Chapter 3

Stereotypes of Older Workers in Organizational and News Media

This study is published as: Kroon, A. C., Van Selm, M., Ter Hoeven, C. L., & Vliegenthart, R. (2016). Reliable and unproductive? Stereotypes of older workers in corporate and news media. Ageing & Society. Advance online publication. doi.org/10.1017/S0144686X16000982
Abstract

Older workers face a severe employability problem, partly because of dominant stereotypes about them. This study investigates stereotypes of older workers in organizational and news media. Drawing on the Stereotype Content Model, we content analyzed newspaper coverage and organizational media of 50 large-scale Dutch organizations, published between 2006 and 2013. The data revealed that stereotypical portrayals of older workers are more common in news media than in organizational media and mixed in terms of valence. Specifically, older workers were positively portrayed with regard to warmth stereotypes, such as trustworthiness, but negatively with regard to competence stereotypes, such as technological competence and adaptability. Additionally, stereotypical portrayals that do not clearly belong to warmth or competence dimensions are found, such as the mentoring role stereotype and the costly stereotype. Because competence stereotypes weigh more heavily in employers’ productivity perceptions, these media portrayals might contribute to the employability problem of older workers. We suggest that older workers could benefit from a more realistic media debate about their skills and capacities.

3.1 Introduction

Despite attempts to outlaw age discrimination, ageism is still considered a problematic feature of most Western labor markets. On average 51 percent of European citizens are worried that employers show preference to people in their twenties (Abrams, Russell, Vauclair, Swift, 2011). Older workers are generally perceived and treated less favorably than younger workers (Gordon and Arvey, 2002). The challenges older workers face can - at least partly - be attributed to an image problem (Van der Heijden, 2005). Age-related stereotypes about the skills and capacities of older workers are prevalent within organizations and have been identified as a crucial obstacle for their employability (Chiu et al., 2001; Finkelstein and Burke, 1998).

Stereotypes about older workers are rooted in societal and organizational factors (Bowen and Skirbekk, 2013; Chiu et al., 2001), and are
likely being reinforced by media. As the main supplier of images and information about ageing and becoming old in age-segregated Western societies, media are a powerful source to highlight shared representations of societal groups, with older workers being no exception (Donlon et al., 2005; Lubbers et al., 1998; Roy and Harwood, 1997). Yet, while media portrayals of older adults (> 65 years of age) have been widely studied (Cohen, 1994; Hanlon et al., 1997; Kessler et al., 2004; Levy et al., 2014), far less attention has been paid to media portrayals of older workers (≥ 45 years of age) specifically.

This study, then, investigates the extent to which stereotypes of older workers are reflected in organizational (i.e., annual reports and employee magazines) and news media and how potential differences in these stereotypes can be accounted for. By investigating both organizational and news media, this study considers the two key domains in which the consequences of stereotypical portrayals of older workers are likely being most significant. First, stereotypes in organizational media are likely to reflect inter-organizational beliefs (Van Selm and Van der Heijden, 2014) and inform (older) workers and organizational stakeholders about how older workers are perceived within their organization. Moreover, stereotypical communication in organizations may have negative consequences for the perceived and actual employability of older staffs and older workers’ work aspirations (Gailliard et al., 2010). Second, stereotypes in news media can inform a broader range of actors about characteristics of older workers. As a consequence, stereotypes in news media might influence beliefs about older workers among policy makers, employers and (unemployed) older workers themselves.

This study makes several contributions to the literature. First, to better understand the content of older workers’ media stereotypes, we investigate the extent to which such stereotypes originate from warmth and competence beliefs (Fiske et al., 2002). Second, and moving beyond a merely descriptive account, we add to the understanding of the factors that explain variation in older workers’ media stereotypes. More specifically, we analyze differences between organizational and news media and investigate how sources in the news bring different stereotypes to the forefront. Herewith, we add to our understanding of how negative stereotypical portrayals of older workers are triggered and could be combatted, which is crucial to take a step towards a more
realistic public and organizational debate about this part of the workforce. Last, by investigating media stereotypes of older workers, we methodologically diverge from previous research (see Posthuma and Campion, 2009), which has largely neglected the broader media environment in which ageist stereotypes are likely being constructed, confirmed or combatted (McCann and Giles, 2002). We rely on a content analysis of news and organizational media of Dutch organizations, in the research period 2006 – 2013. The paper proceeds as follows: First, we use the Stereotype Content Model (SCM) (Fiske et al., 2002) as the theoretical basis for understanding the mixed nature of media stereotypes of older workers. Second, we take into consideration two factors that may explain variation in the share of negative media stereotypes of older workers: media types (i.e., organizational and news media) and sources in organizational and news media.

3.2 Stereotypes of Older Workers

To investigate the content of stereotypical portrayals of older workers in media content, we argue that the Stereotype Content Model (SCM) (Fiske et al., 2002) offers valuable insights. According to this framework, stereotypical beliefs about social groups can be broken down into two recurring dimensions that result from interpersonal and intergroup interactions: warmth (warm versus cold) and competence (competent versus incompetent). In this model, elderly adults have a high position on the warmth dimension and a low position on the competence dimension. For example, older workers are generally judged as benevolent and amiable colleagues (i.e., high in warmth traits), but also as less capable and efficient (i.e., low in competence traits) compared to younger workers (Krings et al., 2011).

Different studies have demonstrated that judgments of warmth and incompetence underlie perceptions of elderly adults across diverse temporal and cultural settings (Cuddy and Fiske, 2002; Cuddy et al., 2005), and contrasts with for example stereotypical beliefs of younger (educated) people, who are perceived as both warm and competent (Fiske et al., 2002). Previous content analyses have shown that both positive and negative portrayals of older adults are present in the media (Gibb and Holroyd, 1996) and that these positively and negatively va-
lenced stereotypes vary on the warmth and competence dimensions (Lepianka, 2015).

