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Author(s): Hytti, Ulla & Kautonen, Teemu & Akola, Elisa
Title: Determinants of job satisfaction for salaried and self-employed professionals in Finland
Year: 2013
Version: Post print

Please cite the original version:

Hytti, Ulla & Kautonen, Teemu & Akola, Elisa. 2013. Determinants of job satisfaction for salaried and self-employed professionals in Finland. *The International Journal of Human Resource Management*. Volume 24, Issue 10. 2034-2053. DOI: 10.1080/09585192.2012.723023.

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This is an Authors' Accepted Manuscript of an article published online 27 September 2012:

Hytti, U., Kautonen, T. and Akola, E. (2013). Determinants of job satisfaction for salaried and self-employed professionals in Finland. *International Journal of Human Resource Management*, 24(10), 2034-2053.

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Determinants of job satisfaction for salaried and self-employed professionals in Finland

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Abstract

This paper contributes to our knowledge of the determinants of job satisfaction by analysing the effects of employment status (self-employed or salaried employee) and work characteristics (autonomy, variety, task identity, task significance and feedback) on job satisfaction in a sample of 2327 Finnish professionals. The results of the structural equation model analysis show that although the self-employed are significantly more satisfied with their jobs than their salaried counterparts also in Finland, employment status as such does not explain job satisfaction when the five work characteristics are added to the structural model. Further, the analysis finds that task significance, variety and autonomy have similar effects on the level of job satisfaction among both employees and self-employed individuals, while feedback has a weaker effect when the individual is self-employed and task identity does not affect job satisfaction in either group. Overall the study points

to the need to develop jobs that are high in autonomy, variety and task significance for professionals in order to enhance job satisfaction.

Keywords: job satisfaction, work characteristics, employment status, self-employed, salary-earners, professionals, Finland

Introduction

Similarly to other Nordic welfare states, Finnish university graduates have been primarily absorbed into salaried employment in the public sector and large firms, and their encouragement towards and engagement in self-employment is a relatively new phenomenon in Finland (Teichler and Kehm, 1995). In light of the increasing educational levels in developed economies (Rubb, 2009) and the growing importance of professional work in Finland and the other Western societies (Cohen et al., 2002; Leicht and Fennell, 1997; 2001), facilitating productivity, creativity and commitment through greater job satisfaction among highly educated professionals gains importance especially in international, innovation-driven organizations (Schuler and Jackson, 1999). In addition to understanding the determinants of job satisfaction for professionals in organizational employment, the role of job satisfaction for self-employed professionals, as a facilitator of longevity, gains importance against the backdrop of current organizational trends, such as downsizing and focusing on core competences, which lead to professional work being more frequently carried out by individuals outside organizational boundaries (Beck, 2000; Muehlberger, 2007).

Prior research associates job satisfaction, defined as ‘...a pleasurable or positive emotional state resulting from the appraisal of one’s job or job experiences’ (Locke, 1976, p. 1304), with important work-related outcomes for employees and self-employed people alike. In the case of

individuals in organizational employment, these include enhanced performance and productivity (Babin and Boles, 1996; Bruce and Nyland, 2011), organizational commitment (Fletcher and Williams 1996; Dirani and Kuchinke, 2011), employee turnover (van Dick et al., 2004) and preference to continue working even when early retirement is available (Mein et al., 2000; Sibbald et al., 2003). For self-employed individuals, job satisfaction is a measure of entrepreneurial success and a proxy for continued investment in the business (Cooper and Artz, 1995), which in turn fosters the longevity of the business and the associated positive externalities such as creation and maintenance of employment.

A comparison of the determinants of job satisfaction for self-employed and salaried professionals provides an opportunity for organizations to learn from the sources of job satisfaction of the self-employed in order to enhance the job satisfaction of their employees, since studies comparing the levels of job satisfaction between salary-earners and self-employed individuals consistently find the self-employed to be more satisfied with their work (Andersson, 2008; Benz and Frey, 2004; Blanchflower and Oswald, 1998; Hundley, 2001). A common explanation of this finding relies on the non-pecuniary benefits of self-employment: ‘doing what you like to do’ provides procedural utility which is valued beyond material outcomes (Benz and Frey, 2008a, 2008b) and thus a higher level of job satisfaction is mainly attributed to the more interesting jobs and the greater autonomy that self-employed individuals enjoy. Whilst autonomy and choice of type of work are inherently embedded in self-employment, the question arises if the differences between the self-employed and employees disappear if individuals in both groups can benefit from the same levels of autonomy and challenging work. In fact, Prottas and Thompson (2006) suggest that the type of work arrangement may be less important in understanding job satisfaction than the nature of the job itself.

