

Stereotyping Older Workers and Retirement: The Managers' Point of View*

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RÉSUMÉ

Cet article présente les résultats d'une étude à propos des différents stéréotypes des gestionnaires envers leurs employés plus âgés et sur l'influence de ces stéréotypes dans la propension des gestionnaires à garder des employés âgés en service. Les données ont été recueillies auprès d'un échantillon de 796 gestionnaires. À travers des composantes d'analyse principales, 15 opinions sur les employés âgés ont été réduites à trois dimensions de stéréotypes. La première dimension concerne la productivité de personnel âgé, les autres dimensions concernent leur fiabilité et leur adaptabilité. Les idées stéréotypées sur les employés âgés ont une influence sur les attitudes des gestionnaires envers la retraite de leurs employés. Les analyses montrent que malgré les facteurs organisationnels, les mécanismes psychologiques expliquent également pourquoi les gens utilisent des stéréotypes sur les employés âgés. Les gestionnaires qui sont eux-mêmes plus âgés et qui maintiennent plus de contact avec des employés âgés, ont tendance à avoir des avis davantage positifs.

ABSTRACT

This article presents the results of a study into stereotyping by managers of their older workers and the influence of these stereotypes on the inclination of managers to keep their older workers in employment. The data for the study were gathered among 796 managers. Through principal components analysis, 15 opinions about older workers were reduced to three dimensions of stereotypes. The first dimension deals with the productivity of older staff; the other two dimensions have to do with their reliability and their adaptability. These stereotypical ideas about older workers influence managers' attitudes toward the retirement of their employees. The analyses show that, besides organizational factors, psychological mechanisms also explain why people view older workers through stereotypes. Managers who are older and in more frequent contact with older employees tend to hold more positive views.

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Introduction

The aging of the population, combined with the low labour-force participation of older adults, is of key policy concern to most countries of the western world. Reversing the trend toward ever-earlier labour-force withdrawal is an objective that we find on almost every policy maker's agenda. Besides the early retirement reforms that have been launched

(Van Dalen & Henkens, 2002), many policy initiatives are targeted at combating age stereotypes in and around the workplace (Organisation for Economic Co-operation and Development [OECD], 2001). Stereotypes may lead to the social exclusion of older workers, not only because people may judge employees on the basis of average and inaccurate representations of the category but also because stereotypes may

lead to self-fulfilling prophecies, when those who are subject to negative stereotypes behave accordingly (Hilton & Von Hippel, 1996). This article focuses on three central questions: (1) How are older workers viewed by managers within organizations? (2) How can we explain that some managers have much more positive views about older workers than others? and (3) How do stereotypes about older workers affect managers' attitudes toward retirement?

Although problems related to older workers are of increasing concern to organizations with an aging workforce, research into attitudes toward older employees has been limited. An early study was carried out by Kirchner and Durnette (1954), who asked production workers and supervisors about the problems of older employees. Kirchner and Durnette's (1954) and Bird and Fishers' (1986) replication of this study led to the conclusion that supervisors had less positive attitudes toward older workers than did production workers. Several other studies have shown that biases against older workers are quite pervasive (Blocklyn, 1987; Chiu, Chan, Snape, & Redman, 2001; Finkelstein, Burke, & Raju, 1995; Finkelstein & Burke, 1998; Hassell & Perrewe, 1995; Henkens, 2000; Lee & Clemons, 1985; Loretto, Duncan, & White, 2000; McGregor & Gray, 2002; Remery, Henkens, Schippers, & Ekamper, 2003; Rosen & Jerdee, 1976a, 1976b; Taylor & Walker, 1994, 1998; Wagner, 1998; Warr & Pennington, 1993). This research has shown that attitudes to and stereotypes of older workers are mixed; that is, older staff are viewed as having both positive and negative attributes. Positive characteristics attributed to older employees include experience, loyalty to the organization, reliability, and interpersonal skills. Qualities such as the acceptance of new technologies and adjustment to organizational changes are attributed primarily to the younger workforce. Most of the studies are, however, highly descriptive. Apart from research carried out by Warr and Pennington (1993) and recently by Chiu et al. (2001), very little effort has been made to distinguish dimensions of stereotypes about older workers. This is in contrast with many studies that show that attitudes toward older people are multidimensional (Chasteen, Schwarz, & Park, 2002; Hummert, Garstka, Shaner, & Strahm, 1994; Hummert, Garstka, & Shaner, 1997; Schmidt & Boland, 1986). Our understanding of this multidimensionality is underdeveloped with respect to age-related stereotypes in the workplace. Finkelstein, Higgins, and Clancy (2000) carried out an interesting study in which managers were asked to give written justifications for the employment-related ratings that were used in a content analysis. The study showed that age mattered to many raters. Age was most

important in considerations of the economic worth of a target. In this article, opinions of older workers were analysed to establish to what extent beliefs could be clustered in different dimensions and to what extent stereotype beliefs affected attitudes toward retirement. The question of whether (and if so which) stereotypes have an impact on an organization's retirement policies has received little attention to date. A recent study carried out by Chiu et al. (2001) using part-time management students as respondents showed that age stereotypes influence discriminatory attitudes at work. Few studies explicitly address attitudes regarding the retirement of older workers (Rosen, Jerdee, & Lunn, 1981). These studies used questionnaires and in-basket simulations to assess attitudes toward and decisions about the retirement of older employees. Rosen, Jerdee, and Lunn (1981), using business students as respondents, found that employee performance had a strong effect on retirement decisions. These studies may pose problems of ecological validity. Barr and Hitt (1986) suggest that student samples may be inappropriate for studies involving managerial employment decisions.

