the lack of a significant relationship between declines in cognitive functioning and job performance with increased age

may be explained by the fact that many older workers find ways to cope and compensate for the age-related factors that could theoretically impair their performance (Abraham & Hansson, 1995).

Complex work can increase cognitive functioning, especially for older workers (Schooler, Mulatu, & Oates 1999). Therefore, by adding complex tasks to older worker job duties, older worker cognitive functioning can be improved. As a result, the potentially negative effects of decrements in age-related cognitive functioning, to the extent that they exist at all, may be reduced when employees work in jobs with more cognitive complexity. Although one study found an inverted U relationship between age and job performance (younger and older engineers had lower performance), the differences were very small (Sparrow & Davies, 1988). Furthermore, training had a greater positive impact on job performance for workers aged 36 and above than it did for younger workers.

Common Finding 2: General Tendencies. There is little evidence that job performance declines as workers get older. Performance often improves with age, and when declines are found, they tend to be small.

Refuting the Poor Performance Stereotype: Skill and Health Are More Important Than Age in Predicting Job Performance

Employee age is often less important to job performance than individual skill and health (McCann & Giles, 2002). There are much greater differences in terms of job performance within age groups than between age groups (Hansson, DeKoekkoek, Neece, & Patterson, 1997). In other words, it is the individual differences between people within age groups that matter most when predicting job performance (Baum, 1983-1984; Sparrow & Davies, 1988), and individual competence is much more important than age (Connor, Walsh, Litzelman, & Alvarez, 1978; Drehmer, Carlucci, Bordieri, & Pincus, 1992).

Common Finding 3: Individual Differences. Employee age is less important to job performance than individual skill and health. There are much greater differences within age groups than between age groups.

Resistance to Change Stereotype

This stereotype takes on several forms, but the primary idea is that older workers are more resistant to change, set in their ways, and more difficult to train. For this reason, the return on training investments will be lower for older workers than younger workers who can be more easily trained. For example, one survey found that employment interviewers believed older workers are harder to train (Britton & Thomas, 1973). A study from the United Kingdom and Hong Kong found common beliefs that older workers are less adaptable than younger workers (Chiu, Chan, Snape, & Redman, 2001). Rosen and Jerdee (1977) also found that managers believe older workers are less flexible and more resistant to change. This finding was later replicated by Weiss and Maurer's (2004) study, which found common

beliefs that older workers are more likely to resist change than younger workers. A meta-analytic investigation of ageism indicated common perceptions that older people are less competent (Kite, Stockdale, Whitley, & Johnson, 2005). Parsons and Mayne's (2001) study found evidence of beliefs that older employees have less energy than younger employees.

Common Finding 4: There is a stereotype that older workers are less adaptable, less flexible, more resistant to change, and have less energy than younger employees and, therefore, will provide lower returns on investments such as training.

Because there is virtually no research that examines the validity of this stereotype, future research should explore not only whether it is true but also other more interesting questions such as when and why resistance to change may be functional or dysfunctional to the organization.

Lower Ability to Learn Stereotype

Research has shown that as a result of negative stereotypes, older workers are commonly rated as having less potential for development than younger workers and that they receive fewer training and development opportunities (Duncan, 2001; Sterns & Doverspike, 1987; Wrenn & Maurer, 2004). Avolio and Barrett (1987) found that younger workers are rated as having higher future potential, and Raza and Carpenter (1987) found that older applicants are perceived to be less intelligent. A meta-analysis of several studies involving age discrimination at work found a common belief that older workers have less potential for development (Finkelstein, Burke, & Raju, 1995). Along similar lines, as a result of age stereotypes, older workers are less likely to receive developmental feedback (Rosen & Jerdee, 1977). As such, age stereotyping can negatively influence perceptions of capacity for development and potential for older workers (Rosen, 1978).

In one study, managers in both Australia and Great Britain believed that older workers had lost their skills and were less trainable than younger workers (Brooke & Taylor, 2005), and some managers believed it was better to simplify jobs for older workers than to provide them with more training (Dedrick & Dobbins, 1991). Often, there is less willingness to allocate training funds to older workers, based on a belief that they are less willing to keep up with technology (Rosen & Jerdee, 1976a, 1976b). Greater resistance among managers to offering training to older workers is sometimes based on beliefs that older workers would have greater difficulty mastering new concepts (Rosen & Jerdee, 1989).

Common Finding 5: There is a stereotype that older workers have lower ability to learn than younger workers.

The research evidence on the validity of this stereotype is mixed. Although one study of employee training in a retail setting found that older workers do not need more training than younger employees (Broadbridge, 2001), another found that older workers have less mastery of training materials and complete the training more slowly (Kubeck et al., 1996).

However, in field studies, these effects are smaller than those shown in studies conducted in laboratory settings (Kubeck et al., 1996). Furthermore, other research shows that older workers do have the capacity to learn and improve their job performance from training (Sterns & Doverspike, 1987).

There is also evidence that some training methods such as active participation, modeling, and self-paced learning may be more effective for older workers (Beier & Ackerman, 2005; Callahan, Kiker, & Cross, 2003). Therefore, future research should examine not only the validity of this stereotype but also why some methods of training (e.g., lecture, online, self-paced, video interactive, role play) may be better for either younger or older workers.

