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The changing influence of culture on job satisfaction across Europe: 1981-2008

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Abstract

This paper contributes to the growing multi-disciplinary body of literature on subjective wellbeing by investigating the temporal stability and impacts of cultural values on job satisfaction over time. It is generally believed that cultural values evolve fairly slowly, leading to the expectation that the impacts of these values on job satisfaction are likely to be fairly stable over an individual's working life. This paper uses four waves of the European Values Study and investigates whether cultural values have evolved and whether their impacts on job satisfaction have changed across Europe over the period 1981-2008.

We parameterise cultural values through reference to traditional vs. secular and survival vs. self-expression value continuums. Results indicate that the strength of many cultural values have declined, the impacts of traditional values on job satisfaction have remained fairly constant, and the impacts of survival values on job satisfaction have declined substantially over the sample period.

Keywords: Culture, Job satisfaction

JEL Numbers: J28

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1   Introduction

Determining what factors influence workers' job satisfaction has become a growing point of interest for organisations. Such interest is driven by the potential for organisations to reap additional returns from employees due to higher levels of work-related satisfaction, by capitalising on employee behaviours such as commitment and motivation, and mitigating effects of withdrawal behaviours such as absenteeism and intention to quit. Although the current body of research is of undoubted value, the effects on job satisfaction of external phenomena, such as globalisation, have been largely overlooked. This is of concern from an organisational perspective, as the international movement of labour facilitates the integration of a labour force with diverse cultural identities, which may influence employees' response to certain organisational changes.

Several theoretical models of job satisfaction have been developed (Hebb, 1949; Morse, 1953) in attempts to understand how employees respond to certain organisational changes. One of the theoretical models, and commonly accepted as one of the most comprehensive models, was developed by Locke (1969), whereby job values were used as the basis for predicting employees' job satisfaction. Research continues towards identifying determinants of job satisfaction, and evidence suggests important contributory factors include socio-demographic variables (e.g. gender, age, marital status, educational level) and domain-specific variables such as dispositional influences (e.g. personality traits) (Judge and Bono, 2001) and work situational influences (e.g. job challenge, acknowledgement, job security) (Kovach, 1995). This type of research is particularly pertinent within organisational settings, as strategic programmes aimed at fostering higher levels of job satisfaction can be developed.

As managers became increasingly aware of how organisational culture can affect employee behaviour, strategic programmes were generally aimed at developing specific organisational cultures. For example, job satisfaction has been shown to be positively related to organisational cultures characterised as clan and adhocracy typologies[i] (Lund, 2003) as well as organisational cultures promoting fairness and opportunities for growth (Bellou, 2010). In contrast, associating job satisfaction with measures of a society's cultural values has not featured prominently in the literature. This general lack of embracing and empirically assessing the influence of culture as a factor contributing to job satisfaction can arguably be due to both the subjective nature and the scarcity of appropriate data for the job satisfaction and cultural variables. Although these issues are omnipresent, progress has been made in effectively measuring a range of cultural values that are unique to a society (see Inglehart and Baker, 2000; Inglehart, 2006) through the use of cross-country data sets (e.g. European Values Study (EVS)). Such progress has led to empirical investigations demonstrating the link between culture and job satisfaction (van der Westhuizen *et al.*, 2012; Fargher *et al.*, 2008; Lange, 2009; Xu and van de Vliert, 2003). Although these studies give valuable insight into the culture and job satisfaction relationship at a moment in time, there is no empirical literature which examines this relationship over a prolonged period of time.

Grounded on seminal research by Hofstede (1991), it appears that many researchers hold the view that cultural values remain stable over time. Based on such a position, culture can be viewed as a homeostatic quasi-equilibrium (Gaspay *et al.*, 2008) and thus, even though there is no empirical support, one can presume that cultural values have a stable influence on job satisfaction over time. The need for evidence to corroborate or otherwise this perspective is becoming increasingly pertinent as culturally diverse labour forces are becoming more common and as organisations are trying to improve their competitive position through

undertaking outsourcing initiatives. Findings could provide the basis for more robust organisational strategies aimed at fostering higher levels of job satisfaction given diverse cultural environments.