In this article, we aim at extending the existing literature on stereotyping of older workers in three ways. In addition to the description of various stereotyping opinions regarding older workers, we shall also (1) investigate the extent to which we can distinguish various dimensions in these stereotypes, (2) seek to explain differences in the extent to which stereotypes about older workers are perpetuated, and (3) study the influence of stereotypes on the inclination of managers to retain older staff. This last point is important in light of the established effect of supervisors' attitudes toward retirement on their employees' retirement decisions (Henkens, 1999). Finkelstein and Burke (1998) point to a common belief in organizations that older workers want to retire as soon as possible. The extent to which managers' retirement attitudes are influenced by stereotypical views is less clear.

We made use of a large-scale survey of managers in both the public and private sectors in the Netherlands. After describing the early retirement context in the Netherlands, we describe our study's theoretical framework. Following the method section, stereotypical views are described. Next, the results of the analyses used to explain differences among respondents in the extent to which they perpetuate stereotypes about older workers and the influence of these stereotypes on their inclination to retain older staff are presented. Our conclusions and a discussion are set forth in the last section.

Early Retirement in the Netherlands

Leaving the labour force before the mandatory retirement age of 65 has been quite common in the Netherlands during the last decades. Until the 1980s, disability and unemployment were the main exit routes of older workers before the official retirement age. During the eighties, early retirement schemes became the most important exit route for older workers. This was partly caused by an overhaul of the system of social security (1987), which made it more difficult for companies to achieve the exit of their older workers through disability or unemployment regulations. The early retirement schemes were originally proposed by trade unions and contained both a "social" and an "employment" purpose. Early retirement offered older workers a financially sounder and socially more acceptable way out of labour than through disability or unemployment, and the exit of older workers had positive effects on youth employment. The Dutch government helped promote some of the early experimental schemes and contributed toward their costs. The benefit bridged the period between the cessation of work and the date of entitlement to a public pension. Full public pensions and other social insurance contributions were maintained, leaving the public pension to which the retiree was entitled at age 65 unaffected (Organisation for Economic Co-operation and Development [OECD], 1995). These interventions did not take place without consequences. The introduction of early retirement schemes led to a sharp decrease in the disability outflow of older workers aged 55 and over.

In the Netherlands, early retirement schemes are "produced" through bargaining processes within different industrial sectors, influenced by the current political and socio-economic circumstances at the sectoral level. The effects of sectoral bargaining are reflected in differences between schemes. In particular, the age one is eligible for early retirement, the level of the benefits, and the distribution of the costs are subject to the bargaining process. Although there are more than 300 different early retirement schemes in the Netherlands, there is relatively little difference in the age of early retirement and benefit levels as between companies and organizations in the public and private sectors.

Financial conditions at early retirement are very favourable in the Netherlands. The gross replacement rates in terms of final pay are 70-to-85 per cent. For 90 per cent of the schemes, this results in net replacement rates of at least 85 per cent of the last wage. This is much higher than in, for example, the United States. The most significant differences between schemes are related to the total costs of

early retirement and the extent to which employees contribute to these costs. In the case of the Netherlands, financing occurs on a pay-as-you-go basis, through a levy on the gross wage bill. Part of the costs are met by employees. In return for the scheme's establishment or improvement, the trade unions accepted lower wage increases than they would otherwise have done. The premium paid by the employer varies between 0.5 and 8 per cent.

The Dutch government is currently reforming its early retirement system, encouraging firms to switch from pay-as-you-go early retirement schemes to schemes with a more actuarially neutral basis. Also, the fiscal advantages of early retirement have been abolished and participation in early retirement savings accounts is no longer mandatory (Van Dalen & Henkens, 2002; Reday-Mulvey & Velladics, 2005). In addition, many employers emphasize that their willingness to contribute financially to early retirement regulations is related to the extent to which they are able to influence the exit decisions of their employees. In this view, early retirement decisions should no longer be a purely employee decision. Supervisors are thought, thereby, to evaluate whether retirement is in the company's interest.