While there is an abundance of research on the impact of work characteristics on salary-earners' job satisfaction (Fisher, 2010; Fried and Ferris, 1987, Judge et al., 1997; Judge *et al.*, 2000, Saari and Judge, 2004) and also some evidence on their impact on job satisfaction among the self-employed (Benz and Frey, 2008b; Hundley, 2001; Schjoedt, 2009), comparative studies across the two types of employment are limited. These are mainly found in economics where the empirical analyses rely on secondary data from large-scale social surveys (Andersson, 2008; Benz and Frey, 2008b; Hundley, 2001). For this reason, those studies employ a limited range of variables and especially the variables employed to capture diverse work characteristics are of an ad hoc nature. A further limitation of those studies, especially for distinguishing between the influence of work characteristics and employment status, is the breadth of the samples: different occupations involve different work characteristics in varying degrees and their effects on job satisfaction are likely to vary between occupations as much as between salary-earners and the self-employed. A number of studies in the field of psychology (such as Cohrs et al., 2006) have investigated the impact of work characteristics on job satisfaction in specific professions and occupations, thus holding the basic occupational characteristics constant, but these studies do not include self-employed individuals. Contrary to many other European countries, Finnish university graduates generally work in the same field in which they have received their education, and graduates also perceive a good match between the job requirements and the competencies acquired during their studies (Kivinen and Nurmi, 2003). Hence, misalignment between education and work is not an important factor affecting job satisfaction in Finland. The current research has revealed no studies that would provide a comparison of salaried and self-employed individuals focusing on an occupationally and geographically relatively homogeneous population and using established psychometric measurement scales.

The present article contributes to closing that knowledge gap (Fairbrother and Warn, 2003; Johnson et al., 2005) with an analysis of the determinants of job satisfaction which distinguishes between the influences of work characteristics (variety, autonomy, task identity, task significance and feedback) and employment status (salary earner versus self-employed) based on a sample of 2327 highly-educated salaried and self-employed Finnish professionals. Highly-educated professionals are a particularly suitable target group given the objectives of the present study as they have specialist knowledge and complex expertise giving rise to a great degree of autonomy in their work and responsibility for it (Koivunen, 2009) – characteristics which the literature commonly associates with the higher job satisfaction levels among the self-employed. Thus, with this focus, it is possible that the job satisfaction difference will disappear between the self-employed and salary-earners (Hundley, 2001), or alternatively, we will find that there indeed is a particular feature in self-employment that explains job satisfaction beyond those work characteristics that cannot easily be imitated in organizational employment.

This article makes the following contributions to the human relations and entrepreneurship literatures. By distinguishing between the effects of employment status and work characteristics as antecedents of job satisfaction in the occupationally relatively homogeneous population of highly-educated professionals, the present research shows that the characteristics of the actual work performed are clearly more important determinants of job satisfaction than whether the person receives a salary or is self-employed. This finding refines past research which has consistently shown that the self-employed are happier with their work. Further, this analysis shows that the impacts of the five work characteristics included in the analysis are similar for salary earners and self-employed individuals, with the exception of feedback which has greater weight for employees. Hence, the determinants of job satisfaction in professional work are similar notwithstanding the employment status, but the greater job satisfaction experienced by the self-employed is partially due

to them experiencing higher levels of the key work characteristics. Consequently, organizations can enhance the job satisfaction of their employed professionals by developing their job profiles to involve higher degrees of variety, autonomy and task significance.

The remainder of this article is organized as follows. The next section provides a review of the literature on job satisfaction and its determinants with a particular focus on the differences between self-employed individuals and salary-earners. The section also formulates testable hypotheses. The subsequent section describes the empirical data and methodology, followed by a section that presents the results. The final section discusses the meaning of the findings and their implications for research and practice.

Literature review and hypotheses

Job satisfaction of professionals and the effect of employment status

In spite of the heterogeneity of professional work (e.g. Freidson 1999; Vila et al. 2007; Western et al. 2006), there are some features common to the work of highly-educated professionals that are relevant to understanding their job satisfaction. Professionals can be defined through their occupational control of work as compared to the situation in which an employer organizes and controls work. Additionally, their work is based on an officially recognized body of knowledge and skills based on abstract concepts and theories: professional work necessitates involvement in specialized tasks that cannot be performed mechanically (Freidson, 1999; Western et al., 2006). As such, highly-educated professionals arguably benefit from higher levels of job satisfaction than other employees (Huang, 2011), due to their higher expectations of the intrinsic and extrinsic rewards in their jobs and their greater ability to enter such jobs, that is, the indirect effect of

education (Fabra Florit and Vila Lladosa, 2007). In this context, recent research points towards fragmentation and downgrading of some forms of professional work. The changing conditions for professional work, such as increasing budgetary control and market-driven services, are considered to change the nature of professionalism (Hanlon, 1999). Such developments may limit the autonomy of professionals and thus adversely affect their job satisfaction (Rosta, Nylenna and Aasland, 2009). The resulting mismatch between the high expectations and the actual reality of the job could result in greater job dissatisfaction in the case of highly educated professionals than with less-educated employees (Jurik et al., 1987, Smith-Ruig, 2009, Lange et al., 2010). In summary, the job satisfaction of highly-educated professionals appears to be more vulnerable to the characteristics of the work they perform than is the case for less-educated workers. In the following, we first discuss the potential impact of the employment status (self-employed versus salary earner) on the job satisfaction of professionals, followed by an analysis of the effects of individual work characteristics.

Prior studies consistently show that the self-employed are more satisfied with their work than salary-earners (Ajayi-Obe and Parker, 2005; Benz and Frey, 2004, 2008a, 2008b; Blanchflower and Oswald, 1998, Blanchflower, 2004; Hundley, 2001, Lange, 2009) and the timing of data collection (see Katz, 1993) or the use of convenience sampling (Jamal, 2007) may explain the few divergent findings. Furthermore, Andersson (2008) demonstrates that those who become self-employed are more likely to report an increase in job satisfaction. While there is evidence that a shift to any new job leads to increased job satisfaction, the positive effects of a shift to (another) organizational job are much smaller than those for people who enter self-employment (Benz and Frey, 2008b). Contrary to expectations the greater job satisfaction of the self-employed seems to hold even in the presence of several factors that prior research generally associates with reduced job satisfaction in the case of employees (Danna and Griffin, 1999). For example, self-employed

individuals are more satisfied with their jobs irrespective threats to their mental health such as tiredness, stress or exhaustion, limitations to their family time, pressures from the family or partner, loss of sleep over worry, feelings of unhappiness or depression, strain or working under great pressure and lower wages (Ajayi-Obe and Parker, 2005; Andersson, 2008; Blanchflower, 2004).

