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# Netspar DISCUSSION PAPERS

Netspar

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# THE ROLE OF LINE MANAGERS IN RETIREMENT MANAGEMENT AND THEIR PERCEPTIONS OF THEIR ROLE OF THE TIMING OF EMPLOYEE RETIREMENT

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### **NETSPAR DISCUSSION PAPERS**

### **ABSTRACT**

**Purpose** – The focus of this study is on line managers' attitudes towards their management role in respect of employee retirement. This study has two main aims. Firstly, it explores line managers' perspectives regarding retirement management (RM): their perceived responsibility for RM, the training they have received and the degree of decision latitude they experience in RM. Secondly, the study examines the factors that affect the extent to which line managers' perceive it to be their *role* to influence the timing of employees' retirement decisions. This is modelled as a function of employee characteristics and line manager attributes. The purpose of this research is to inform practice by describing differences in line managers' perceptions about retirement management and identify potential sources of bias in decision-making surrounding their decision-making.

**Design/methodology/approach** – The design incorporates two studies: a survey of line mangers (N = 129) which investigates their attitudes towards RM, and a vignette study. In the survey, line managers were presented with a list of behaviours associated with managing older workers and asked to indicate which level in the organisation they perceived to be responsible for that (line manager, human resources or both). In addition, line managers' experiences of RM training and their assessments of how much latitude they have for decision making in the area were measured.

In the vignette study, 192 scenarios were created which described hypothetical older workers based on the following variables: gender, grade, health, attitude towards retirement, work enjoyment, work performance and ease of replacement. Line managers (N = 129) were asked to indicate the extent to which they perceive that they have a *role* to play in the timing of older workers' retirement. Information about the line managers (demographics, attitudes to retirement and experience) was extracted from the survey and included in the analysis. Multilevel logit analysis was used to model the probability of the respondents' perceptions of their role in the timing of the retirement decision. The information was combined and multilevel models were estimated, with vignettes at the lower level (Level 1) of the multilevel structure and respondents at the upper level (Level 2).

**Findings** – Line managers recognise their own role in retirement management activities, but perceive that a number of activities are shared with the centralised HR departments. Line managers also reported low levels of training in RM but acknowledge relatively high decision latitude in responding to requests for flexible working requests. In terms of their role in the

timing of employee retirement, line manager characteristics, but not employee characteristics, were found to exert an influence on line managers' perceptions of their role. Specifically, the gender and age of the manager, and whether or not the manager has prior experience of managing employees over the age of 65 were substantively associated with the probability that a manager will consider themselves to have a role to play in the timing of an employee's retirement. Female managers, older managers and managers with greater expectations of their own later retirement were more likely to perceive a role in influencing employee retirement.

**Research limitation / implications –** Respondents are asked to make decisions based on hypothetical scenarios.

**Originality value -** The focus of the study is specifically on line managers perceptions of their own role. The study makes a contribution by integrating both line manager and employee characteristics in understanding line managers' views on their role in employee timing.

**Key words**: Older Workers, Line Managers, Multilevel Models, Extending Working Life, Vignette, Decision Making.

## THE ROLE OF LINE MANAGERS IN RETIREMENT MANAGEMENT AND THE TIMING OF EMPLOYEE RETIREMENT

Changing retirement patterns have fragmented traditional routes to retirement and the trend away from fixed or mandatory retirement ages presents challenges to both individuals and employers. In previous decades, institutional arrangements, such as mandatory retirement ages, constrained the actions of both individuals and their managers in respect of retirement behaviours. In many organizational settings, employees were 'pushed' out of the labour market through fixed / mandatory retirement ages as well as being 'pulled' into retirement through welfare regimes that were often generous to early leavers (Ebbinghaus, 2008). Such arrangements led to the emergence of quasi social 'rights' and retirement expectations. Over the past decade, however, the paradigm has shifted, both at a policy level (such as through the closure of early retirement schemes, the removal of fixed retirement ages, anti-age-discrimination) and, to a lesser degree, through slowly shifting social recognition of the changing environment.

Much has been made of the increased *individualization* of retirement decisions, where employees shoulder many of the risks of decision making associated with end-of-work choices (Loretto and Vickerstaff, 2013). Less focus, however, has been given to the roles and responsibilities of employers and managers. When retirement was institutionalized, the role of employers in 'managing' retirement was relatively limited and was dominated by 'hard' HR functions (Storey, 1994) such as, the provision information about policies and procedures (e.g., pension arrangements), resource deployment and succession planning. The new retirement climate however is characterised by greater choice for individuals which, in turn, places pressure on employers to extend managerial activities into retirement. Employers and their practices are becoming central to providing the opportunities to individual older workers to extend their working lives (Vickerstaff, 2006).

### **Retirement Management**

Retirement management (RM) is a term used to describe organizational initiatives to enhance opportunities for older workers and play a role in dealing with the timing and the manner of employee's end-of-career behaviours. Such initiatives can include 'pre' and 'post' retirement arrangements. Some arrangements might fall under the term 'flexible retirement' (EFA, 2003; Age Positive, 2007) and include flexibility over the age at which an employee retires,

the length of time an employee takes to retire, and the nature and intensity of work in the lead up to final retirement (Age Positive, 2002).

In practice, there is little guidance about what specific RM behaviours may be. Around the time of the abolition of the default retirement age in the UK in 2011, there was a flurry of 'guidance' documents from a range of bodies to support employers in managing without a default retirement age. The majority of this guidance was targeted at 'employers' in general and did not distinguish between levels within the organization, for example between front line managers, middle managers and HR departments. In many instances, the management of older workers and retirement was fused. Some of the guidance related to 'hard' HRM issues and focused on the removal of any references to fixed retirement in company policies, the need the for age-appropriate health and safety policies and robust performance management policies to ensure that all workers are able to perform at the appropriate level. In addition to these formal processes and procedures, 'softer' HRM practices were also advocated such as good communication with employees, the development of supportive cultures for older workers, the challenging of stereotyped norms and so on. Employers were advised to be open to more flexible arrangements for older workers both 'pre-' and 'post-' retirement. Employers were exhorted not to adopt 'one size fits all' approaches, but to discuss individual needs. Such approaches contrasted with the concern that some employers expressed prior to abolition of retirement ages, which included potential concerns about having a formal process, a focal point, whereby the employers legitimately could talk to their employees about future plans (DWP, 2010).