Theoretical Framework

Theories about Perceptions and Stereotypes

People's perceptions enable them to process and order information as effectively as possible. In order to do so, they engage in categorization and stereotyping. *Categorizing* means that, when information is taken in, it is "stored" in categories (pigeonholing) that correspond to certain places in memory (Brewer, Dull, & Lui, 1981). Thinking in terms of categories is said to be "cognitively economical" (Macrae & Bodenhausen, 2001, p. 241). Social categories are based on personal characteristics – such as age, sex, race, ethnicity, and social status. *Stereotyping* may be described as, "Beliefs about the characteristics, attributes, and behaviours of members of certain groups...and beliefs about how and why these attributes go together" (Hilton & Von Hippel, 1996, p. 240).

This definition speaks of *groups* of people. Members of a group tend to overestimate the similarities between members of the same group and to underestimate the differences (Linville, Fischer, & Salovey, 1989; Verkuyten & Nekuee, 1999). As a result, differences between groups are perceived to be much greater than they actually are. Categorizing and stereotyping lead people to be more inclined to attribute positive characteristics to members of their own group (in-group bias) and more negative characteristics to

members of other groups (out-group bias) (Lalonde & Gardner, 1989; Tajfel & Turner, 1979). Stereotypes are not necessarily negative, but stereotypes of out-group members tend to be less favourable than those of in-group members (Hilton & Von Hippel, 1996; Tajfel & Turner, 1979). In social psychology, the stereotyping process is described from different perspectives. The two main approaches are the *cognitive functional approach* (see Hamilton & Trolie, 1986; Weber & Crocker, 1983) and *social identity theory* (Tajfel & Turner, 1979) or the *self-categorization theory* (see Oakes, Haslam, & Turner, 1994).

The *cognitive functional approach* deals with information processing and selection and with remembering information. This approach is based on the idea that people are information processors and that their capacity to take in and digest information is limited. These limitations give rise to systematic errors when information is being processed, errors that, in turn, lead to the creation and perpetuation of stereotypes (see, also, Bodenhausen, 1988). Another assumption of this approach is that, in mental terms, activating categorical information is easier than forming an opinion about others on the basis of one's own impressions (Fiske & Neuberg, 1990; Macrae & Bodenhausen, 2001; Pendry & Macrae, 1994). The first mechanism assumes that having information about personal characteristics contributes to the creation of less black-and-white perceptions (see Vrugt & Schabracq, 1996). This would lead one to assume that people who have more information and/or who are able to process more information tend to create more qualified perceptions. We hypothesize that lack of interaction (and, therefore, direct experience) with older people leads to negative beliefs about older workers (Butler, 1969) (hypothesis 1). Following Hewstone and Brown (1986), we call this the *contact hypothesis*.

A second line of research used to explain stereotypes draws on *social identity theory* (Tajfel & Turner, 1979) or *self-categorization theory* (Oakes et al., 1994). These theories are based on the assumption that people categorize the world on the basis of the social groups to which they belong and/or with which they identify themselves. In doing so, they try to take on a positive identity. They compare themselves with other individuals or groups in an effort to distinguish themselves favourably from those groups. People evaluate others in terms of the degree to which they are similar (Lalonde & Gardner, 1989; Tajfel & Turner, 1979). Within this explanatory mechanism, Ashmore and DelBoca (1981) speak of a dynamic and a sociocultural approach. The *dynamic approach* assumes that stereotypes act as self-protecting devices. People hold stereotypical views of others or

of other groups because these others are considered to be a threat to the people in question. The *sociocultural approach* is based on the idea that people form stereotypical perceptions, values, attitudes, and expectations about others (out-groups) as a result of socialization processes and that these perceptions are not questioned within the perceiver's own reference group (the in-group). Socialization processes lead people to acquire a sense of belonging to a particular in-group, thus setting them apart, in a negative sense, from members of the out-group (Ashmore & DelBoca, 1981). Snyder and Miene (1994) suggest that older adults may present a threat to the young because thinking of aging reminds young people that they too will grow old. The use of stereotypes can be seen as serving an ego protection function — blaming older adults instead of the aging process itself. Moreover, older workers often occupy the most senior positions in organizations; these positions may conflict with the career prospects of younger employees (Ekamper, 1997). Following Finkelstein et al. (1995), we call this the *in-group bias hypothesis*: The younger the respondents are, the more negative their stereotypes are about older workers (hypothesis 2).

Stereotypes are thus embedded in our social environment. They serve as a protection mechanism and as a tool to simplify the complex world in which we live. Stereotypes may also be accurate representations of reality or at least of the local reality to which the perceiver is exposed (Judd & Park, 1993). Stereotypes about older workers may be shared within certain organizational contexts, where age and productivity may be related. In this case, stereotyping may be much less dependent on the personal characteristics of the perceiver than on aspects of the organizational context. In general, the productivity of people is determined by both positive (higher education and more experience) and negative factors. The negative factors include a possible decline in physical abilities, which in turn may deteriorate further through physically taxing work. McEvoy and Cascio (1989) indicate that there is persuasive evidence (from different studies focusing on a wide variety of jobs) that no general relationship between age and performance exists. Only, the ability to cope with physical strain decreases with age (Shephard, 1995). We hypothesize that in organizations where physical demands on older workers are greater, stereotypes regarding older workers will be more negative (hypothesis 3).