The aim of this paper is to fill this gap in the literature by empirically investigating the stability of cultural values and the impacts of culture on job satisfaction over time. Culture is parameterised by following the approach of Inglehart and Baker (2000), and all four waves of the EVS are incorporated to allow for a comparison of changes between 1981 and 2008.

2 Literature review

Although extensively researched, much debate surrounds the meaning of job satisfaction. At the centre of this debate is the question of whether job satisfaction is determined by the characteristics of the job itself, within the mind of the employee, or through the interaction of the employee and their job (Locke, 1969). Through addressing such questions, Locke (p. 316) defines job satisfaction as "the pleasurable emotional state resulting from the appraisal of one's job as achieving or facilitating the achievement of one's job values". In the context of this definition, Locke (p. 320) defines values as "that which a man actually seeks to gain and/or keep or considers beneficial". Based on these definitions, it can be postulated that job satisfaction is a function of the perceived relationship between what an employee seeks to gain from their job and what the employee perceives their job to be offering (Locke, 1969).

On an empirical level, job satisfaction has become one of the most widely focused areas of interest in organisational research due to the growing awareness of its relationship with employee behaviours such as absenteeism, intention to quit and motivation. Earlier work on

this subject (Hoppock, 1937; Kerr, 1948) laid the foundation for what has become a multi-disciplinary pursuit, including extensive work in human resource management, applied psychology, sociology and labour economics. Research in the social sciences continues towards identifying explanatory variables of job satisfaction. These variables range from socio-demographic variables (e.g. gender, age, marital status and educational level) to more domain-specific variables such as dispositional influences (e.g. personality traits) (Judge and Bono, 2001) and work situational influences (e.g. job challenge, acknowledgement and job security) (Kovach, 1995).

In labour economics, research in job satisfaction has been approached very cautiously due to the subjective nature of the job satisfaction variable. In essence, job satisfaction is believed to measure "what people say rather than what people do" (Freeman, 1978, p. 135). Even though there is a growing body of evidence supporting the notion that differences in job satisfaction can be attributed to differences in employees' dispositions (House *et al*., 1996; Judge and Larsen, 2001) the job satisfaction variable has still been accepted in labour economics, and especially in personnel economics, due to the influence job satisfaction has on economic behaviour. Empirical literature has found job satisfaction to be a major determinant of labour market mobility (Freeman, 1978) and withdrawal behaviours such as absenteeism, lateness and drug abuse (Saari and Judge, 2004). Accordingly, low job satisfaction can be costly to an organisation in terms of low job performance, low productivity and high staff turnover (Hayes *et al*., 2002; Mirvis and Lawler, 1977).

What is culture?

Although a plethora of empirical research exists supporting the link between organisational culture and individual values and behaviour (Bellou, 2010; Riggle *et al*., 2009; Taylor *et al*., 2008) linking this to how cultural values can affect individual behaviour within an organisational setting has largely been neglected. Research on this front was initiated by Hofstede (1980) when he introduced a national cultural framework based on data that was collected from IBM employees across fifty countries in two survey rounds between 1967 and 1973 (Yamamura *et al*., 2003). Within this framework, a set of cultural dimensions were developed to characterise the concept of national culture[ii], which was defined as "the collective programming of the mind that distinguished the members of one group or category of people from other" (Hofstede, 1980, p. 25). Hofstede's (1991) central argument is that culture is like one's mental software, which is considerably stable in nature and is a consistently reliable predictor as to how individuals within society are likely to think and act. In contrast to this view, there are some who perceive culture as being more dynamic. For instance, Myers and Tan (2002) hold that culture is always being reinvented and in a continual state of flux while Jones and Alony (2007) suggest that more research is needed to capture shifting cultural maps that are the result of globalisation. It is also argued that the homogenising effect of globalisation means that people are now operating within at least two national-based frames of cultural reference (Hewling, 2005). Consequently, due to the continuous exposure to new cultures, past cultural identities may have become diluted, and ultimately reinvented.