Although the guidance raises the issue of flexibility, less is mentioned about the more contentious issue about the extent to which employers might have a role in influencing the *timing* of an employee retirement. The previous institutionalized nature gave the illusion of retirement being a 'right' and there remain strong norms which consider that retirement is a well-deserved entitlement (Hanisch and Hulin, 1990). In the ideology of 'rights', any type of intervention into the timing of retirement can appear to be an incursion across the boundary of work and private life. The issue arises as to whether 'flexibility' around the age at which an individual retires is a two-way concern, or whether such decisions now lie solely with the employee. In other words, at one end of the spectrum, retirement might be considered to be a private, individual matter (perhaps akin to the choice about marriage or having a child) over which the organization has no legitimate role to act, because it breaches the work / private life boundary. At the other end, the task of management is to manage resources, including human

resources, in the most efficient manner possible to meet organizational goals (Kalleberg et al., 1996). In times of skills shortages or tight labour markets, actively seeking to retain older workers in the workforce by delaying retirement can be seen to be legitimate in order to maintain operational effectiveness.

### The role of line managers

Despite such issues being raised as 'organizational' concerns, in reality, it is often line managers who are required to implement organizational policies (Hales, 2006). A key theme in the HRM literature has been the devolution of human resourcing decisions to line managers, away from centralized HR departments (Bond and Wise, 2003; Colling and Ferner, 1992; Cunningham and Hyman, 1999; Hales, 2006; Teague and Roche, 2012; Torrington et al., 2008).

Yet line managers are critical. Flynn (2010), for example, found that it is ultimately line managers, rather than senior managers or senior human resource specialists, who make decisions about retirement options. Through the effect of social support (Henkens and van Dalen, 2011), line managers are able to exercise influence over the timing of the retirement decision. Line managers also have a direct influence on the work environment through the degree to which the supervisor creates a positive or negative environment (Karpinska et al., 2011). Additionally, line managers are also normally the gateway to increased or diminished opportunities, such as, training or access to resources which influence the feasibility of alternative work and retirement (Henkens and Van Dalen, 2013).

The shift from standardized agreements towards alternative retirement options leads to a growing diversity of retirement routes that enable both potential retirees and the organization to negotiate individualized 'deals' (Rousseau et al., 2006). Line managers have a critical role in the negotiation of such arrangements. Extending working life has the potential to present a range of challenges to line managers, particularly where there is a need to operate more robust performance management systems and extend 'good management practices' to the whole workforce, rather than restricted to older workers. There have been a number of studies on the role of line managers and the management of older workers in terms of support (Boerlijst et al, 1993), training (Thijssen, 1996), and early retirement (Henkens and Van Solinge (2003).

Line managers are, therefore, core stakeholders in the process of managing employee retirement and are the focus of this study. Despite their crucial role, there has been limited

investigation into line managers in this context. Any fuller knowledge of the role organizations play in retirement alternatives has to incorporate the line manager perspective, and so it is critical to understand how line managers see their own role in the management of such activities.

In related areas, such as studies into line managers perceptions of their roles in work-life balance, there is considerable variability between line managers in their interest and skill in becoming involved in issues of people management, where the bounds of work and private life are blurred (McCarthy et al., 2010; Yeandle, 2005; Yeandle et al., 2003). Preliminary research (Davies et al., 2012) suggests that there is real ambivalence about the extent to which managers should become involved in retirement decisions, and that for managers this is a difficult ethical challenge.

The purpose of this study is twofold: firstly, we investigate line managers own attitudes to RM through an examination of where they believe responsibility for RM lies, the degree of decision latitude they perceive to have in relation to decision making. Secondly, we develop the analysis further by investigating the line managers' perceptions of their role in relation to the timing of employee retirement.

### Theoretical background

To examine the role of line managers, it is important that research reflects the multi-level phenomenon under investigation, and in this study we investigate both: a) characteristics of the employee, and b) the line manager's own characteristics in terms of experience and subjective norms. The factors are elaborated in the conceptual model in Figure 1.

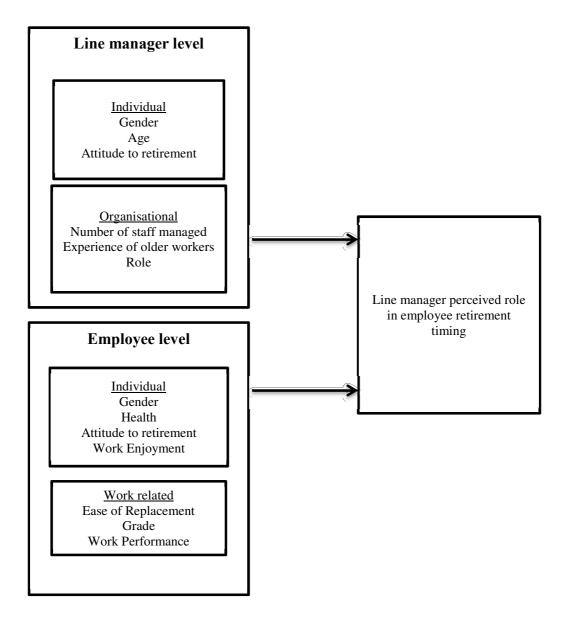


Figure 1: Conceptual model

### Line manager level

In a climate of ambiguity surrounding the remit and scope of a line manager's responsibilities, the extent to which it is appropriate for line mangers to play an active role will vary. One of the purposes of this study is to explore the determinants of line managers' perceptions, specifically relating to their remit in terms of the timing of employee retirement. We propose that differences in line managers' perceptions of their role in an employee's retirement timing will be influenced both by their own personal characteristics (gender, age and attitude to retirement) and their work experience (management experience and role).

Line manager gender. Significant bodies of work have examined differences between male and female managers. HR is generally seen to be a profession dominated by women (Legge,

1987), and women have been found to take a greater interest in HR matters (Brandl et al., 2009). Although other studies have found there to be no significant relationship between gender and beliefs about older workers (Hassell and Perrewe, 2006), no studies to date have looked at the organisational role of gender in retirement decisions.

Line manager age. Research on the relationship between attitudes and behaviour (Eagly and Chaiken, 1993; Regan and Fazio, 1977) suggests two main reasons for expecting a relationship between respondent age and retirement management behaviour. First, the attitude-behaviour relationship is strongest when attitudes are more easily accessible (Ajzen and Fishbein, 1977; Glasman and Albarracín, 2006; Tversky and Kahneman, 1981). Late career psychological processes such as work disengagement and the development of a selfconcept independent from work (Damman et al., 2013; Greller and Simpson, 1999) are likely to correspond to an increase in the amount of time spent thinking, talking, and reading about retirement (Ekerdt et al., 2000; Evans et al., 1985). Second, the attitude-behaviour relationship is strengthened when the object of the attitude is personally and continuously relevant (Glasman and Albarracín, 2006). Attitudes towards retirement management are more likely to be salient to older managers who themselves are close to retirement age and have more direct and indirect retirement issues than younger managers whose focus is on maintenance of the work-related self-concept. Older managers may then be more open to the potential for different retirement outcomes.