Warmth and competence as core dimensions of social judgments are of relevance to the context of employability specifically. Yet, few attempts have been made to apply the SCM to this domain (see for an exception Krings et al., 2011). Indeed, insights from studies using the SCM are not used in managerial studies focusing on beliefs about older workers. As a consequence, it has so far remained unclear to what extent warmth and competence stereotypes about elderly adults also apply to older workers, especially since SCM-research generally uses much older and often retired persons (> 65 years of age) compared to older workers (≥ 45 years of age) (e.g., Cuddy et al., 2005). However, there is some evidence that older workers indeed are perceived as warmer and less competent than younger workers (Krings et al., 2011).

The evaluations of older workers in organizational studies closely correspond to the dimensions of the SCM (Karpinska et al., 2013; Van Dalen et al., 2010). Studies in the organizational field point to noticeable similarities between stereotypes about older workers and elderly adults. Previous studies have shown that stereotypes of older workers are also not consistently negative or positive, but are instead mixed (Bal et al., 2011; Chiu et al., 2001; Van Dalen et al., 2010). Generally, older workers are perceived as reliable, trustworthy and loyal, but also as less adaptable, motivated and capable compared to younger workers (see for meta-analyses: Bal et al., 2011; Posthuma and Campion, 2009).

The similarity between the SCM and stereotypes of older workers is particularly apparent in the work of Van Dalen and colleagues (2010; see also Karpinska et al., 2013). The scholars conclude that older workers are positively evaluated for a set of soft work skills, defined as organizational citizenship behaviors (e.g., reliability and commitment). These soft skills are similar to warmth beliefs as proposed by the SCM. On the contrary, older workers are perceived more negative when it comes to the set of hard work skills (e.g., technology skills, physical and mental capabilities). These hard skills correspond to the competence dimension of the SCM.

Considered core-stereotype dimensions, warmth and competence are also relevant on the macro-organizational level. Specifically, mixed evaluations of older workers have been found in an analysis of busi-
ness responses to (Van Selm and Van der Heijden, 2013). Dutch organizations have responded to the issue of sustainable employability by taking measures that accommodate or ease the load on older workers, while measures aimed at professional development and growth are less common practice. These organizational responses can be interpreted as stereotype-confirmative in that they indicate reduced competence of older workers (Van Selm and Van der Heijden, 2013).

Based on the above-outlined literature, we expect that warmth and competence are prominent dimensions of negative and positive stereotypes about older workers, as the SCM predicts (Fiske et al., 2002). Specifically, we hypothesize:

H1 In organizational and news media, older workers are positively portrayed with regard to warmth stereotypes but negatively with regard to competence stereotypes.

### 3.3 Variation in Negative and Positive Stereotypical Portrayals

In addition to describing the content of stereotypical portrayals of older workers in organizational and news media, this study aims to complement our understanding of variation in stereotypical portrayals of older workers. We trace the circumstances that trigger negative stereotypes because their impact on perceptions of older workers might be especially problematic (Gailliard et al., 2010). Specifically, we consider the influence of media- and source-types on variation in the share of negative stereotypes of all (positive and negative) stereotypes.

#### 3.3.1 Media Types

As argued, organizational and news media are key arenas that could contribute to the accessibility of stereotypical beliefs about older workers. Specific to the context of news media, previous studies have identified stereotypes about gender (Sendén et al., 2014), mental illness (Aragonès et al., 2014) and ethnicity (Van Dijk, 1992). News media are more likely to contain stereotypes compared to organizational media because journalists rely on personification and exemplification as storytelling techniques (Eilders, 2006). In selecting examples to illustrate
news stories, negative stereotypes might play a role. Contrary, it is not likely that corporations will explicitly state negative stereotypes about older workers in their media, given that accusations of ageist beliefs and behaviors are likely to stain the organizational reputation (Kunze et al., 2011). Indeed, previous research has shown that negative employee disclosures are very rare in corporate annual reports (Kent and Zunker, 2013). We formulate the following hypothesis:

**H2** The share of negative stereotypes is lower in organizational media compared to news media.

### 3.3.2 Sources in Organizational and News Media

We now consider the influence of source types in organizational and news media on the share of negative stereotypes. Specifically, we investigate whether organizational representatives on the one hand, and quoted and unquoted sources on the other, bring different stereotypical portrayals of older workers to the forefront. First, it is interesting to investigate whether and how organizational representatives (such as managers and employers) express stereotypes about older workers in different domains. In the Netherlands, employers hold mixed stereotypical views of older workers. Consistent with the multidimensionality of perceptions of older workers mentioned before, Dutch employers judge older workers positively in terms of their reliability and commitment, but negatively regarding their adaptability and technological competences (Van Dalen et al., 2010). These stereotypical views are not necessary explicitly stated by employers or managers in organizational and news outlets. Potentially, organizational representatives communicate differently about older workers in the news arena, when they are out of their comfort zone and have no direct control over the content of messages. The influence on the organizational reputation is likely to be especially apparent in this context, as expressing stereotypes in news media might result in public scrutiny and critique. Due to a lack of research in this area, we formulate the following research question:

**RQ1** To what extent do organizational representatives use negative stereotypes when they talk about older workers in organizational and news media?
Second, we investigate the influence of quoted and unquoted sources on variation in the share of negative stereotypes. Quoted sources are cited actors, such as politicians, workers or organizational actors, who are explicitly and identifiably responsible for stereotypical statements in the media. Contrary, unquoted sources result from editorial input, making the origin of stereotypical statements less obvious.

