

# Review of Research on Age Discrimination in the Employment Interview

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**Abstract** This paper reviews the research literature on age discrimination in the employment interview and related contexts. Twenty one studies were identified which explored whether age discrimination occurs within the context of the employment interview since the Age Discrimination in Employment Act was put into law. Sixteen studies were conducted in laboratory settings. It was concluded that evidence of age discrimination in the employment interview is commonly observed in laboratory studies which do not assess the influence of other job-relevant characteristics. Laboratory studies may create too much artificiality, where the impact of qualifications is artificially minimized and the impact of irrelevant factors like age are maximized. Only 5 of the 21 studies were conducted in the field, but they found far less consequential age discrimination in the employment interview.

**Keywords** Employment interview · Age discrimination · Legal issues

The passing of the Age Discrimination in Employment Act (ADEA) in 1967 has resulted in a wide variety of research

into how age might impact decisions in the employment setting. For example, scholars have examined how age affects actual job performance, the nature of age stereotypes in the work setting, how age might impact performance ratings, and how age relates to recruitment, selection, and promotion decisions. This paper focuses on a subset of this research by reviewing the research literature on how applicant age might affect outcomes in the employment interview.

This paper presents a narrative review of this area of research in order to summarize findings for both researchers and practitioners. This method is used to identify and explain the reasons why some studies find the occurrence of age discrimination in the employment interview context when others do not. We begin with a discussion of the methodology used to identify and select articles to be covered in the present review. This is followed by a narrative summary of key articles. We organize key research findings by first presenting lab findings and then results from field research. A chronological list of the empirical articles reviewed, and their major features, is contained in Table 1. We conclude this paper by discussing the research and practical implications.

## Review Methodology

Several different means were utilized to locate relevant articles. First, the reference lists of the last four major reviews of the employment interview were searched (Arvey and Campion 1982; Harris 1989; Posthuma et al. 2002; Schmitt 1976) covering the period of time since the ADEA was passed in 1967. Second, all empirical articles in the most recent review (Posthuma et al. 2002) were manually searched to identify any studies that concern age discrimination. Third, a computer search of the published

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**Table 1** Summary of Relevant Empirical Age Discrimination Articles

Article	Interviewers	Setting	Applicant age	Job type	Age × age interaction	Major findings and notes
Arvey et al. (1987)	Store managers	Field	Under 20, 21–25, 26–30, 30–40, 40–50, over 50	Retail sales clerks & cashiers	Not studied	<ul style="list-style-type: none"> <li>Older applicants had higher interview performance.</li> </ul>
Avolio and Barrett (1987)	Undergraduate students	Lab	32, 59, or none given	Supervisory position	Not studied	<ul style="list-style-type: none"> <li>Younger applicants had higher future potential and overall evaluation ratings.</li> </ul>
Baron (1993)	Undergraduate students	Lab	NA	Entry-level management trainee	Not studied	<ul style="list-style-type: none"> <li>Applicant qualifications had a much stronger effect than mood.</li> <li>Mood had no effect on ratings for highly qualified applicants.</li> </ul>
Baskett (1973)	Undergraduate students	Lab	NA	Vice President	Not studied	<ul style="list-style-type: none"> <li>Qualifications significantly related to hiring and salary recommendations.</li> </ul>
Cleveland et al. (1988)	Part-time evening graduate students	Lab	60 or 61	Intermediate Programmer	Not studied	<ul style="list-style-type: none"> <li>When there were fewer older applicants in the applicant pool, older applicants are rated lower than younger applicants in terms of hire recommendation and potential to advance.</li> <li>When the age-type of the job was held constant, no differences were found.</li> <li>Not an interviewing study.</li> </ul>
Connor et al. (1978)	Undergraduate students	Lab	24 and 63	Switchboard operator and teachers aid	Not studied	<ul style="list-style-type: none"> <li>No clear differences in assessment of old and young applicants.</li> <li>Competence was more important than age.</li> </ul>
Finkelstein et al. (1995)	Meta-analysis (primarily students)	Lab only	24–34 and 55–65	Various	Studied	<ul style="list-style-type: none"> <li>Younger people rated younger workers higher than older workers on several measures. No differences for older people.</li> <li>Older workers were given less favorable ratings when raters were younger, when there was no job-relevant information about workers provided to participants, and when participants concurrently rated old and young workers.</li> </ul>
Fuslier and Hitt (1983)	Undergraduate students	Lab	25, 40, 55	Entry-level professional	Not studied	<ul style="list-style-type: none"> <li>Studies not limited to the employment interview.</li> <li>Work experience accounted for the largest amount of variance in evaluations.</li> </ul>
Gibson et al. (1993)	Owners and personnel managers (in Canada)	Field	Old/young	Various	Studied	<ul style="list-style-type: none"> <li>Not an interviewing study.</li> <li>Younger workers received higher ratings from younger employers; older workers received higher ratings from older employers.</li> <li>Older workers rated more favorably in individual initiative, stability, and experience.</li> <li>Not an interviewing study.</li> </ul>
Gordon et al. (1988)	Undergraduate students	Lab	25, 40, 55	Assistant director or Director of marketing and research	Not studied	<ul style="list-style-type: none"> <li>All applicants were perceived similarly in terms of attractiveness.</li> </ul>