Similar findings have been reported from the context of professional work. For example, medical doctors report high levels of job satisfaction despite their considerable work load (Rosta et al., 2009). Hence, we may assume that the differences in job satisfaction between self-employed and employed professionals are not as prevalent (Hundley, 2001) as have been found in studies dealing with the general population. There is however some evidence suggesting that the employment status is of importance in the case of professionals when assessing job satisfaction and its consequences (Lachman and Aranya, 1986). In line with the prior research evidence, we hypothesize that the self-employed are more satisfied with their jobs than salaried employees in the context of the present study.

H1: Being self-employed is positively related to job satisfaction among professionals.

Job satisfaction and work characteristics

A great deal of research examines the antecedents of job satisfaction. The nature of the work itself generally emerges as the most important job facet (Saari and Judge, 2004). Previous research confirms that there is a strong positive effect from work characteristics on job satisfaction – and not vice versa (ter Doest and de Jonge, 2006). In particular, prior studies demonstrate a positive effect between the five core job dimensions (autonomy, variety, task identity, task significance and feedback) and job satisfaction (Fisher, 2010; Judge, Bono and Locke, 2000). *Autonomy* refers to

having the freedom and discretion to decide when, where and how to carry out the job. *Variety* constitutes of the degree to which the job requires the exercise of a number of different skills, abilities or talents. *Task identity* refers to the degree to which the job requires the completion of whole and identifiable pieces of work; completing a task from beginning to end with a visible outcome. *Task significance* is the perception of one's job having a positive impact on other people. Finally, feedback is the opportunity to receive direct and clear information on the effectiveness of work performance after completing a task; either directly from the task itself or from other people. This is the job characteristics model (Hackman and Oldham, 1980) or the situational approach, which suggests that job satisfaction reflects the characteristics of the work, and more favourable characteristics will lead to greater job satisfaction (Hackman and Oldman, 1976; Fisher, 2010; Fried and Ferris, 1987; Grant, 2008; Grzywacs and Butler, 2005; Judge, Locke and Durham, 1997; Lee and Wilbur, 1985; Prottas, 2008; Prottas and Thompson, 2006; Schjoedt, 2009). These work characteristics enhance the individual's sense of responsibility and meaning and provide them with intrinsic motivation and resources to cope with the demands of work, which translates to satisfaction with the job (Grzywacs and Butler, 2005; Judge, Bono and Locke, 2000).

Consistent with prior research, the principal argument in this article is that there is a direct causal relationship between work characteristics and job satisfaction for salaried and self-employed workers alike. Against this backdrop, the present study proposes the following:

H2a: Autonomy is positively related to job satisfaction for salaried professionals.

H2b: Variety is positively related to job satisfaction for salaried professionals.

H2c: Task identity is positively related to job satisfaction for salaried professionals.

H2d: Task significance is positively related to job satisfaction for salaried professionals.

H2e: Feedback is positively related to job satisfaction for salaried professionals.

H2f: Autonomy is positively related to job satisfaction for self-employed professionals.

H2g: Variety is positively related to job satisfaction for self-employed professionals.

H2h: Task identity is positively related to job satisfaction for self-employed professionals.

H2i: Task significance is positively related to job satisfaction for self-employed professionals.

H2j: Feedback is positively related to job satisfaction for self-employed professionals.

Further, this study proposes that the effects of the work characteristics on job satisfaction subsume the effect of employment status in the particular context of highly educated professionals, so that the role of employment status as a predictor of job satisfaction reduces significantly when the five core work characteristics are accounted for (Protzas and Thompson, 2006). Professionals, irrespective of their employment status, have work roles that provide them with autonomy, responsibility and control over their work (Western et al., 2006). Therefore, the role of the employment status may be less pre-eminent in the case of professionals than with other occupational groups. Against this backdrop, the present study advances the following hypothesis:

H3: The positive effect of being self-employed on job satisfaction disappears with the addition of autonomy, variety, task identity, task significance and feedback to the model.

Further, this study proposes that the effects of the individual core work characteristics may differ between self-employed and salaried professionals. The remainder of this section discusses each individual work characteristic in turn, addressing potential differences between salaried employees and self-employed individuals in the particular context of highly educated professionals, and argues why the effects of the various work characteristics differ or do not differ according to employment status.

Autonomy is an important determinant of job satisfaction particularly among the self-employed (Benz and Frey, 2004; Hundley, 2001; Schjoedt, 2009). Autonomy and independence characterize the work of professional employees (Koivunen, 2009; Western et al., 2006), and hence we may assume that autonomy is an important factor contributing to the job satisfaction of professionals whether employees or self-employed. However, given that autonomy particularly defines self-employment notwithstanding the type of work, and the evidence from prior research suggesting autonomy as the primary explanation for the greater job satisfaction of the self-employed, we also propose the effect of autonomy to be more pronounced for self-employed professionals.