Although there is mounting evidence for the mixed nature of ageist stereotypes in the workplace (Bal et al., 2011; Posthuma and Campion, 2009), it is not likely that positive and negative stereotypes are equally expressed by quoted and unquoted sources in organizational and news media. Generally, individuals are more likely to express positive than negative stereotypes. While associations with elderly adults on an implicit level tend to be consistent with negative stereotypes, explicit stereotypes are more often positive (Nosek et al., 2002), arguably because individuals fear to stigmatize. These findings suggest that although implicit negative beliefs may give rise to prejudice and ageism against older workers (Posthuma and Campion, 2009), such negative beliefs are not likely to be explicitly communicated by attributable individuals. Based on this, we expect that identifiable, quoted sources in organizational and news media are more likely to state positive stereotypes, while anonymous, unquoted sources are more likely to state negative stereotypes. This leads to the following hypothesis:

H3 The share of negative stereotypes is lower when quoted compared to unquoted sources are cited in organizational and news media.

3.4 Methods

3.4.1 Data

We relied on a large-scale content analysis of organizational and news media published in the period 2006 – 2013 to empirically test our hypotheses. For our sample of organizational media, we selected 50 large-scale organizations with at least 850 workers in the Netherlands. From these organizations, all available annual reports and employee magazines that were published during the research period were collected.
By considering both internal and external organizational outlets, our measure of organizational media is more inclusive compared to previous studies, which have generally not included different organizational media outlets because of data availability difficulties (Hughes, 2014). The collected annual reports and employee magazines were searched with the following keywords: older (workers or workers) and/or workforce aging and/or sustainable employability. Thus, when one of these terms appeared in the text, the item was included.

For our sample of news media, we relied on the five largest paid national newspapers of the Netherlands (de Volkskrant; NRC Handelsblad; Trouw; Algemeen Dagblad; De Telegraaf). We searched LexisNexis with the same search string used to select our organizational material. The final sample consisted of 1328 items (N newspaper articles = 894; N employee magazine articles = 283; N annual reports = 151). Individual newspaper articles, employee magazine articles, and annual reports constituted the coding units.

3.4.2 Coding procedure

The codebook was developed in several steps. First, a set of stereotype categories was established based on typologies of stereotypes about older workers as found in previous research. Adopting an inclusive approach, in this phase, we relied on both literature from the SCM and managerial studies investigating perceptions of older workers (Chiu et al., 2001; Finkelstein and Burke, 1998; Posthuma and Campion, 2009; Van Dalen et al., 2010). In a second step, these stereotypes were used to analyze the material in a qualitative pre-study (N ≈ 100). Here, the aim was to assure that we did not miss out on relevant stereotype-categories and

---

1For newspaper articles, the follow search string was used: (hlead (oudere OR “duurzame inzetbaar!” OR “breed inzetbaar!” OR “brede inzetbaar!” OR “flexible inzetbaar!” OR employability OR employable OR levensfase! OR vergrijzing OR generatie! OR babyboomer! OR ontgroen! OR mobiliteit OR jobrotatie OR “job rotatie” OR baanrotatie OR levensfase!) w/5 (loopbaan OR werknemer! OR medewerker! OR werker! OR personeel OR arbeid!) OR (hlead (4!-plusser! OR 5!-plusser! OR 6!-plusser! OR 7!-plusser!) w/5 (werklo! OR personeel OR medewerker! OR werk! OR arbeid! OR loopbaan!)) OR (hlead (“oude werknemer!” OR “oude medewerker!” OR “oude arbeider!”)). The exact same keywords were used to select suitable employee magazine articles and annual reports.
to verify whether stereotypes mentioned by the literature were actually present in news and organizational media.

This resulted in the following 9 stereotype-elements: 1) Costs (wages of older workers); 2) Mentor role (wisdom, experience); 3) Warm personality (friendly and collegial); 4) Reliability and trustworthiness; 5) Involvement and commitment to the organization; 6) Ability and willingness to learn; 7) Technological competence and adaptability; 8) Physical capability and health; 9) Productivity. As these categories were the outcome of an extensive literature review and a rigorous qualitative pre-study, they are as inclusive as possible. The theoretical origin of these stereotype elements is presented in Table 3.1.

In a second phase, the identified stereotype elements were coded in a quantitative content analysis. Four coding assistants independently coded all the material. Coders were extensively trained and multiple pre-tests were executed. Coding assistants were instructed to code for the presence of stereotypes in case the media article referred to older worker(s) and/or workers aged 45-years and/or older. In case certain stereotypical characteristics were discussed in relation to workers explicating to be younger than 45 years of age, stereotypes were not coded. After an acceptable level of consensus was reached, the actual coding started. Reliability was established on a sample of randomly selected coding units, which yielded satisfactory to good results (Krippendorff’s alpha (α) reported below).

For all coding units, coders firstly indicated whether a stereotype-element (1) was present or not (0). Second, for all the stereotype-elements, coders indicated whether it was (0) negatively or (1) positively valenced. An example of a positively valenced stereotype-element is: “Older workers are eager to learn new skills”. Contrary, an example of the same, but negative, stereotype-element is: “Older workers are not motivated to participate in professional training activities.” See Table 3.1 for an overview of examples of all stereotype elements. The goal of this exploratory study is to assess whether older workers are portrayed in the news as warm and incompetent. For this aim, dichotomous measures suffice, as we merely focus on the presence of warmth and competence stereotypes. Previous comparable studies have used the same approach (Lepianka, 2015). A maximum of 9 stereotype-elements could be coded per coding unit.
3.4.3 Measures

The share of negative stereotypes. A stereotype-element \( (N = 573) \) was considered to be present in case older workers were discussed in congruence with the predefined stereotype-categories. A total of 290 negative and 283 positive stereotype-elements were coded (see Table 3.1). Krippendorff’s alpha’s for intercoder reliability was on average .70, with individual stereotype-elements varying between .61 and .89.

For analysis, we rely on the share (i.e., percentage) of negative stereotype elements relative to all stereotype elements. The following formula was used:

\[
\text{Share of Negative Stereotypes} = \frac{\text{Negative Stereotypes}}{\text{Positive + Negative Stereotypes}} \times 100
\]  
(3.1)

By taking the relative share of negative stereotypes, we ensure that variation in negative stereotypes is relative to the variation in positive stereotypes. Moreover, it allows us to incorporate information on both negative and positive stereotypes in a single dependent variable.