Inglehart and Baker (2000) and Inglehart (2006) associate shifts in national culture with economic development. Industrialisation is documented as giving rise to distinct cultural shifts from traditional value to secular-rational systems, while the post-industrialisation phase is associated with greater emphasis on self-expression over survival values. Within this cultural change, however, is often observed a significant degree of persistence of traditional values. This persistence and the variation in cultural values among industrialised societies can be attributed to differences in cultural heritage, and particularly to religious heritage.

In response, Hofstede and Hofstede (2005) argue that the core of culture is formed by values, which are tendencies to prefer certain states of affairs when compared to others. Formed early on in life, values are implicit and are typically held unconsciously, passed down through the generations as parents instil the same values into their children as they had instilled into them by their parents (Hofstede, 2010). For this reason, an individual's values are likely to remain stable even if a person relocates to a different culture. On the other hand, Hofstede and Hofstede (2005) acknowledge that visible cultural practices, such as symbols (e.g., words, gestures) and rituals (e.g. practices or activities), are formed later in life and are more likely to be changed under alternative cultural environments.

Quantifying cultural values is problematic. As with job satisfaction, cultural values are subjective concepts that pose challenges when attempting to empirically demonstrate their significance. Recent contributions to the parameterisation and influence of cultural values on job satisfaction include van der Westhuizen *et al*. (2012), Fargher *et al*. (2008), Lange (2009) and Xu and van de Vliert (2004). The effects of cultural values on participatory decision making (PDM) and job satisfaction across Europe were empirically explored by van der Westhuizen *et al*. (2012)[iii] whose empirical results suggest that movements towards traditional values resulted in higher levels of job satisfaction while movements towards

survival values resulted in the opposite effect. Additionally, it was found that both traditional and self-expression values resulted in higher levels of PDM, and that this impact was more significant for women, with respect to the self-expression domain. In a comparative study, Fargher *et al*. (2008)[iv] investigated the effects of cultural values on job satisfaction between Eastern and Western Europe (making use of the 1999 / 2000 EVS wave) and identified that traditional values were more imbedded in Western European culture, and thus played a more influential role in job satisfaction for this region. From a similar standpoint, Lange (2009) illustrated how a legacy constructed on communist industrial relations in Central and Eastern Europe influences job satisfaction, even after economic and social transition had occurred. Taking a different approach, Xu and van de Vliert (2004) found that job level was positively correlated with job satisfaction in countries with individualistic cultural values but had no effect on job satisfaction for countries with collectivistic cultural values.[v]

It is important to note that although existing literature has examined job satisfaction using a cross-cultural approach using a single time period, a key feature of this study is that it investigates the link between culture and job satisfaction over time, thereby providing an opportunity to gauge the influence of culture on job satisfaction beyond a specific period in time. To the knowledge of the authors, this is the first study to empirically inspect the interaction of culture and job satisfaction across time.

3 Data and methodology

Data

Our data represent the four waves of the European Values Study (EVS), which ran in 1981, 1990, 1999/2000 and most recently in 2008.[vi] The sample is restricted to the countries that were surveyed across all four waves to provide a consistent data source.[vii] Our sample is also restricted to those respondents who were employed, of working age (between the ages of 18 and 64) and not self-employed. This yielded an effective sample of 17,600 respondents.

