Commitment or control?
Human resource management practices in female and male-led businesses

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ABSTRACT
This paper investigates the extent to which HRM differs between female- and male-led businesses. A Control-Commitment Continuum consisting of several HRM dimensions is proposed. To test to what extent HRM systems and ‘specific’ practices in female- and male-led businesses differ with respect to commitment-orientation, use is made of a panel of approximately 2,000 Dutch entrepreneurs. Contrary to what is generally believed, we find that HRM in female-led firms is more control-oriented than in male-led firms.

INTRODUCTION
Research in the field of human resource management (HRM) has demonstrated that the shaping of HRM practices depends upon factors, such as the sector in which activities are undertaken (Mowday, 1998; Ram, 1999; Curran et al., 1993), business strategy (Schuler and Jackson, 1987; Lengnick-Hall and Lengnick-Hall, 1988; Youndt et al., 1996) and firm size (De Kok and Uhlaner, 2001; Ram, 1999). Also, the gender of the entrepreneur may play a role in the structuring of HRM practices (Verheul et al., 2002).

The management literature generally provides inconclusive evidence regarding the question whether women and men are different managers or leaders. In the scientific management literature (Gilligan, 1982; Ely, 1994; Grant, 1988) as well as in the popular management literature (Helgesen, 1990; Rosener, 1990, 1995; Loden, 1985) it is argued that women and men adopt different management styles. Others claim that, when controlling for the context within which women and men run their business, the ways in which they behave are fairly similar (Dobbins and Platz, 1986). Most research investigating the influence of gender on management styles focuses on large businesses. The present study explores gender effects in HRM in small businesses. We argue that gender can have both a direct and an indirect effect on HRM. These effects are presented in Figure 1. In addition to gender, other factors can influence the shaping of HRM practices, including firm size, sector, goals and strategy and firm age. In Figure 1 these factors are referred to as the ‘business profile’. We take these factors into account in the present study, i.e., the ‘business profile’ is controlled for, because gender can be expected to influence the factors making up the business profile (Verheul and Thurik, 2001).

Following Boselie (2002), and making use of the work of Beer et al. (1984), Walton (1985) and Arthur (1992; 1994), in the present study a distinction is made between those HRM practices that focus upon enhancing employee commitment and those practices that increase control of the owner-manager over employees and the production process. These two aspects of HRM practices are considered the extremes on a continuum, where HRM practices tend to be either more commitment- or more control-oriented. The research question in this study is whether HRM practices in female and male-led businesses differ on the Control-Commitment Continuum. Hypotheses are formulated on the influence of gender on both the HRM system and a range of HRM dimensions. These hypotheses are tested using SME Policy Panel data of EIM Business and Policy Research in Zoetermeer in the Netherlands. Every four months approximately 2,000 Dutch entrepreneurs participate in this SME Policy Panel which is used for both cross-sectional and longitudinal research.
THE COMMITMENT-CONTROL CONTINUUM

Commitment versus Control HRM Systems

The distinction between commitment and control can be traced back to McGregor’s (1960) Theory X and Y, as well as to the distinction between autocratic versus democratic decision-making (Lewin and Lippitt, 1938), task-oriented versus interpersonal oriented styles (Bales, 1950; Blake and Mouton, 1964), transactional versus transformational leadership (Bass et al., 1996), direct control versus responsible autonomy (Friedman, 1977), Tannenbaum and Smith’s (1958) continuum (tell-sell-consult-join) and the employer control categories (fraternalism-paternalism-benevolent autocracy-sweat shop) of Goss (1991). These management modes either emphasize maintenance of tasks through direct forms of control or nurturing of interpersonal relationships through indirect or self-control of employees (Van Engen, 2001).

Walton (1985) explicitly proposes the distinction between commitment and control strategies and this distinction is further elaborated in the context of HRM by other authors (Guest, 1987; Arthur, 1992, 1994; Legge, 1995; Godard, 1998). Commitment and control are two distinct ways in which employee behaviors and attitudes can be influenced (Arthur, 1994). Given the assumption that HRM consists of a series of internally consistent HRM practices, which combine into a specific HRM system, it can be argued that HRM systems are either control- or commitment-oriented. Control HRM systems are characterized by a division of work into small, fixed jobs for which individuals can be held accountable, and direct control with managers supervising rather than facilitating employees (Walton, 1985). This type of HRM system aims at reducing direct labor costs, or improve efficiency, by enforcing employee compliance with specified rules and procedures (Walton, 1985; Eisenhardt, 1985). In contrast, commitment HRM systems are characterized by managers who facilitate rather than supervise, i.e., there is indirect control. This type of HRM system aims at establishing (psychological) links between organizational and personal goals. Commitment here is seen as an individual’s bond with an organization, i.e., attitudinal (affective) commitment. Establishing a link between employee commitment and firm performance, through behavioral commitment, is not within the scope of the present paper.

Dimensions of the Commitment-Control Continuum

In the present paper a distinction is made between HRM practices that can be labeled approximately as control- or commitment-oriented. As the basis for this study we use the dimensions of the traditional versus high-commitment work system as proposed in Beer et al. (1984). Following Walton (1985), Arthur (1994) and Boselie (2002) these two work systems are labeled control and commitment HRM systems, respectively. According to Arthur (1994) control HRM systems focus on cost reduction, or improvement of efficiency, whereas commitment HRM systems emphasize employee development and trust. The HRM systems are bundles of coherent HRM practices, characterizing the strategic HRM approach (Boselie, 2002). Because HRM practices usually do not add up to a coherent system (Duberley and Walley, 1995; Legge, 1995; De Kok et al., 2002), in the present study we distinguish between a range of dimensions of the HRM system.