Warmth and competence stereotypes. For the classification of stereotype-elements into warmth and competence dimensions, we primarily follow the operationalization of the SCM (Fiske et al., 2002). However, the original items used to measure warmth and competence are rather general, as they aim to capture stereotypes of diverse social groups. As a consequence, the items are not specifically tailored to the context of older workers. With the aim to arrive at a more specific operationalization of warmth and competence in the context of this study, we combine the original items of the SCM with the operationalization of soft and hard work skills identified by Van Dalen et al. (2010). This allows for a more tailored approach to measuring warmth and competence stereotypes in the specific context of older workers. As mentioned before, soft work skills are concerned with social capacities (e.g., social skills, reliability, and commitment) and may, therefore, be considered as elements related to job performance within the domain of warmth. Conversely, hard work skills fit within the competence dimension, as here the emphasis is on individual mastery capacities (e.g., productivity, ability and willingness to learn new skills).
Of the nine identified stereotype elements, seven fit well into the warmth and competence dimensions of the SCM framework. The warmth dimension was created with the following 3 stereotype-elements: 1) Involvement and commitment (α = .73); 2) Reliability and trustworthiness (α = .66); and 3) Warm personality (α = .65).

The competence dimension was created with the following 4 stereotype-elements: 1) Productivity (α = .84); 2) Physical capability and health (α = .61); 3) Technological competence and adaptability (α = .72); 4) Ability and willingness to learn (α = .72). The connection between these categories and the literature is summarized in Table 3.1.

Two identified stereotypes did not straightforwardly correspond to the warmth or competence dimension. First, stereotypes about costs of older workers (α = .70) were not included in our measure of warmth and competence, given that this stereotype does not straightforwardly fit one of both categories. Second, stereotypes about older workers’ mentor role entail elements of both warmth and competence. Mentoring roles are typically viewed as “taken on by someone senior who is passing on years of experience and wisdom, whereas the protégé role is that of a novice looking to learn, grow and advance” (Finkelstein et al., 2003). Such roles entail components of warmth, as offering (emotional) support to younger colleagues may be regarded as a characteristic located on the warmth dimension. Moreover, it might reinforce the stereotype that older workers have less potential for career development and are not a viable future investment (Finkelstein et al., 1995). On the other hand, mentoring could be understood to have components of competence, as offering technical support and supporting the development of tacit knowledge is more likely to fit in with the competence dimension.

Independent variables

*News (vs. organizational) media.* All coding units were coded as (1) news media or (0) organizational media.

*Organizational representatives.* Coders indicated the source of all stereotype-elements, i.e., the actor who states the stereotype in news or organizational media. Coders could indicate a variety of actors, such as workers, politicians, union members, and employers. Organizational representatives were coded as source in case (HR) managers, employ-
ers or organizational spokespersons mentioned a stereotype element in organizational or news media (1), relative to other sources or unquoted sources (0) (α = .66).

**Quoted (vs. unquoted) sources.** Coders indicated the source of all stereotype-elements, i.e., the actor who states the stereotype in news or organizational media. Coders could indicate a variety of actors, such as workers, politicians, union members, and employers. A source was considered to be quoted in case a stereotype-element was mentioned by one of these or other identifiable actors (1). A source was considered to be unquoted when a stereotype-element is not mentioned in a quote or statement of an identifiable actor (0). In the latter case, it is not clear whether the stereotype originates from the journalists or editor responsible for the content or from anonymous sources (α = .66).

**Control variables.** To control for overtime changes, a time variable was added, ranging from the first (1) to the last (96) month of the research period. In addition, we control for the financial crisis. We took the fall of the Lehman Brothers as a starting point of the crisis (0 = before September 2008, 1 = September 2008 and after).
### Table 3.1: Operationalization and theoretical origin of stereotype elements

<table>
<thead>
<tr>
<th>Stereotypes</th>
<th>Operationalization</th>
<th>Examples</th>
<th>Theoretical origin</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Costly stereotype</strong></td>
<td>Relates to the costs associated with employing an older worker.</td>
<td>Example positively valenced category: “Older workers are not more costly compared to younger workers”. Example negatively valenced category: “It is not economically beneficial to hire older workers”</td>
<td>Older workers are often seen as more costly because they use more employment benefits or receive higher wages (Finkelstein et al., 2000). This is not necessarily true, as wage differentials may be offset by other factors, such as performance (Posthuma and Campion, 2009).</td>
</tr>
<tr>
<td><strong>Mentor role stereotype</strong></td>
<td>Relates to the mentoring role of older workers: coaching, supporting, and passing on wisdom, knowledge, and experience.</td>
<td>Example positively valenced category: “Older workers support younger workers’ professional development”. Example negatively valenced category: “Nowadays, older workers may learn more from younger workers than vice versa”.</td>
<td>This category is part of the positively evaluated stereotype domain of older workers (Harwood, 2007, p. 59), and possesses both elements of warmth and competence. Offering (emotional) support to younger colleagues may be regarded as a characteristic located on the warmth dimension. On the other hand, mentoring could be understood to have components of competence. Offering technical support and supporting the development of tacit knowledge is related to the competence dimension.</td>
</tr>
<tr>
<td><strong>Warmth stereotypes</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Warm personality stereotype</strong></td>
<td>This category covers interpersonal skills and characteristics. It relates to the extent that older workers are described as (un) friendly, (not) collegial, and/or as possessing poor/excellent interpersonal skills.</td>
<td>Example positively valenced category: “It is nice to work with older workers: They are collegial and friendly.” Example negatively valenced category: “It is challenging to work with older workers: They are not collegial and do not like to cooperate.”</td>
<td>Older workers are seen as more warm compared to younger workers (Krings et al., 2011). This dimension closely corresponds to warmth concepts such as benevolence (Cuddy et al., 2005; Fiske et al., 2002).</td>
</tr>
<tr>
<td><strong>Reliability and trustworthiness stereotype</strong></td>
<td>This category relates to the extent that older workers are portrayed as (not) trustworthy and reliable.</td>
<td>Example positively valenced category: “Older workers have a high sense of moral integrity, they are trustworthy colleagues.” Example negatively valenced category: “One can not count on older workers: They are not reliable.”</td>
<td>Older workers are generally seen as more reliable and trustworthy (Posthuma and Campion, 2009). This closely corresponds to soft work skills (Van Dalen et al., 2010).</td>
</tr>
<tr>
<td><strong>Involvement and commitment stereotype</strong></td>
<td>This category relates to the extent that older workers are described as (not) committed to their employer, and involved with working tasks.</td>
<td>Example positively valenced category: “Older workers are loyal to their employer. They care about the organizational well-being and have low levels of absenteeism”. Example negatively valenced category: “Older workers are not loyal to their employer.”</td>
<td>Older workers are generally perceived as more stable, dependable and committed (Posthuma and Campion, 2009). This closely corresponds to soft work skills (Van Dalen et al., 2010).</td>
</tr>
</tbody>
</table>