Line manager retirement expectations. Age norms can be highly entrenched in social institutions and people can hold strong expectations about the age at which certain life events or transitions should occur (Lawrence, 1996). Individuals may well have firm views about when individuals should continue to work until, and the age at which they should retire. Line managers' attitudes towards their own retirement age and timing may well influence their expectations of their subordinates. Thus, a manager who is looking forward to his or her own retirement may assume that retirement is inevitably to be looked forward to by an employee. Likewise, a manager who expects to extend working life might also expect subordinates to be open to extending working life also.

Drawing on the arguments above, the following hypotheses have been derived:

**H1**. Female managers will be more likely to perceive that they have a role in older workers' retirement timing than male managers.

- **H2**. Older line managers will be more likely to perceive that they have a role in older workers' retirement timing.
- **H3**. Line managers who expect to retire past 65 themselves will be more likely to perceive that they have a role in older worker's retirement timing.

Line manager experience and role. Despite the increasing importance of retirement to both employers and individuals, the management of an employee's retirement is likely to be occasional rather than a regular occurrence. Unlike certain other areas of people management, managers may have limited experience or involvement with employee retirement, and so their ability to develop competence in this area of management will be limited. They may, therefore, be able to exert limited judgement about the potential for different types of involvement. As retirement management experience grows, the scope for the role of the line manager may become more apparent.

- **H4** Managers who have more experience of managing older staff are more likely to perceive that they have a management role to play.
- **H5.** Managers with more experience of management are more likely to perceive that they have role in older worker's retirement timing.

### Employee-level characteristics

In addition to the characteristics of the line manager, specific circumstances of the employee may play a role in line manager evaluations. Employment decisions are likely to involve the evaluation of a combination of different observable attributes of employees, such health, recent work performance, grade/position, attitude towards work and retirement, and their ease of replacement.

Gender. The impact of gender on retirement decisions, both from an individual and organizational perspective, has largely been overlooked in previous research (Beehr and Bennett, 2007; Moen, 1996; Talaga and Beehr, 1995). This is despite the fact that retirement as a life course event (Quick and Moen, 1998) and the way that retirement is experienced (Martin, Matthews, & Brown, 1988) can be gender-specific. There are a number of potential asymmetries between men and women that may account for differences in the retirement process such as finance, health and socialisation. Loretto and Vickerstaff (2013) found that men tend consider retirement to be a 'reward' for a lifetime of labour; whereas, women are

more likely see retirement as a liberation from the pressures of juggling paid work with caring responsibilities. Such differences may impact on the planning, timing and mode of retirement. Until recently, there have also been clear distinctions in the state pension age between men and women. Although there is evidence of retirement being gendered, it is not clear how this might influence line managers' decisions and consequently, although we test for the effect of gender, no specific hypothesis was made in relation to the impact of gender or line managers' perceived role in the retirement timing of older workers.

Health. The relationship between health and retirement has received considerable research attention. Henkens et al (2009) found that an older worker's health status was considered important by both managers and business students, in informing their decision to retain an older worker or let them go. Poor health may detract from productivity, increase an individual's demand for non-work time to care for his/her health, and impact on retirement preferences (Dwyer and Mitchell, 1999). Health problems can also accelerate the work disengagement process (Damman et al., 2013). Because poor health may impair work performance, and so affect operational efficiency, we expect that line managers will be more likely to perceive that they have a role in older workers' retirement age if they are in poor health.

Attitude to retirement. We expect an employee's attitudes to retirement to influence line managers' perspectives. There are several reasons why managers may take the preferences of workers into account. First, a strong preference for retirement may be perceived as a sign of low work motivation that may ultimately decrease productivity. Second, previous research into supervisors' support for early retirement indicates that supervisors tend to actively consider employees' personal circumstances and preferences (Rosen and Jerdee, 1974). Henkens, van Solinge, & Cozijnsen (2009), for instance, found that older worker's attitudes toward retirement played an important role in managers', but not business students' assessments of the desirability of retaining an older worker. Specifically, managers were influenced by the wishes of the older workers when assessing the desirability of retaining them or advocating their early retirement. Finally, supporting an older worker's preference for retirement may be seen as a reward for his/her years of loyal service (Henkens, 2000; McCann and Giles, 2002).

Work enjoyment. A further factor to be taken into consideration is the older worker's attitude towards work. This is because of the important role that employee motivation has on commitment, performance (both individual and organizational) and productivity (Demerouti et al., 2010; Fried and Ferris, 1987). A positive work attitude is likely to lead to increased productivity; whereas, dissatisfaction undermines productivity. Moreover, committed workers are more likely to contribute to achieving the existing and future needs of the organization. This, in turn, may influence a manager's likelihood of influencing the retirement decision. There have been mixed results in the literature about the relationship between work related attitudes and retirement behaviours. A recent meta-analysis found job satisfaction to be negatively associated with retirement attitudes, but not to be associated with retirement decisions (Zhan et al., 2009). From the line manager's perspective, however, work enjoyment may be a signal of a continued commitment to the job and so to continued productivity.

Drawing on the arguments above, we derive the following hypotheses.

**H6** Gender will influence line managers' perceptions of their role in employee's retirement timing

**H7** Poor health will positively influence line managers' perceptions of their role in employee's retirement timing

**H8** Attitude to retirement will positively influence line managers' perceptions of their role in employee's retirement timing

**H9** The level of work enjoyment will positively influence line manager's perceptions of their role in an employees' retirement timing

Work performance. When faced with important retirement/retention decisions, line managers may attach considerable importance to an older worker's recent job-related performance. Although stereotypes that associate older workers with poor performance (e.g. Van Dalen et al., 2010) have not stood up to empirical scrutiny (Crawford et al., 2010), retirement has often been used as a means of losing poorly performing older workers without resorting to formal performance management systems. Rosen et al. (1981) found that employee performance had a strong effect on retirement decisions, with high performers being judged fit to continue working regardless of age. Henkens et al. (2009) indicate that an older worker's (good) performance was an important reason for managers and business students to support retaining a hypothetical worker. The perceived contribution of the older worker towards achieving

organisational goals is likely to play a crucial role in supervisors' perception of their role in the retirement timing of older workers.