**Table 1** continued

Article	Interviewers	Setting	Applicant age	Job type	Age × age interaction	Major findings and notes
Haefner (1977)	Managers	Field	25 and 55	Semi-skilled position	Not studied	<ul style="list-style-type: none"> <li>Employers preferred younger, highly competent individuals over older, highly competent individuals.</li> <li>Not an interviewing study.</li> <li>No effect for age similarity in any condition.</li> </ul>
Lin et al. (1992)	Personnel specialists	Field	Under 25, 25–35, 35–45, over 45	Custodian	Studied	<ul style="list-style-type: none"> <li>Does not appear to be an interaction effect between interviewer age and applicant age (analyses are not clear).</li> <li>Age of applicant did not affect judgments of competence, but the outcome of an interview did.</li> <li>Age only affected judgments of activity level.</li> <li>Qualifications are much more important than the demographic characteristic of gender.</li> <li>Not an interviewing study.</li> <li>Did not study age.</li> </ul>
Locke-Connor and Walsh (1980)	Students and workers	Lab	25 and 65	Travel agent	Studied	<ul style="list-style-type: none"> <li>Young applicants evaluated more favorably than old applicants.</li> <li>Older workers applying for a fast-food job evaluated more favorably than older workers applying for pizza delivery job.</li> <li>Not an interviewing study.</li> </ul>
Olian et al. (1988)	Meta-analysis (primarily students)	Lab	NA	Various	Not studied	<ul style="list-style-type: none"> <li>Older applicants evaluated lower than young applicants.</li> <li>Older applicants had a lower evaluation for a young-typed job.</li> </ul>
Perry and Bourhis (1998)	Undergraduate students	Lab	Younger and Older	Pizza deliverer and fast-food worker	Not studied	<ul style="list-style-type: none"> <li>Quality of credentials was more important than verbal and nonverbal behavior.</li> <li>Did not study age.</li> <li>Although not directly tested, the inference is that there was no interaction between interviewer age and applicant age.</li> <li>Older applicants rated lower in intelligence.</li> <li>Older applicants received lower hiring recommendations from male interviewers.</li> <li>For employability decision, demographics were least important (behind liking, intelligence, skill, and physical attractiveness).</li> <li>For hiring decisions, demographics are least important (behind skill, employability, intelligence, likability, and attractiveness).</li> </ul>
Perry et al. (1996)	Undergraduate students	Lab	24 and 53	Salesperson selling CDs, records, tapes and salesperson selling stamps and coins	Not studied	
Rasmussen (1984)	Undergraduate students	Lab	NA	Not noted	Not studied	
Raza and Carpenter (1987)	Professional interviewers	Field	18–62; median of 31	Variety of managerial, clerical, and semi-skilled positions	Studied	

