

**Stereotyping Older Workers and
Retirement: The Managers' Point of View**
WANE Working Paper #5

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Workforce Aging in the New Economy

A Comparative Study of Information Technology Employment



WORKFORCE AGING In The NEW ECONOMY (W.A.N.E.) explores the relationships among workforce aging, employment growth in information technology (IT) labour markets, and the transformation of employment relations in the new economy. This work involves a multi-disciplinary, cross-national comparison of IT employment and workforce aging in Canada, the United States, the European Union, and Australia.

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**Stereotyping older workers and
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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 this study were gathered among 796 managers. Through factor analysis, 15 opinions about older workers were reduced to three dimensions of stereotypes. The first important dimension deals with the productivity of older staff, the other two dimensions are about their reliability and their adaptability. The stereotypical ideas about older workers influence managers' attitudes toward retirement of their employees. The analyses show that besides organisational factors, psychological mechanisms also explain why people use stereotypes about older workers. 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 labor force participation of older adults, is of key policy concern to most countries of the western world. Reversing the trend toward ever earlier labor 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 (OECD, 2001). Stereotypes may lead to the social exclusion of older workers, not only because one 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). The central question of this article is threefold: (1) how are older workers viewed by managers within organisations, (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' retirement attitudes?

Although problems related to older workers are of increasing concern to organisations with an aging workforce, research into attitudes toward older employees is 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 (1954) and Bird and Fishers' (1986) replication of this study found 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; Chui et al., 2001; Hassel & Perrewe, 1995; Henkens, 2000; Lee &

Clemons, 1985; Finkelstein et al., 1995; Finkelstein & Burke, 1998; Loretto et al., 2000; McGregor & Gray, 2002; Remery, et al., 2003; Rosen & Jerdee, 1976 a, b; Taylor & Walker, 1994, 1998; Wagner, 1998; Warr & Pennington, 1993). This research has shown that attitudes and stereotypes about 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 organisation, reliability and interpersonal skills. Qualities such as the acceptance of new technologies and adjustment to organisational 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 et al., 2002; Hummert et al., 1994, 1997; Schmidt & Boland, 1986). The multidimensionality is underdeveloped with respect to the age-related stereotypes in the workplace. Though several beliefs about older workers are mentioned in the current literature, it is unclear to what extent these beliefs can be clustered in different dimensions. In addition, very few studies have tried to find an explanation for the stereotypes observed in the workplace. A recent study carried out by Chui et al. (2001) using part-time management students as respondents showed that age stereotypes influence discriminatory attitudes at work. The question of whether, and, if so which, stereotypes have an impact on organisations' retirement policies have received little attention to date. Few studies explicitly address attitudes regarding the retirement of older workers (Rosen, Jerdee & Lunn, 1981;

Rosen and Jerdee, 1979, 1982). These studies used questionnaires and in-basket simulations to assess attitudes 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 in 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 stereotype 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 hold onto 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 & Burke (1998) point to an erroneous common belief in organisations that older workers want to retire as soon as possible. Whether managers' retirement attitudes are influenced by stereotypical views is less clear.

We shall make use of a large-scale survey administered to managers in both the public and private sectors in the Netherlands. Whereas Section 2 describes our study's theoretical framework, Section 3 deals with the methods used in the empirical study. Section 4 describes the stereotypical views held and examines whether patterns of stereotypes can be distinguished. The results of the analyses used to explain differences between

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 in Section 5. Our conclusions and a discussion are set forth in Section 6.

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, we use tools such as categorizing and stereotyping. Categorizing entails storing information in categories ('pigeonholing') that correspond to certain places in our memory (Brewer et al., 1981). Thinking in terms of categories is said to be "cognitively economical" (Macrae & Bodenhausen, 2001: 241). Social categories are based on a person's 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: 240).

The above 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 et al., 1989; Verkuyten & Nekuee, 1999). As a result, the 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 (ingroup bias) and to attribute more negative characteristics to members of other groups (outgroup bias) to which they do not belong (Tajfel & Turner, 1979; Lalonde & Gardner, 1989). Stereotypes are not necessarily negative, but stereotypes

about 'outgroup' members tend to be less favorable than those about ingroup members (Tajfel & Turner, 1979; Hilton & Von Hippel, 1996). In social psychology, the stereotyping process is described from different perspectives. The two main approaches are the *cognitive functional approach* (see Weber & Crocker, 1983; Hamilton & Troler, 1986) and the *social identity theory* (Tajfel & Turner, 1979) or the *self-categorization theory* (see Oakes *et al.*, 1994).