In general, we can say that workers' labour productivity does not depend entirely on the personal qualities of the person in question but rather depends as well on the combination of labour and capital in

the production process. Technological change is one of the most important causes of productivity growth. When modern and more productive capital goods become available (as a result of technological developments), staff have to update their technical know-how (Bartel & Sicherman, 1993). If employees fail to invest in their own human capital in later life, depreciation is bound to occur. Human capital theory provides the answer to the question as to how productivity decline can be prevented, namely, by maintaining workers' human capital (Becker, 1975; Polachek & Siebert, 1993). This maintenance can be achieved by updating existing human capital through the retraining of older workers. We hypothesize that, in organizations that provide additional training, managers' stereotypes about older workers are more positive (hypothesis 4). In addition, Sterns and Kaplan (2003) emphasize the challenges faced by mid-life and older workers in terms of self-management. In response to organizational and technological changes, older workers need to have increased involvement in and responsibility for learning, skill mastery, and re-skilling. Assuming that highly educated workers are better equipped to acquire new skills to prevent their knowledge from becoming obsolete, we hypothesize that the higher the proportion of highly educated workers in an organization, the more positive the attitudes toward older workers will be (hypothesis 5).

Stereotypes and Managers' Attitudes toward Retirement

One important aspect of stereotypes is that prevailing views may affect managers' discriminatory attitudes and behaviour. Chiu et al. (2001) showed that the more respondents perceive older workers as being able to adapt to change, the more favourable their views are on the training and promotion of older workers. One of the more pervasive beliefs in today's workplace is that older workers should retire somewhere in their mid-fifties or early sixties (Joulain & Mullet, 2001; McCann & Giles, 2003; Van Dalen & Henkens, 2005). At this point in life, one should reap the rewards of years of hard work and enjoy one's "golden years". On the one hand, these views may be well intended and reflect positive attitudes toward older workers: a well-earned retirement at the end of a long career of hard work. On the other hand, as McCann and Giles (2003) indicate, support for retirement may also reflect underlying attitudes that younger workers have more to offer to an organization than older workers. In line with this argument, we hypothesize that negative beliefs about older workers stimulate support for early retirement (hypothesis 6).

Methods

Data

In May 2002, a questionnaire was sent to over 3,433 companies and organizations with more than nine employees. The names and addresses of the private sector organizations were taken from a sample drawn from the trade register of the Chamber of Commerce. To include organizations in the public sector, questionnaires were sent to all Dutch municipalities, general hospitals and nursing homes, and homes for the elderly. The total response rate was 31 per cent, which is lower than the average response for individual surveys but substantially higher than the response generally found in corporate surveys. In Europe and the United States, response rates have been found to be at most 20 to 30 per cent (see Brewster, Hegewisch, Mayne, & Tregaskis, 1994; Kalleberg, Knoke, Marsden, & Spaeth, 1996). For the purpose of this study, we used the questionnaires completed by a board member/managing director (27%), the owner (11%), a plant manager (15%), or the head of the human resources department (46%). Of the 796 managers, 66 per cent were males and 34 per cent were females. They varied in age between 21 and 74 years, with a mean age of 45 ($SD = 8,8$); one third of the respondents were 50 years or older. The types of industrial sectors varied from the health/welfare sector (30%), the manufacturing/construction sector (23%), and the service sector (banking, transport, insurance, trade, hotels and restaurants) (25%), to local government (22%).

Measurement

Stereotypes of Older Workers

To study stereotypes of older workers, we used a set of attitudinal, likert-type questions that had been developed in England by Walker and Taylor (Institute of Personnel Management [IPM], 1993). This set of questions has been used extensively in the United Kingdom (Loretto et al., 2000, Lyon & Pollard, 1997; Taylor & Walker 1994, 1998; Warr & Pennington, 1993), in the United States (Wagner, 1998), New Zealand (Gray & McGregor, 2003; McGregor & Gray, 2002), Canada (Berger, Marshall, & Ashbury 2005; Marshall, 1996; Underhill & Marshall, 1997), Hong Kong (Chiu et al., 2001), and Australia (Schmidt, 1999).

The stereotypes were measured using 15 statements about older workers. Older workers were defined as workers aged 50 and over. The respondents were asked to indicate on a 5-point scale (1 *strongly disagree* to 5 *strongly agree*) to what extent they agreed with the statements presented. An example of a positively formulated statement is, "Older workers are more

reliable than younger workers." An example of a negatively formulated statement is, "Older workers are not as creative as younger workers."