Table 1 continued

Article	Interviewers	Setting	Applicant age	Job type	Age × age interaction	Major findings and notes
Singer and Bruhns (1991)	Managers and undergraduate students in New Zealand	Lab	NA	Sales-rep. supervisor	Not studied	<ul style="list-style-type: none"> <li>Work experience was more important for the managers and academic qualifications were more important for students.</li> </ul>
Singer and Sewell (1989)	Managers and undergraduate students in New Zealand	Lab	25 and 48	Finance manager and account clerk	Not studied	<ul style="list-style-type: none"> <li>When qualifications were equal, managers gave similar ratings to the young and old candidates applying for the high-status job, but preferred the young applicant for the low-status position.</li> <li>Student subjects evaluated the two equally qualified candidates similarly for the low-status job, but they favored the old applicant for the high-status position.</li> </ul>
Weiner and Schneiderman (1974)	Experienced and inexperienced managers	Lab	NA	Staff engineer	Not studied	<ul style="list-style-type: none"> <li>When job information is available, interviewers rely less on stereotypes.</li> </ul>

articles within the PSYCINFO and ABI Inform databases was conducted. Search terms included employment interview, age, ADEA, and age discrimination. The goal of the computer search was to locate studies published since 1990 in order to comprehensively search for studies published since the review of Harris (1989). Finally, the reference lists of all relevant articles were examined to identify any additional studies. Within each search, we sought to identify published journal articles which discussed the issue of age or work experience and their influences on interview ratings or judgments.

Two criteria were used to select articles for the present review. First, only articles published since the passage of ADEA were eligible for inclusion. This was done because prior to the passage of ADEA, age discrimination was not considered to be illegal. Second, the review focused on the impact of age in organizational settings where some type of employment decision was made within the context of the selection process. Additionally, other age-related research articles are reviewed which are indirectly related but have findings that pertain to the issue of age discrimination in the employment interview. Other age-related research was not included in our analysis if the context and findings did not offer contributions to our analysis of discrimination in the employment interview. In total, 21 articles were identified and reviewed, with 16 conducted in laboratory settings and 5 conducted in field settings.

### Laboratory Research Examining Age Discrimination in the Employment Interview

Although the ADEA was made into law in 1967, it still remains unclear whether this piece of legislation has served as an effective catalyst to change stereotypes within the employment context (Grossman 2005). Lab study manipulations are valuable analysis tools when trying to identify the variables contributing to particular relationships. Therefore, we begin our review by identifying key laboratory findings by first describing some key research which has found age discrimination in employment interviews and in the selection process. Next, we present research which suggests that other variables explain why age discrimination may, on the surface, seem to occur within the selection process.

Within the last 30 years, there has been evidence that raters may discriminate based on age during the interview and selection process. Avolio and Barrett (1987) conducted a laboratory study with 156 undergraduate students who played the role of interviewers reviewing a 12 min simulated audio-taped interview of an applicant (age of 32, 59, or none given) applying for a temporary supervisory position. They found that younger applicants were viewed to have higher “future potential” and they were given

higher overall evaluation ratings than the ratings given to older applicants, although there was no difference between older applicants and applicants whose ages were not specified. No interaction effects were found. Avolio and Barrett's (1987) findings were re-explored in other research by extending tests to include more explanatory variables.

For example, Perry et al. (1996) studied personal and contextual factors that may facilitate or inhibit the use of older worker stereotypes and influence evaluations of applicants. Using an undergraduate sample, with an average age of 20.69 years, they manipulated applicant age (young or old) and job age-type (identified as stereotypically associated with younger or older employees: young-typed or old-typed job). At the bivariate level, older applicants were evaluated lower than young applicants ( $r = -.28$ ). There was a significant age by job age-type interaction such that older applicants had a lower evaluation for a young-typed job. There was a significant age by job by older worker bias interaction. As rater bias increased, old applicants were rated more favorably for the old-typed job. For young-typed job, as bias increased, old applicants were evaluated less favorably.