Job satisfaction is a self-reported ordinal variable on a scale of 1-10, with 1 representing 'complete dissatisfaction' and 10 corresponding to 'complete satisfaction' with the respondent's job. Job satisfaction relative to the country average is used as the dependent variable in the upcoming empirical analysis, to control for country-specific influences in our estimations.[viii] Table 1 provides descriptive statistics of all explanatory variables used in the forthcoming empirical analysis. These include a range of socio-demographic characteristics (such as gender, age, marital status and household income), work-related characteristics (occupational status,[ix] job values, etc) and cultural values of the individual.

< Insert Table 1 >

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This study focuses on two dimensions of culture grounded on previous research by Inglehart and Baker (2000) and Inglehart (2006): traditional vs. secular-rational and survival vs. self-expression values. Traditional societies tend to emphasize religion, the family unit, absolute moral standards and deference to authority, while secular-rational values emphasize the opposite. In terms of the latter dimension, societies ranking highly with regard to survival values are found to prioritise economic and physical security above all else, which leads to insistence on traditional gender roles, low levels of interpersonal trust, intolerance of others, and an emphasis on hard work, while self-expression values favour the opposite. A range of variables were selected from the EVS to capture these two distinct cultural spectrums.

Figure 1 portrays the mean values of the cultural variables for the core set of countries that are comparable across all four EVS waves. In contrast to all the other cultural variables that are dummy in nature, *No divorce* and *No homosexuality* are categorical and ordered from 1 to 10 and are therefore placed on the secondary axes in the two plots shown in Figure 1. With respect to the traditional cultural values, all except *Belief in Hell* follow a downward trend in our core countries sample. Most noticeably, confidence in *Church* has experienced a substantial drop between the 3rd and 4th wave of the EVS. This finding is in-line with existing literature which documents evidence that as societies move toward greater levels of economic development there is greater-emphasis on secular-rational values as opposed to traditional ones, with the notable exception of religious beliefs which are found to persist despite religious institutions themselves declining in importance (e.g. Inglehart and Baker, 2000; Inglehart, 2006).

< Insert Figure 1 >

In a similar fashion, all five indicators of survival values have decreased in importance over the sample period. Two variables are particularly prominent: homosexuality became increasingly justifiable and tolerance experienced a remarkable increase (i.e. intolerance fell) between the 1st and 2nd wave. These observations are in-line with existing literature which finds that self-expressive values have increased in importance over the past few decades within industrialised societies (e.g. Inglehart and Baker, 2000; Inglehart, 2006). Hoftsede (2010) also acknowledges that national wealth is associated with increasing levels of individualism, which is itself a close equivalent of the self-expression measure (Inglehart, 2006).

While Figure 1 provides insight into the general trends of cultural values across Europe over time, more complex econometric work is required to extract the impact of these values on job satisfaction, holding constant other potential confounding factors.

Empirical approach

Given the categorical and ordinal nature of the job satisfaction variable, an appropriate empirical estimation approach to apply to identify the determinants of job satisfaction is ordered logistic regression. The general form of the ordered logit model is:

$$Y_i = \beta X_i' + u_i \qquad i = 1, 2, ..., N \tag{1}$$

with the ordered response, *Y*, having 10 categories. The ordered response model is defined as:

$$\Pr(Y = j \mid X, \alpha, \beta) = F_j(\alpha_j - X'\beta) - F_{j-1}(\alpha_{j-1} - X'\beta) \tag{2}$$

where $j = 1,2,...10$, $\alpha_0 = -\infty$, $\alpha_{j-1} \le \alpha_j$, $\alpha_m = \infty$ and F is the cumulative distribution function of the logistic distribution $F_j = 1/(1 + \exp(-(\alpha_j - X'\beta)))$. The underlying job satisfaction equation for estimation is:

$$\begin{aligned} JS = \alpha &+ \beta * Culture + \beta * Job\,values + \beta * Job\,level + \beta * Gender + \beta * Age \\ &+ \beta * Marital\,status + \beta * Employment\,characteristics + \beta * Household\,income + u \end{aligned} \tag{3}$$

To ensure that the occurrence of multicollinearity was minimised in the forthcoming regressions, all cultural variables were orthogonalised using Draper and Smith's (1981) orthogonalisation process. For the traditional variables, this is done with respect to the 'confidence in church' indicator; and for the survival values, this is done with respect to the 'homosexuality is never justifiable' variable. This process ensures that each of the cultural variables are contributing a unique aspect within their own cultural value domain, and are not related to the other cultural variables within their own cultural value domain.