Shorter Tenure Stereotype

Another stereotype is that older workers provide a lower return on investments, such as training, because they have less time in their careers during which their employers can reap the returns of their investments (e.g., Greller, 1999; Hedge et al., 2006). Many managers believe that younger workers will stay with the organization longer because older workers are closer to retirement (Dennis, 1988). Often firms prefer to train younger workers because they believe the younger workers will have longer tenure on the job (Hutchens, 1993).

Common Finding 6: There is a common stereotype that older workers will have shorter job tenure and, therefore, will result in lower returns on investments such as training and development than younger workers.

Refuting the Shorter Tenure Stereotype

Research shows that older workers often do not provide lower returns on employer investments such as training because older workers are less likely to quit and also because the payback from such investments tends to come in the short term (Hedge et al., 2006). Because older workers are often less likely to leave a company than are younger workers and the tail on the training investment is relatively short, the payback period during which employers should recoup their training investments is not longer for younger employees (Levine, 1988).

Common Finding 7: Older workers do not often give lower returns on investments, such as training, because older workers are less likely to quit, and the payback from such investments tends to come in the short term.

More Costly Stereotype

Another common stereotype is that older workers are more costly because they are paid higher wages, use more benefits, and are closer to retirement (e.g., Capowski, 1994). Several studies have indicated how negative stereotypes about older workers can lead to perceptions that they have lower economic value (Ostroff & Atwater, 2003). For example, managers typically rate older workers as having lower economic worth (Finkelstein & Burke, 1998; Finkelstein,

Higgins, & Clancy, 2000). Cost considerations are often invoked in decisions to lay off older workers (McGoldrick & Arrowsmith, 2001). In the past, several federal courts have held that the potentially higher cost of older workers does not justify age discrimination (Faley, Kleiman, & Lengnick-Hall, 1984). However, employers can make legally defensible decisions that affect older workers when they are based on reasonable factors other than age, such as seniority and market salaries (Miller, Kaspin, & Schuster, 1990; *Smith v. City of Jackson*, 2005).

Compared to other age stereotypes, there is comparatively little evidence on the validity of the cost stereotype. There is some evidence that older workers may not be more costly or need more training (Broadbridge, 2001). There is also evidence that worker salaries do tend to increase until about age 50 and then level off (Hedge et al., 2006). Thus, salaries of older workers may be higher than those of younger workers. However, there are other potential factors that may offset these salary differentials. For example, there is evidence that older workers have lower rates of absenteeism (Broadbridge, 2001). However, more research is needed to determine the validity of this stereotype and other factors, such as the quality of work performance, diligence, and so forth, that may offset salaries and benefits.

Common Finding 8: There is a common stereotype that older workers are more costly because they are paid higher wages, use more benefits, and are generally closer to retirement.

More Dependable Stereotype

This stereotype is more positive. According to this stereotype, older employees are more dependable, stable, honest, trustworthy, loyal, and committed to the job and are less likely to miss work or quit (Broadbridge, 2001; Chasteen, Schwarz, & Park, 2002; Crew, 1984; Levine, 1988; MacNeil, Ramos, & Magafas, 1996; Rosen & Jerdee, 1976a). Sometimes, older workers are thought to be more stable and more sociable (Gibson, Zerbe, & Franken, 1993) or better natured and more sincere (Cuddy & Fiske, 2002). Broadbridge (2001) also found that older workers are perceived as being less likely to steal from their employers.

Common Finding 9: There is a common age stereotype that older employees are more stable, dependable, honest, trustworthy, loyal, committed to the job, and less likely to miss work or turn-over quickly.

There is some evidence to support the validity of this stereotype with respect to objective measures of counterproductive behaviors. For example, older workers are less likely to steal from their employers, have lower rates of absenteeism, and are less likely to quit (Broadbridge, 2001; Hedge et al., 2006). However, future research is needed on the more positive dimensions of work performance (e.g., teamwork, customer service, and citizenship behaviors) and how they relate to worker age and age stereotypes.

People Use Age Stereotypes in Work Settings

People often hold age stereotypes in work settings (Kite & Wagner, 2002), and age stereotypes have been shown to influence the outcomes of employment-related decisions in a variety

of settings (Taylor, 2001). For example, research has shown that as a result of age stereotypes, older persons with the same or similar qualifications or attributes as younger persons commonly receive lower ratings in interviews and performance appraisals (Avolio & Barrett, 1987; Finkelstein et al., 1995; Gordon, Rozelle, & Baxter, 1988; Haefner, 1977; Levin, 1988). Research has also shown that older workers are likely to have more difficulty either finding or retaining employment or getting promotions (*The Economist*, 2006). On the other hand, some studies that used hypothetical job candidates have shown that age does not influence the evaluation of applicants (e.g., Fusilier & Hitt, 1983). Vecchio (1993) found that teachers who are older than their supervisors do not get less favorable ratings from their supervisors than teachers who are younger. Nevertheless, a recent meta-analysis of this literature confirms that there is a general preference for younger workers. However, as research designs become more like real employment settings, the effects are reduced (Gordon & Arvey, 2004).