Continuing the research of Perry et al. (1996), Perry and Bourhis (1998) trained 81 introductory business students to evaluate hypothetical job applicants for two different jobs (younger-typed and less younger-typed). The hypothetical applicants varied in terms of their age (young vs. old) and their degree of match with the job. After the experiment was conducted, they found that young applicants were evaluated more favorably than older applicants. In addition, the evaluation of the applicant increased as the match with the job increased. In this study, a significant age by job interaction was found such that older workers applying for the less young-typed job were evaluated more favorably than old applicants applying for the more young-typed job.

Although age discrimination has been found within the context of the lab, other experiments have found support for additional variables which may explain why age discrimination appears to occur during the interview and the selection process. Haefner (1977) created hypothetical job candidate profiles and had 286 managers make hiring decisions. He found statistically significant main effects for gender (males were rated higher), age (younger candidates were rated higher), and competence (highly competent candidates were rated higher). Haefner also found a significant age by competence interaction such that the managers preferred younger, highly competent individuals to older, highly competent individuals. Age made little difference with barely competent individuals.

Along these same lines, Locke-Connor and Walsh (1980) further examined the influence of age and competence within interview evaluations. The study was conducted with 185 young (students) and 129 mid-life

(most were not students) participants with no prior interviewing experience. The laboratory study had participants read an applicant biography varying in sex and age and interview transcripts differing in quality of response. Locke-Connor and Walsh (1980) found that applicants with more competent interview transcripts were rated more positively on all the study measures. Applicants were considered to be more competent when they had more responsibilities within their previous work experience and when they had more education. Overall, participants did not explain the success of young applicants differently than they explained the success of old applicants, although there were some differences in explaining failures. Importantly, the age of the applicant did not affect judgments of competence. The age of the applicant, however, influenced one dependent variable, the applicant's activity level. These results suggest that age is more important when situations are ambiguous—when less work related experience information is made available to the raters. In other words, stereotypes have the greatest effect when raters have no other information to rely on.

Connor et al. (1978) assessed perceptions of an old or young candidate in a job interview by training 86 male and 91 female introductory psychology students to rate candidates. The authors argued that a candidate's age might not be as important as other characteristics such as attractiveness, income, competence, success, or other situational factors. Raters evaluated hypothetical job applicants, where the job was described as temporary in nature to minimize the impact of a potentially shorter career for older candidates. Connor et al. (1978) found that those who were not hired were rated less favorably, were judged to have lower ability, and have less relevant background. There was no effect of degree of favorability toward the elderly and no clear differences in the assessment of old and young applicants. These results suggest that age did not impact the evaluations because the applicant was competent, highlighting the relative importance of applicant qualifications over age or other demographics.

Within a related selection context, Fusilier and Hitt (1983) examined a variety of protected applicant characteristics in applicant screening. They asked 523 undergraduate business students to play the role of personnel administrator and were given a job description and employment application form. The hypothetical applicants varied in terms of their experience (0 or 5 years), race (black or white), sex, and age (25, 40, or 55). They found that experience was the only significant main effect, accounting for about 27% of the variance in a summary outcome measure. There was one significant age by experience interaction, where the disparity in evaluations of experience was greatest for the 55-year-old applicant (i.e., the difference in evaluations of 0 and 5 years of

experience were greatest for the 55 year old applicant). These results are notable because work experience had the greatest effect of all the factors studied.

As we can see, thus far, age may not be the only determinant in choosing among applicants. Other applicant characteristics (e.g., experience, competence) play a key role in differentiating among candidates when making hiring decisions. Additionally, characteristics of the applicant pool and the raters have been shown to influence discrimination within the interview and selection contexts.