The *cognitive functional approach* deals with information processing and selection, and remembering this information. This approach is based on the idea that people are information processors and their capacity to take in and digest information is limited. These limitations give rise to systematic errors when information is being processed, which in turn leads 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; Pendry & Macrae, 1994; Macrae & Bodenhausen, 2001). The first mechanism assumes that having information about personal characteristics diminishes 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, are able to create more qualified perceptions. We hypothesize that lack of interaction (and, therefore, direct experience) with older people will lead to negative beliefs about older workers (Butler, 1969) (Hypothesis 1). Following Hewstone & Brown (1986) we call this the 'contact hypothesis'.

A second line of research used to explain stereotypes draws on the *social identity theory* (Tajfel & Turner, 1979) or the *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, people try to take on a positive identity. They compare themselves with other individuals or groups in an effort to distinguish themselves favorably from other groups. People evaluate others in terms of the degree to which they are similar (Tajfel & Turner, 1979; Lalonde & Gardner, 1989). Within this explanatory mechanism, Ashmore and DelBoca (1981) speak of a dynamic and a socio-cultural 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 person in question. The *socio-cultural approach* is based on the idea that people create stereotypical perceptions, values, attitudes and expectations about others (outgroups) as a result of socialization processes and that these perceptions are not questioned within their own reference group (the ingroup). Socialization processes lead people to acquire a sense of belonging to a particular ingroup, thus setting themselves apart from members of the outgroup in a negative sense (Ashmore & DelBoca, 1981). Snyder & 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. By blaming older adults instead of the aging process itself, the use of stereotypes can be seen as serving an ego protection function. Moreover, older workers often occupy the most senior positions in organisations; these positions may conflict with the career prospects of younger employees (Ekamper, 1997). In line with this reasoning, we formulate the 'ingroup 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 we live in. Having said that, 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 organisational 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 organisational context. In general, the productivity of people is determined by both positive (higher education and more experience) and negative factors. The negative factors include such things as the wear and tear that comes with age, which has a negative effect on their physiological capabilities, and this in turn may deteriorate further through physically taxing work. McEvoy and Cascio (1989) state that there is persuasive evidence from different studies across 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 organisations 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' labor productivity does not depend entirely on the personal qualities of the person in question, but rather on the combination of labor 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 human capital in later life, depreciation is bound to occur. Human

capital theory provides the answer to the question as to how productivity decline could be prevented, namely by maintaining workers' human capital (Becker, 1975; Polachek & Siebert, 1993). This maintenance could be achieved by updating existing human capital through the retraining of older workers. We hypothesize that in organisations that provide additional training, managers' stereotypes about older workers are more positive (Hypothesis 4). In addition, 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 organisation, the more positive the attitudes toward older workers will be (Hypothesis 5).

Stereotypes and managers' attitudes toward retirement

An important aspect of stereotypes is that the prevailing views may affect managers' discriminatory attitudes and behavior. Chui et al. (2001) show that the more respondents perceive older workers as being able to adapt to change, the more favorable their views are on training and promotion of older workers. In this article we focus on managers' attitudes toward retirement. One of the more pervasive beliefs in today's workplace is that older workers should retire somewhere in their mid 50s or early 60s (Joulain & Mullet, 2001; McCann & Giles, 2003). This belief holds that 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 & Giles (2003) state, the support of retirement may also reflect underlying attitudes that younger workers have more to offer to an organisation than older workers. In line

with this argument one would hypothesize that negative beliefs about older workers stimulate support for their early retirement (Hypothesis 6).

Methods

Data

In May 2002, a questionnaire was sent to over 3,433 companies and organisations, each with more than nine employees. The names and addresses of the private sector organisations were taken from a sample drawn from the trade register of the Chamber of Commerce. To include organisations 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 percent, which is lower than the average response of 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 percent (see Brewster et al., 1994; Kalleberg et al., 1996). For the purpose of this study we used the questionnaires completed by board members/managing directors (27 percent), owners (11 percent), plant managers (15 percent), and heads of human resources department (46 percent). Of the 796 managers, 66% were males and 34% 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 the local government (22%).