Subjective appraisals of employee performance may be particularly susceptible to the influence of age bias (Sterns & Alexander, 1988). Studies have found that certain types of performance appraisal formats do not reduce age bias in making evaluations for who should be retired (Rosen, Jerdee, & Lunn, 1981) and that social comparison processes may exacerbate age stereotyping (Shore & Goldberg, 2005). Thus, certain forced ranking appraisal systems may increase biases against older workers in layoff situations (Osborne & McCann, 2004).

Common Finding 10: Age stereotypes have been shown to influence the outcomes of employment-related decisions in a variety of settings.

Moderators of Age Stereotypes

Research suggests that the influence of age stereotypes could be moderated by several variables (Braithwaite, Gibson, & Holman, 1985-1986; Shore & Goldberg, 2005). Three potentially important moderators are the age of the person holding the stereotype, the influence of job-related information, and perceptions that certain jobs are appropriate for certain ages.

Older Workers Also Hold Stereotypes

It might be expected that older workers would be less likely to hold negative stereotypes about older workers than younger workers (Locke-Connor & Walsh, 1980; Shore & Bleicken, 1991), and some evidence supports this expectation (Rupp, Vodanovich, & Crede, 2005). However, the majority of research indicates that older workers hold the same stereotypes about older workers as do younger workers and that older workers are also likely to employ those stereotypes in decision making (Glover & Branine, 2001; Schwab & Heneman, 1978). Two studies found that older supervisors give older employees lower performance evaluations (Ferris, Yates, Gilmore, & Rowland, 1985; Shore, Cleveland, & Goldberg, 2003), and a meta-analytic study found that older people believe older people are less competent (Kite et al., 2005). Furthermore, older people not only hold some of the same beliefs about older workers, but they also have more differentiated types of stereotypes about older workers (Brewer & Lui, 1984).

Other research indicates that older workers have a strong resistance to being perceived as “old” (Bultena & Powers, 1978; Chasteen, 2005; Chasteen et al., 2002), even though older people are unlikely to deny their real age (Baum, 1983-1984). In some circumstances when older people identify older workers as their in-group, they may be more likely to evaluate older workers more favorably (Celejewski & Dion, 1998; Spears, Doosje, & Ellemers, 1997). Other research indicates an in-group bias in that older workers view older people more favorably than they do younger people (Celejewski & Dion, 1998; Spears, Doosje, & Ellemers, 1997). Thus, it appears that although older workers often hold the same age stereotypes as others, the negativity of these stereotypes may be diminished when they identify with other older workers.

Common Finding 11: Older employees may hold the same age stereotypes as do younger employees and are likely to employ those stereotypes in decision making. The effects of these stereotypes diminish when they identify with older workers as their in-group.

Job-Related Information Can Reduce the Influence of Age Stereotypes

The effects of age stereotypes on employment decisions tend to be reduced when job-relevant information is available and considered. For example, Erber, Caiola, and Pupo (1994) found that when reference letters state positive things about stereotypically “forgetful” older job applicants, the applicants are likely to be evaluated more positively. A field study of employment interviews shows that when interviewers have information about the jobs, the use of age stereotyping is reduced (Lin, Dobbins, & Farh, 1992). Moreover, actual managers with work experience are more likely to use objective job qualifications to make decisions about job candidates, whereas inexperienced student subjects are more likely to use age as a factor in selection decisions (Singer & Sewell, 1989).

Furthermore, a study of recently hired workers shows that older workers are rated lower on job performance, but this negative relationship disappears after controlling for prior work experience (Saks & Waldman, 1998). This is consistent with several studies on attitudes toward the elderly, which show that when more specific information about individuals is introduced, it is less likely that the individuals would be judged by age stereotypes (Kite & Johnson, 1988; Lee & Clemons, 1985). It also suggests that individuation processes that encourage evaluators to focus on the abilities of individuals rather than their membership in particular groups can reduce the negative effects of age stereotyping (Fiske & Neuberg, 1990).

Common Finding 12: The effects of age stereotypes on employment decisions tend to be reduced when job-relevant information is available and considered.

Some Jobs Have a Perceived “Correct Age”

Age stereotypes have been shown to be more influential when the perceived appropriate age for a person holding a particular job does not match the candidate’s (or incumbent’s) actual age (e.g., Cleveland, Festa, & Montgomery, 1988; Shore & Goldberg, 2005). There is sometimes a perception that certain jobs—or even professions—should be held by employees

of a certain age group (Cleveland & Hollman, 1990; Cleveland & Shore, 1992; Gordon & Arvey, 1986; Perry & Bourhis, 1998; Perry, Kulick, & Bourhis, 1996; Singer, 1986) and that age norms are associated with certain jobs (Lawrence, 1998). For example, Cleveland and Hollman (1990) found that job tasks associated with older workers (e.g., meeting with policy makers on administrative matters vs. seeking new information) and the number of older people holding a particular job tends to increase the likelihood that it would be perceived as a job appropriate for older workers. Pasupathi and Lockenhoff (2002) found that certain hiring practices, such as asking more questions of older workers, are significantly enhanced in interviews for managerial jobs as compared to sales jobs. Moreover, negative age stereotypes about older workers are more likely to be activated when older workers apply for jobs that are not perceived as appropriate for their age (Perry et al., 1996).