(Table continues on next page)
### Stereotypes of older workers in organizational and news media

<table>
<thead>
<tr>
<th>Stereotypes</th>
<th>Operationalization</th>
<th>Examples</th>
<th>Theoretical origin</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Competence Stereotypes</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability and willingness to learn</td>
<td>This category covers the extent to which older workers are portrayed as (not) willing or able to learn new skills.</td>
<td>Example positively valenced category: “Older workers are eager to learn new skills.” Example negatively valenced category: “Older workers are not motivated to participate in professional training activities.”</td>
<td>Older workers are perceived to be less adaptable and trainable (Posthuma and Campion, 2009; Weiss and Maurer, 2004). Willingness to learn is considered a ‘hard’ work skill (Van Dalen et al., 2010).</td>
</tr>
<tr>
<td>Technological competence and adaptability stereotype</td>
<td>This category relates to the extent that older workers are (not) capable to work with new technology, and the extent that they can (not) adapt to changes in their environment.</td>
<td>Example positively valenced category: “Older workers are capable to work with the latest technology.” Example negatively valenced category: “Older workers have poor technology skills.”</td>
<td>Older workers are generally seen as lacking technological skills (Posthuma and Campion, 2009). This corresponds to hard working skills (Van Dalen et al., 2010).</td>
</tr>
<tr>
<td>Physical capability and health stereotype</td>
<td>This category relates to the extent that older workers are healthy, and possess physical strength and stamina.</td>
<td>Example positively valenced category: “Older workers are vital workers.” Example negatively valenced category: “Heavy physical activities are problematic for older workers.”</td>
<td>Older workers are often perceived as having low physical abilities (Posthuma and Campion, 2009). This category directly relates to hard work qualities.</td>
</tr>
<tr>
<td>Productivity stereotype</td>
<td>This category relates to the extent that older workers are productive and efficient.</td>
<td>Example positively valenced category: “Older workers are of significant commercial value for employers.” Example negatively valenced category: “Older workers are less productive compared to younger workers.”</td>
<td>This category closely corresponds to the competence dimension (Cuddy et al., 2011).</td>
</tr>
</tbody>
</table>
3.5 Results

3.5.1 Descriptive results

Salience Stereotype Elements. Table 3.2 displays our descriptive results. The majority of the items do not mention stereotype elements: in 281 (21.2%) items, stereotype elements were coded. In these items, a total of 290 negatively valenced and 283 positively valenced stereotype elements were coded. These stereotype elements appeared in 16 (10.6%) annual reports, 46 (16.3%) employee magazine articles, and 219 (24.5%) newspaper articles (see Table 3.2). This indicates that overall, news articles are more likely to contain stereotype elements compared to employee magazine articles and annual reports. There is variation in the distribution between negative, positive and mixed media stereotypes across outlets. Annual reports (8.6%) and employee magazines (7.8%) more often mention only positive stereotypes compared to news media (6.5%). On the contrary, it is more common that only negative stereotypes appear in news articles (12.3%) compared to organizational media (annual reports: 1.3%, employee magazine articles: 5.3%).

Content Stereotype Elements. We now turn to the prominence of the different stereotypes, as displayed in Table 3.3. First, regarding all negative stereotypes, the stereotype that older workers are costly is most common \(N = 177, 40.3\%\), followed by the stereotype that older workers are unproductive \(N = 66, 22.8\%\) and less physical resilient and unhealthy \(N = 64, 22.1\%\). The stereotype ability and willingness to learn \(N = 17, 5.9\%\) and technological competence and adaptability \(N = 12, 4.1\%\) were less frequently present. Notice that competence stereotypes \(N = 159, 54.8\%\) are more frequently coded as negatively valenced compared to warmth stereotypes \(N = 11, 3.8\%\).

Of all positive stereotypes, the mentor role stereotype is the most common \(N = 158, 55.8\%\), followed by the stereotype that older workers are involved and committed \(N = 34, 11.3\%\). The stereotypes that older workers have a warm personality \(N = 23, 8.1\%\) and are reliable and trustworthy workers \(N = 18, 6.4\%\) received less attention.

\(^2\)We did not find differences across quality (Volkskrant; NRC Handelsblad; Trouw) and tabloid newspapers (Telegraaf; Algemeen Dagblad) in terms of the likelihood that stereotypes are reported.
Table 3.2: Negative and positive stereotype elements across annual reports, employee magazine articles, and news articles

<table>
<thead>
<tr>
<th></th>
<th>Annual reports</th>
<th>Employee magazine articles</th>
<th>News articles</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Negative and positive stereotype elements</td>
<td>1</td>
<td>0.66</td>
<td>9</td>
<td>3.18</td>
</tr>
<tr>
<td>Only negative stereotype elements</td>
<td>2</td>
<td>1.32</td>
<td>15</td>
<td>5.30</td>
</tr>
<tr>
<td>Only positive stereotype elements</td>
<td>13</td>
<td>8.61</td>
<td>22</td>
<td>7.77</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>10.60</td>
<td>46</td>
<td>16.25</td>
</tr>
</tbody>
</table>

Note. % refers to the percentage of annual reports, employee magazine articles, and news articles that report a. both negative and positive stereotype elements, b. only negative stereotypes elements and c. only positive stereotype elements.