Table 1 presents the distinction between control and commitment HRM systems we use as the basis for our study. It is a continuum where the HRM dimensions (e.g., job scope, task assignment, etc.) differ with respect to their commitment-orientation. The selection of HRM dimensions presented in Table 1 is a combination of the dimensions as presented in Beer et al. (1984) and Arthur (1992; 1994). We also include the distinction between formal and informal HRM systems, representing the degree to which procedures and regulations are formalized. The higher the degree of formalization, the higher the degree of (direct) control over employees and the production process. Most dimensions in Table 1 can clearly be divided into a control and commitment ‘side’.
For instance, indirect supervision is a commitment feature, whereas direct supervision is a control feature. However, explicitly paying attention to the learning process of employees can enhance both commitment – employees are involved and willing to make efforts for the organization – and control – learning is a tool for successfully pursuing cost reduction (Boselie, 2002).

DETERMINANTS OF COMMITMENT ORIENTATION OF HRM

Management styles tend to be contextual. They vary with environmental characteristics, e.g., stability versus uncertainty, as well as organizational features, such as firm size, industry or sector, business strategy and firm age or stage of development (i.e., the business profile). The present study assumes an interaction of gender, the business profile and HRM (see Figure 1). In the empirical analysis we will control for the business profile characteristics to single out the direct gender effect1. The influence of gender and each of the business profile characteristics on the extent to which HRM systems are commitment- or control-oriented is discussed and hypothesized below.

HRM systems are comprised of several HRM dimensions (see Table 1). Because these HRM dimensions are close to the practice of HRM, in the present paper we will use the terms practices and dimensions interchangeably. According to the strategic HRM perspective, the HRM practices within a system should have a similar focus. However, in most organizations HRM practices do not add up to a coherent package deriving from a long-term coherent management strategy (Duberley and Walley, 1995, p. 905). Hence, in addition to testing for a gender effect on the general focus of the HRM system, we test for gender effects on eight of the 13 HRM dimensions as outlined in Table 1. These eight dimensions are chosen because they are covered by the data set at our disposal. For the remaining dimensions no data are available. Accordingly, nine hypotheses are formulated on the influence of gender on the commitment-orientation of HRM, one referring to the commitment-orientation of the HRM system and eight referring to the commitment-orientation of the separate HRM practices within the system. Although the main focus is to investigate the influence of gender on HRM, hypotheses are also formulated on the influence of each of the controls (i.e., business profile characteristics) on the commitment-orientation of the HRM system as this benefits the discussion of the results.

Gender Differences in HRM

Gender and the HRM system

Many authors refer to more instrumental (transactional), task-oriented, autocratic styles, explicitly as ‘masculine’ leadership styles, and to interpersonally oriented, charismatic (transformational) and democratic styles as ‘feminine’ leadership styles. Whereas the ‘masculine’ style often refers to a leadership style that emphasizes maintenance of tasks, the ‘feminine’ style is based on nurturing of interpersonal relationships (Van Engen, 2001).

A management style is referred to as participative or democratic if employees are consulted and are able to participate in decision-making. If elements of consultation and delegation of decisions are not present, a management style is referred to as autocratic (Lewin and Lippitt, 1938). A management style is transactional when job performance is viewed as a series of transactions with employees where they are motivated by rewards and punishments, and where the leader derives his/her power by charisma. Instead, a transformational leadership style focuses upon getting subordinates to transform their self-interest into the interest of the group through concern for a broader goal, i.e., motivation by inclusion, and leader power is based on position (Bass, 1985). An interpersonally oriented leadership style includes behavior such as supporting employees, being available, explaining procedures and looking out for their welfare, whereas a task-oriented leadership style consists of behavior such as having employees follow rules and procedures, maintaining high performance standards and explicitly formulating work roles and tasks (Bales, 1950; Blake and Mouton, 1964). Rosener (1990) argues that the female leadership style goes beyond the transformational and participative style, to being an interactive style, with women
positively interacting with their employees, encouraging participation and sharing power and information. In addition to these leadership dichotomies, sometimes another style, laissez-faire, is added indicating an absence of leadership (White and Lippitt, 1960).

Although the bulk of the management and entrepreneurship literature indicates that women tend to engage in the more ‘feminine’ leadership styles (Rosener, 1990; Chaganti, 1986; Eagly and Johnson, 1990; Kabacoff, 1998; Yammarino et al., 1997; Bass et al., 1996), contradicting evidence was presented by Sadler and Hofstede (1976) arguing that both men and women prefer a ‘consult’ style and Mukthar (2002) who finds that female owner-managers are more autocratic. This latter finding may be explained by the fact that because women tend to combine work and household responsibilities, their ambitions are different from those of men. They are less likely to grow beyond a certain threshold size, beyond which they can no longer control their activities and combine responsibilities. Based on the bulk of the literature arguing that women are likely to practice ‘feminine’ leadership styles, and because these participative, transformational or people-based styles bear a close resemblance to the commitment-oriented HRM system, we expect that HRM systems in female-led businesses are commitment-oriented rather than control-oriented. Despite some counterintuitive findings the following hypothesis is formulated:

H1: HRM systems in female-led businesses are more commitment-oriented than those in male-led businesses.