Common Finding 13: Age stereotypes have been shown to be more influential when the perceived correct age of a person holding (or applying for) a particular job does not match the candidate's (or incumbent's) age. That is, there is sometimes a perception that certain jobs should be held by employees of a certain age.

Age Stereotypes Are More Common in Some Industries

Research has shown that age stereotypes are particularly strong in certain industries, such as finance, insurance, retailing, and information technology/computing (Arrowsmith & McGoldrick, 1996; Perry & Finkelstein, 1999). For example, retailing is thought to be a particularly "young" industry, and older workers often believe that they will have fewer growth opportunities with these employers (Broadbridge, 2001). Another study shows that hotel and catering businesses often rely on younger workers, and for this reason, managerial attitudes are likely to perpetuate disadvantages for older workers in this sector (Lucas, 1995). Similar results have been reported in the finance and insurance industries, where managers are more likely to hire younger workers (McGoldrick & Arrowsmith, 2001). Even so, one study found that the perceived interview performance of older applicants for retail jobs is not lower than that of younger applicants (Arvey, Miller, Gould, & Burch, 1987).

Common Finding 14: Age stereotypes are particularly strong in certain industries, such as finance, insurance, retailing, and information technology/computing.

Recommended Directions for Research on Age Stereotypes

To address the gaps in the research on this important topic, we identify potential questions that should be addressed. They are discussed below and summarized in Table 2. These directions are intended to advance our understanding of how age stereotypes occur as well as how organizations can effectively counteract the negative effects of these stereotypes.

Research Recommendation 1 (More Complex Relationships). Figure 1 synthesizes and integrates much of the prior research to provide a framework for future research. Early

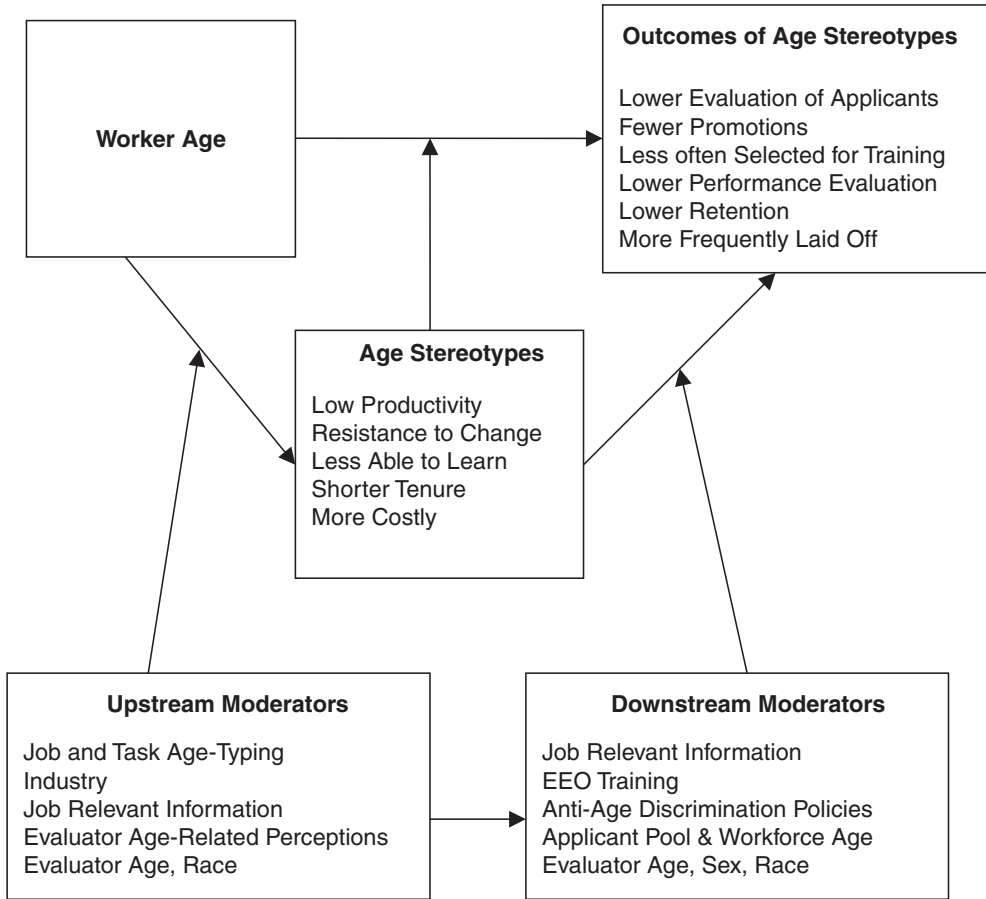
Table 2
Recommended Directions for Future Research on Workplace Age Stereotypes