Warmth stereotypes are more often coded as positively valenced (N = 75, 26.5%) compared to competence stereotypes (N = 35, 12.4%)³.

Herewith, and as visualized in Figure 3.1, our descriptive data support the expectation that older workers are portrayed positively with regard to warmth stereotypes, but negatively with regard to competence stereotypes (H1). To investigate whether the categories indeed differ significantly from each other, a chi-square test was performed. First, warmth stereotype elements were more often positively than negatively valenced ($\chi^2 = 41.81, df = 1, p < .001$). Conversely, competence stereotype elements were less often positively than negatively valenced ($\chi^2 = 79.26, df = 1, p < .001$). Hence, H1 is supported by the data.

³From all news articles, 141 articles were op-ed articles. Op-ed contributions contain slightly more positive ($M = 0.26, SD = 0.07$) and negative ($M = 0.35, SD = 0.06$) stereotype elements than newspaper articles (resp. $M = 0.23, SD = 0.03$; $M = 0.28, SD = 0.28$). This applies especially to quality newspapers. More precisely, op-ed articles in quality newspapers (Volkskrant, NRC Handelsblad, Trouw) are more likely to mention positive ($M = 0.31, SD = 0.08$) and negative ($M = 0.38, SD = 0.08$) stereotype elements compared to op-ed articles in tabloid newspapers (Telegraaf, Algemeen Dagblad) ($M = 0.15, SD = 0.08$; $M = 0.28, SD = 0.09$)
Table 3.3: Negative and positive stereotypes about older workers in organizational and news media

<table>
<thead>
<tr>
<th></th>
<th>Negative stereotypes</th>
<th>Positive stereotypes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Organizational</td>
<td>News media</td>
</tr>
<tr>
<td></td>
<td>media</td>
<td>media</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Costly (not costly vs. costly)</td>
<td>7</td>
<td>20.59</td>
</tr>
<tr>
<td>Mentor role</td>
<td>1</td>
<td>2.94</td>
</tr>
<tr>
<td><strong>Warmth stereotypes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Warm personality</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Reliability and trustworthiness</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Involvement and commitment</td>
<td>1</td>
<td>2.94</td>
</tr>
<tr>
<td><strong>Total warmth stereotypes</strong></td>
<td>1</td>
<td>2.94</td>
</tr>
<tr>
<td><strong>Competence stereotypes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability and willingness to learn</td>
<td>4</td>
<td>11.76</td>
</tr>
<tr>
<td>Technological competence and adaptability</td>
<td>5</td>
<td>14.71</td>
</tr>
<tr>
<td>Physical capability and health</td>
<td>12</td>
<td>35.29</td>
</tr>
<tr>
<td>Productivity</td>
<td>4</td>
<td>11.76</td>
</tr>
<tr>
<td><strong>Total competence stereotypes</strong></td>
<td>25</td>
<td>73.53</td>
</tr>
<tr>
<td><strong>Total stereotypes</strong></td>
<td>34</td>
<td>100</td>
</tr>
</tbody>
</table>

*Note.* Variation of positively and negatively valenced stereotype elements across 9 stereotype categories. 256 negative and 283 positive stereotypes are reported, that appeared in 16 annual reports, 46 employee magazine articles and 219 news articles.
3.5.2 Explanatory results

Regarding our expectations about the association between media- (H2) and source characteristics (RQ1 and H3) and the percentage of negative stereotypes, our data calls for a multilevel model, as our units of analysis are clustered (Hox, 2005). Stereotypes stated by sources are nested within time-periods and (news) organizations. To account for the clustering of observations, we aggregated our data to the level of (news) organizations, months, and sources. Choosing a monthly aggregation level, we can closely track overtime variation while too many missing values on the weekly level were avoided (see for an example Kleinnijenhuis et al., 2013). As the highest two levels (i.e., organizations and months) are not hierarchically nested we use a cross-classified multilevel design with maximum likelihood estimation.

Figure 3.1: Warmth and competence stereotypes of older workers in organizational and news media
Table 3.4: Multilevel model explaining percentage of negative relative to positive stereotypes

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$B$ (SE)</td>
<td>$B$ (SE)</td>
<td>$B$ (SE)</td>
</tr>
<tr>
<td>Quoted sources</td>
<td>-13.61 (6.13) *</td>
<td>-13.05 (6.11) *</td>
<td></td>
</tr>
<tr>
<td>Organizational representatives</td>
<td>5.53 (5.69)</td>
<td>17.02 (8.56) †</td>
<td></td>
</tr>
<tr>
<td>News (vs. organizational) media</td>
<td>21.32 (6.44) ***</td>
<td>25.49 (6.78) ***</td>
<td></td>
</tr>
<tr>
<td>Organizational representatives *</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>News (vs. organizational) media</td>
<td>-20.39 (11.35) †</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial crisis</td>
<td>12.25 (9.26)</td>
<td>13.63 (9.15)</td>
<td></td>
</tr>
<tr>
<td>Time trend</td>
<td>-0.17 (0.16)</td>
<td>-0.20 (0.16)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>28.75 (9.25) ***</td>
<td>44.30 (8.53) ***</td>
<td>41.66 (8.58) ***</td>
</tr>
<tr>
<td>$\sigma_m$</td>
<td>0.00 (0.00)</td>
<td>0.00 (0.00)</td>
<td>0.00 (0.00)</td>
</tr>
<tr>
<td>$\sigma_t$</td>
<td>0.00 (0.00)</td>
<td>0.00 (0.00)</td>
<td>0.00 (0.00)</td>
</tr>
<tr>
<td>Log-Likelihood</td>
<td>-1621.94</td>
<td>-1614.23</td>
<td>-1612.63</td>
</tr>
<tr>
<td>Units: (News) Organizations</td>
<td>26</td>
<td>26</td>
<td>26</td>
</tr>
<tr>
<td>Units: Months</td>
<td>86</td>
<td>86</td>
<td>86</td>
</tr>
<tr>
<td>Units: Stereotypes</td>
<td>308</td>
<td>308</td>
<td>308</td>
</tr>
</tbody>
</table>