Cleveland et al. (1988) examined how the composition of the applicant pool was found to influence evaluations of job applicants (Cleveland et al. 1988), suggesting that as the proportion of older people in an applicant pool increases, an older applicant would receive more favorable assessments. Using 154 part-time evening graduate students as participants, Cleveland et al. (1988) created four conditions where the number of older applicants in the applicant pool was systematically varied. They found significant effects of age composition on hiring recommendations and perceived advancement potential, where conditions with applicant pools containing fewer older applicants received lower ratings. Applicants were given similar qualification and performance ratings across all the conditions. When the age-type of the job is held constant (young vs. old job), however, there is no age composition main effect. This suggests that the main effect of age composition of the applicant pool may have served as a cue about the age-typing of the job, thereby affecting ratings.

Singer and Sewell (1989) examined age bias and comparability of samples with 66 managers and 119 undergraduate psychology students in New Zealand. Using resumes and videotapes, they employed a two (25 or 48 year old applicant) by two (age-related information vs. neutral information exposure) by two (low or high job status: selecting for a finance manager position or an accounts clerk position) design to predict selection decisions (including the decision to hire, starting salary, suitability, competence, etc.). Raters who read age-related information before being presented with candidates to evaluate were given a story describing how a group of older employees were responsible for the company's success, and within the neutral information condition, raters were given a story with no age-related descriptions. This sort of priming was expected to mitigate age discrimination. They found a significant main effect for job status and a significant sample by age by job status interaction. None of the other effects were significant. Manager and student samples provided different results which necessitated separate analyses by sample. For the manager sample, there was a main effect for job status but no effect for age or priming. However, there was a significant age by priming by job status interaction for hiring decisions. Specifically,

in the neutral information priming condition, young applicants fared better for the low status job. In the age-related information condition (where raters read positive material about older employees before being introduced to candidates), managers preferred to hire the older candidate for the low status job and viewed the old applicant as more competent. For the student sample, there was a main effect for age and job status but no main effect for priming. In addition, there were significant age by information and age by job status interactions. In the neutral condition, old applicants were preferred for high status jobs, but when students were primed with the story about older workers being successful, students preferred young applicants for most dependent measures with the exception of giving a higher starting salary to old applicants in the high job status condition. Importantly, "the present data clearly showed that selection performance evaluations and hire decisions concerning the same applicants were completely different for the manager and student samples... These results suggest that the age bias effect in selection decisions may not be a direct result of age-related stereotypic attitudes commonly shared by most individuals" (p. 151).

Continuing with this research, Singer and Bruhns (1991) examined the relative effect of work experience and academic qualifications on selection interview decision making. With a sample of 90 managers and 120 undergraduate students from New Zealand, they manipulated applicant experience (low or high) and academic qualifications (low, medium, or high) in resumes and short videotaped interviews. Consistent with their hypotheses, they found that work experience was more important in the manager sample and academic qualifications were more important in the student sample (although the students still viewed work experience as important). This is an important finding for two reasons. First, it emphasizes the importance of work experience, something that is naturally related to age. Second, it highlights how managers and students can give quite different responses in experimental settings.

Gibson et al. (1993) examined judgments of hypothetical "ideal" employees among owners and personnel managers at 811 organizations in Canada. Questionnaires were mailed to the person responsible for hiring at the organization. They were to indicate which of 21 attributes characterize ideal employees. They found that younger employees received higher ratings from younger employers whereas older employees received higher ratings from older employers. In addition, older workers were rated more favorably in terms of individual initiative, stability, and experience, but rated less favorably in terms of potential for development. There were no differences for experience and no interaction of occupational category and age.