Grade and Ease of Replacement. When evaluating whether to intervene in the timing of an older worker's retirement timing, line managers may be heavily influenced by employee's human capital (i.e., their knowledge and experience; Becker, 1975). Although limited research has considered the relevance of human capital to line managers' retirement decisions, it seems likely that retirement of older workers, who have accumulated considerable specific knowledge over the years would mean the loss to the organisation. Concern that valuable knowledge and experience might be lost from the organization might be an important reason for line managers to intervene in retirement timing. Two factors may be influential in assessing the value of the human capital: grade and ease of replacement. As human capital is acquired over time, it is likely that individuals occupying more senior roles will have accumulated greater specific human capital than those in less senior roles. Retirement of more senior staff, therefore, would mean the loss of greater organisational capital, than retirement of less senior staff. Secondly, line mangers may give consideration to how easy it would be to replace the employee. The anticipated effort and costs, for instance, in recruitment and training, which must be put into the replacement of an older worker, will affect the desirability of retaining an employee. Where an employee might be replaced easily, there is no necessity for the line manager to intervene in the retirement process. In line with human capital theory, we predict:

**H10** Poor work performance will positively influence line managers' perceptions of their role in employee's retirement timing

**H11** An employee's grade will positively influence the line managers' perceive that they have a role in older workers' retirement timing

**H12** The ease with which an employee can be replaced will positively influence line managers' role in the timing of retirement.

### **Research Design**

To address the research questions, the research design incorporate two studies: i) a survey of academic line manager's attitudes to RM and ii) a vignette study based on a factorial design. Data for the two studies were collected concurrently between November and December 2012.

The data collection phase remained open for three weeks during which two reminder emails were distributed.

### **Participants**

The population selected for investigation for both studies were academic line managers in UK universities. Individuals holding the role of Dean, Head of Department or Subject Leader were identified as potential line managers. 29 universities in the UK were selected and 1000 potential respondents were identified using the University websites. Participants were invited personally to participate in the study via email and they were directed to an online survey tool (surveygizmo.com).

Data were obtained from a total of 197 respondents (21.49% response rate) originating from 29 UK universities: 18 in England; 4 in Wales; 2 in Ireland and 5 in Scotland. A total of 129 (14.27% of the total) line managers (94 males, 34 females), most of whom (95.3%) had experience with managing workers over the age of 55 years in their departments, took part in the survey. The modal age range of line managers was 50-59 years (46.1%). 2.3 % of respondents were aged between 30 and 39 years, 28.9% were aged between 40 and 49 years, 18% were aged between 60 and 64, 3.9% 65 years and over, and 0.8 were aged under 30 years. Three categories of line manager were included in the data collection: Deans (n = 12; 9.4%), Heads of Department (n = 13; 10.2%), and Heads of Subject (n = 102; 80.4%).

### Study 1: Survey of attitudes to retirement behaviour.

Three elements of RM were considered: responsibility for RM within the organisation, the extent of line manager decision latitude in RM and RM training. There is little literature which specifies the behaviours expected of line managers in respect of managing retirement activities. In order to derive items, content analysis was undertaken of a range of guidance documents which offer advice to organisations in managing older workers and managing without a default retirement age (See Appendix 1). Twenty three RM behaviours were identified, which were classified into the following categories: older workforce-friendly environment; workforce performance; workforce planning; communication; and information provision. Respondents were asked to indicate which level of the organisation was primarily responsible for each of the retirement management behaviours: line manager, human resource department, both or neither. In addition, respondents were asked to indicate the level of discretion they considered themselves to have in relation to support of flexible working

arrangements; the level of support they receive from their own line managers; and also the types of training they have received in RM.

### **Study 2: Vignette study**

To test the hypotheses outlined in the theory development section, a vignette study was adopted to investigate the effect employee level (level 1) and line manager level (level 2) characteristics on line managers' perceptions of their own role in the timing of employee retirement.

### Employee level characteristics (level 1)

To simulate employee characteristics, a factorial design was adopted. In the factorial survey, participants were presented with vignettes (brief descriptions of a situation or person) in which specific information was systematically manipulated by the researcher (Ganong and Coleman, 2006; Wallander, 2009). Factorial designs have been widely used to analyse individuals' judgments and actions in specific contexts, and as a means of eliciting betweengroup similarities and differences in responses (Crenshaw et al., 1995; Taylor, 2006; Williams and Soydan, 2005). When carefully constructed, factorial designs can elicit decisions closely resembling those made in real-life work situations (i.e., have good ecological validity). Indeed, Taylor (2006) has argued that such designs might even produce more valid results than decision-makers' own accounts of their actual behaviour. Retirement management can be an infrequent managerial activity and therefore individual managers are likely to have only a limited range of direct experience. The vignette design, which is based on hypothetical scenarios, therefore, allows the researchers to examine a much wider range of possibilities than would occur in the experience of a given manger.

The number of characteristics used in factorial surveys should remain limited. This is because individuals are typically unable to process large amounts of information (Sternberg and Sternberg, 2012). Consequently, if too many dimensions are introduced, it becomes challenging for the respondent to clearly visualise the hypothetical person and situation (Rossi, 1982). Vignettes must appear realistic to the respondent to elicit useful responses (Barter, 1999; Esposito and Jobe, 1991; Seguin and Ambrosio, 2002; Wason et al., 2002). Seguin and Ambrosio (2002) also recommend that vignettes provide enough contextual information for respondents to clearly understand the situation being portrayed, but are

ambiguous enough to ensure that multiple solutions exist (Barter, 1999; Seguin and Ambrosio, 2002; Wason et al., 2002).

Independent variables. The variables were used to construct the vignettes were derived from the hypotheses detailed earlier and are presented in Table 1. Each vignette was presented as a hypothetical older worker who was described as approaching retirement. A sample vignette is shown in Appendix 2. Given all possible combinations of the variables and their respective levels, the total number of unique vignettes was 192 (i.e., 2x2x2x3x2x2x2; see Table 1). None of the vignettes contained impossible combinations of the factors. Before collecting data for this study, a pilot study was conducted on an independent sample of academic line managers (N = 20), to verify that the vignettes described situations that could be easily imagined by participants and elicit a range of responses, to assess the survey for clarity, and to gain an indication of completion time. This piloting process supported the validity of the situations; all vignettes were successful in eliciting responses, and participants reported that the scenarios were easily imagined and sufficient details had been provided to elicit responses. Only minor alterations were made to the survey based on pilot participants' responses.

Table 1: Level 1 variables

Variable	Category
Gender	0 = Male
	1 = Female
Health status	0 = Poor health
	1 = Good health
Grade/job role	0 = Senior lecturer
	1 = Professor
Attitude towards retirement	1 = Do not know
	2 = Not looking forward
	3 = Looking forward

Attitude towards work	0 = Does not enjoy work
	1 = Enjoys work
Recent performance	0 = Poor
	1 = Good
Ease of replacement	0 = Difficult to replace
	1 = Easy to replace

Participants were asked to indicate the extent to which they believe themselves have a role to play in the timing of the retirement of each worker (*Role*), the dependent variable. This was measured on a scale from 1 (*no role*) to 5 (*definitely have a role*). Each participant was presented with eight randomly allocated vignettes. This yielded a total of 1012 vignette level observations.

### Line manager characteristics (level 2)

At the line manager level, six line manager characteristics were selected as independent (explanatory) variables: Gender; grade, age, attitude towards working beyond 65 years and experience of managing staff over the age of 65. These variables are summarised in Table 2.