$\sigma_m$; variation on the level of the type of (news) organizations; $\sigma_t$; variation on the level of time;

Unstandardized coefficients ($B$) are reported from multilevel models using MLE estimation; Standard errors between brackets; $\sigma_m$; variation on the level of the type of (news) organizations; $\sigma_t$; variation on the level of time; † $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$
Table 3.4 displays three models summarizing the results of the multi-level analysis predicting the percentage of negative stereotype elements relative to all stereotype elements. On the highest two cross-classified levels, we find 26 (news) organizations and 86 months, indicating that stereotypes were not mentioned by all organizations. On the lowest level, 308 sources expressing positive or negative stereotypes are present. Model 1 displays the intercept-only model without explanatory variables. In Model 2, the explanatory variables were added, namely: quoted (vs. unquoted) sources, organizational representatives, news (vs. organizational) media, financial crisis and time trend. Last, in Model 3 the interaction term of organizational representatives and media type was added. Fit statistics (Log-Likelihood) indicate that the models with explanatory variables (Model 2 and 3) fit the data better compared to the intercept-only model (Model 1). The intra-class correlations (ICC) on the level of (news) organizations is 0.07, indicating that a substantial part of the variance can be explained by this level. The ICC of months is 0.00, signifying over-time consistency. Our control variables time trend and financial crisis are not related to the likelihood that negative stereotypes are stated.

We expected that the share of negative stereotypes would be lower in organizational media compared to news media (H2). Table 2.3 shows that in descriptive terms, the data supports this assumption. Organizational media contains more positive (N = 67, 66.3%) compared to negative (N = 34, 33.7%) stereotypes. The reverse holds for our sample of news media. Here, we find slightly more negative (N = 256, 53.3%) compared to positive (N = 216, 46.8%) stereotypes. Table 3.4 shows that the effect of the media type is significant. Specifically, we find a positive effect of news media on the likelihood that negative stereotypes are stated. As displayed in Table 3.4, Model 2, the probability to find negative instead of positive stereotypes is 21.32 per cent higher in news media compared to organizational media, keeping other variables constant. Hence, H2 is supported by the data.

We now move to the question to what extent organizational representatives use negative stereotypes when they discuss older workers in organizational and news media (RQ1). Our descriptive results show that, in absolute terms, organizational representatives state approximately the same amount of negative (N = 23, 52%) as positive (N =
21, 47.73%) stereotypes. Accordingly, Model 2 in Table 3.4 shows that there is no significant association between the presence of organizational representatives as sources and the share of negative stereotypes present in news and organizational media. In Model 3, the interaction term of news (vs. organizational) media and organizational representatives as sources was added to the model. The coefficient of this interaction term is marginally significant ($p = .073$). This indicates that the share of negative stereotypes express by organizational representatives is slightly lower in news media compared to organizational media.

Last, we expected that quoted sources are less likely to state negative stereotypes compared to unquoted sources in organizational and news content. In absolute terms, quoted sources were more prone to state positive ($N = 227, 53.5\%$) compared to negative ($N = 197, 46.5\%$) stereotypes. Contrary, we find that, in descriptive terms, unquoted sources more frequently stated negative ($N = 93, 62.4\%$) compared to positive ($N = 56, 37.6\%$) stereotypes. To test whether this association is significant, we consult Table 3.4, Model 2 again. Here, we find a significant negative relation between quoted sources and the share of negative stereotypes. The probability to find negative stereotypes (relative to positive stereotypes) is 13.61% lower when sources are quoted compared to unquoted. As such, H3 is supported.

### 3.6 Conclusion and Discussion

As workforces worldwide grow older, an increasing number of people, organizations, and societies can be affected by stereotypes about older workers. Motivated by the knowledge that media play a crucial role in constructing and confirming images of groups in society, this study investigates stereotypes of older workers in organizational and news media. From our analyses, we can draw three main conclusions. First, older workers are generally positively portrayed with regard to warmth stereotypes, such as reliability and commitment, but negatively with regard to competence stereotypes, such as productivity and adaptability. In addition to these warmth and incompetence stereotypes, older workers are frequently portrayed as costly, and as possessing mentor skills. Second, our results show that negative stereotypes are more common in news media compared to organizational media. Last, we found that
organizational representatives are slightly less likely to state negative stereotypes in news media compared to organizational media, and that quoted sources are less prone to state negative stereotypes compared to unquoted sources. We will discuss the implications of these findings in more detail below.

The categorization of older workers as warm but incompetent is consistent with stereotypes of elderly adults as predicted by the SCM (Fiske et al., 2002). In a content analysis of Dutch media, Lepianka (2015) found that “seniors” and “the elderly” are relatively negatively portrayed with regard to competence traits, and positively with regard to warmth traits. In line with this, our findings demonstrate that older workers receive low-competence and high-warmth media stereotypes. Hence, despite that older workers (≥ 45 years of age) are a much younger and more active group than the elderly typically studied in research on the SCM (> 65 years of age) (e.g., Cuddy et al., 2005), the content of media stereotypes of both groups seems largely comparable. With this, our findings demonstrate the usefulness of the SCM in understanding the puzzling mix of positive and negative media stereotypes of older workers.