Organizational Characteristics

The organizational characteristics were assessed using four variables. First of all, managers were given a list of industrial sectors defined by Eurostat (1990) and were asked to indicate the sector in which their own organization operated. We categorized the industrial sectors of manufacturing and construction, the service sector, the local government sector, and the health/welfare sector. Second, the workers' level of education was determined by asking managers to give the percentage of highly educated staff (higher vocational training or university level) within the organization (continuous variable). Third, the managers were asked to give the percentage of older workers who were involved in physically demanding work (continuous variable). Lastly, managers were asked whether the organization was implementing a training policy designed to improve the employability of staff members (answer categories 0 *no*, 1 *yes*).

Individual Characteristics

The individual characteristics of the respondents were measured using three variables. The first variable was a continuous variable: age. The second variable was indicative of the degree to which the respondents associated with older workers, and was based on the following two questions: "How often do you come into contact with older workers (50+) through your work, both within your own organization and in other organizations?" (answer categories: 1 *daily*, 2 *a few times a week*, 3 *about once a week*, 4 *about once a month*, 5 *hardly ever*); and "I regularly come into contact with older workers through my work" (answer categories on 5-point scale, from 1 *strongly disagree* to 5 *strongly agree*). The answers to the questions were transformed and added up ($r=0.46$; $\alpha=0.76$). The higher the score on the scale constructed, the more respondents came into contact with older workers. There is conflicting evidence regarding the influence of sex differences with respect to sensitivity to age differences. While some studies (Snyder & Miene, 1994) report that women are more likely to stereotype older adults than men, most studies find no effects (Hummer et al., 1997). To account for possible gender differences in stereotyping older workers, *sex* was included in the analysis (0 *male*, 1 *female*).

Managers' Attitudes toward Early Retirement

We measured respondents' attitudes toward retirement by posing three questions. First, "Do you think

it is desirable for older workers in your organization to continue working until they have reached the official retirement age of 65 years?" (The five answer categories were 1 *very desirable*, 2 *desirable*, 3 *neither desirable nor undesirable*, 4 *undesirable*, 5 *very undesirable*.) Second, we asked the respondents, "Do you think it is desirable for older workers in your organization to continue working after they have reached the official retirement age of 65 years?" (The five answer categories were 1 *very desirable*, 2 *desirable*, 3 *neither desirable nor undesirable*, 4 *undesirable*, 5 *very undesirable*.) The third question posed was, "If you are currently confronted with labour shortages, what is your opinion on stimulating older workers to continue working until they are 65 (the official retirement age)?" (Answer categories were: 1 *we already stimulate delaying retirement*, 2 *we will consider it*, 3 *we will not consider it*.) On the basis of the answers to these three questions, a scale was constructed ($\alpha=0.63$) by calculating the unweighted mean of the standardized scores. The higher the score on the scale constructed, the more managers supported early retirement.

Analysis

The analyses have been carried out in two steps. Since our model is not based on *a priori* information about the data structure, we first used a principal components analysis to identify the relationship among the 15 different statements about older workers and to find out whether this relationship could be expressed in terms of a number of dimensions. Second, structural equation modelling was used for the explanatory analyses.

Principal components analysis is a statistical technique that linearly transforms an original set of variables into a substantially smaller set of uncorrelated variables that represent most of the information in the original set of variables (Dunteman, 1989). The analysis is carried out with principal components analysis and promax rotation. Rotation results in variables' loading primarily on one component and in their having either high or low loadings on a component and, hence, in many instances, brings about a simplification of the initial solution, where variables may have moderate loadings across a number of components (Dunteman, 1989). The simplicity of the rotated factor-loading matrix makes interpretation easier. All analyses were also carried out using varimax rotation, but this did not change our results.

Structural equation modelling was used to test our hypotheses, simultaneously, regarding the components that influence stereotypes and the impact

Table 1: Managers' opinions about characteristics of older workers (%) (N = 796)

Statements	Disagree	Neither Agree nor Disagree	Agree	Average	SD
Older workers are less interested in participating in training programs than younger workers.	37	18	45	3.2	1.06
Older workers are less creative than younger workers.	54	37	9	2.5	0.76
Older workers are just as enterprising as younger workers.	13	36	51	3.4	0.79
Older workers are less capable of doing physically taxing work than younger workers.	15	25	60	3.5	0.83
Older workers are less productive than younger workers.	57	36	7	2.4	0.76
Older workers keep up just as well as younger workers.	15	32	53	3.4	0.78
Older workers are less interested in technological change than younger workers.	29	36	35	3.1	0.89
Older workers are less able to adapt to technological change than younger workers.	28	36	37	3.1	0.88
Absenteeism is higher among older workers than among younger workers.	67	25	8	2.3	0.81
Older workers prefer not to be assigned tasks by younger workers.	41	41	19	2.8	0.83
Older workers are more loyal than younger workers.	29	40	31	3.0	0.94
Older workers are more meticulous than younger workers.	38	43	19	2.8	0.88
Older workers are more reliable than younger workers.	42	45	13	2.7	0.82
Older workers have greater social skills than younger workers.	25	40	35	3.1	0.86
Older workers are more careful than younger workers.	23	33	44	3.2	0.87

stereotypes have on managers' opinions regarding retirement. The dimensions of the stereotypes about older workers, as well as managers' attitudes toward retirement, were used as latent variables and the organizational characteristics and individual characteristics of the respondents were used as independent variables.