Table 2: Level 2 (line manager) variables

Variable	Category
Gender-R	0 = Male 1 = Female
Age	0 = Under 50 years 1 = 50 or over
Attitude towards working beyond 65 (Continue)	<ul><li>0 = Not intending to</li><li>1 = Intending to</li></ul>
Experience of managing staff over 65 (Experience)	<ul><li>0 = No Experience</li><li>1 = Experience</li></ul>
No of staff managed (Staff level)	Continuous

### **Analysis**

### Study 1: Survey of retirement management attitudes

### Responsibilities

Line managers were asked to indicate where they perceived responsibility for twenty three retirement management behaviours was: line manager level or centralised HR level. The distribution of responses (Table 3) suggests that issues of retirement management are shared between line managers and centralised human resources department. Line managers perceive themselves as predominantly concerned with resource-related activities such as, performance management, workforce planning and succession planning. On the other hand, information provision relating to extending working life is considered to be the role of HR. It is notable, however, from the table that for the majority of behaviours, the activities are perceived to be shared between line managers and HR. This supports the view that there may be ambivalence in the boundaries and responsibility of the line manager role. Direct communication with the employee is seen as being the role of the line manager. Cultural issues such as maintenance of equity and fairness, along with the challenge of stereotypes are seen as joint activities.

**Table 3: Responsibility for retirement management** 

	Line manager	Human resources	Both	Neither
Older workforce friendly		resources		
environment			·	
Maintain equity and fairness between	31	4	93	1
staff members ensuring that there is	(24.0%)	(3.1%)	(72.1%)	(0.8%)
not more favourable treatment of an				
employee because of their age				
Allow flexible working options	55	12	60	2
around retirement (i.e., part-time or	(42.6%)	(9.3%)	(46.5%)	(1.6%)
reduced hours, working from home)				
Encourage older workers to take up	49	5	68	7
training / development opportunities	(38.0%)	(3.9%)	(52.7%)	(5.4%)
Ensure older workers are aware of	27	11	89	2
the training opportunities that are	(20.9%)	(8.5%)	(69.0%)	(1.6%)
relevant to them				
Challenge stereotypes about older	19	19	77	14
workers	(14.7%)	(14.7%)	(59.7%)	(10.9%)

	24	1 22	70	11
Reduce the potential cultural	24	(17.107)	72	11
barriers to flexible retirement	(18.6%)	(17.1%)	(55.8%)	(8.5%)
(e.g., lack of awareness amongst				
other employees, attitudes and				
beliefs of colleagues)		10	<b>7</b> 0	20
Take proactive steps to engage and	39	12	50	28
retain older workers	(30.2%)	(9.3%)	(38.8%)	(21.7%)
Review health and safety policies and	29	33	63	4
promote sensible working practices	(22.5%)	(25.6%)	(48.8%)	(3.1%)
for older workers	27	21	44 (24 107)	17
Carry out health and safety	37	31	44 (34.1%)	17
workplace assessments and take	(28.7%)	(24.0%)		(13.2%)
account of the needs of older workers				
Work performance	122	0	<u> </u>	2
Have regular conversations with all	122	(0.0%)	(3.0%)	_
employees about your expectations	(94.6%)	(0.0%)	(3.9%)	(1.6%)
of them and their work performance Use performance management	62	7	57	3
Use performance management systems to manage any under-	62 (48.1%)	(5.4%)	(44.2%)	(2.3%)
	(40.1%)	(3.4%)	(44.2%)	(2.5%)
performance Workforce planning				
	42	12	71	4
Monitor who is leaving your department and why	(32.6%)	(9.3%)	(55.0%)	(3.1%)
Prepare succession plans	107	0	21	1
1 repare succession plans	(83.0%)	(0.0%)	(16.3%)	(0.8%)
Plan the transfer of key knowledge,	112	0.076)	15	2
skills and experience back into your	(86.8%)	(0.0%)	(11.6%)	(1.6%)
department	(00.070)	(0.070)	(11.0%)	(1.0%)
Determine when employees are	26	16	45	42
likely to retire	(20.2%)	(12.4%)	(34.9%)	(32.6%)
	(20,2,0)	(12,1,0)	(8 113 76)	(62.676)
Individual communication and				
support				
Encourage employees to discuss their	57	14	48	10
options for working on and for	(44.2%)	(10.9%)	(37.2%)	(7.8%)
retirement	, , ,			, , ,
Accommodate an older worker's	33	13	76	7
individual circumstances (e.g.	(25.6%)	(10.1%)	(58.9%)	(5.4%)
financial, health and skills) through				
personalised working arrangements				
	28	23	72	6
Explore with an older worker any	(21.7%)	(17.8%)	(55.8%)	(4.7%)
potential barriers to taking up				
flexible retirement (e.g., fears				
over loss of status, concerns about				
financial implications)				
	23	28	73	5
Offer older workers support in	(17.8%)	(21.7%)	(56.6%)	(3.9%)
their choices around the timing of				
their retirement				
Initiate discussions with employees	119	0	6	4
about where they see themselves in	(92.2%)	(0.0%)	(4.7%)	(3.1%)
the next few years				
<u>-</u>				

Information provision				
Provide, or direct employees to	12	71	43	3
sources of information and advice on	(9.3%)	(55.0%)	(33.3%)	(2.3%)
retirement options/extending working				
life				
Inform older workers of the	12	34	77	6
availability of flexible working or	(9.3%)	(26.4%)	(59.7%)	(4.7%)
retirement arrangements (e.g.,				
part-time or reduced hours%)				

### Discretion and influence

Line managers were asked about the extent to which they felt they had discretion in RM behaviours. Table 4 shows the mean score for discretion was 3.08 (1= not at all, 5 = considerable). Nearly 70% of respondents considered that had a moderate amount or more of discretion about how management of employees.

**Table 4: Line manager discretion** 

Item	M (SD)
Discretion over the way you manage the retirement process of your	3.08(1.07)
older workers	
Influence over the retirement policies and procedures in your	2.49(1.26)
department	

As might be expected, influence over policies and procedures falls within the remit of line managers to a lesser degree, around 45% of respondents considering that they had a moderate amount or more of influence over retirement policies and procedures.

### **RM** training

Line managers were asked about the mechanisms through in which they had been informed about their institution's policies regarding retirement or extending working life and the frequencies are shown in Table 5. The most frequent source of information was communication from Human Resources (78%), followed by management training (38%) and the staff intranet (38%). 16% of respondents had received no information.