Gender and HRM dimensions

In addition to the general focus of the HRM system in female-led businesses (as hypothesized in H1), the influence of gender on the commitment-orientation of the separate HRM dimensions will be discussed to create a better insight into the composition and coherency of HRM systems in female- and male-led businesses. Hypotheses are formulated using a selection of the dimensions of the Commitment-Control Continuum as represented in Table 1. Hypotheses are based on the literature and, where no theoretical evidence is available, we assume that HRM practices will be in line with the general commitment-orientation of HRM systems in female-led businesses, as hypothesized in H1.

Several studies find that female managers are more likely to let employees participate in decision-making (Cromie and Birley, 1991; Neider, 1987; Stanford et al., 1995; Jago and Vroom, 1982). Verheul et al. (2002) argue that although both men and women let employees participate in decision-making, the degree to which employees are able to contribute is dependent upon the gender of the entrepreneur. Although male entrepreneurs let employees participate in decision-making, they usually make the final decisions themselves. Female entrepreneurs are assumed to be more likely to involve employees throughout the decision-making process. According to Jago and Vroom (1982, p. 781): “Women managers may be more likely to recognize the need for commitment to decisions by others and this may cause them to take appropriate measures to obtain that commitment in the decision-making process”. Because the existing literature indicates that employee participation is higher in female-led businesses we expect to find the following:

H1.1: In female-led businesses there will be a higher degree of employee participation than in male-led businesses.

Brush (1992) describes the role of women as coordinating relationships rather than ordering people around. Women leaders tend to focus on relationships instead of hierarchy (Buttner, 2001; Brush, 1992; Belenky et al., 1986; Fischer and Gleijm, 1992; Stanford et al., 1995). Accordingly, Rosener (1990) assumes a high degree of decentralization and delegation of decision-making power in businesses headed by women. Stanford et al. (1995) view women entrepreneurs as more open to criticism and accessible for employees. They foster relationships with employees based on mutual
trust and respect. Because it is suggested that women tend to structure their business in a non-hierarchical manner, the following hypothesis is formulated:

H1.2: In female-led businesses there will be a higher degree of decentralization [DECENTR] than in male-led businesses.

Because female-led businesses are said to focus upon relationships instead of hierarchy, it is likely that control mechanisms are structured accordingly. Indeed, Verheul et al. (2002) suggest that whilst male entrepreneurs directly control the production process where failures or “clumsiness” are corrected within the process, female entrepreneurs are more likely to make use of indirect ways of controlling employees motivating them by encouraging commitment to the company’s goals and scheduled meetings. Such evidence leads us to believe that control mechanisms in female-led businesses tend to be more indirect than in male-led businesses. Accordingly, the following hypothesis is formulated:

H1.3: In female-led businesses supervision is relatively indirectly structured [INDIRECT] as compared to male-led businesses.

Several studies suggest that businesses of women use more informal practices (Brush, 1992; Cuba et al., 1983; Hisrich and Brush, 1987; Chaganti and Parasuraman, 1996; Rosener, 1990). The assumed non-hierarchical structure of women-led businesses seems to give way to an emphasis on informal, non-systematic structuring. Mukthar (2002) argues that given that female owner-managers are more informal, and thus more flexible using little or no documented procedures, they rely on intuition for decision making within the business. Because of this evidence and the recent argument of Mukthar (2002) we expect that female-led businesses are structured more informally than male-led businesses, leading to the following hypothesis:

H1.4: Female-led businesses have a relatively informal structure [INFORMAL] as compared to male-led businesses.

The alleged non-hierarchical and informal environment of female-led businesses is likely to have consequences for the way in which jobs and tasks are structured, e.g., enhancing employee motivation, and in turn commitment. In accordance with the assumption that HRM systems in female-led businesses are more commitment-oriented (see Hypothesis H1), we expect jobs to be more broadly defined and with a high degree of task differentiation, leading to the following hypotheses on the scope and contents of jobs/tasks in female- and male-led businesses:

H1.5: In female-led businesses jobs are more broadly defined [BROADJOB] than in male-led businesses.
H1.6: In female-led businesses tasks are more differentiated [TASKDIFF] than in male-led businesses.

Regarding gender differences in the degree to which attention is paid to training and development of employees, the evidence there is (Verheul et al., 2002), suggests that in both female- and male-led businesses attention is paid to the learning process of employees. However, in Verheul et al. (2002) it is also suggested that female entrepreneurs are more likely to oblige their personnel to engage in training and development than male entrepreneurs, which may be an indication of their educational demands. Moreover, the focus of the training may differ in female- and male-led businesses. For instance, female entrepreneurs may be more likely to pay attention to management training as the bulk of women in management positions do not have the advantage of experience in management positions and they tend to rely more on their employees (Cromie and Birley, 1991) or they may be expected to pay more attention to social development of employees as they are thought to value collective action (Jago and Vroom, 1982; Gibson, 1995) for which social
skills are important. Because these forms of training have a more general character, it may be that women focus more on general training. Although it is difficult to a priori formulate hypotheses on the degree and focus of training and development in female- and male-led businesses, the following hypotheses are proposed, based on scant evidence, logical reasoning and intuition:

H1.7: In female-led businesses more explicit attention is paid to the learning process of employees \[ \text{LEARN} \] than in male-led businesses

H1.8: In female-led businesses there is a higher degree of general training \[ \text{TRAINGEN} \] than in male-led businesses

Business Profile and HRM

Firm size

Several studies show that firm size influences the shaping of HRM practices (Hornsby and Kuratko, 1990; Deshpande and Golhar, 1994; Marlow and Patton, 1993; Jackson et al., 1989; De Kok and Uhlaner, 2001). The bulk of these studies argues that small businesses often spend less time on developing and formalizing HRM practices. In addition, small-scale activities enable a more flexible, informal and personal style with direct communication between employees and the owner-manager. This may facilitate delegation and a high autonomy of employees in decision-making (Ram, 1999). Hence, firm size is likely to have implications for the degree of control or commitment in HRM systems. Golhar and Deshpande (1997) and Deshpande and Golhar (1994) find that both large and small (manufacturing) firms rank open communication, training of new employees, and employee participation initiatives among the most important HRM practices. Goffee and Scase (1995) argue that adaptiveness and job variety are distinctive characteristics of small firms. They indicate that work in small businesses is broadly defined and employees have a high degree of discretion and responsibility. In addition, there may be little need for direct management control as work is continuously adapted to customer preferences.