H4: The effect of autonomy on job satisfaction is stronger for self-employed professionals.

Variety. Brevity and fragmentation as well as working with both operational and strategic matters characterize the work of self-employed owner-managers (O’Gorman, Bourke and Murray, 2005), and as such variety would describe their work very well (Schjoedt, 2009). When considering organizationally employed and self-employed professionals, one could argue that those who are self-employed benefit from an even greater degree of variety. Apart from the variety included in their professional work (such as medicine or architecture), they also experience variety resulting from managing the business (perhaps being involved in marketing, finance and leadership). On the other hand, the business side of things may be of marginal importance for professionals such as medical doctors and solicitors who concentrate on pursuing their vocation, rather than managing a business. Against this backdrop, this study hypothesizes no important differences in the impact of the variety of work on job satisfaction between self-employed and salaried professionals.

Task identity. The versatile and fragmented nature of entrepreneurial work (O’Gorman et al., 2005) suggests that perhaps the self-employed do not really experience task identity – the ability to complete a task from the beginning to an end – in their jobs, as they need to be multitasking jacks-of-all-trades (Schjoedt, 2009). Similarly, the work of professional salaried employees is becoming increasingly complex (Koivunen, 2009, Western *et al.*, 2006). Based on these arguments present research expects the effect of task identity on job satisfaction to be similar for self-employed and salaried professionals.

Task significance. Even if professionals may expect and benefit from better extrinsic rewards (e.g. in terms of pay and reputation) than individuals in many other occupational groups, most studies suggest that the meaning of work outweighs the extrinsic motives and that most people would continue to work even without the economic necessity (Harpaz, 1986). Professional work is characterized by rendering a service to society or to different groups within society (Hanlon, 1999; Western et al., 2006). Examples include doctors contributing to public health or curing illnesses, engineers building long-lasting constructions or developing new products, or business managers wishing to develop domestic companies into international success stories (Garrido et al., 2005). Hence, task significance is an important intrinsic work characteristic for professionals, their employment status notwithstanding, which contributes to their job satisfaction. Hence, this study does not expect important differences in the impact of task significance on job satisfaction between self-employed and employed professionals.

Feedback. In organizational contexts, a particular and often studied area of feedback is that between managers and subordinates. In the case of self-employed workers, this particular type of relationship is missing and hence also the opportunity for receiving feedback is limited. Further, many self-employed people work alone, without hiring people to work for them, and those who do

hire employees, typically hire only a few (Parker, 2009). Thus, compared to organizational settings, opportunities for peer feedback may be limited as well. On the other hand, the self-employed often have a direct and constant relationship with their customers and could therefore benefit from direct and clear feedback from them (Schjoedt, 2009). Overall we may assume that self-employed people identify with their work and are more strongly driven by their own visions (Malach-Pines et al., 2002) than employed professionals who expect and need to respond to feedback from their peers and superiors, feeling it an important part of working in an organization (Daft, 2009). Hence, it is reasonable to assume that feedback is a more important constituent of job satisfaction for the employed, which is why we propose the following hypothesis:

H5: The effect of feedback on job satisfaction is stronger for salaried professionals.

Methodology

Sample and data collection procedures

The research team collected the data among selected member affiliates of the Confederation of Unions for Professional and Managerial Staff in Finland (Akava), which is a trade union confederation for those with university, professional or other higher education. The sampling frame is representative of the target population in Finland, since approximately 70 per cent of all highly educated professionals are members of one of Akava's affiliates (Akava, 2011). Five professional groups characterize the data: engineers and architects, business and economics professionals, psychologists, law professionals, and medical professions including veterinarians, dentists and physicians. Each affiliated group provided email addresses for their self-employed members. For comparative purposes, since the self-employed are a minority among the union membership, the

researchers requested a similar sized random sample of email addresses of salaried employees. Thus, the sampling frame of 8653 highly educated professionals comprised self-employed and salaried employees in approximately equal measure.

The data were collected by means of a web-based survey in May—June 2010, which generated 2424 responses (response rate 28%). Since the purpose of this analysis is to perform a comparison of self-employed and salaried professionals, those 97 respondents who were outside the labour force (e.g. students, people on parental leave, in military service or retired) at the time the survey was administered are excluded from the analysis. Thus, the final sample comprises 2327 individuals of whom 37.3% are self-employed while the remaining 62.7% are in paid employment. The sample includes 38% men and 62% women with an average age of 49 years who have at least a bachelor's degree (11%), but often a master's degree (75%) or a doctorate (14%). Table 1 presents further descriptive statistics.

Measures

Job satisfaction. The measure of job satisfaction comprises five items selected from the 18-item index developed by Brayfield and Rothe (1951); parts of the index have been used extensively in subsequent studies (e.g. Agho, Mueller and Price, 1993; Brooke, Russell and Price, 1988; Judge, Heller and Klinger, 2008). The respondents rated each item from 1 to 4 such that high scores denote a high level of job satisfaction. The full list of scale items is available in Appendix 1.

Work characteristics. This study adapted the items for measuring autonomy, variety, task identity and feedback from the Job Characteristics Inventory (Sims, Szilagyi and Keller, 1976), which has been used extensively in prior research (for a review and meta-analysis, see Fried and

Ferris, 1987). The items capturing task significance originate from Hackman and Oldman (1980) and Morgeson and Humphrey (2006). The respondents rated the fit of each item with their current work on a four-point scale from 1 (not at all) to 4 (very well). Appendix 1 provides a full list of items for each index.