**Table 5: Sources of general RM training** 

	N	Percent
Via the staff handbook	26	20.2
Management training	49	38.0

Staff Intranet	49	38.0
Communication from Human Resources	101	78.3
Via your line manager	31	24.0
During induction	7	5.4
In recruitment interviews	0	0.0
In your employee contract	0	0.0
In recruitment advertising	0	0.0
None of the above	21	16.3

Line mangers were asked about the content training that they had received. Generally, the levels of training of line managers about retirement management were low (see Table 6 for the mean and standard deviation scores).

**Table 6: Training content** 

Item	M (SD)
Operate/manage without a fixed retirement age	1.80 (0.92)
Organisational policies relating to managing retirement	1.80 (0.92)
Implications of the abolition of the default retirement age on HR practices (e.g., discrimination, performance management and succession planning)	1.93 (1.00)

<sup>1 =</sup> none at all, 5 = a great deal

Nearly half of line managers had received no training about operating without a fixed retirement age. Nearly 45% of line managers had received no training around the wider implications of retirement.

### Support for dealing with requests for flexible working

Line managers were asked about the support provided to them in dealing with potential requests for flexible working. The most frequent response (48.1%) was support from HR department.

Table 7: Sources of support for dealing with flexible working requests

	N	%
Coaching/feedback from Human Resources/Personnel Management	62	48.1
Information about legal requirements	52	40.3
Training courses	15	11.6
Advice/guidance on staff intranet	35	27.1
Written advice/guidelines	39	30.2
None of the above	36	27.9

### **Support for line managers**

The provision of flexible working arrangements is a core aspect of retirement management and line managers were asked about the support they receive from their own line managers in finding flexible solutions for older workers. The findings show that generally line managers do have support from their own managers, around 83% considered that that they had a moderate of support or more from their own line manager to find flexible working solutions.

**Table 8: Support for line managers** 

	M (SD)
How supportive would your own line manager be in helping you	3.40 (.99)
find ways to enable older workers to extend their working lives?	
To what extent would your own line manager support your	3.70 (.10)
decision-making over retirement timing and providing flexible	
working arrangements?	

Likewise, line managers generally feel well supported by their own managers in their decision making. 90% of respondents felt that their own line managers would provide moderate or higher levels of support. This reinforces that line mangers themselves have discretion and are not necessarily constrained by organisational issues.

### **Study 2: Vignette study.**

The hypotheses were tested in study 2. The analysis is at the level of vignette – that is each hypothetical scenario and is based on responses to 1012 vignettes. For each vignette, each respondent was asked to rate the extent to which they considered they had a role in the timing of the retirement of the employee on a scale of 1 (no role) to 5 (definitely have a role). The mean score for perceived role was 3.11; however, in most cases (26% of cases), respondents gave a rating of 3, indicating that they were uncertain about whether it was their role as line manager to intervene in the timing of retirement Figure 2. The findings suggest that there is variation in the perceptions.

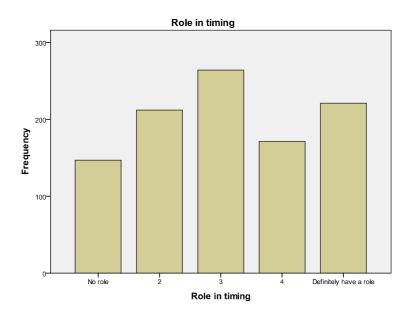


Figure 2: Distribution of Role

The factorial study data, based on employee characteristics and line manager data, were used to form a multilevel (hierarchical) structure with *vignettes* at the lower level (Level 1) and *respondents* at the upper level (Level 2). The outcome variable was *Role*. This was derived from individuals who answered options either 1 or 2 (no / limited role) or 4 or 5 (role) to the original 5-point scale item in the questionnaire relating to their role in the timing of the employee's retirement.

A random intercepts multilevel multiple generalized linear model, using the logit transformation, was derived as a function of a set of candidate variables at both levels of the analysis. Analysis was undertaken on the data set comprising 1012 valid Level 1 units and 128 valid Level 2 units.

A multiple regression model was derived including all Level-1 variables. All parameters in this model were then assessed for inclusion in a corresponding parsimonious model. For multilevel models, the likelihood ratio statistic (LRS), and its related statistic for the comparison of nested models, the model  $\chi^2$  statistic, are determined by numerical algorithms and are not considered to be reliable in the available specialised multilevel modelling software (Rasbash et al., 2009). Hence decisions relating to parameter inclusion or exclusion were made using Wald test criteria. As under certain conditions the standard error of certain variables can be inflated in logistic regression models, a liberal regime was utilised, with any variable or interaction appearing to exhibit a degree of substantive significance (associated p-value of approximately 0.100 or less) in a full model being carried forward for inclusion in a parsimonious model.

A similar process was then undertaken on Level 2 variables only, using similar inclusion criteria. A final model was then derived including variables and interactions remaining in both of the parsimonious models.

Multiple logistic regression models

*P*-values, odds ratios and associated confidence intervals derived for all candidate variables in the modelling of the *Role* outcome measures are summarized in Table 9.

Table 9: p-values, odds ratios and confidence intervals

Model specification	Factor/Covariate	<i>p</i> -value	Odds ratio	
			Best estimate	95% CI
All Level 1 variables forced entry <sup>1</sup>	Gender	0.765	1.05	(0.77, 1.43)
	Attitude	0.470	1.13	(0.81, 1.56)
	Grade	0.569	1.09	(0.80, 1.49)
	Enjoyment	0.801	0.96	(0.71, 1.30)
	Health	0.809	1.04	(0.76, 1.41)
	Replace	0.606	1.08	(0.80, 1.47)
	Performance	0.556	0.91	(0.67, 1.24)

Model specification	Factor/Covariate	<i>p</i> -value	Odds ratio	
			Best estimate	95% CI
Level 1 variables substantively significant in multiple model only	-	-	-	-
All Level 2 variables forced entry	Continue	0.906	0.95	(0.42, 2.18)
	Gender-R	0.133	2.04	(0.80, 5.20)
	Age	0.015	2.95	(1.23, 7.07)
	Staff level	0.706	1.00	(1.00, 1.00)
	Experience	0.055	2.25	(0.98, 5.15)
Level 2 variables substantively	Gender-R	0.102	2.09	(0.86, 5.06)
significant in multiple model only	Age	0.011	2.94	(1.29, 6.84)
	Experience	0.051	2.18	(1.00, 4.78)
Final model	Gender-R	0.102	2.09	(0.86, 5.06)
	Age	0.011	2.94	(1.29, 6.84)
	Experience	0.051	2.18	(1.00, 4.78)

<sup>&</sup>lt;sup>1</sup>All tested interactions found to be non-significant in the presence of corresponding main effects

A summary of the findings in relations to the hypotheses is given Appendix 4.

As seen in Table 9, no factors or tested interactions associated with the employee are substantively associated with a manager's belief that they have a role to play in the timing of an employee's retirement. Amongst factors associated with the manager, the gender and age of the manager, and whether or not the manager has prior experience of managing employees over the age of 65 are substantively associated with the probability that a manager will consider themselves to have a role to play in the timing of an employee's retirement.