High-warmth and low-competence stereotypes bring us to the core of the image problem that older workers face. Previous research suggests that low competence stereotypes about older workers’ physical capability, technological competences, and flexibility carry more weight in the formation of productivity perceptions of employers than high warmth stereotypes (see Van Dalen et al., 2010). Our findings indicate that low-competence and high-warmth stereotypes are at least partly reflected and potentially reinforced by the media. Warmth and incompetent stereotypes might, therefore, amongst other factors (Skirbekk, 2004), contribute to the competitive disadvantage of older workers on the labor market.

Yet, warmth and competence stereotypes did not cover the total pallet of stereotypes about older workers that exist in news and organizational media. First, the stereotype that older workers are costly was prominently present. Although there is indeed some evidence that older workers are more costly than younger workers (Finkelstein et al., 2000) this is not necessarily true, as wage differentials may be offset by other factors, such as performance (Posthuma and Campion, 2009).
Second, we found that older workers are commonly portrayed as good mentors. This stereotype possesses both elements of competence and warmth. Thus, although the SCM is useful to understand how older workers are portrayed in the news, warmth and competence stereotypes are not necessarily mutually exclusive categories and do not cover the complete pallet of media stereotypes of older workers.

In addition, our results revealed a lower share of negative stereotypes in organizational compared to news media. This, however, does not indicate that negative stereotypes are absent in Dutch organizations. On the contrary, recent research has shown that age-discrimination is widely experienced on the Dutch labor market (Andriessen et al., 2014). Rather, organizational media seems to be a more restricted environment when it comes to expressing stereotypes. Arguably, organizational attempts to safeguard the reputation and avoid accusations of stereotyping limit the extent to which skills and capacities of older workers are openly discussed, especially in a negative manner (Kunze et al., 2011).

Last, our results show that sources indeed accounted for variation in the share of negative stereotypes of older workers. We found that organizational representatives are less likely to state negative stereotypes in the news compared to the organizational environment. This might indicate that organizational representatives are especially aware of the reputational consequences of communicating ageist stereotypes when talking to the media. This is not surprising, as accusations of ageist beliefs and behaviors are likely to stain the organizational reputation (Kunze et al., 2011). In addition, we found that quoted sources are less prone to state negative stereotypes compared to unquoted sources. This seems to indicate that individuals are willing to endorse positive stereotypes, but fear to be associated directly with negative stereotyping. This corresponds with previous research which suggests that explicit stereotypes about elderly adults are generally more positive compared to implicit stereotypes (Nosek et al., 2002), and might reflect tendencies to deny stereotypes because of personal or social norms and standards.

Stereotypes about older workers are largely inconsistent with reality (Posthuma and Campion, 2009). For example, previous research shows that older workers are not per definition less physically competent and healthy compared to younger workers (Ng and Feldman, 2012), one
of the most prominent negative media stereotypes we found. Because age is a poor predictor of workers’ performance (McDaniel et al., 2012), stereotypes are not a solid basis for decisions about whom to hire, promote or fire. In various settings, age stereotypes have shown to negatively influence employment decisions (Gordon and Arvey, 2002) and cause resistance to investing in the training of older workers (Van Dalen et al., 2010). Therefore, consequences of stereotypes are real. Following from this, we argue that people, organizations, and societies are likely to benefit from a more realistic media debate about older workers’ skills and capacities. This relates especially to negative competence media stereotypes. A more balanced portrayal of older workers’ competences might help to counter stereotypical beliefs about this group (Van Selm and Van der Heijden, 2014). For example, media could emphasize that individual skills and health are of greater importance to job performance than age (Posthuma and Campion, 2009).

This study has a number of shortcomings. First, we consciously selected organizational media because stereotypes about older workers are likely being most influential in an organizational setting. However, the low number of stereotypes reported in organizational media may be due to its self-promotional nature. This material follows different logics compared to news media, which may explain our findings in part. Future studies should compare outlets that are more comparable in nature, such as different sections of business news or financial outlets.

Second, we may not have captured all sources of variation in stereotype elements. Particularly, the specific context of the older worker(s) discussed in the media may have influenced these results. For example, stereotypes expressed by organizational representatives might have been overtly positive due to loyalty reasons (Skirbekk, 2004).

Second, it should be noted that we only measured direct references to stereotypes of older workers in this study. As a consequence, we might have missed out on predictors of warmth and competence stereotypes. Previous research has indicated that warmth stereotypes are rooted in perceived lack of competitiveness, while perceptions of competence are related to status (Fiske et al., 2002). By focusing on elements of competition and status, future studies might capture warmth and competence stereotypes about older workers with a higher level of detail.

Third, we have treated older workers as a single category, encom-
passing references to all workers aged 45 years and older. Yet, previous research suggests that ageist stereotypes differ across life stages, so that old-old individuals receive fewer positive stereotypes than young-old individuals (Hummert et al., 1997). In addition, previous research indicates that industry (Posthuma and Campion, 2009) and (job) positions (Abrams et al., 2011) moderate the prevalence and, potentially, content of stereotypes. Future research may include these explanatory variables to investigate in more detail how media stereotypes vary across age stages, industries, and job positions. Last, future research should investigate the real-world consequences of the here-reported stereotypes, so to answer the significant question of what effect these media stereotypes have on the actual employability opportunities of older workers.

This study is the first to empirically investigate stereotypes of older workers in organizational and news media. The finding that warmth and competence stereotypes of older workers hold in both media strengthens our belief that this media approach offers a fertile research line. Media analyses allow for unobtrusive measurements across diverse settings and contexts, making it possible to assess the influence of several contextual and economic factors – which were beyond the scope of this article. This is likely to boost our understanding of how stereotypes about older workers can be combatted, which might, in turn, contribute to a more positive media environment for older workers to gain and retain employment. With this study, we hoped to have set the first step in that direction.
3.7 References


and methodological advances in Germany. *Communications*, 31(1):5–24.


Chapter 3. Stereotypes of older workers in organizational and news media