Control variables. The analysis includes a number of additional variables in order to monitor for effects that might influence the hypothesized relationships. A factor with three indicators accounts for the potential spillover effects of other life spheres on job satisfaction (Georgellis and Lange, 2011). While in general it is shown that job satisfaction exerts a greater influence on life satisfaction than vice versa (Chacko, 1983; Judge and Watanabe, 1993), previous studies also report that satisfaction with other life spheres impacts job attitudes (Rogers and May, 2003). The three indicators measure the respondent's satisfaction with their leisure time, family life and social relationships. The respondent's age (years) and sex (dummy with male as base category) are included because job satisfaction is generally found to be connected to age (Lee and Wilbur, 1985) and sometimes also to gender (Mason, 1997). Finally, a categorical variable indicating the respondent's profession based on their trade union membership controls for the potential effects of the different professional groups (see e.g. Cohrs et al., 2006; Freidson, 1999; Lachman and Aranya, 1986; Western et al., 2006). This variable includes five broad professional groups: engineers and architects, business and economics professionals, psychologists, law professionals and medical professions (physicians, veterinarians and dentists). The largest group, the medical professions, serves as the base category in the inferential analysis.

Descriptive statistics

Table 1 presents the descriptive statistics including a comparison of self-employed and salaried respondents. The test statistics in the final column show that in line with prior research, the self-employed respondents are significantly more satisfied with their work than their salaried counterparts. Further, the test statistics indicate that the self-employed score higher in each work characteristic. Particularly notable are the differences in autonomy, task identity and feedback. The finding that the self-employed respondents are more often on average male and older is not surprising based on previous studies (Fabra Florit and Vila Lladosa, 2007; Parker, 2009).

INSERT TABLE 1 ABOUT HERE

Analysis strategy

This analysis opts for structural equation modelling (SEM) for hypothesis testing instead of ordinary linear regression, for two principal reasons. First, since most research constructs are factors, modelling them as latent variables in SEM allows accounting for measurement error. Second, SEM enables the analysis to include a single unmeasured latent method factor (Podsakoff et al., 2003) for a rigorous control of common method variance, which is a potential problem with these data because the explanatory variables and the response variable were measured with the same research instrument at the same time using the same informant. This procedure controls for systematic variance among the items associated with the latent variables in the model by adding a first-order factor with all of the said items as indicators.

The analysis employs the MPlus Version 6 software package (Muthén and Muthén, 1998-2010) to test the hypotheses in a procedure consisting of multiple stages. The first stage ensures the dimensionality, reliability, and validity of the measurement models for the latent variables

(Anderson and Gerbing, 1988). The second stage tests H1 and H3 by estimating successive linear structural models. The third stage examines H2a-j, H4 and H5 by estimating a structural linear model separately for the self-employed and salaried employee sub-samples, and by using group comparisons to investigate potential differences in the path coefficients between the groups.

Results

Measurement model assessment

The research model includes seven latent variables with reflective measurement models. Once they had collected the data, the research team subjected all scales to a purification process. This involved recommended assessments of dimensionality, reliability and validity (Anderson and Gerbing, 1988) by means of exploratory and confirmatory factor analysis. An exploratory principal components analysis with direct oblimin rotation results in seven factors with eigenvalues greater than 1.0 that explain 66% of the variance in the data. The rotated solution shows that all items load on their intended factors with loadings ranging from 0.53 to 0.86. Thus, the results suggest all items be retained for further analysis.

Next, the researchers estimated the confirmatory factor analysis (CFA) with the maximum-likelihood estimator separately for the self-employed and organisationally employed sub-samples. All indicators load on their intended constructs with the 0.1% significance level (Appendix 1). The conventional fit indices suggest an acceptable fit between the model and the data according to the criteria proposed by Hu and Bentler (1999) for maximum-likelihood estimation: the comparative fit index (CFI), the Tucker-Lewis index (TLI) and the normed fit index (NFI) close to or above 0.95 (self-employed: 0.93, 0.92 and 0.90; employees: 0.95, 0.94 and 0.93, respectively), the root mean

square error (RMSEA) < 0.06 (self-employed: 0.048; employees: 0.043) and the standardized root mean squared residual (SRMR) < 0.08 (self-employed: 0.051; employees: 0.044). Table 2 reports the correlation matrix of the resulting latent variables together with the Cronbach's alpha scores.

INSERT TABLE 2 ABOUT HERE

Structural model assessment and hypothesis tests

The first structural model examines H1 and H3 with multiple successive structural linear equations. Table 3 displays the model estimates. Step 1 regresses job satisfaction on the status of being self-employed. The results confirm that highly educated self-employed professionals are more satisfied with their work than their salaried counterparts, which supports H1. However, the self-employment status only explains 4.4% of the variation in job satisfaction. Adding the five work characteristics to the model in step 2 raises the explanatory power of the model to 46.7% of the variation in the response variable. All five variables capturing the different work characteristics exert a significant and positive effect on job satisfaction, even though the effect of task identity is only significant at the 5% level. Further, the significant effect of employment status disappears with the addition of the work characteristics, as H3 predicts.

Step 3 regresses the dependent variable on the control variables, while Step 4 estimates the full model specification. Compared to the model containing only the control variables, the full model shows a significantly better fit (chi-squared difference test in Table 3) and it also explains notably more variation in job satisfaction (51% versus 17%). In terms of the potential confounding effects of the control variables, Step 4 indicates minor changes in the relationships of interest

compared to Step 2, particularly the disappearance of the statistical significance of the effect of task identity on job satisfaction.