Measurement

Stereotypes about older workers

The stereotypes were measured using 15 statements about older workers. The respondents were asked to indicate on a five-point scale (1 'strongly disagree' – 5 'strongly agree') to what extent they agreed with the statements presented (Likert-type scale). 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*". These statements were also used in several other studies on stereotypes about older workers (See Chui et al., 2001; IPM, 1993; Loretto et al., 2000; Lyon & Pollard, 1997; McGregor & Gray, 2002; Taylor & Walker 1994, 1998; Warr & Pennington, 1993; Schmidt, 1999; Wagner, 1998).

Organisational characteristics

The organisational characteristics were measured using four variables. First of all, managers were given a list of industrial sectors according to Eurostat (1990) and were asked to indicate the sector to which their own organisation belonged. We categorized the industrial sectors as follows: manufacturing and construction; service sector; local government sector; and the health/welfare sector. 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 organisation (continuous variable). Thirdly, the managers were asked to give the percentage of older workers who were involved in physically demanding work (continuous variable). And lastly, they were asked whether the organisation 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 is a continuous variable: age. The second variable is indicative of the degree to which the respondents associated with older workers, and is based on the following two questions: "How often do you come into contact with older workers (50+) through your work, both within your own organisation and in other organisations?" (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' – 5 'strongly agree'). The answers to the questions were transformed and added up ($r=.46$; $\alpha=.76$). 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 on the 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 (Hummert et al., 1997). To account for possible gender differences in stereotyping older workers, *sex* has been included in the analysis ('0' male, '1' female).

Managers' attitudes toward early retirement

We measured the respondents' attitudes toward retirement by posing three questions. First: "Do you think it is desirable for older workers in your organisation 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).

Secondly, we asked the respondents "Do you think it is desirable for older workers in your organisation to continue working after they have reached the official retirement age of 65 years?" (Again five answer categories: '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 labor shortages, what is your opinion on stimulating older workers to continue working until they are 65 (the official retirement age)?" (Answer categories '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 ($\alpha=.63$) by calculating the unweighted mean of the standardized scores. The higher the score on the scale constructed, the more managers support early retirement.

Analysis

Factor analysis was carried out to identify the relationship between the 15 different statements about older workers, and to find out whether this relationship can be expressed in terms of a number of dimensions. 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).

Factor analysis has been carried out with principal components analysis and varimax rotation, by far the most commonly used rotation algorithm. Rotation results in variables loading primarily on one factor and having either high or low loadings on a factor, and hence in many instances brings about a simplification of the initial solution, where variables might have moderate loadings across a number of factors (Dunteman,

1989). The simplicity of the rotated factor loading matrix makes interpretation easier. The factor scores are calculated as a factor loading-weighted average of all items. All analyses have also been carried out using promax rotation, this however, did not change our results.

For the explanatory analyses, we used multivariate regression analysis. The dimensions of the stereotypes about older workers were used as dependent variables and the organisational characteristics and individual characteristics of the respondents were used as independent variables. Multivariate regression analysis was also used to explain the influence of the dimensions of stereotypes on the inclination of managers to retain older workers. The organisational characteristics and the characteristics of the respondents were used as control variables.

Results

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 also tended to have moderate views about older workers' interest in technological change.

Dimensions of stereotypes about older workers

Table 2 presents the results of the factor analysis. The factor analysis gives three factors with an Eigenvalue higher than 1. The three factors explain 44% of the variance in the 15 statements about older workers. 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 factor loading means that the statement in question is strongly correlated with the factor concerned, a low factor loading indicates no more than a weak correlation. Factor loadings of .40 or more are shown in bold. 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 percent of the variance in the statements about older workers was found to be related to the first factor. Respondents with a high score on this dimension are positive about the productivity of older workers. They were less inclined to think that older workers are less productive than younger employees, that they are less able to keep up and are sick more often.

Dimension 2: Reliability

The second factor in Table 3 is characterized by positive attitudes about older workers. Thirteen percent of the variance in the statements about older workers is related to this factor. Respondents with a high score on this dimension had positive views about older workers in terms of their loyalty, reliability, accuracy, and interpersonal skills compared with younger employees.

Dimension 3: Adaptability

The third factor in Table 3, which has an explained variance of 8 percent, 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 their interest in training. Attitudes about the ability to cope with physical strain load heavily on this factor.

Explanatory analyses

Section 2 presented theories about the perceptions about, and stereotyping of older workers. A number of hypotheses were formulated on the basis of these theories to explain differences in the extent to which stereotypes exist. This section tests the hypotheses for each separate dimension of the stereotypes about older workers. The results of our analyses are given in Table 4. Two groups of variables have been included in the analyses: the individual characteristics of the perceiver and characteristics of the organisational context.