Results

Dimensions of Stereotypes of Older Workers

Table 1 presents all 15 statements about older workers. For each statement, we have indicated the percentage of respondents who agreed (*strongly*) or disagreed (*strongly*). Upon closer inspection of Table 1, we see that very few respondents view older workers as being less productive than younger workers. The respondents were most negative about their ability to perform physically demanding work and to adjust to new technologies. They tended to have moderate views about older workers' interest in technological change.

Table 2 presents the results of the principal components analysis. The analysis yields three components with an Eigenvalue higher than 1. The three components explain 44 per cent of the variance. Each new variable has been given a name that corresponds to

the cluster of statements with which it has a strong correlation. We have called these new variables the *dimensions* of stereotypes about older workers. Whereas a high loading means that the statement in question is strongly correlated with the component concerned, a low factor loading indicates no more than a weak correlation. Items with factor loadings of 0.35 or more are shown in bold and were used as measures in the latent variables in our structural equation model. All the scores on our stereotype dimensions are transformed, so that a high score on the dependent variable reflects high productivity, reliability, and adaptability.

Dimension 1: Productivity

Twenty-four per cent of the variance in the statements about older workers was related to the first component. Respondents with a high score on this dimension had positive views about the productivity of older workers. They were less inclined to think that older workers were less productive than younger employees, that they were less able to keep up, and that they were sick more often.

Dimension 2: Reliability

The second component is characterized by positive attitudes about older workers. Thirteen per cent of the variance in the statements about older workers were related to this component. Respondents with

Table 2: Results of a principal components analysis with promax rotation on 16 items concerning older workers (N = 796)^a

Statements	Component 1	Component 2	Component 3
1. Older workers are less productive than younger workers.	-0.84	0.01	-0.10
2. Older workers are less creative than younger workers.	-0.68	0.17	-0.01
3. Older workers keep up just as well as younger workers.	0.62	0.29	0.12
4. Absenteeism is higher among older workers than among younger workers.	-0.64	0.07	-0.09
5. Older workers are just as enterprising as younger workers.	-0.37	0.23	0.32
6. Older workers prefer not to be assigned tasks by younger workers.	-0.41	0.28	-0.07
7. Older workers are more loyal than younger workers.	-0.06	0.77	-0.07
8. Older workers are more reliable than younger workers.	-0.23	0.73	-0.09
9. Older workers are more meticulous than younger workers.	0.12	0.75	-0.00
10. Older workers have greater social skills than younger workers.	-0.01	0.65	-0.06
11. Older workers are more careful than younger workers.	-0.07	0.36	-0.35
12. Older workers are less interested in technological change than younger workers.	-0.11	0.05	-0.82
13. Older workers are less able to adapt to technological change than younger workers.	-0.07	0.03	-0.69
14. Older workers are less capable of doing physically taxing work than younger workers.	-0.12	0.04	-0.61
15. Older workers are less interested in participating in training programs than younger workers.	-0.07	0.02	-0.55
Eigenvalue	3.7	2.1	1.2
R ²	24.8	13.9	8.1

^a We explored the psychometric properties of the three dimensions by calculating Cronbach's Alpha for each dimension, including the items with high factor loadings (bold). We found Alpha's of 0.69 for productivity, 0.73 for reliability, and 0.62 for adaptability.

a high score on this dimension held positive views about older workers in terms of their loyalty, reliability, accuracy, and interpersonal skills, as compared with younger employees.

Dimension 3: Adaptability

The third component in Table 2, which explained 8 per cent of the variance, is characterized mainly by attitudes regarding older workers' ability to adapt to technological developments. Managers with a high score on this dimension held positive views about older staff in terms of their interest in, and ability to, adapt to technological change and about their interest in training. Attitudes about the ability to cope with physical strain loaded heavily on this component.

Explanatory Analyses

A number of hypotheses were formulated on the basis of the theories to explain differences in the extent to which stereotypes exist and in the impact of stereotypes on managers' retirement attitudes. In this

section, the hypotheses for each separate dimension of the stereotypes about older workers are tested. The results of our analyses are presented in Table 3. Two groups of independent variables have been included in the analyses to explain stereotypes: the individual characteristics of the perceiver and characteristics of the organizational context.

The first hypothesis, the contact hypothesis, assumes that more frequent contact between perceiver and older workers results in more favourable views regarding the latter. Table 3 provides empirical support for this hypothesis. More frequent contact with older workers resulted in more positive attitudes about their productivity (first column of Table 3). With respect to older workers' adaptability and reliability, we did not find a significant effect.