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1. **More Complex Relationships.** Future research should focus on more complex relationships with age stereotypes, such as relationships between moderators, whether stereotypes are moderators or mediators, recursive effects from age stereotypes to discriminatory cultures and back again, nonlinear effects, and multiple dimensions of stereotypes, employee performance (e.g., productive vs. counterproductive), and outcomes.
 2. **Managerial Practices.** Future research should focus on managerial practices that will create a friendlier environment and atmosphere for older workers and reduce the potential for age stereotyping.
 3. **Alternative Contexts.** Future research should identify the human resources decision-making contexts in which age stereotyping is most likely to occur other than those already heavily studied.
 4. **Employee Evaluation Methods.** Because corporate restructuring and downsizing include the potential for age discrimination complaints, researchers should identify the types of evaluations of employee performance and employee potential that will reduce age stereotyping.
 5. **Training.** Future research should examine whether awareness training that focuses on individual characteristics may reduce the effects of age stereotyping, as research has shown it mitigates race and gender discrimination and sexual harassment.
 6. **Interactive Effects.** Future research should examine how different age stereotypes interact with each other. Do multiple negative stereotypes have an enhancing effect? Can positive age stereotypes counteract the effects of negative age stereotypes?
 7. **Comparisons with Other Stereotypes.** Future research should explore how age stereotypes differ from other stereotypes and how this might make it more difficult (or easier) to mitigate their effects.
 8. **Multiple Group Membership.** Future research should examine the interactive effects of stereotypes due to multiple group membership.
 9. **Age Covariates.** Future research should examine the effects of other forms of discrimination that covary with age and, thereby, create interactive effects.
 10. **Costliness.** Future research should use utility analysis to determine definitively whether older workers are a poorer (or better) investment in terms of hiring and training dollars.
 11. **Performance Management Systems.** Future research should examine how longer-term performance management systems may differentially improve the retention of older workers who are likely to have longer tenure.
 12. **National Culture.** Future research should investigate the extent to which national culture influences age stereotypes.
 13. **Research Methods. Objectivity.** Future research needs to be careful to avoid socially desirable responding that may underestimate the effects of age stereotyping and also use objective methodologies that are not biased toward validating age stereotyping.
 14. **Research Methods: Cross-Sectional.** Much of the research in this field is based on cross-sectional designs. In the future, more research should adopt longitudinal methods to track the same workers over time and avoid confounds with cohort effects.
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research suggests a direct relationship between age and negative effects on workers. For example, employers may prefer to hire younger workers (Haefner, 1977). Often, these negative outcomes have been characterized as age discrimination (Rosen & Jerdee, 1976a). However, worker age also tends to induce age stereotypes. For example, older workers are stereotyped as more resistant to change (Cuddy & Fiske, 2002). More recent research illustrates how these stereotypes may moderate the relationship between worker age and the negative outcomes.

Figure 1 illustrates how stereotypes could act as either moderators or mediators between employee age and outcomes for workers (Baron & Kenny, 1986). Future research needs to examine the extent to which age stereotypes function as moderators or mediators.

Figure 1
Workplace Age Stereotypes



Note: EEO = equal employment opportunity.

Age stereotypes may act as moderators when they influence the direction or strength of the relationship between worker age and outcomes for workers and organizations. As moderator variables, age stereotypes could indicate in which situations or for whom the relationship between worker age and outcomes is strongest. For example, suppose there is a negative correlation between worker age and the tendency to give workers promotions. This negative correlation may be enhanced when the persons deciding who will be promoted hold negative stereotypes about older workers.

Age stereotypes may act as mediators when they explain the relationship between worker age and outcomes for workers and organizations. When age stereotypes act as mediator variables, they can explain why or how worker age is related to outcomes for workers or organizations. For example, suppose an employer observes higher turnover among older workers. This higher turnover may be caused by the employer's stereotyped beliefs that older workers are less able to learn new skills (Brooke & Taylor, 2005). The older workers could be frustrated by their employer's perception that they cannot learn new skills and, therefore, accept jobs with another employer who believes that they can learn.

In addition, relationships with age stereotypes are influenced by two types of moderators. We characterize "upstream moderators" as factors that moderate the relationship between worker age and the age stereotypes. They could indicate in which situations or for whom the relationship between worker age and the existence of age stereotypes is strongest. The upstream moderators tend to be based on individual differences in evaluators; contextual factors, such as industry; and cognitions such as perceptions, age salience, and job typing. For example, because some jobs are thought to be more appropriate for younger people, the type of job or task may influence the degree to which worker age and stereotypes are invoked (Cleveland & Hollman, 1990).

"Downstream moderators" are factors that moderate the relationship between age stereotypes and outcomes that affect workers. They could indicate in which situations or for whom the relationship between age stereotypes and outcomes is strongest. The downstream moderators also include individual differences in evaluators. However, the downstream contextual moderators focus more on applicant pool and workforce characteristics and management practices, policies, and procedures. For example, despite the stereotype that older workers cost more, formal policies to encourage hiring older workers can help to prevent age discrimination in selection decisions (Capowski, 1994; Chiu et al., 2001). Future research should explore whether upstream moderators, such as job task typing, could also act as downstream moderators, thereby exacerbating the impact of age stereotypes on outcomes. Research should also examine whether downstream moderators, such as management practices and policies, can also act as upstream moderators, thereby reducing the likelihood that worker age will result in age stereotyping.

Future research should also identify other moderators but also test more complex relationships between moderators and other variables. For example, it may be the case that upstream moderators influence downstream moderators. Thus, the upstream moderators not only influence the relationship between worker age and the prevalence of age stereotypes, but upstream moderators may also influence downstream moderators.

The upstream moderators could influence downstream moderators by increasing the likelihood that they may occur. For example, industry may influence the likelihood of diversity training. In certain industries, such as retailing, where profit margins and overhead expenses are low, employers may implement less diversity training to prevent age stereotyping. In turn, lower levels of diversity training may moderate the relationship between age stereotypes and negative outcomes by increasing the likelihood that age stereotypes will have negative effects.