The first hypothesis, the ‘contact hypothesis,’ assumes that more frequent contact between perceiver and older workers results in more favorable views regarding the latter. Table 4 provides empirical support for this hypothesis. More frequent contact with older workers is correlated with more positive attitudes about their productivity (first column of Table 4) and about their reliability. With respect to older workers’ adaptability, we do not find a significant effect.

The second hypothesis, the ‘ingroup bias’ hypothesis assumes that the use of stereotypes can be seen to serve an ego protection function. This hypothesis predicts that older respondents have more positive views about older workers than do younger respondents. Hypothesis 2 also supports views about the productivity and reliability of older workers. Younger respondents have less positive attitudes toward older workers than older respondents. We did not find a correlation with respect to their adaptability. Hassel and Perrewé (1995) suggested that it is

plausible that the number of interactions people have with older workers is more effective in reducing negative stereotypes about older workers among younger respondents than it is among older respondents. In further analysis we included an interaction variable in the regression analyses. This interaction variable was determined to be not significant. Lastly, we found gender differences in the stereotypes men and women have about older workers; women were found to hold somewhat less positive views about older workers’ reliability.

Stereotypes about older workers may, however, also be shared within certain organisational contexts. Hypotheses 3, 4 and 5 refer to the importance of the organisational context. Table 3 shows that stereotypes about the productivity of older workers are much less related to the organisational context than stereotypes about older workers’ reliability and adaptability. Regarding the stereotypes about older workers’ productivity, we only find support for Hypothesis 3, namely that stereotypes about older workers are less positive in organizations where physical demands on older workers are greater. For Hypothesis 4, we found limited support. In organisations with a large proportion of highly educated workers, views on adaptability tended to be more positive than in organisations with a less educated workforce. However, the proportion of highly educated workers was found to have a negative impact on the extent to which older workers were felt to be reliable. We did not find support for Hypothesis 6. Stereotypes about older workers were not found to be related to the training facilities that organisations offer their staff.

A remarkable result with respect to the organisational context is that we found significant differences between industrial sectors. In the local government sector we found less positive views about older

workers' reliability and adaptability than in the other sectors.

Stereotypes and attitudes toward retirement

In Section 2, we formulated a hypothesis about the influence of stereotypes on the inclination of managers to retain older workers. Table 4 presents the results of our test of this hypothesis. Model 1 includes only the control variables as explanatory variables. Model 2 has added the dimensions of stereotypes about older workers. In Model 2, Hypothesis 6 is confirmed for all three stereotypes about older workers. 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 favor of their employees working until the official retirement age of 65 (20%) and even fewer were in favor of them continuing beyond the age of 65. Model 2 also shows that if stereotypical beliefs of managers are held constant, those managers who have few contacts with older workers are even more supportive of early retirement.

Conclusions and discussion

This research among managers in the Netherlands shows that various stereotypes exist about 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 were found to have favorable attitudes toward older workers. Only few felt that older employees were less productive than younger ones. Attitudes about older staff were positive in terms of their reliability. Negative perceptions tended to be related

to their perceived lack of adaptability and their resistance to innovation, in particular technological innovations.

In this study we have tried to present an explanation for perceptions and stereotyping based on psychological theories. The empirical analyses have shown that the mechanisms assumed were all verified to a certain extent. Both the socio-psychological and the cognitive explanatory mechanisms were relevant in explaining people's views about the *productivity* and *reliability* of older workers. Older respondents tended to see older workers as belonging to their own socio-cultural ingroup, and had more positive attitudes toward older workers than did the younger respondents. This is in line with earlier results of a bivariate analysis carried out by Hassel & Perrewé (1995). The hypothesis that familiarity with older workers reduces negative stereotyping regarding the productivity and reliability of older workers was 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 & Brown (1986) who found contact alone was not sufficient to lead to more positive attitudes. This suggests that work-related contacts are specific types of contacts. Moreover, it underscores McCann & Giles (2003) remarks that workplace intergenerational communication is an important area of inquiry, which has received little attention in the current literature.