Commitment seems particularly important in small businesses as employees are often ‘allrounders’ who are difficult to replace as they possess firm-specific (tacit) knowledge. Also, it is relatively costly for small businesses to find new employees in the market because of the absence of economies of scale (Nooteboom, 1993). Moreover, small firms usually have no specialized staff for different functional areas, such as finance, marketing and personnel, and jobs are broadly defined, comprising of different tasks. Being involved in a broad range of activities may increase the involvement of employees with the organization.

Although there are many arguments favoring a commitment-oriented strategy in small businesses, it has to be noted that owner-managers of small businesses often are reluctant to give up control over their business (Goffee and Scase, 1995). However, in general, we would expect HRM systems in small businesses to be more commitment-oriented than those in large businesses. This leads to the following hypothesis:

H2: HRM systems in smaller businesses are more commitment-oriented than those in larger businesses \[ \text{firmsize} \].

Sector: service versus non-service firms

Businesses in different sectors may be characterized by different employment cultures (Curran et al., 1993). Moreover, Curran et al. (1993) show that also within different types of service firms there is variation in employment culture. Accordingly, employee commitment may be more important in certain business environments than in others. Commitment is more likely to be a goal of HRM in the service sector than in other sectors because committed employees are important for customer loyalty and satisfaction (Heskett et al., 1997; Hall, 1993; Maister, 1997). In service firms the relationship between customers and employees is the key to the production process (Heskett et
Hence, it may be argued that HRM systems are more commitment-oriented in service than in non-service firms. The following hypothesis is formulated:

**H3:** HRM systems in service businesses are more commitment-oriented than those in non-service businesses [service].

### Business strategy

It has been argued that business strategy influences the type of leadership or, in general the shaping of HRM practices (Schuler and Jackson, 1987; Lengnick-Hall and Lengnick-Hall, 1988; Youndt et al., 1996). Boselie (2002) argues that Walton’s (1985) distinction between control and commitment strategies appears to be inspired by Porter’s (1980, 1985) distinction between the strategies cost reduction, focus and differentiation. According to Guthrie et al. (2002) firms adopting a differentiation strategy also aim for high involvement work practices.

Youndt et al. (1996) make a distinction between three strategies: cost, quality and flexibility. Each of these strategies will have important implications for the shaping of HRM systems (Youndt et al., 1996). The most efficient approach to HRM for firms minimizing costs is to adopt a command-and-control style where emphasis is placed on efficiently managing low-skilled, manual workforce. For firms pursuing a quality strategy the determinant of organizational competitiveness may be the intellectual capital of the firm. In these firms there is a transition from manual labor, where responsibilities are limited to the physical execution of work, to knowledge work with broader responsibilities. In these firms the aim is to develop human-capital enhancing HRM systems with a focus on training and development of employees. In the same fashion, firms pursuing differentiation focus strategies require human-capital-enhancing HRM systems focusing on skill acquisition and development in an effort to facilitate adaptability and responsiveness. This leads to the following hypotheses:

**H4:** HRM systems in firms focusing on minimizing costs, aiming at low prices, are less commitment-oriented than those in firms that do not pursue this type of strategy [lowprice].

**H5:** HRM systems in firms pursuing a quality strategy are more commitment-oriented than those in firms that do not pursue this type of strategy [quality].

**H6:** HRM systems in firms pursuing a focus strategy are more commitment-oriented than those in firms that do not pursue this type of strategy [focus].

In addition to the focus of business strategy, the extent to which a firm pursues growth may influence the shaping of HRM practices. It is argued that the pursuit of a growth strategy is related to more formal and professionally developed HRM practices (Thakur, 1999; Matthews and Scott, 1995). As a formal structure is expected to be characteristic of a control-oriented HRM system (Table 1), the following hypothesis is formulated:

**H7:** HRM systems in firms pursuing a growth strategy are less commitment-oriented than those in firms that do not pursue such a strategy [growth].

### Firm age or stage of development

Several scholars have argued that as firms move through various stages of development, differing problems must be addressed, resulting in the need for different management skills, priorities, and structural configurations (Greiner, 1972; Churchill and Lewis, 1983; Kazanjian, 1988; Kimberly and Miles, 1980; Smith, Mitchell and Summer, 1985). Commitment in HRM may be more important in the first stages of business development when the business is small and struggles to stay “alive”. In later stages usually more employees need to be recruited and management control becomes more important. Since younger firms tend to be in an earlier stage of development than older firms, firm age may be of influence on the shaping of HRM systems. The
following hypothesis is formulated to capture the effect of firm age on the commitment-orientation of the HRM system:

H8: HRM systems in younger firms are more commitment-oriented than those in older firms [firmage].

Time invested in the business

Although there is no literature to support the relationship between time invested in the business and the employment relationship, it may be argued that whether someone works full-time or part-time in the business influences the shaping of HRM practices. Commitment may be more important in businesses where the entrepreneur, or owner-manager, is not always present to control the production process. Time invested in the business may be related to the degree to which employees work independently on their jobs. In addition, the degree to which team building is important may be dependent upon the course of the work week of the entrepreneur.