The second hypothesis, the in-group bias hypothesis assumes that the use of stereotypes can be seen to serve an ego protection function. According to this hypothesis, older respondents have more positive

Table 3: Results of the structural model (LISREL analyses) to explain stereotypes about older workers and their influence on managers' support for retirement (N = 796)

	Variables Productivity (latent variable)		Reliability (latent variable)		Adaptability (latent variable)		Managers' Support for Early Retirement (latent variable)	
	B	t-value	B	t-value	B	t-value	B	t-value
Productivity (latent variable)							-0.22**	(-2.64)
Reliability (latent variable)							-0.25**	(-4.10)
Adaptability (latent variable)							-0.16	(-1.94)
Organizational Characteristics								
Occupational Sector								
Local government sector (ref)								
Manufacturing/construction	0.01	(0.14)	0.59**	(4.39)	0.20	(1.37)	0.18	(1.26)
Service sector	0.00	(0.13)	0.45**	(3.53)	0.19**	(2.77)	0.31	(2.15)
Health sector	-0.30*	(-2.27)	0.26*	(2.06)	0.50**	(3.57)	0.21	(1.49)
Organization Has Training Facilities	-0.17	(-1.50)	-0.19	(-1.68)	0.15	(1.25)	0.07	(0.59)
% Highly Educated Workers	0.02	(-0.01)	-0.29	(-1.52)	0.42**	(2.00)	-0.18	(-0.84)
% Workers Doing Physically Demanding Work	-0.32	(1.75)	0.05	(0.30)	-0.11	(-0.57)	0.25	(1.32)
Individual Characteristics								
Age/10	1.35**	(3.08)	1.13**	(2.25)	0.28	(0.53)	0.75	(1.36)
Sex	0.17	(1.86)	-0.28**	(-3.07)	0.17	(1.77)	-0.09	(-0.96)
Frequency of Contact with Older Workers	0.19**	(3.75)	0.05	(1.11)	0.01	(0.29)	-0.17**	(-3.09)
R ²	8%		10%		5%		15%	
	Chi (2) = 698 (df = 300)							

*p<0.05; **p<0.01

views about older workers than do younger respondents. Hypothesis 2 was supported with regard to the productivity and reliability of older workers. Younger respondents had less positive attitudes toward older workers than did older respondents. We did not find a correlation with respect to their adaptability. Hassell and Perrewé (1995) suggested that the number of interactions people have with older workers is more effective in reducing negative stereotypes among younger managers than it is among older managers. In further analysis, we included an interaction variable. The interaction variable was not significant. Lastly, we found gender differences in the stereotypes through which men and women viewed older workers; women had somewhat less positive views about older workers' reliability.

Stereotypes of older workers may, however, also be shared within certain organizational contexts.

Hypotheses 3, 4, and 5 refer to the importance of the organizational context. Table 3 shows that stereotypes of the productivity of older workers were much less strongly related to the organizational context than were stereotypes of older workers' reliability and adaptability. Only limited support was found for hypothesis 4. In organizations with a large proportion of highly educated workers, views on adaptability tended to be more positive than in organizations with a less educated workforce. Hypothesis 5 was not supported. Stereotypes of older workers were not found to be related to the training facilities that organizations offered their staff.

A remarkable result with respect to the organizational context is that we found significant differences among industrial sectors. In the local government sector, we found less positive views about older workers' reliability and adaptability than in the other sectors.

In the last column of Table 3, the hypotheses regarding the influence of stereotypes on the inclination of managers to retain older workers are tested. The results show that hypothesis 6 was confirmed. Negative stereotypes were found to have a negative influence on managers' opinions about the desirability of keeping older workers in employment. Note that only very few of the managers interviewed were in favour of their employees working until the official retirement age of 65 (20%) and even fewer were in favour of them continuing beyond the age of 65. Model 2 shows also that even if the stereotype beliefs of managers were kept constant, those managers with few contacts with older workers supported early retirement even more strongly.

Conclusions and Discussion

This research among managers in the Netherlands shows that there are various stereotypes of older workers. The multidimensionality of attitudes toward older adults, which has been established in several studies, can also be found in the workplace. Older workers are stereotyped by managers in terms of their productivity, their reliability, and their adaptability. On the whole, the respondents had favourable attitudes toward older workers with respect to their productivity and reliability. Only a few managers felt that older employees were less productive than younger ones. Attitudes about the reliability of older staff were also positive. Older workers are, however, often associated with a lack of adaptability and a resistance to innovation and, in particular, technological innovations.

In this study, we present an explanation for perceptions and stereotyping based on psychological theories. The empirical analyses show that the mechanisms assumed were all verified to a certain extent. Both the socio-psychological and the cognitive explanatory mechanisms are relevant in explaining people's views about the productivity and reliability of older workers. Older respondents have more positive attitudes toward older workers than do younger respondents. This is in line with earlier results of bivariate analyses carried out by Hassell and Perrewé (1995) and Finkelstein et al. (1995). The hypothesis that familiarity with older workers reduces negative stereotyping regarding the productivity and reliability of older workers is also confirmed. We may even have underestimated the importance of contact, since we examined only the number of interactions that individuals had with older workers. The type and intensity of the interaction may be more important than the frequency

of contact. Our results contradict the results of Hewstone and Brown (1986), who found that contact alone was not sufficient in the development of more positive attitudes. This suggests that work-related contacts are a specific type of contact. Moreover, it underscores McCann and Giles's (2003) remarks that workplace intergenerational communication is an important area of inquiry that has received little attention in the current literature.