The odds of a female manager considering that they have a role in the timing of an employee's retirement are just over double (2.09 times) those of a male manager considering that they have a role in the timing of an employee's retirement, controlling for other manager-level factors.

The odds of a manager aged 50 years or over considering that they have a role in the timing of an employee's retirement are about two and a half times (2.49 times) those of a manager aged under 50 considering that they have a role in the timing of an employee's retirement, controlling for other manager-level factors.

The odds of a manager with experience of managing employees aged over 65 years considering that they have a role in the timing of an employee's retirement are about twice (2.18 times) those of a manager without experience of managing employees aged over 65 years considering that they have a role in the timing of an employee's retirement, controlling for other manager-level factors.

### **DISCUSSION**

Despite the extensive work which has been conducted in the US and Dutch contexts around retirement decisions, less has been conducted in this tradition from the UK where work has been approached, to a greater extent, from the perspective of social policy (McNair, 2006; Phillipson, 2004, 2002; Platman, 2004; Vickerstaff, 2006; Vickerstaff et al., 2003). In the traditional perspective (at least in recent history) retirement was determined largely by institutionalised policies and so fell outside the domain of normal management activity. In this climate, retirement was constructed as a private life-event. More contemporary perspectives frame retirement as a more flexible set of arrangements, individually negotiated between employer and employee in order to achieve the best fit between individual and organisational needs and preferences. In this model, line mangers have legitimate and valid interests in the optimal use of the workforce and the role that older workers may have to play. Although in the absence of mandatory retirement age, older workers may continue to work beyond normal retirement ages and leave, as in any other form of organisational withdrawal, a more nuanced and sophisticated managerial approach would be to seek out mutually desirable outcomes. The present study examines how line mangers consider their role.

In study 1, we investigated line managers own attitudes and experiences of retirement management. The retirement management behaviour results suggests that line managers do acknowledge some level of responsibility in this area, particularly in relation to workforce planning and resource allocation. However, the majority of behaviours are perceived as shared with centralised HR departments. These findings highlight the blurred boundaries between different levels of HR responsibility. In discussions about the labour force participation of older workers, lifelong learning and training are often perceived as key policy measures to keep workers employed until older (OECD, 2006). However, only 38% of line managers perceived that it was a line manager role to encourage older workers to take up training and development opportunities. Even fewer (20.9%) perceived that it was the line managers' role to ensure older workers are aware of the training opportunities that are relevant to them. In terms of line manager discretion over flexible working, this study found that nearly 70% of respondents acknowledged that they have discretion over the way in which retirement is managed and they considered they had organisational support for their activities in this area. These findings reinforce the potential influence that the line manager levels may have over retirement behaviours in organisations. By contrast, the level of training received is relatively low, nearly 45% of line managers having received no training. This may suggest that RM is not currently a mainstream managerial concern that is seen as being relevant for inclusion in typical managerial training programmes. An alternative argument is that RM is simply a subset of other forms of people management and might be grouped together with other types of management issues such as flexible working, family-friendly working or worklife balance issues. At an anecdotal level, retirement management was not reported to be a mainstream or pressing issue in the piloting work undertaken.

In study 2, factors that influence line managers' perceptions of their role in the timing of older workers' retirement were addressed. This study makes a significant contribution by including both employee level and line manager characteristics in a multilevel design.

The results show that academic line managers prefer not to intervene in the timing of older workers' retirement. Indeed, nearly fifty percent (46.3%) of managers indicated that they would not become involved in the retirement decision. The findings from study 1 suggest that, generally speaking, line mangers do perceive they have discretion in this area, but it appears that they are less willing to act. This is perhaps because they consider retirement to be a private affair or as a voluntary and employee-driven transition (Hanisch and Hulin, 1990; Hardy, 2002). The apparent reluctance to intervene is consistent with previous research indicating that managers are hesitant to initiate a conversation about extending working life (Henkens et al., 2009). The limited role that many line managers perceived themselves to

have is interesting because previous research indicates that for some older workers, perceived supervisory support for remaining in the workforce is an important motivation to delay retirement. This suggests that despite views that employers are critical (de Meza et al., 2008), employers may not be a major driving force for extending working lives and that initiatives to increase the labour force participation will have to come from other sources.

The findings illustrate that intervention in retirement timing is controversial and the degree to which organisational actors, such as line managers, have a mandate to 'manage' is mixed. It is an area with a pressing need for debate.

Pragmatically, this reluctance to become involved may be an obstacle for workers wishing to extend their working lives. Older workers wishing to work longer may have to take a proactive stance to lead a discussion with their line manager about the options that are available and not assume that line managers will take that initiative.

A contribution of the study is that the characteristics of line managers themselves were found to be significantly related to their views on whether it is appropriate for them to play a role in employee timing. Managers who have had greater contact with older workers were more likely to perceive that they have a role in employees' retirement timing. Perhaps line managers who are not familiar with managing older workers have difficulty imagining the value of older workers continuing to work within their organization, perhaps due to subjective age norms, or are less aware of some of the contradictory pressures that some older workers may experience (for example, the loss of social status versus the gain of freedom from work pressures).

Of interest is that female managers are more likely than male managers to perceive they have a role in the timing of employee retirement. Given the design of the study, it is not possible to be definite about the precise underlying mechanism operating. A number of research streams have investigated differences between male and female leadership styles and meta-analyses have shown that female leaders are more transformational than male leaders (Eagly et al., 2003). Transformational leadership styles are associated with collaborative behaviours, mentoring and empowering styles of management (Bass, 1985). Women managers are also seen to adopt more 'communal' leadership styles which focus on group dynamics and the process of decision making. In the context of involvement in employee retirement timing,

female managers may be more willing to collaborate with older workers to find the most suitable course of action for them (i.e., whether the decision to retire is most appropriate or not). They may be more willing to investigate / consider more non-traditional routes than male managers.

None of the employee characteristics in these analyses were significant suggesting that differences in perceptions of the appropriateness of intervention lie at the line manager. Given these findings, it might be that other line-manager level variables such as values or personality might be important, but these were not included in this study

A notable strength of the work is the use of a combination of a vignette design with survey items, as it offered us the possibility to model the impact of both line manager and employee characteristics on respondents' perceptions of their role in the timing of older workers retirement. Applying multilevel models enabled us to assess, simultaneously, the influence of multiple explanatory variables on the dependent variable (i.e., perceived role). This approach is particularly helpful for identifying relationships among a range of influences in episodes involving considerable complexity such as decision making in research contexts wherein data have a hierarchical structure (Ciarleglio and Makuch, 2007; Hair et al., 1998).