Upstream moderators could also influence levels or degrees of downstream moderators. For example, industry may influence the mean level of applicant pool age. Information technology businesses may have younger applicant pools because recent college graduates have

knowledge of advances in computers. In turn, the age of the applicant pool may moderate the relationship between age stereotypes and negative outcomes.

Future research should also investigate more complex relationships with age stereotypes. The nature of curvilinear relationships with age stereotypes needs to be further examined. For example, to what extent do age stereotypes exist more strongly at different ages (e.g., held more strongly by younger than middle-aged employees)? The potential for threshold effects should also be examined. For example, does age matter more after age 65?

Consistent with the attraction–selection–attrition paradigm, organizations may tend to attract, select, and retain either younger or older employees (Schneider, 1987). Over time, the variation in worker age in an employer's workforce may be reduced, resulting in age homogenization. This could result in either a younger workforce with a youth culture or an older workforce. The prevalence of negative age stereotypes in an organization may increase the tendency toward age homogenization with a younger workforce. Alternatively, greater age homogeneity with a younger workforce may increase the tendency toward negative age stereotyping. Future research should examine whether age homogenization causes age stereotyping, or vice versa.

Also, the multidimensional structure of age stereotypes and their effects should be further explicated. For example, how many dimensions are there to the older worker productivity stereotypes (e.g., speed vs. quality vs. innovation)? To what extent can different dimensions of age stereotypes be refuted? For example, would it be easier to show that older workers can be better team members than to show that they can be fast? How do different dimensions differentially relate to other variables? For example, to what extent are older workers perceived as more dependable and better at teamwork, customer service, and organizational citizenship behaviors, or do they just have fewer counterproductive behaviors, and how do these different dimensions relate to employee selection, promotion, and layoffs? Moreover, how do contextual factors interact with these multiple dimensions (e.g., speed of performance as a job requirement)? It will also be important to identify which dimensions of this stereotype are more accurate than others (e.g., trustworthy vs. attendance).

Research Recommendation 2 (Managerial Practices). Future research should focus on managerial practices that will create a friendlier environment and atmosphere for older workers and reduce the potential for age stereotyping (e.g., Steinhauer, 1998; Walker, 1999). For example, practices that reward long tenure or organizational memory may communicate that age is valued. In this way, theory-based research can inform practice in a manner that benefits both organizations and older workers.

Research Recommendation 3 (Alternative Contexts). Future research should identify the human resources decision-making contexts in which age stereotyping is most likely to occur other than those already heavily studied. For example, the influence of age stereotypes on team assignments and processes has not been adequately studied, which is important, given the widespread use of teams in organizations these days. Should teams be staffed with diverse ages as well as other demographics? Will this lead to greater perspective in problem solving or training of younger employees?

Research Recommendation 4 (Employee Evaluation Methods). Because corporate restructuring and downsizing include the potential for age discrimination complaints,

researchers should identify the types of evaluations of employee performance and potential that will reduce age stereotyping (Faley et al., 1984). For example, how can the tendency toward performance evaluation that focuses on future potential, thereby working to the disadvantage of older workers, be improved?

Research should also examine whether the perceptions of older worker costliness may negatively influence the performance ratings of older employees. Thus, even when older workers actually produce the same amount, because they are perceived as more costly, they may be rated lower on their performance appraisal. Research should also examine the extent to which the nature of the tasks being performed may influence perceptions of costliness and older worker productivity. Perceptions of older worker performance may be more contaminated by age stereotypes when the tasks they are performing are novel or more technological. Moreover, research should examine the extent to which the positive perceptions of older workers (e.g., dependable, more warmth) may only transfer to social tasks and not to tasks dealing with technology.

Scholars have noted the need for behaviorally oriented performance appraisal systems that are accurate, fair, and valid (Werner & Bolino, 1997). Along these lines, it will be helpful to determine what types of behavior-based systems will be influenced by different stereotypes and which types of performance evaluation systems (e.g., rater training, multisource feedback) are more effective in reducing age-related errors in performance evaluation.

It will also be helpful to determine which aspects of organizational justice (i.e., distributive, procedural, interactional) are more important in predicting perceptions of the age-related fairness of performance evaluations (Ambrose, Hess, & Ganesan, 2007). It may be that as workers age, they may want to be treated with more respect and dignity and thereby be more strongly influenced by interactional justice than formal procedures or even the outcomes of performance evaluations.

Research Recommendation 5 (Training). Future research should examine whether awareness training that focuses on individual characteristics (i.e., individuation) may reduce the effects of age stereotyping, as research has shown it mitigates race and gender discrimination and sexual harassment (e.g., Brewer & Miller, 1984). In this way, the research on age stereotyping may benefit from research on other topics, such as race and gender. Moreover, research should explore whether training programs could emphasize the fact that everyone may eventually experience age stereotyping and thereby create more empathy for its prevention. Furthermore, more research is needed on the truthfulness of the lower ability to learn stereotype and how organizations may implement training that is effective for older and younger workers.