Note that, in explaining the stereotypes of adaptability, the assumed psychological explanatory mechanisms did not play a role. The frequently stated negative views regarding older workers' adaptability can be found among young as well as older managers and do not relate to the number of contacts with older workers. Attitudes about older workers' adaptability were found to be primarily related to the organizational context. This result suggests that there may be a mismatch among the demands of the organization, the aging of the workforce, and the way in which personnel policies address this phenomenon. Given that, due to the rate of technological change, retraining and updating have become the hallmarks of today's workplace, negative stereotyping may arise when older workers do not participate in training. This study shows that, in organizations in which a large percentage of staff are highly educated, views about older workers' adaptability are more positive. In our analyses we do not, however, find a direct effect of the availability of training facilities. One reason for this may be that we do not know what barriers to participating in training programs are faced by older workers. Taylor and Urwin (2001) show that older workers are still much less likely to participate in employer-provided training programs than younger workers.

An interesting result of our study is that attitudes toward older workers are much less positive in the local government sector than in other sectors of the Dutch economy. Strong job protection in this sector, compared to other sectors, and the use of seniority-based salary systems result in relatively low job mobility among civil servants. As a result, many older civil servants tend to have a long employment history in the government sector (Henkens & Tazelaar, 1997). Whether these long working careers make older workers less committed to their work (resulting in negative stereotypes) is an interesting question for future research. A recent study by Henkens & Kalmijn (in press) shows that workers who are mobile between firms at the end of their careers retire substantially later. Negative stereotypes may also reflect discomfort with the low mobility of older workers' hampering career prospects of younger employees.

A third issue examined in this article relates to the influence of stereotypes on managers' attitudes to keeping older workers employed. Support for holding onto older workers was found to be limited among the managers in our study. This result underscores the discrepancy between government policy aimed at raising the labour force participation of older adults and policies within organizations (OECD, 2001; Remery et al., 2003; Van Dalen & Henkens, 2005). Most managers do not seem to offer strong support to later retirement. The support for later retirement is even weaker in organizations in which older staff is associated with negative stereotypes. An important finding is that managers who are in frequent contact with older workers are more in support of later retirement. Apparently managers who are not familiar with older workers have difficulty imagining the value of older workers' working longer in their organization.

Stereotypes are persistent and difficult to change because the stereotyping process usually begins at a young age and tends to be unconscious. Reducing stereotypical beliefs to prevent social exclusion and the loss of human capital places stiff demands on the ability of managers to communicate effectively with their staff. A recent large-scale study among Dutch organizations in the private and public sectors shows that the communication between older workers and their managers about matters related to the end of their professional careers left much to be desired (Henkens & van Solinge, 2003). These issues are barely discussed, and it would appear that sometimes people tend to think "on behalf of older workers" rather than "with older workers". Without effective communication between managers and their older subordinates, managers may find themselves trapped in the self-fulfilling prophecy of creating the circumstances under which older workers are gradually transformed into the stereotype the employer imagines them to be. Future research should also include the opinions of colleagues. Recent results for the Netherlands show that the total population has much more outspoken opinions of older workers than do managers (Van Dalen & Henkens, 2005).

Many studies use the set of items analysed in this article to describe opinions regarding older workers. However, one can question using measures in which older and younger workers are pitted against each other (e.g., older workers are less productive than younger workers) rather than looking at how people feel about these ages individually. As suggested by Finkelstein and Burke (1998), contrasting older and younger workers in one item may increase the salience of age and increase age stereotyping. New

research should compare the results obtained with the items used in this study with measures in which respondents are asked to judge several age categories separately. In addition, though the Likert-type format used in the scales gives information about people who feel negatively about older workers unambiguously, the meaning of disagreement with one item doesn't distinguish between a preference for one age category and a belief in the equality of the ages.

With respect to the generalizability of the results, it should be noted that countries vary greatly in the extent to which age discrimination is legally sanctioned. In the United Kingdom, employers may include maximum preferred ages in advertisements for vacancies. The Netherlands, Canada, and France prohibit by legislation the use of maximum age limits in job advertisements. An important aspect with respect to the generalizability of our results to other countries concerns mandatory retirement. All supervisors know that, even if they discourage the early retirement of their older subordinates, all older workers have to retire at age 65. While mandatory retirement because of age is not allowed in the United States, the Netherlands, as well as Japan and the other European countries, have mandatory retirement ages (Turner & Watanabe, 1995). Future research must show the extent to which the conclusions drawn in this study also hold in situations where no mandatory retirement age exists.

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