The final step of the model assessment addresses the effect of common method variance, which may inflate the relationships especially between the attitudinal items constituting work characteristics and job satisfaction. In order to deal with the model identification problem common with the single unmeasured latent method factor (Podsakoff et al., 2003), the analysis sets one parameter in each set of items constituting a factor, loading on the method factor, to be equal. The parameter estimates in the relationships between the explanatory variables and job satisfaction change very little with the addition of the method factor, suggesting that common method variance is not a serious issue in these data.

INSERT TABLE 3 ABOUT HERE

The second structural model addresses H2a-j, H4 and H5, which concern the differences in the effects of the work characteristics on job satisfaction between salaried and self-employed professionals. First, we estimate a model that includes only the relationships between the work characteristics and job satisfaction for both sub-samples separately (Model 1 in Table 4). The path coefficients show that all work characteristics except for task identity exert a significant (0.1%) effect on job satisfaction. Hence, the findings support H2a, H2b, H2d, H2e, H2f, H2g, H2i and H2j, while they do not support H2c and H2h.

In order to test for potential differences between the parameter estimates in the two sub-samples, we estimate Model 1 with multiple group analysis so that the intercepts and factor loadings are constrained to be equal for both self-employed and salaried workers; residual variances are free;

and factor means for employees are fixed at zero while they are free in the self-employed group. In the restricted base model, the path coefficients are also constrained to be equal. Estimating a series of unrestricted models, where the path coefficients are allowed to load free one by one, reveals that there is a significant group difference between the coefficient estimates for feedback ($\chi^2_{1df} = 4.67, p = 0.03$) while allowing any of the other parameters to load free does not improve the fit of the model significantly.

Model 2 (Table 4) adjusts the estimates for the control variables. The most notable change is that the coefficient estimate for feedback becomes even smaller for the self-employed sub-sample. Administering the same test procedure for investigating group differences in the parameter estimates delivers the same result as in Model 1: the only statistically significant difference concerns feedback ($\chi^2_{1df} = 13.76, p < 0.001$). Therefore, the analysis finds support for H5 but not for H4.

INSERT TABLE 4 ABOUT HERE

Discussion

This analysis examined the roles of employment status and work characteristics as determinants of job satisfaction for Finnish professionals. Previous studies have consistently shown that the self-employed are more satisfied with their jobs than salary earners, but prior research also argues that the effect of the actual characteristics of the work performed might be more important than the employment status as such. Since university graduates have been primarily absorbed into salaried employment in Finland (Teichler and Kehm, 1995), there is no self-evident cultural bias towards favouring work conditions typical in self-employment. By focusing on the occupationally and

geographically relatively homogeneous group of professionals who tend to enjoy a great degree of autonomy and control over their work, we argued that it is possible to tease out the actual effect of employment status over work characteristics more accurately than in previous studies which apply more heterogeneous samples.

Against this backdrop, the first three hypotheses (H1-H3) concerned the impact on job satisfaction of being self-employed vis-à-vis salaried when the inherent characteristics of the work are included in the analysis. The results of the structural equation model analysis support our theoretical reasoning: the positive and significant effect of being self-employed disappeared with the addition of the five work characteristics to the model. While autonomy, feedback, task significance and variety were positive and significant determinants of job satisfaction in both occupational groups, task identity did not exert a significant effect in either group. A potential explanation for this finding is that the work of professionals has become so complex and fragmented (O’Gorman et al., 2005, Western et al, 2006) that they no longer expect to finish whole and identifiable pieces of work but rather versatility and multitasking are taken as a fact of working life. Thus, whether identifiable tasks are available or not, does not affect job satisfaction as this is no longer an active concern for professionals.

We further hypothesized that the effects of two particular work characteristics – autonomy (H4) and feedback (H5) – would have different strengths for salaried and self-employed professionals. We expected that due to the nature of self-employment, and the role assigned for autonomy as an important motive to transition to self-employment in the first place, the effect of autonomy on job satisfaction would be stronger for the self-employed. The data did not support this hypothesis. With the benefit of hindsight, this is not such a surprising finding in the specific context of professionals, who tend to place a high value to the autonomy of their work (Leicht and Fennell,

2001). Further, we expected that the effect of feedback on job satisfaction would be stronger for salaried professionals who work in organizations where constant feedback from peers and superiors is a common daily practice and an important feature of organizational employment, whereas the daily contact with other people and opportunities for receiving feedback are more limited for self-employed professionals who understandably may not value this feature of their work highly. The data supported this hypothesis.

Overall our study provides strong support for suggesting that the self-employed are more satisfied with their jobs because their work includes those characteristics that all professionals value in greater magnitudes than is the case with salaried employees. The comparative analysis showed that it is rather the magnitude of the presence of these characteristics in the work of self-employed professionals (e.g. they experience higher levels of autonomy than employees) that contributes to their greater job satisfaction, than differences in the strengths of these effects (autonomy has a similarly positive effect on job satisfaction in both groups, i.e. the slopes of the regression lines are not significantly different).