4   Results

The examination cultural value variables above highlights some important trends. However, a more sophisticated empirical approach is required in order to identify whether cultural values influence job satisfaction. The results of our ordered logistic regression are provided in Table 2.

< Insert Table 2 >

Three model variants were employed for each of the four waves of the EVS. The first model includes only socio-demographic characteristics as determinants of job satisfaction; the second augments this model with work-related characteristics; while the third augments it further to include cultural values based on the two dimensions of traditional vs. secular-rational and survival vs. self-expression.

Our early model suggests that males are more satisfied at work relative to their female counterparts (e.g. model I in 1990 and 1999) but this impact changes sign when work-related characteristics are added to the model. The finding that men are less satisfied at work, on average, relative to females, corresponds to findings by Fargher *et al*. (2008) who made use of just the 3rd wave of the EVS.

Apart from 1981, the results support a U-shaped relationship between age and job satisfaction. Clark *et al*. (1996) link this empirical observation to an individual's personal circumstances over their life stages, and non-work related factors that impact on job satisfaction. The effect of marital status on job satisfaction is generally positive if the worker is married, although this impact is not always statistically significant. Once we have taken account of the fullest range of explanatory variables (i.e. model III) then we find that it is only in 1999 that being married had a significant positive impact on job satisfaction.

The impact of household income uncovers some noteworthy trends. Based on results from model I, belonging to a medium or high income household has a positive impact on job satisfaction, relative to belonging to a low income household. However, in 1999 and 2008,

these estimated coefficients turn negative, once work-related characteristics are added to the model (i.e. models II and III). This result may be due to workers from higher income households having higher expectations than those from lower income households, and once work-related factors such as occupational status and other work attitudes are controlled for, the impact on job satisfaction is negative, as these expectations are not being met. This reasoning may also help to explain why the impact of belonging to a higher income household was still positive (albeit statistically insignificant) prior to 1990, even after controlling for work-related characteristics; expectations of what you receive from your job in terms of utility may have been lower three decades ago or they may have become artificially inflated over time, and hence these expectations were easier to meet and exceed in wave 1, relative to waves 2, 3 and 4.

It would have been useful to add education to the group of socio-demographic characteristics in Table 2, as it is often expected to play a key part in determining job satisfaction. However, in order to ensure consistency across our specifications in all four waves it was necessary to exclude educational qualifications as an explanatory variable because such data were not collected as part of the survey in waves 1 and 2. While this is an important limitation to acknowledge, we draw comfort from the fact that other recent studies, such as Fargher *et al*. (2008), did not find a statistically significant impact of medium educational attainment (relative to low levels of education) across the whole European sample in their study of wave 3, and only found a significant impact of high educational attainment on job satisfaction for males from Western Europe. Additionally, we would expect to indirectly capture educational attainment through the use of occupational status indicators (professional, skilled, less skilled and manual), which many past empirical studies, such as Fargher *et al*. (2008), did not employ in their specifications.

With respect to work-related characteristics, the impact of PDM on job satisfaction stands out. Having the freedom to be part of the decision making process appears to be a key determinant of satisfaction at work, and this result is unchanged when cultural characteristics are added to the specification, i.e. model II to III. This finding validates recent empirical research by van der Westhuizen *et al.* (2012) which found this result for wave 4, and our findings also indicate that this impact appears to be time-invariant over the 1981-2008 period. Within the set of work-values, if the individual thinks that good pay is an important job characteristic then they are less likely to be satisfied at work. The same result holds for good hours. It is likely that those who indicate that either good pay and / or good hours are important are those that are not happy with their pay and / or hours, and hence is a possible reason why they are less satisfied at work. Job security appears to have had a decreasing impact on job satisfaction over time; it was significant at the 1 percent level in 1981, as well as in model II in 1990, significant at the 10 percent level in model II in 1999, and insignificant by 2008.