H9: HRM systems in firms where the entrepreneur invests many hours are less commitment-oriented than those in firms where the entrepreneur invests few hours [hours].

METHODOLOGY

Data set

To test the hypotheses, use is made of a panel of EIM Business and Policy Research. Every four months approximately 2,000 Dutch entrepreneurs participate in this panel. The panel is used for both cross-sectional and longitudinal research. Independent variables include gender of the entrepreneur (i.e., owner or managing director), firm size, age, hours invested in the business, service firm and business strategy. See Verheul (2003) for a detailed description of the data.

Measurement of HRM

Of the 15 dimensions of the Control-Commitment Continuum presented in Table 1, eight dimensions, covered by the available data, are selected in the empirical study. Commitment dimensions are constructed using multiple items. Factor analysis is used to determine which items belong to which dimension. The results of the factor analysis are presented in Table 2.

The first factor is made up of items pertaining to informal structure and learning dimensions. For the purpose of the present study, both dimensions are included separately in the analysis. Factor two clearly shows the decentralization dimension. Despite the relatively low factor loading, the item ‘employees control their own work’ is also included in the decentralization dimension. Factors three and four clearly show the general training and broadly defined jobs dimensions, respectively. Factor five is made up of employee participation items. Because the third item ‘employees are involved in decision-making’ does not contribute to any of the other factors it is included in the employee participation dimension. Factors six and seven show the indirect supervision and task differentiation dimension. Eigenvalues range from 2.72 of the first factor to 1.30 for the seventh factor. The factors in Table 2 correspond surprisingly well with the dimensions in Table 1, so it can be argued that the dimensions as identified by Beer et al. (1984), Arthur (1992; 1994) and Boselie (2002), are relevant and valuable for studying HRM issues.

Following the dimensions in Table 2, eight commitment variables are constructed as an unweighted average of the underlying items: employee participation (PARTICIP), decentralization (DECENTR), indirect supervision (INDIRECT), informal structure (INFORMAL), broadly defined jobs (BROADJOB), task differentiation (TASKDIFF), explicit attention paid to learning (LEARN) and general training (TRAINGEN). Also, a general commitment variable (COMMITM) is constructed as an unweighted average of the eight specific commitment variables.
RESULTS

In this section the relationship between independent and dependent variables is investigated using correlation coefficients. The relationships between the business profile characteristics, gender and the commitment variables are further investigated through a series of regression analyses on the specific commitment variables (PARTICIP, DECENTR, etc.) and the general commitment variable (COMMITM).

Correlation Analysis

Correlation analysis\(^5\) shows that gender correlates with all except one of the other independent variables. From a bilateral perspective, women have smaller and younger businesses, invest less time in the business, tend to have a service firm and are less likely to pursue low price, focus and growth strategies. This correlation of gender with the other independent variables suggests an indirect influence of gender (through the ‘business profile’) on HRM (Figure 1).

There is a moderate degree of correlation between the commitment variables. Most strongly associated commitment variables include the relationships between informal structure and attention paid to learning ($r=-0.43, p<0.01$) and between employee participation and attention paid to learning ($r=0.42, p<0.01$). The learning environment tends to be formally structured, with room for employee participation. Although we would expect that all commitment variables are positively correlated, this is not the case. This could be an indication of a lack of coherency within the HRM system for the firms in the sample.

For the correlations between dependent and independent variables, the high correlations of firm size with attention paid to learning ($r=0.45, p<0.01$), informal structure ($r=-0.43, p<0.01$) and employee participation ($r=0.42, p<0.01$) stand out. Large businesses tend to be characterized by explicit attention for learning, formal structure and high degree of employee participation. The degree to which an HRM system is commitment-oriented is related to gender ($r=-0.09, p<0.01$), hours invested ($r=-0.09, p<0.01$), service sector ($r=0.15, p<0.01$), focus strategy ($r=0.11, p<0.01$) and growth strategy ($r=0.09, p<0.01$).

Regression Analysis

Gender and HRM

The results of these regression analyses are presented in Table 3. Six of the eight gender effects are negative, of which three are significantly negative. None are significantly positive. On the whole, the effect of gender on the commitment-orientation of the HRM system (COMMITM) is negative. Hypothesis H1 is rejected: contrary to what is generally believed we find that female entrepreneurs are less likely to make use of commitment in structuring their HRM systems. Of the hypotheses on the HRM dimensions, operationalized by the specific commitment variables, H1.1 through H1.3 are rejected. As compared to male-led businesses, in female-led businesses there is a lower degree of employee participation, a higher degree of centralization and more direct supervision of employees. In addition, no evidence is found for hypotheses H1.4 through H1.8. Female- and male-led businesses do not differ regarding formalization of the organizational structure, job scope, task assignment, the attention paid to learning and general training.

Business profile and HRM

Several ‘business profile’ factors influence the commitment-orientation of HRM practices, including firm size, time invested in the business, a service business, focus and growth strategies. Firm size has a varying effect on the commitment-orientation of HRM. Of the eight size effects on specific commitment variables, four are significantly negative and three are significantly positive. As compared to larger firms, smaller businesses are characterized by a higher degree of direct supervision of employees, a lower degree of formalization, more broadly defined jobs and more
task differentiation. These contrary effects produce an overall size effect on the commitment-orientation of the HRM system (COMMITM) that is not significant. Hypothesis H2 is not supported.