Limitations and future research directions

This study is not without its limitations. While the empirical focus on professionals has notable advantages for the purposes of this analysis, it is also a limiting factor. The results could differ if a wider range of occupational cultures were included in the analysis. In order to further advance our knowledge of the determinants of job satisfaction, we need studies that include different occupations in such a manner that enables the analyst to hold broad occupational features within a category (e.g., professional work versus manual labour) fixed, while making comparisons across

these broad categories. A stratified sampling approach involving several different occupations in a comparative setting would seem promising for such a research effort.

Another notable limitation, albeit common in management research, is the cross-sectional nature of the study, which limits the demonstration of causation. However, we have strong theoretical reasons for believing that work characteristics determine job satisfaction, rather than the other way around (ter Doest and de Jonge, 2006). Nevertheless, longitudinal research designs would be required to verify the present findings.

In addition to accounting for methodological issues, future research should also strive to advance theory. One promising avenue for future research is studying the dynamics of job satisfaction. Recent research suggests that daily or other ‘micro’ changes in job satisfaction may be important, for example, to uncovering the dynamics of how affective work attitudes spill over to the family domain (Ilies et al., 2009) or to overall life satisfaction (Hart, 1999). Moreover, whilst we have excluded the dispositional characteristics from our investigation, further research should verify if core self-evaluations for example (Judge et al., 1997) are important in determining the differences in job satisfaction between employed and self-employed professionals. In addition, personality can influence perceptions of work characteristics: for example, individuals with positive core self-evaluations might focus on the positive aspects of their jobs (Judge et al., 1997).

In spite of the limitations, the results of this study have important implications for human resources management in organizations employing professionals. Even in the context of a Nordic welfare state, such as Finland, professionals enjoy work that has ‘entrepreneurial characteristics’, such as autonomy, task significance and variety. This questions the recent trend of increasing managerialism and managerial control over professionals’ work in organizations (Hanlon, 1999). A

feeling of being monitored and controlled and of losing autonomy may result in reduced job satisfaction for professionals with its deleterious effects on performance.

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APPENDIX 1 Scale items (translated from Finnish)

Scale	Item	CFA loading	
		Self-employed	Employees
Job satisfaction			
Jobs1	I am satisfied with my job for the time being	0.73	0.75
Jobs2	Most days I am enthusiastic about my work	0.80	0.84
Jobs3	I like my job better than the average worker does	0.78	0.80
Jobs4	I find real enjoyment in my work	0.85	0.83
Jobs5	I am often bored with my job (R)	0.74	0.71
Autonomy			
Auto1	I can decide myself how to do my work	0.76	0.81
Auto2	I can act very independently in my work	0.65	0.75
Auto3	I have the freedom to do pretty much what I want at work	0.57	0.62
Auto4	I can determine the pace of my work	0.65	0.62
Variety			
Var1	My job has a lot of variety	0.68	0.74
Var2	My work duties are highly repetitious (R)	0.65	0.63
Var3	The tasks and duties of my typical work day are very similar (R)	0.67	0.63
Var4	My work does not have any variety (R)	0.76	0.76
Feedback			
Fb1	I do not receive regular feedback on how well I am doing in my job (R)	0.70	0.65
Fb2	I often receive information from others regarding my work performance	0.59	0.58
Fb3	I receive a lot of feedback on how well I do my job	0.77	0.72
Fb4	It is always possible for me to find out how well I am doing at work	0.71	0.75
Fb5	I always know whether I am performing my work well or poorly	0.49	0.57
Task identity			
Taskid1	My work is organized so that I can do one task/ project from beginning to end myself	0.56	0.60
Taskid2	My work does not really offer the opportunity to complete work I start (R)	0.62	0.65
Taskid3	I have the opportunity to do a job or project from the beginning to end	0.84	0.84
Task significance			
Tasksig1	The results of my work are likely to significantly affect the lives of other people	0.70	0.76
Tasksig2	The job itself is very significant and important in the broader scheme of things	0.82	0.79
Tasksig3	The job has a large impact on people outside the organization	0.60	0.60
Other life spheres			
Life1	The way you spend your spare time	0.66	0.68
Life2	Your family life	0.52	0.55
Life3	Your social life	0.76	0.74

Notes: (R) indicates a reverse-coded item. The question to which the job satisfaction and work characteristics scale items relate: 'How well do the following statements describe your work?' The question to which the satisfaction with other life spheres items relate: 'How satisfied are you with the following aspects of your life?' The CFA loadings are the standardized parameter estimates from the confirmatory factor analysis.

Table 1 Descriptive statistics

	(1) All		(2) Self-employed		(3) Employees		Difference (2) and (3)
	Mean	SD	Mean	SD	Mean	SD	
<i>Explanatory variables</i>							
Job satisfaction	3.20	0.62	3.36	0.58	3.10	0.62	$t = 9.92^{***}$
Variety	2.91	0.58	2.95	0.58	2.89	0.57	$t = 2.74^{**}$
Autonomy	3.11	0.58	3.41	0.48	2.93	0.56	$t = 21.24^{***}$
Task identity	3.23	0.59	3.49	0.50	3.08	0.58	$t = 17.54^{***}$
Task significance	3.21	0.61	3.26	0.59	3.18	0.62	$t = 3.20^{**}$
Feedback	2.49	0.55	2.66	0.55	2.38	0.53	$t = 11.82^{***}$
<i>Control variables</i>							
Satisfaction with other life spheres	3.14	0.53	3.15	0.54	3.13	0.52	$t = 0.53$
Age	48.77	9.67	51.25	8.64	47.29	9.94	$t = 10.10^{***}$
Female	61.8%		58.1%		64.0%		$\chi^2 = 8.05$ (1 df)**
Profession							$\chi^2 = 40.57$ (4 df)***
Engineer/architect	19.3%		16.4%		21.0%		
Business/economics	16.5%		20.7%		14.1%		
Law	5.2%		5.1%		5.3%		
Psychology	10.5%		13.8%		8.5%		
Medical professions (base)	48.5%		44.1%		51.1%		
Observations (% of total)	2327 (100%)		867 (37.3%)		1460 (62.7%)		

Notes: * $p < 0.01$, ** $p < 0.001$. The significances in the difference column are based on the two-tailed t -statistic (2325 df) for continuous variables and on the chi-square test for categorical variables.