Cultural values

Our attention now turns to our core set of independent variables. For the first set of cultural values, those from the traditional vs. secular-rational perspective, the results from the ordered logistic regression generally support the notion that the influence of cultural values on job satisfaction remains stable over time. In particular, two variables stand out: i) Confidence in Church and ii) Always love and respect one's parents. Both variables have statistically significant positive impacts on job satisfaction in all four waves.[x]

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< Insert Table 3 >

Although the preliminary analysis of mean values in Figure 1 indicated that there has been an overall decline in confidence in the Church, with a substantial drop between the 3rd (1999 / 2000) and 4th (2008) wave of the EVS, the results of the ordered logistic regression portrays that in general, having confidence in church does have a positive influence on a respondents' job satisfaction and this influence has remained relatively stable between 1981 and 2008. The odds ratios indicate that having confidence in church results in an individual being 11.4 percent more likely to move up one category of job satisfaction in 1981, and this figure steadily increases to 18.8 percent by 2008. Such findings provide credence to Inglehart and Baker's (2000) notion that even though church attendance has dwindled to the point where only a small number attend church services regularly, religious traditions have shaped national culture through institutions, like the church, to a point where those values have become ingrained within individuals and ultimately shape their behaviour and values within various life domains. Such results also corroborate recent propositions by Hofstede and Hofstede (2005), who argue that while culture remains stable over time, rituals and practices (e.g. Church attendance) are more supple to change.

A similar finding is identified for 'always loving and respecting ones parents': although the trend emphasised in the previous section showed that there has been an overall decrease, its positive influence on job satisfaction appears to be relatively stable across the four waves of the EVS. Fargher *et al.* (2008) who found a similar result for male respondents using data from wave 3 of the EVS, attributed their finding to conformity values which may spill-over into a respondents' work domain.

Taken together, the results for the traditional vs. secular-rational values are consistent with Hofstede's main thesis that culture is like one's mental software, considerably stable in nature and a consistently reliable predictor as to how individuals within society are likely to think and act. In particular, our findings indicate that traditional values are a consistent predictor over time of individuals' perception of utility in their workplace. Inglehart and Baker (2000) also observed that while industrialisation brings with it a shift from traditional to secular-rational values, there is no on-going effect evident post-industrialisation. That is, this dimension demonstrates relative stability beyond the initial surge in economic development.

For the second set of cultural values, those from a survival vs. self-expression based perspective, the results from the ordered logistic regression generally counter the notion that culture remains stable across time. The first three variables under this domain (no homosexuality, intolerance and no petition) displayed an overall decrease in their influence over job satisfaction across the four waves of the EVS. This is in line with the results of the preliminary descriptive statistics presented in Section 3 which showed a decrease in the mean values of intolerance and no homosexuality. Based on the results in Table 2, the positive influence of never justifying homosexuality on job satisfaction is only statistically significant in the first and third wave of the EVS, and this result represents changing and less-rigid attitudes towards sexual orientation. The belief that tolerance and respect are unimportant to teach at home had a statistically significant and positive impact on job satisfaction in the first wave of the EVS only. Furthermore, never expressing one's civil liberties through signing a petition was positively-related and statistically significant with respect to job satisfaction in the first three waves of the EVS. These results are not surprising in light of empirical literature which shows that cultural values across various countries have generally moved

toward self-expressive type values[xi] (Flanagan and Lee, 2003; Halman and Moors, 2003; Inglehart and Baker, 2000).