Research Recommendation 6 (Interactive Effects). Another interesting question for future research is how different stereotypes interact with each other. For example, is it likely that multiple negative stereotypes (e.g., poor performance, costly) will have an enhancing effect, thereby exacerbating the negative impact on older workers?

Moreover, is it possible that a positive age stereotype (more reliable or trustworthy) can offset the impact of negative stereotypes (e.g., resistant to change) and thereby reduce the likelihood of employment discrimination? If so, is it possible that positive age stereotypes might be used to counteract the effects of negative age stereotypes? If so, organizations may tap into natural human tendencies to engage in age stereotypes in a way that offsets some of their negative impact. Future research is needed to answer these questions.

Research Recommendation 7 (Comparisons to Other Stereotypes). Future research should explore how age stereotypes differ from other stereotypes (e.g., everyone gets older, but not everyone will experience being a minority or female) and how this might make it more difficult (or easier) to mitigate their effects. There is a need to investigate whether the resistance to change stereotype is true, but it will also be important to determine how this stereotype differs from those that are based on race or sex.

Research Recommendation 8 (Multiple Group Membership). Future research should examine the interactive effects of stereotypes due to multiple group membership (e.g., being older and being female or minority). Here, research can determine the extent to which negative stereotypes may be increased by multiple group membership or whether membership in multiple groups may moderate stereotyped thinking.

Research Recommendation 9 (Age Covariates). Future research should examine the effects of other forms of discrimination that covary with age and thereby create interactive effects (e.g., age and weight, age and disability). Research that investigates combinations of factors that are correlated with age will enable researchers to determine whether stereotyped attributions are based on age or other factors such as weight or disability and whether these factors enhance or moderate stereotyped thinking.

Research Recommendation 10 (Costliness). Future research needs to more fully examine the issue of older worker costliness. Utility analysis can be used to determine more definitively whether older workers are worse (or better) investments in terms of salaries, benefits, and training dollars after considering the multiple dimensions of their work performance. It can also explore the possibility of interactive and curvilinear effects. For example, are middle-aged workers better (or worse) investments than both younger and older workers when considering all aspects of job performance?

Research Recommendation 11 (Performance Management Systems). In addition, given that older workers may have longer job tenure than younger workers, future research should examine how performance management systems, such as goal setting, may be made more effective for them and for the organization. For example, will setting longer-term goals be more effective in recruiting, retaining, and motivating productive older workers as opposed to younger workers who have short-term career objectives?

Research Recommendation 12 (National Culture). Future research should investigate the extent to which national culture influences age stereotypes. For example, are managers from cultures with less ageism (e.g., Asian) less likely to hold or use negative stereotypes about older workers? Do such cultures have different or more positive stereotypes about older workers (e.g., older workers are wiser)? In this way, future research can be aligned with the growth of international business and the need for effective cross-cultural management expertise.

Research Recommendation 13 (Research Methods: Objectivity). Future research needs to recognize that the way we ask questions may influence the outcomes of research studies on

this topic. Clearly, research that asks managers specifically about older workers will have the potential for socially desirable responding and may reduce the effect sizes observed. Alternatively, researchers should be careful not to design their research in such a way that it will inevitably prove that older worker stereotypes are harmful.

Research Recommendation 14 (Research Methods: Longitudinal). Future research should recognize the potential limitations of cross-sectional designs that study workers at one point in time. Future research should strive to incorporate longitudinal methodologies to track changes with age within the same workers.

Recommendations for Practice

Despite the incomplete nature of the research on workplace age stereotypes, the existing research does provide a basis for several important recommendations for practice. These recommendations are listed in Table 3 and discussed below.

Practice Recommendation 1 (Identify Reasonable Factors). Given the increase in the size of age discrimination verdicts against employers, managers should be made aware that the law requires them to provide justification for their decisions that are based on reasonable factors other than age when older workers are adversely affected. The potential problem for managers is that they may fall into the trap of relying on erroneous stereotypes about older workers, thereby exposing themselves to legal liability. Until the *Smith v. City of Jackson* (2005) case, it was not clear if age discrimination claims could be based on adverse impact alone. In that case, the Supreme Court decided that age discrimination claims can be based on adverse impact, even without proof of intent to discriminate. Nevertheless, employers can justify adverse impact against older workers by showing that their decisions are based on a reasonable factor other than age. Now organizations should not only monitor the numbers to determine if adverse impact has occurred but also be prepared to offer a reasonable explanation for their decisions.

Practice Recommendation 2 (Avoid Erroneous Decisions). Organizations need to think more critically about whether they are making decisions based on erroneous stereotypes about older workers that end up excluding older workers from their workforce, thereby hurting their bottom line. False beliefs about older workers (e.g., “they can’t sell computers to young customers”) may lead organizations to hire, promote, and train younger employees who may actually be less productive and more costly.

Practice Recommendation 3 (Use Job-Related Information). Managers should be aware that age stereotyping can be difficult to avoid and requires constant vigilance—both observational and statistical—to ensure that it does not affect employment decisions. One of the best ways to avoid the effects of age stereotypes is to focus employment decisions on job-relevant information. However, doing so requires careful job analysis and examination of the validity of selection decisions.