Service businesses have a higher score on the commitment-orientation of the HRM system. Hypothesis H3 is supported. A service (rather than a non-service) business is characterized by higher degrees of employment participation, decentralization, task differentiation, and more attention for learning and general training.

Adopting a focus strategy has a positive impact on the degree to which the HRM system is commitment-oriented. Hypothesis H6 is supported. Regarding the HRM dimensions, businesses pursuing a focus strategy have a higher degree of employee participation and decentralization as well as more explicit attention for learning. In addition, adopting a growth strategy positively influences the commitment-orientation of the HRM system. Hypothesis H7 is rejected. Businesses pursuing growth are characterized by a high degree of employee participation, attention for learning, general training and a relative formal organizational structure.

More time invested in the business leads to a HRM system that is less commitment-oriented. Hypothesis H9 is supported. Regarding the HRM dimensions, more time invested in the business leads to less employee participation, more decentralization and less attention paid to learning.

Firm age as well as a low-price or quality strategy do not influence the commitment-orientation of the HRM system in a systematic fashion, although pursuing a low-price strategy is accompanied by a higher degree of centralization. Hypotheses H4, H5 and H8 are not supported.

Because gender is significantly correlated with several ‘business profile’ factors influencing the commitment-orientation of the HRM system, this may be an indication of an indirect gender effect. However, leaving out either gender or the controls does not produce any disturbing effects. Hence, there is no evidence of an indirect gender effect. Only for indirect supervision and general training the gender effect is not similar when comparing regression results including all variables and gender only.

CONCLUSION AND DISCUSSION

Making use of several HRM dimensions on the Commitment-Control Continuum (see Table 1), as first proposed by Beer et al. (1984), the present study finds that gender of the entrepreneur influences the degree to which HRM practices are commitment-oriented. Gender influences both the commitment-orientation of several of the HRM dimensions (i.e., employee participation, decentralization and supervision), as well as that of the aggregate HRM system.

The effect of gender on the commitment-orientation of the HRM system is a direct effect, rather than an indirect one, the latter working through business profile factors, such as firm size, sector, business strategy, firm development stage and time invested in the business (Figure 1). This means that when the business profiles of female- and male-led businesses are similar, the gender difference in the commitment-orientation of the HRM system remains.

Contrary to what is generally believed, the present study shows that HRM systems in businesses led by women are more control-oriented and less commitment-oriented than those in male-led businesses. Previous research has shown that women are more likely to let employees participate in decision-making (e.g., Cromie and Birley, 1991; Stanford et al., 1995; Neider, 1987), focus upon relationships instead of hierarchy (e.g., Buttnar, 2001; Brush, 1992; Stanford et al., 1995) and have a more indirect way of managing employees (e.g., Verheul et al. 2002). In this study, female-led businesses are characterized by less employee participation, more centralization and direct instead of indirect ways of controlling employees, as compared to male-led businesses. The counterintuitive finding that women are more control-oriented than men may be related to gender differences in risk taking propensity. If women are less willing to take risk than men, this may to some extent explain why they are less willing to involve others in the decision-making
process as relying upon others means giving up control. Practicing direct control over others reduces uncertainty.

The finding that women are more control-oriented corresponds with the findings of Mukhtar (2002) and Piercy et al. (2001). However, the results of the present study should be interpreted with caution as there may be intermediating factors that are not controlled for in the present study and that are associated with gender. For example, women may be involved in specific types of businesses. Contingency control theory argues that organizational structuring and type of control within a firm is dependent upon factors, such as type of technology (e.g., routine versus non-routine) involved, firm size as well as environmental uncertainty. Although the present study controls for firm size, it may be that women are less likely to be involved in high-tech businesses, and in sectors with unstable environments, whereas these may positively influence the commitment-orientation in the organizational structure. A business in an uncertain environment should maintain a flexible organizational structure to adequately adapt to changing market circumstances. This flexibility is more likely to be feasible when a business focuses on commitment in the structuring of HRM practices than when the focus is on control. To shed more light upon the effective gender effect on HRM practices, further research should explore the mediating effects of environmental and technological complexity.

Further research should also focus on the influence of the other factors, such as firm size, on the commitment-orientation of HRM. In the present study no size effect was found as the overall effect of firm size on the commitment-orientation of the HRM system was cancelled out by reverse effects on the HRM dimensions. In the present study different HRM practices are added up to construct the aggregate measure of HRM system. However, as noted in the theoretical section, in most firms HRM practices do not form a coherent system. This is confirmed by the relatively low, and in some cases even negative, correlations among the ‘specific’ HRM variables. Hence, researchers should be made aware that the use of aggregate measures of HRM practices may lead to misinterpretation of findings.

The present study is based upon the views of Beer et al. (1984), Walton (1985) and Arthur (1992, 1994), assuming that control and commitment are two sides of a single dimension. However, it is important to investigate whether, indeed, commitment and control are two extremes on one continuum (Boselie, 2002, p. 41). Piercy et al. (2001) conclude that, next to displaying a higher level of behavioral control, female sales managers create more organizational commitment in their teams. This may be an indication that control and commitment can go hand in hand rather than be exclusive. Moreover, a distinction should be made between different types of control and/or commitment. Although several scholars have proposed different types of control (e.g., Merchant, 1985; Harzing, 1999; Snell, 1992; Burton, 2001), further research is needed to investigate commitment types. In addition, human resource managent systems may be classified according to different lines. Although the distinction between a focus on control and commitment is a comprehensible one, it is likely that in practice more diverse employment models can be identified. For instance, Burton (2001) distinguishes between five employment models based on the structuring of three human resource dimensions: attachment, coordination/control and selection.