Finkelstein et al. (1995) conducted a meta-analysis of experimental studies that examined the issue of age



discrimination. Although not limited to employment interview studies, this article tested a number of different possible explanations for age discrimination. To summarize the rather complex findings, older workers were given less favorable ratings when raters were younger, when no job-relevant information about workers was provided to participants, and when participants concurrently rated old and young workers. Interestingly, these are all things that are likely to create very high demand conditions for bias. The results also suggest that older raters do not rely as heavily on age stereotypes as do younger raters. It is possible that more of the young raters were students and old raters were managers, and managers are less likely to rely on stereotypes.

There were several other studies that did not examine age discrimination directly, but did investigate other factors related to applicant age (e.g., applicant experience and qualifications) that add insight to any discussion of age discrimination. The first of these studies was by Baskett (1973), who examined the effect of attitude similarity and competency on hiring recommendations and salary offers. Fifty-one undergraduate students were asked to evaluate a hypothetical job candidate for the position of vice president. The hypothetical candidates varied in terms of attitude similarity and competency. Baskett found that similarity was only related to salary offers whereas candidates who were more competent received both higher hiring recommendations and larger starting salaries. This suggests that competency is more important when making hiring recommendations.

Weiner and Schneiderman (1974) examined the relative contribution of relevant and irrelevant information on hiring decisions. This laboratory study of 96 managers, half of whom were experienced interviewers, involved the presentation of several combinations of favorable and unfavorable relevant and irrelevant information. Within this study, relevant information was applicant information, given to the raters in the form of written statements, which related directly to job specifications whereas irrelevant information was applicant information which had no direct relationship to job requirements. They found that when job information was available, favorable relevant and favorable irrelevant information accounted for 42% and 8% of the variance in the hiring decision, respectively. When job information was not available, however, favorable relevant information accounted for 17% of the variance in the hire decision and favorable irrelevant information accounted for 24% of the variance in the hire decision. This suggests that irrelevant information is more important when the situation is ambiguous (i.e., when specific job requirement information is not available for the rater).

Rasmussen (1984) examined the relative effect of resume qualifications, nonverbal behavior, and verbal

behavior on selection interview outcomes. In a laboratory study with 80 undergraduate psychology students, he manipulated resume credentials, verbal behavior, and nonverbal behavior in simulated videotaped interviews. He found that the quality of resume credentials was highly important, and accounted for the majority of the variance in ratings of applicant qualifications. This suggests that qualifications of the applicant are much more important than other, less relevant, factors.

Along the same lines, Olian et al. (1988) conducted a meta-analysis of the effect of qualifications and sex on hiring recommendations in experimental studies. They found that gender accounted for 4% of the variance in hiring recommendations whereas qualifications accounted for 35% of the variance in hiring recommendations. Again, this is consistent with the notion that job-related qualifications are much more important than irrelevant demographic characteristics such as gender and, by extension, age.

Finally, Baron (1993) investigated how the mood of an interviewer might impact applicant ratings of a hypothetical applicant for an entry-level management trainee job. With 92 undergraduate students role-playing as an interviewer in a laboratory study, Baron manipulated participant affect (positive, negative, and neutral mood) and applicant qualifications (low, high, or ambiguous). He found that applicant qualifications exerted a much stronger effect than mood. In addition, mood did not affect ratings for highly qualified applicants. In fact, mood exerted its strongest effect in the ambiguous qualifications condition. This suggests that irrelevant factors (such as mood) exert the greatest influence when applicant qualifications are not clear. When qualifications are clear, there were no effects of mood.

In total, these additional studies suggest that factors other than the age of the applicant have an important influence on how raters perceive applicants during an interview for a hiring decision.