Table 2 Latent variable correlations

	1.	2.	3.	4.	5.	6.	7.
1. Job satisfaction	<i>0.89</i>						
2. Variety	0.49	<i>0.82</i>					
3. Autonomy	0.50	0.35	<i>0.80</i>				
4. Task identity	0.38	0.13	0.62	<i>0.74</i>			
5. Task significance	0.45	0.36	0.32	0.30	<i>0.75</i>		
6. Feedback	0.46	0.24	0.37	0.50	0.32	<i>0.82</i>	
7. Satisfaction with other life spheres	0.37	0.15	0.20	0.22	0.18	0.29	<i>0.68</i>

Notes: $N=2327$. Pearson product-moment correlation coefficients. Cronbach alpha values on the diagonal axis.

Table 3 Structural model estimation: the direct effect of employment status

	Step 1	Step 2	Step 3	Step 4 ¹	Step 4 with method factor
<i>Explanatory variables</i>					
Self-employed	0.221***	0.010		0.029	0.029
Variety		0.253***		0.272***	0.315***
Autonomy		0.208***		0.221***	0.244***
Task identity		0.058*		0.023	0.046
Task significance		0.229***		0.175***	0.178***
Feedback		0.234***		0.185***	0.204***
<i>Control variables</i>					
Satisfaction with other life spheres			0.365***	0.201***	0.203***
Age			0.115***	0.037*	0.039*
Female			0.028	0.052**	0.055**
Profession					
Engineer/architect			-0.106***	-0.094***	-0.100***
Business/economics			-0.067***	-0.083***	-0.088***
Law			-0.023	-0.028	-0.032*
Psychology			0.051**	-0.016	-0.018
R-squared	0.044	0.467	0.171	0.510	0.466
Chi-squared (df)	104.70 (9)	2172.17 (257)	327.23 (61)	3568.54 (482)	2842.12 (457)
Chi-squared difference		2067.47 (248)*** (compared to Step 1)		3241.31 (421)*** (compared to Step 3)	726.42 (25)*** (compared to Step 4)
Akaike information criterion	19619	100437	32595	113325	112648
NFI	0.984	0.914	0.960	0.885	0.900
TLI	0.976	0.911	0.959	0.875	0.898
CFI	0.985	0.924	0.967	0.889	0.914
RMSEA	0.068	0.057	0.043	0.052	0.047
SRMR	0.016	0.070	0.029	0.064	0.057

Notes: $N=2327$. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ (one-tailed test). Standardized coefficient estimates reported.

¹ An examination of the modification indices suggests that the poor NFI, TLI and CFI values in Step 4 are the result of omitted paths between the control variables and the explanatory variables in the model specification. Since these paths are not relevant for hypothesis testing in the current analysis, we decided not to include them in the model specification. The poor values for these indices are thus not due to the factor structure.

Table 4 Structural model estimation: the moderating effect of employment status

	Model 1		Model 2		Model 3	
	Self-employed	Employee	Self-employed	Employee	Self-employed	Employee
<i>Explanatory variables</i>						
Variety	0.277***	0.246***			0.327***	0.263***
Autonomy	0.239***	0.175***			0.207***	0.212***
Task identity	0.051	0.061			0.026	0.024
Task significance	0.224***	0.238***			0.166***	0.173***
Feedback	0.184***	0.262***			0.085**	0.233***
<i>Control variables</i>						
Satisfaction with other life spheres			0.497***	0.310***	0.332***	0.154***
Age			-0.008	0.092***	0.000	0.033
Female			0.077*	0.026	0.059*	0.059**
Profession						
Engineer/architect			-0.055	-0.128***	-0.084*	-0.111***
Business/economics			-0.006	-0.130***	-0.025	-0.121***
Law			-0.042	-0.011	-0.093	-0.025
Psychology			0.157***	-0.042	0.111**	-0.071**
R-squared	0.422	0.460	0.293	0.138	0.506	0.503
Observations	867	1460	867	1460	867	1460
Chi-squared (df)	761.26 (234)	1034.06 (234)	143.12 (61)	258.13 (61)	1507.52 (456)	2044.36 (456)
Chi-squared difference (Model 2 vs. Model 3)					1364.40 (395)***	1786.23 (395)***
Akaike information criterion	36567	63081	11823	20626	41436	71053
NFI	0.908	0.931	0.953	0.949	0.845	0.879
TLI	0.923	0.936	0.965	0.951	0.871	0.891
CFI	0.934	0.945	0.972	0.961	0.886	0.903
RMSEA	0.051	0.048	0.039	0.047	0.052	0.049
SRMR	0.053	0.048	0.031	0.031	0.059	0.051

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ (one-tailed test). Standardized coefficient estimates reported.