The main limitation of the present study is that participants were asked to assess hypothetical situations. Consequently, participants' real-life experience did not necessarily shape their decisions. The potential artificiality of vignettes may weaken the external validity of the results (de Ridder and Kerssens, 2003). However, the results of the pilot study indicated that many of the line managers were familiar with the types of situations described in the vignettes. Moreover, most participants in the main study reported that they had experience of managing older workers. This may have led to more accurate responses, because participants were able to imagine the situation well.

The present research can be seen as an important step towards understanding employers' views and behaviour towards older workers, particularly in the UK context which has not been subject to the same degree of scrutiny has the US or Dutch environments.

### Appendix 1

### **Documents used to derive retirement behaviour items**

ACAS (2011). Guidance for employers Working without the default retirement age.

DWP (2011). Case Study: JD Wetherspoon.

DWP (2011). Workforce management without a fixed retirement age. Age Positive. DWP.

LSIS (2011). Beyond the Default Retirement Age Practical support for the FE and Skills Sector.

TAEN (2001). Managing without Fixed Retirement: A checklist and first briefing for HR managers.

TAEN (2005/2006). Rethinking Retirement: An employer's guide to managing the workforce without a fixed retirement age.

### Appendix 2

### Sample vignette

### **Instructions**

Below are eight scenarios describing hypothetical staff members who are eligible to retire, but have not yet made up their mind about the timing of their retirement. You are asked to imagine that you have already had a meeting with each of them to discuss their circumstances. The scenarios describe what you know about their situation following the discussion. For each scenario, you are offered three possible courses of action that you might take and are asked to select the one that corresponds most closely to your preferred course of action. The scenarios are all different but sometimes the differences are only very slight, so please read them carefully.

Mary is a Professor. She enjoys work. She is in good health. You do not know how this staff member feels about retirement. Lately, Mary's work performance has been good. If she were to retire now, she would be relatively easy to replace.

As Mary's line manager, to what extent do you think you have a role to play in the timing of the retirement?

No role 1 2 3 4 5 Definitely have a role

### Appendix 3

### **Mathematical model**

Consider n independent binomial observations of the form the form  $y_{ij}/n_{ij}$ , with  $y_{ij}\sim B(1,p_{ij})$ , where  $y_{ij}$  is a particular value of a particular outcome associated with the  $i^{th}$  vignette completed by the  $j^{th}$  respondent; and  $p_{ij}$  is the corresponding response probability for either the COA and Role response measures.

Then a null model (i.e. a model including no factors or covariates) fitted to the data associated with either response measure is given by:

$$logit p_{ii} = \beta_{0i} + \epsilon_{ii};$$

where 
$$\beta_{0i} = \beta_0 + u_{0i}$$
; and  $u_{0i} \sim N(0, \Omega_u)$ .

A corresponding main effects model including r factors/covariates at vignette level and s factors/covariates at respondent level is given by:

$$\text{logit } p_{ij} = \beta_{0j} + \beta_1 x_{1ij} + \beta_2 x_{2ij} + \cdots + \beta_r x_{rij} + \beta_{r+1} x_{r+1j} + \beta_{r+2} x_{r+2j} + \cdots + \beta_{r+s} x_{r+sj}$$

where  $\beta_{0j} = \beta_0 + u_{0j}$ ; and  $\beta_1, \beta_2, ..., \beta_{r+s}$  are constants to be determined by the modelling process;

and  $u_{0j}$  is the variance at *respondent* level of the model, with  $u_{0j} \sim N(0, \Omega_{0r})$ .

All parameter values were derived using the Iterative Generalised Least Squares (IGLS) procedure available in the MLwiN multilevel modelling software.

### Assessment of hierarchical data structures

The assessment of each data structure was facilitated by the determination of the variance partition coefficient (VPC). This is a measure of the extent to which the responses of units in the same group resemble each other as compared to those from individuals in different groups (Rasbash, Steele et al. 2005); where in the current context groups represent quantities modelled at upper levels of the hierarchy such as *respondents*. The VPC may also be interpreted as the proportion of total residual variation that is due to differences between groups. For a 2-level structure with *vignettes* nested within *respondents*, the VPC for vignettes in a null model is given by the following expression:

$$VPC = \frac{\sigma_{u0}^2}{\sigma_{u0}^2 + \sigma_{\varepsilon}^2}$$

where  $G_{k0}^2$  is the "between respondent" variance, and  $G_{k0}^2 + G_{k0}^2$  is the total variance at vignette and *respondent* levels. However, for binary models there is no single VPC measure, as the variance associated with the lowest level of the hierarchy is a function of the mean. Hence a simulation method was utilised for estimating the VPC at both levels, using 5000 simulated values of the random terms at *respondent* level. For each simulated value, estimates of the success probability were calculated, with the estimates corresponding to the  $M_{k0}^{th}$  sampled value for null models given by the expression

$$p_j^{(m)} = \frac{\exp(\beta_0 + u_{0j}^{(m)})}{1 + \exp(\beta_0 + u_{0j}^{(m)})}$$

The corresponding variance (for binary data) for the estimate corresponding to the  $m^{th}$  sampled value was calculated using the expression

$$p_j^{(m)}(1-p_j^{(m)})$$

The level-1 variance was then defined to be the mean of these values.

Some slight adjustment to the calculated values of the VPC for models including prognostic variables would be expected, depending on the values assumed to be taken by each variable included in the model.

Appendix 4
Summary of hypotheses and outcome of statistical testing

	Hypothesis	Outcome
	Line Manager Level	
H1	Female managers will be more likely to perceive that they have a role in older workers' retirement timing than male managers	Supported
H2	Older line managers will be more likely to perceive that they have a role in older workers' retirement timing	Supported
Н3	Line managers who expect to retire past 65 themselves will be more likely to perceive that they have a role in older worker's retirement timing	Unsupported
H4	Managers who have more experience of managing older staff are more likely to perceive that they have a management role to play	Supported
Н5	Managers with more experience of management are more likely to perceive that they have role in older worker's retirement timing	Unsupported
	Employee Level	
Н6	Gender will influence line managers' perceptions of their role in employee's retirement timing	Unsupported
H7	Poor health will positively influence line managers' perceptions of their role in employee's retirement timing	Unsupported
Н8	Attitude to retirement will positively influence line managers' perceptions of their role in employee's retirement timing	Unsupported
Н9	The level of work enjoyment will positively influence line manager's perceptions of their role in an employees' retirement timing	Unsupported
H10	Poor work performance will influence line managers' perceptions of their role in employee's retirement timing	Unsupported
H11	An employee's grade will positively influence the line managers' perceive that they have a role in older workers' retirement timing	Unsupported

H12	The ease with which an employee can be replaced will positively	Unsupported
	influence line managers' role in the timing of retirement	

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