### Limitations Found in Laboratory Research

In summary, laboratory studies have found that age discrimination may occur during the employment interview or in the process of evaluating the interview depending on the presence of certain conditions. However, the manipulations and controls which make lab studies ideal for isolating potential indicators of discrimination are also the factors which prevent findings from being completely generalizable to other contexts. That being stated, the above mentioned articles note several limitations. Singer and Bruhns (1991) suggest that studies of the employment interview conducted in artificial settings with inexperienced interviewers and no decision consequences should be interpreted with caution. Locke-Connor and Walsh (1980) warn that many of the

laboratory studies of age discrimination are predisposed toward finding a significant age discrimination effect. Specifically, they argue that lab studies that only contain irrelevant job information (i.e., age, gender, or race) rather than including job-relevant information (i.e., qualifications, job-fit information, etc.) may not adequately generalize to field settings. Other studies may not provide salient decision consequences (e.g., actually having to work with the people they “hire”) for the laboratory interviewers (Perry et al. 1996). Additionally, using hypothetical candidates, situations, and student samples may be too contrived to offer any adequate suggestion to the field (Finkelstein et al. 1995; Perry and Bourhis 1998).

### Findings within Field Research

In a seminal review article on discrimination in the employment interview, Arvey (1979) reviewed court cases up to that time. He found that although very few cases dealt with age discrimination, stereotyping and differential interviewer behavior were two possible processes that might contribute to differential evaluation of applicants. Field studies following Arvey’s legal review examined the influence of candidate age, rater characteristics, and the impact of having access to more job relevant information during the employment interview on candidate interview performance and rater hiring decisions. We describe three key field articles of the five identified in the review that illustrate the main findings from the field.

First, in two separate cross-sectional data collections studies conducted a year apart, Arvey et al. (1987) examined the relationship between age and interview outcomes for individuals applying for jobs as seasonal retail sales clerks. Sample sizes ranged from 205 to 774, depending on the analysis. The interviews were modestly structured in that the questions were developed based on a job analysis. In all analyses, Arvey et al. (1987) found a significant bivariate correlation between age and interview scores that showed that older job applicants were judged to have *higher* interview performance. It is important to note, however, that applicant age may have been confounded with qualifications or experience in that the older applicants were more qualified.

Raza and Carpenter (1987) suggested that demographic factors such as age would have little influence in interviews conducted by professional interviewers because they examine more relevant characteristics and can better control inappropriate influences. They focused on the decision-making processes of eight professional interviewers who conducted 171 unstructured job interviews spanning a variety of industries to test how rater characteristics may contribute to previous findings of age discrimination. The

age of the applicants ranged from 18 to 62, with a median of 31. The age of the interviewers ranged from 25 to 45, with a median of 31. At the bivariate level, they found that older applicants were rated lower in intelligence and received lower hiring recommendations. Raza and Carpenter suggested that this latter finding only held for male interviewers when subgroup analyses were conducted. When conducting more complex path analyses, however, they found that demographic variables (applicant age and gender) affected several applicant rating variables and indirectly affected interview outcomes. But, for both employability and hiring decisions, demographics were the least important, behind such things as skill, intelligence, liking, and attractiveness. In sum, older applicants were not uniformly rated lower than younger applicants, but they were differentially viewed by male and female interviewers. Older and younger applicants were rated similarly for likability, skill, and employability. Male interviewers gave older applicants lower intelligence ratings and lower hiring recommendations, whereas female interviewers gave older applicants lower attractiveness ratings. These results are important because this study used real, experienced interviewers, as compared to student interviewers used in many other studies.

Finally, Lin et al. (1992) conducted a field study with two samples totaling 2,805 applicants for custodian jobs in a West Coast urban school district. They examined age similarity effects in structured panel interviews with four age groups, under 25, 25–35, 35–45, and over 45. They failed to find any significant effect for age similarity in any condition, causing Lin et al. (1992) to conclude that “raters in the real world have more job-related information available, which minimizes the need to use age as a primary factor in selection recommendations” (p. 369).

### General Summary and Discussion

Age stereotypes exist within the workplace (Sullivan and Duplaga 1997), but our review suggests that discrimination within the interview or during the evaluation of the interview may be explained by characteristics other than age. Both laboratory and field studies have found that job related applicant information and job-applicant fit explain more variance in the prediction of hiring decisions than applicant age.