The present study uses a sample of Dutch female and male entrepreneurs. Because it can be expected that gender differences in leadership or management styles (Osland et al., 1998) or leadership styles in general (Gibson, 1995) differ internationally, the results may not be generally applicable. In addition, Hofstede (2001) finds that, as compared to other countries, the Netherlands are characterized by a relatively low degree of ‘masculinity’. The relative ‘feminine’ culture in the Netherlands is likely to affect the extent to which women and men differ with respect to management of their employees. Because in a ‘feminine’ culture male behavior is likely to be more similar to, than different from, female behavior, this may be an indication of the importance of the gender differences found in the present study.
REFERENCES


Grant, J., 1988, Women as managers: what can they offer to organizations?, *Organizational Dynamics* 16 (3), 56-63.


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Appendix

Figure 1: Gender and HRM

Table 1: Commitment-Control Continuum

<table>
<thead>
<tr>
<th>HRM Dimension</th>
<th>Commitment</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job scope</td>
<td>Broadly defined jobs</td>
<td>Narrowly defined jobs</td>
</tr>
<tr>
<td>Task assignment</td>
<td>Task differentiation</td>
<td>Fixed tasks</td>
</tr>
<tr>
<td>Supervision</td>
<td>Indirect</td>
<td>Direct</td>
</tr>
<tr>
<td>Organizational structure</td>
<td>Informal</td>
<td>Formal</td>
</tr>
<tr>
<td>Learning</td>
<td>Structured learning (explicit)</td>
<td>‘Learning-by-doing’ (implicit)</td>
</tr>
<tr>
<td>Training</td>
<td>General</td>
<td>Specific</td>
</tr>
<tr>
<td>Employee role</td>
<td>Team member</td>
<td>Individual</td>
</tr>
<tr>
<td>Information sharing</td>
<td>Global (firm) information</td>
<td>Local (task) information</td>
</tr>
<tr>
<td>Status</td>
<td>Not important</td>
<td>Important</td>
</tr>
<tr>
<td>Employee participation</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Decentralization</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Social activities</td>
<td>Important</td>
<td>Unimportant</td>
</tr>
<tr>
<td>Basis of payment</td>
<td>Skills mastered</td>
<td>Job content</td>
</tr>
</tbody>
</table>

Table 2: Factor Analysis Matrix (Principal Component Analysis, Varimax Rotated)

<table>
<thead>
<tr>
<th>Dimensions and items</th>
<th>Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td><strong>Participation</strong></td>
<td></td>
</tr>
<tr>
<td>1: Employees involved in recruitment/selection</td>
<td>0.20</td>
</tr>
<tr>
<td>2: Employees involved in employee assessment</td>
<td></td>
</tr>
<tr>
<td>3: Employees are involved in decision-making</td>
<td>0.43</td>
</tr>
<tr>
<td><strong>Decentralization</strong></td>
<td></td>
</tr>
<tr>
<td>1: Employees 'determine' their own decisions(a)</td>
<td>0.82</td>
</tr>
<tr>
<td>2: Employees make their own decisions(a)</td>
<td>0.84</td>
</tr>
<tr>
<td>3: Employees determine their work pace</td>
<td>0.68</td>
</tr>
<tr>
<td>4: Employees control their own work</td>
<td>-0.12</td>
</tr>
<tr>
<td><strong>Indirect supervision</strong></td>
<td></td>
</tr>
<tr>
<td>1: Employees work independently</td>
<td>0.18</td>
</tr>
<tr>
<td>2: Employees fulfill their tasks without direct supervision</td>
<td>0.29</td>
</tr>
<tr>
<td><strong>Informal structure</strong></td>
<td></td>
</tr>
<tr>
<td>1: There are no written rules/procedures</td>
<td>-0.58</td>
</tr>
<tr>
<td>2: Consultation does not occur via fixed rules</td>
<td>-0.57</td>
</tr>
<tr>
<td>3: Jobs/tasks (contents) are not written down</td>
<td>-0.71</td>
</tr>
<tr>
<td><strong>Broadly defined jobs</strong></td>
<td></td>
</tr>
<tr>
<td>1: Employees each do not have specific tasks</td>
<td></td>
</tr>
<tr>
<td>2: Order of tasks is not determined in advance</td>
<td></td>
</tr>
<tr>
<td>3: Outcomes are not specified in advance</td>
<td>-0.34</td>
</tr>
<tr>
<td>4: Employees' jobs are interchangeable</td>
<td></td>
</tr>
<tr>
<td><strong>Task differentiation</strong></td>
<td></td>
</tr>
<tr>
<td>1: Work is diverse</td>
<td></td>
</tr>
<tr>
<td>2: Employees have multiple tasks</td>
<td></td>
</tr>
<tr>
<td><strong>Learning</strong></td>
<td></td>
</tr>
<tr>
<td>1: Employees are provided with feedback</td>
<td>0.52</td>
</tr>
<tr>
<td>2: Explicit attention for employee learning</td>
<td>0.59</td>
</tr>
<tr>
<td>3: Number of employees with training</td>
<td>0.64</td>
</tr>
<tr>
<td><strong>General training</strong></td>
<td></td>
</tr>
<tr>
<td>1: Management training</td>
<td>0.30</td>
</tr>
<tr>
<td>2: Social and individual development training</td>
<td>0.18</td>
</tr>
<tr>
<td>3: Team building training</td>
<td></td>
</tr>
<tr>
<td><strong>Eigenvalue (factor)</strong></td>
<td>2.72</td>
</tr>
</tbody>
</table>

N=833

Note 1: all underlying items are questions with three response categories: 1 = to a limited extent, 2 = to some extent, 3 = to a large extent.