Note that in explaining the stereotypes about 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 old managers and does not relate to the number of contacts with older workers. Attitudes about older workers' adaptability were found to be primarily related to the organisational context. This result suggests that there may be a mismatch between the demands of the organisation, the aging of the workforce and the way in which personnel policies cope with 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 has shown that in organisations in which a large percentage of staff are highly educated, views about older workers' adaptability are more positive. In our analyses we did not, however, find a direct effect of the availability of training facilities. One reason for this may be that we do not know the barriers to participating in training programs faced by older workers. Taylor & Urwin (2001) have shown 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 and the use of seniority-based salary systems result in relatively low job mobility of civil servants compared with other sectors. 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 point for future research. 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 is the influence of stereotypes on managers' attitudes about keeping older workers employed. Support for retaining older workers was found to be limited among the managers in our study. This result underscores the discrepancy between governments' policy objectives concerning raising the labor force participation of older adults and policies within organisations (OECD, 2001; Remery et al., 2003). Most managers do not seem to have a sense of urgency supporting later retirement. The support for later retirement is even weaker in organisations in which older staff is associated with negative stereotypes. An important result is that managers who are in frequent contact with older workers are more in support of later retirement. This result shows that stereotype views regarding older workers do not only refer to the functioning within organisations, but also to their early retirement. Apparently, managers who are not familiar with older workers have difficulty imagining the value of older workers working longer in their organisation.

Stereotypes are persistent and difficult to change because the stereotyping process usually begins at a young age and tends to be unconscious. The perpetuation of stereotypes obscures our view of individual differences between older workers. Although these differences are underestimated, similarities that are congruent with the prevailing stereotypes are overestimated. 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 organisations in the private and public sectors has shown that the communication between older workers and their managers about matters related to the end of their professional careers left much to be desired. These issues are barely discussed, and it would

sometimes appear that people tend to think “on behalf of older workers” rather than “with older workers” (Henkens & van Solinge, 2003). Counteracting this phenomenon is the first and most important step toward a situation that does justice to individual differences in what employees and organisations want in light of what is possible.

Without these communications managers may find themselves trapped in the self-fulfilling prophecy where they create the circumstances under which older workers gradually transform into the stereotype the employer imagines the older worker to be.

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Table 1 Dutch managers' opinions about characteristics of older workers, in % (N = 796)

| Statements | Disagree | Neither agree nor disagree | Agree | Average | Std.dev |
|---|-----------------|-----------------------------------|--------------|----------------|----------------|
| Older workers are less interested in participating in training programmes than younger workers. | 37 | 18 | 45 | 3.2 | 1.06 |
| Older workers are less creative than younger workers | 54 | 37 | 9 | 2.5 | .76 |
| Older workers are just as enterprising as younger workers | 13 | 36 | 51 | 3.4 | .79 |
| Older workers are less capable of doing physically taxing work than younger workers. | 15 | 25 | 60 | 3.5 | .83 |
| Older workers are less productive than younger workers. | 57 | 36 | 7 | 2.4 | .76 |
| Older workers keep up just as well as younger workers. | 15 | 32 | 53 | 3.4 | .78 |
| Older workers are less interested in technological change than younger workers. | 29 | 36 | 35 | 3.1 | .89 |
| Older workers are less able to adapt to technological change than younger workers. | 28 | 36 | 37 | 3.1 | .88 |
| Absenteeism is higher among older workers than among younger workers. | 67 | 25 | 8 | 2.3 | .81 |
| Older workers prefer not to be assigned tasks by younger workers. | 41 | 41 | 19 | 2.8 | .83 |
| Older workers are more loyal than younger workers. | 29 | 40 | 31 | 3.0 | .94 |
| Older workers are more meticulous than younger workers. | 38 | 43 | 19 | 2.8 | .88 |
| Older workers are more reliable than younger workers. | 42 | 45 | 13 | 2.7 | .82 |
| Older workers have greater social skills than younger workers. | 25 | 40 | 35 | 3.1 | .86 |
| Older workers are more careful than younger workers. | 23 | 33 | 44 | 3.2 | .87 |