Table 3
Recommendations for Human Resources Practice

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1. **Identify Reasonable Factors.** Managers should be aware that age stereotyping is prevalent and difficult to avoid. Therefore, it requires constant vigilance—both observational and statistical—to ensure that age stereotyping does not affect employment decisions and expose employers to legal liability. Also, employers should be prepared to identify reasonable factors other than age that justify their decisions.
 2. **Avoid Erroneous Decisions.** Managers need to think more critically and analytically to avoid tendencies to exclude older workers in selection decisions or to target them for layoffs, thereby reducing the overall productivity of the workforce.
 3. **Use Job-Related Information.** Managers should be trained to identify the common age stereotypes and to know the evidence against their validity so they can recognize them when they occur. They should focus on objective processes such as job analysis, selection procedure validity, and so forth.
 4. **Use Training and Development.** Organizations should use training and development to help avoid the impact of negative stereotypes of older workers. Managers should be trained in the many positive characteristics of older workers. Also, enhancing employee development may help organizations to focus on the longer term, improving retention and growth of workers as they age.
 5. **Target High-Risk Settings.** Managers should target anti-age stereotyping interventions to high-risk situations. Managers should be trained that age stereotypes often involve the belief that certain jobs should be held by persons of a certain age, because this may increase the likelihood of discrimination against older workers for these jobs. Human resources in some industries where this is most prevalent should work to change this culture.
 6. **Use Older Workers as a Competitive Advantage.** Managers should find ways to exploit the knowledge that there is much wider variation in most work-related variables within age groups than between age groups. Employee skill is much more important than age in predicting job performance. In this way, they will be more likely to use such things as valid selection processes that focus on skill rather than age, thereby enabling them to hire productive older workers that other employers have overlooked.
 7. **Consider Adding Complexity.** Managers who are concerned that their older workers may be losing their cognitive abilities may be tempted to simplify their jobs. However, research suggests that it may be better to add complexity to their work and thereby enhance both their cognitive functioning and their work performance.
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Practice Recommendation 4 (Training and Development). Effective organizational interventions may include both training and development. In training programs, managers should learn to identify the common age stereotypes (e.g., poor performance, resistance to change) and to know the evidence that refutes them so they can recognize them when they occur and be less apt to rely on them. Using employee development programs, organizations can send a message that they intend for their employees to stay with the organization for longer periods, even as they age. When organizations intend to develop employees for higher-level responsibilities, there is an implicit expectation that they will remain with the organization for a longer period of time and that workers may be promoted as they get older.

Managers should be trained in the many positive characteristics of older workers (e.g., more stable, dependable, loyal). In this way, the potentially harmful effects of negative age stereotypes may be diminished. They may be more likely to want to recruit, hire, and retain older workers. However, this should only be the first step toward avoiding erroneous thinking and toward more logical analysis of valid criteria for making their decisions. Explaining the fallacies of negative age stereotypes should not be used to encourage employers to hire older workers, per se. Rather, they should be encouraged to make more rational decisions

based on effective methods that increase the size and quality of applicant pools, the need to use valid selection procedures, the implementation of well-designed performance evaluation methods, and appropriate types of incentive compensation.

Practice Recommendation 5 (Target High-Risk Settings). Managers should consider targeting anti-age stereotyping interventions toward high-risk situations. It is in these areas that organization returns on their anti-age stereotyping investments are likely to be higher. For example, because there are beliefs that certain jobs should be held by persons of a certain age, organizations may wish to pay closer attention to avoiding the influence of age stereotyping for these jobs. Similarly, firms or organizations with business units in industries where age stereotyping is more prevalent (e.g., computers, insurance, finance) should target more resources toward dealing with this problem. Examples could be recruiting advertisements that feature older workers at computers, using the company gym, and so forth.

Practice Recommendation 6 (Use Older Workers as a Competitive Advantage). Managers should find ways to use to their advantage the fact that there is much wider variation in most work-related variables (e.g., skill, motivation, job performance) within age groups than between age groups. Employee skill is much more important than age in predicting job performance. Managers who recognize these principles should be more willing to replace misguided preferences for recruiting and hiring younger workers with a preference to recruit and select the most qualified regardless of age. In this way, they may also be able to hire better-qualified older workers who are available in the labor market because they have been overlooked by other employers.

Practice Recommendation 7 (Consider Adding Complexity). Managers may hold stereotypes that older workers lose their cognitive abilities, and therefore, in misguided attempts to help them be more productive, they may try to simplify their job duties. To the contrary, it may be better to add cognitively complex tasks to their work because this may be effective in increasing older worker cognitive functioning. In this way, older worker cognitive functioning is enhanced, and their work productivity may be improved.

Summary and Conclusion

Each day, we all get a little bit older. Aging inevitably impacts everyone. Unfortunately, the aging process often results in erroneous stereotypes that can have harmful effects for employees, employers, and society in general. This article provides a comprehensive analysis of the research literature on common age stereotypes in the workplace. We provide a framework and insightful suggestions to guide future research on this important topic to better understand its causes and to identify effective methods whereby the problems with age stereotypes can be avoided. We also provide practical advice for employers to help them see how their older workers can be productive and valued members of the workforce. By targeting the intellectual resources of academia toward research on this important topic, we can gain a better understanding of the causes and effects of workplace age stereotypes, we can

help organizations to be more effective, and we can also help employers to give older workers the respect and dignity that they deserve.

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