Note 2: only factor loadings $\geq 0.1$ are presented. Factor loadings $\geq 0.5$ are highlighted in bold. Items with factor loadings in bold are included in the construction of the commitment variables.

\(a\) The distinction between these two items is not entirely clear. The first item may refer to decision-making at a higher hierarchical level where employees do not only make their own decisions, but also determine what kind of decisions they can make themselves. The inclusion of both items in the analysis is justified by their similar factor loadings.
Table 3: Regression Explaining Dimensions on the Control-Commitment Continuum (β-values are represented)

<table>
<thead>
<tr>
<th>COMMITMENT VARIABLES</th>
<th>constant</th>
<th>gender</th>
<th>firmsize</th>
<th>firmage</th>
<th>hours</th>
<th>service</th>
<th>lowprice</th>
<th>quality</th>
<th>focus</th>
<th>growth</th>
<th>R²</th>
<th>F-stat</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>PARTICIP</td>
<td>1.16***</td>
<td>-0.12**</td>
<td>0.16***</td>
<td>0.01</td>
<td>-0.09***</td>
<td>0.06**</td>
<td>-0.01</td>
<td>0.02</td>
<td>0.03**</td>
<td>0.07***</td>
<td>0.209</td>
<td>27.98***</td>
<td>964</td>
</tr>
<tr>
<td>DECENTR</td>
<td>2.37***</td>
<td>-0.24***</td>
<td>-0.0002</td>
<td>-0.02</td>
<td>-0.08**</td>
<td>0.14***</td>
<td>-0.04*</td>
<td>0.02</td>
<td>0.04*</td>
<td>0.02</td>
<td>0.051</td>
<td>3.69***</td>
<td>624</td>
</tr>
<tr>
<td>INDIRECT</td>
<td>2.66***</td>
<td>-0.19**</td>
<td>-0.08***</td>
<td>0.03</td>
<td>-0.02</td>
<td>0.05</td>
<td>-0.009</td>
<td>0.03</td>
<td>0.006</td>
<td>0.009</td>
<td>0.037</td>
<td>3.99***</td>
<td>955</td>
</tr>
<tr>
<td>INFORMAL</td>
<td>2.69***</td>
<td>-0.12</td>
<td>-0.26***</td>
<td>0.03</td>
<td>0.02</td>
<td>-0.01</td>
<td>-0.009</td>
<td>0.0004</td>
<td>-0.01</td>
<td>-0.08**</td>
<td>0.204</td>
<td>17.60***</td>
<td>627</td>
</tr>
<tr>
<td>BROADJOB</td>
<td>2.25***</td>
<td>0.008</td>
<td>-0.07***</td>
<td>-0.02</td>
<td>-0.02</td>
<td>-0.01</td>
<td>-0.01</td>
<td>-0.002</td>
<td>0.01</td>
<td>-0.03</td>
<td>0.039</td>
<td>2.77***</td>
<td>626</td>
</tr>
<tr>
<td>TASKDIFF</td>
<td>2.50***</td>
<td>-0.03</td>
<td>-0.04**</td>
<td>-0.02</td>
<td>0.01</td>
<td>0.07**</td>
<td>-0.003</td>
<td>0.005</td>
<td>0.03</td>
<td>0.02</td>
<td>0.027</td>
<td>1.946**</td>
<td>631</td>
</tr>
<tr>
<td>LEARN</td>
<td>1.94***</td>
<td>0.03</td>
<td>0.22***</td>
<td>-0.04</td>
<td>-0.07**</td>
<td>0.16***</td>
<td>-0.009</td>
<td>-0.02</td>
<td>0.04**</td>
<td>0.07***</td>
<td>0.270</td>
<td>25.48***</td>
<td>628</td>
</tr>
<tr>
<td>TRAININGEN</td>
<td>1.16***</td>
<td>-0.05</td>
<td>0.13***</td>
<td>-0.0007</td>
<td>0.04</td>
<td>0.11***</td>
<td>0.02</td>
<td>-0.002</td>
<td>0.004</td>
<td>0.09***</td>
<td>0.097</td>
<td>11.42***</td>
<td>964</td>
</tr>
<tr>
<td>COMMITM</td>
<td>2.15***</td>
<td>-0.08**</td>
<td>0.007</td>
<td>-0.009</td>
<td>-0.03**</td>
<td>0.06***</td>
<td>-0.008</td>
<td>-0.0003</td>
<td>0.02**</td>
<td>0.03**</td>
<td>0.057</td>
<td>4.02***</td>
<td>606</td>
</tr>
</tbody>
</table>

*Coefficient is significant at the 0.10-level (2-tailed); ** Coefficient is significant at the 0.05-level (2-tailed); *** Coefficient is significant at the 0.01-level (2-tailed).
The direct gender effect equals the effect of gender on HRM when controlled for the business profile. For a more detailed discussion of direct and indirect gender effects we refer to Verheul and Thurik (2001).

These counterintuitive findings may be explained by the fact that most of the studies on gender differences in management in the field of entrepreneurship are qualitative and make use of samples that consist only of females.

The average number of people employed is 34.73. We include the logarithm of firm size in the analysis as we expect that the effect of increasing size on human resource management diminishes.

Initially, nine commitment dimensions were selected. However, in the factor analysis the dimension of the importance of collective, i.e., team-based, action, dropped out. That is why we decided to proceed with eight variables.

See Verheul (2003) for a full account of the correlation analysis, including a table with all dependent and independent variables.

For more detailed information see Verheul (2003).