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

| Statements | Factor 1 | Factor 2 | Factor 3 |
|---|-----------------|-----------------|-----------------|
| Older workers are less productive than younger workers. | -0.79 | 0.07 | -0.09 |
| Older workers are less creative than younger workers.. | -0.67 | 0.23 | -0.15 |
| Older workers keep up just as well as younger workers. | 0.61 | 0.23 | 0.23 |
| Absenteeism is higher among older workers than among younger workers. | -0.60 | 0.11 | -0.06 |
| Older workers are just as enterprising as younger workers. | -0.42 | 0.17 | 0.37 |
| Older workers prefer not to be assigned tasks by younger workers. | -0.43 | 0.33 | -0.18 |
| Older workers are more loyal than younger workers. | -0.01 | 0.77 | -0.12 |
| Older workers are more reliable than younger workers. | -0.25 | 0.74 | -0.02 |
| Older workers are more meticulous than younger workers. | 0.07 | 0.73 | -0.02 |
| Older workers have greater social skills than younger workers. | -0.04 | 0.65 | -0.10 |
| Older workers are more careful than younger workers. | -0.18 | 0.40 | -0.38 |
| Older workers are less interested in technological change than younger workers. | -0.09 | 0.12 | -0.78 |
| Older workers are less able to adapt to technological change than younger workers. | -0.23 | 0.11 | -0.68 |
| Older workers are less capable of doing physically taxing work than younger workers. | -0.03 | 0.02 | -0.56 |
| Older workers are less interested in participating in training programmes than younger workers. | -0.19 | 0.04 | -0.54 |
| Eigenvalue | 3.7 | 2.1 | 1.2 |
| R ² | 24.8 | 13.9 | 8.1 |

We explored the psychometric properties of the three dimensions by calculation 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.

Table 3 Results of the multivariate regression analyses to explain stereotypes about older workers (N = 796)

| | Factor 1 Productivity | | Factor 2 Reliability | | Factor 3 Adaptability | |
|---|--------------------------|---------|-------------------------|---------|--------------------------|---------|
| | B | t-value | B | t-value | B | t-value |
| <i>Organizational characteristics</i> | | | | | | |
| <i>Occupational sector</i> | | | | | | |
| Local government sector (ref) | | | | | | |
| Manufacturing/construction | .00 | (0.08) | .25** | (5.13) | .09** | (1.71) |
| Service sector | -.01 | (-0.19) | .20** | (4.23) | .15** | (3.18) |
| Health sector | .09 | (1.87) | .14** | (2.86) | .20** | (3.82) |
| Organization has training facilities | .04 | (1.06) | -.06 | (-1.57) | .03 | (0.70) |
| % highly educated workers | -.03 | (-0.80) | -.06* | (-1.54) | .09** | (2.14) |
| % workers doing physically demanding work | -.08* | (-2.03) | .02 | (0.45) | .03 | (0.73) |
| <i>Individual characteristics</i> | | | | | | |
| Age | .12** | (3.08) | .12** | (3.10) | .00 | (0.06) |
| Sex | .04 | (1.13) | -.11** | (-2.93) | .05 | (1.43) |
| Frequency of contact with older workers | .19** | (4.64) | .07* | (2.07) | .03 | (0.69) |
| R ² | 6.9% | | 9.1% | | 3.4% | |
| F(9,786) | 6.4** | | 8.7** | | 3.0** | |

* significant p< 0.05; **significant p< 0.01

Table 4 Results of regression analyses to explain support for early retirement of older workers by managers (N = 796)

| | Model 1 | | Model 2 | |
|--|------------------------|------------|-------------------------|------------|
| | <i>B</i> | (t-values) | <i>B</i> | (t-values) |
| <i>Stereotypes</i> | | | | |
| Factor 1: Productivity | | | -.16** | (-4.38) |
| Factor 2: Reliability | | | -.10** | (-2.91) |
| Factor 3: Adaptability | | | -.14** | (-3.91) |
| <i>Organizational characteristics</i> | | | | |
| <i>Sector</i> | | | | |
| Local government sector (ref.) | | | | |
| Manufacturing/construction | .00 | (0.02) | .04 | (0.79) |
| Service sector | .05 | (0.96) | .09 | (1.80) |
| Health sector | .00 | (0.02) | .06 | (1.13) |
| Organization has training facilities | .01 | (0.38) | .02 | (0.48) |
| % highly educated workers | -.04 | (-1.02) | -.04 | (-1.03) |
| % workers doing physically demanding work | .06 | (1.44) | .05 | (1.30) |
| <i>Individual characteristics</i> | | | | |
| Age | .01 | (0.26) | .04 | (1.07) |
| Sex | -.04 | (-1.02) | -.04 | (-1.04) |
| Frequency of contact with older Workers | -.17** | (-4.55) | -.14** | (-3.76) |
| R ² | 4.5% | | 8.4% | |
| | <i>F</i> (9,786)=3.1** | | <i>F</i> (12,783)=6.0** | |

** significant $p < 0.01$; * significant $p < 0.05$