There appears to be a number of circumstances under which age discrimination is more likely to be found. Perhaps most importantly, studies that were conducted in field settings with managers or interviewers tended to show less overall age discrimination effects than studies conducted in laboratory settings. In fact, in at least one study (Arvey et al. 1987), older workers were rated higher than younger



workers. There are many possible explanations for the lack of as much observed age discrimination against older workers in field settings. One compelling explanation is that interviewers in the real world who are faced with the consequences of their decisions are more motivated to base their decisions on job-related information such as qualifications or previous experience (for example see Arvey et al. 1987). In fact, such interviewers have access to more job-related information and are motivated to seek and use that information, thereby minimizing the impact of age on interview outcomes.

There are also many other explanations. First, laboratory studies usually do not use employees operating in an actual employment context. Laboratory tasks may be too artificial and raters are asked to make decisions without consequences (e.g., Cleveland et al. 1988; Gordon et al. 1988; Haefner 1977; Perry et al. 1996). These conditions make age more salient and are likely to produce strong demand effects for age discrimination (Finkelstein et al. 1995). Second, due to demand effects, the student subjects in such artificial situations may think that they are expected to show age discrimination. That is, they think the experimenters expect them to show discrimination. Third, age stereotypes are likely to have their greatest effect when less applicant information is available to the raters (e.g., Baron 1993; Locke-Connor and Walsh 1980). The lack of other information makes the age manipulation more salient. Studies that include job relevant information tend not to find differences between young and old applicants (e.g., Connor et al. 1978; Weiner and Schneiderman 1974). Studies that only include irrelevant factors such as applicant demographics are more likely to find significant effects.

Fourth, in studies where there are direct comparisons between job related factors such as experience and qualifications and unrelated factors such as age, the job related factors are much stronger predictors of rating outcomes (e.g., Connor et al. 1978; Fusilier and Hitt 1983; Lin et al. 1992; Locke-Connor and Walsh 1980; Raza and Carpenter 1987). Competency, experience, or qualifications seem to be far more important than anything else (such as age) in predicting interview or selection decisions (e.g., Baron 1993; Baskett 1973; Locke-Connor and Walsh 1980; Rasmussen 1984; Singer and Bruhns 1991; Weiner and Schneiderman 1974). This point is often neglected in laboratory studies that artificially hold these important variables constant.

Fifth, when studies directly compare manager and student samples, different results are found (Singer and Bruhns 1991; Singer and Sewell 1989). This suggests that one should interpret the results of student-based studies with caution, particularly when the rating task is highly artificial (as described above). This is important because there is some suggestion that older raters such as real

managers do not rely as heavily on age stereotypes as do younger raters such as students (Finkelstein et al. 1995).

In conclusion, some people may think it is obvious that older applicants are discriminated against in the employment interview. It is probably true that stereotypes about older workers do exist and many of these stereotypes can be negative (Sullivan and Duplaga 1997). However, stereotypes do not always predict rater behaviors. So, even if raters possess negative stereotypes, this is not a sufficient reason to conclude that there will necessarily be age discrimination in employment interviews. As our review demonstrates, there is less evidence to suggest that age discrimination occurs in the employment interview after controlling for other characteristics, and there is less evidence of age discrimination in field studies than in laboratory studies. Yet, due to the small sample of field studies within this area of research, we feel that additional rigorously designed field research should be conducted to further explore this issue. Additionally, as legal ramifications for age discrimination in the workplace are potentially damaging, research should not stop exploring if or which variables predict age discrimination after controlling for the variables discussed in this review (i.e., job relevant information, applicant pool, etc.). For example, if rater characteristics (i.e., gender, education, tenure, etc.) continue to influence how raters evaluate candidates (see Raza and Carpenter 1987; Singer and Sewell 1989), practitioners should structure interviews to focus on job-related factors and consistent administration (Campion et al. 1997; Campion et al. 1988) and take time to properly train raters on how to rate interviews without age biases.

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