The second grouping of survival vs. self-expression variables showed that values relating to trusting people and traditional two-parent families were only statistically significant determinants of job satisfaction in the second wave of the EVS. What is more, lacking interpersonal trust is the only cultural variable which exhibits a relatively strong and negative impact on job satisfaction in 1990. This result aligns with the empirical findings by Fargher *et al*. (2008), who argued that interpersonal trust is a social construct, which ultimately shapes individuals' preferences and attitudes, including attitudes towards work.

In contrast to the group of variables characterising traditional values, the results from Table 2 and subsequent odds ratios presented in Table 3 show that there has been shifts in cultural values across the four waves of the EVS, and especially with respect to values concerning survival vs. self-expression. These shifts go against Hofstede's (1980) premise that culture is stable and a consistent and reliable predictor of how individuals will behave or act. The shifts have occurred on two distinct levels: i) an overall shift towards a greater focus of self-expression (i.e. displaying higher levels of tolerance for outgroups and respect for individuals' freedom of expression) and ii) a continual reinvention of cultural values relating to interpersonal trust and two-parent families across two decades. The results also suggest that shifts toward a culture more focussed on self-expression do not influence workers' job satisfaction, at least not at conventionally accepted levels of statistical significance. This calls into question Inglehart and Baker's (2000) findings that individuals who are orientated towards self-expression values should tend to display higher levels of subjective well-being. However, based on theoretical work by Locke (1969), if individuals do not perceive their job

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values as being achieved within the work environment (e.g. opportunities for self-expression) then low job satisfaction is likely to result. Therefore, organisational programmes may need to be (re)aligned in support of changing cultures to ensure job satisfaction is being promoted and organisational benefits are being captured.

Overall, the results from Tables 2 and 3 are relatively unambiguous and can be summarized succinctly by two main findings: (i) the time-invariant impact of traditional cultural values on job satisfaction and (ii) the declining importance of survival values on job satisfaction. Further research is required to delve deeper into the potential causes of these trends. For instance, are there country-specific factors that play a role in this sample from Europe and/or are demographic shifts in the working age population driving either of these outcomes. While this is beyond the scope of the paper, preliminary analysis of a proxy age cohort born in 1960 does reveal that the importance of confidence in church is increasing in terms of its influence on job satisfaction, while the reverse is true for the value that homosexuality is never justifiable.

Repeating the regression analysis for the age group 21-30 in wave 1, 31-40 in wave 2, 41-50 in wave 3 and 51-60 year olds in wave 4 yields insignificant odds ratios for confidence in church in 1981 and 1990, which increase to 1.118 and 1.250 (significant at the 5 percent level) in 1999 and 2008, respectively. This evidence corroborates Smith (2012) who finds that belief in God[xii] is the highest among older adults. When analysing differences among age groups, Smith finds that the largest hike in belief in God occurred among those aged 58 and older. Smith then argues that the belief in God is likely to increase around this age level in response to the increasing anticipation of one's own mortality.

Using the same empirical approach reveals a contrasting pattern for homosexuality being never justifiable, with the odds ratios falling from 1.164 (significant at the 5 percent level) in 1981 to 0.987 (insignificant) by 2008. This indicates that at the start of an average individual's working life having the value that homosexuality is never justifiable actually increased job satisfaction levels, but by the end of their working life span (i.e. aged 51-60 in wave 4) this impact diminishes to a negligible effect.

5   Conclusions

Determining what factors influence workers' job satisfaction levels has become a growing point of interest for organisations. Although the current body of research is of undoubted value, the potential effects of globalisation and international labour migration on job satisfaction has been largely overlooked. With a focus on Europe, this study investigates whether diversity in cultural values differentially affect job satisfaction over time.

This paper made use of the recently released fourth wave of the EVS and combined it with all previous waves collected since 1981. The ordered logit regression model was applied for the balanced group of countries in each wave. At first the model focussed solely on socio-demographic characteristics as determinants of job satisfaction, where results were generally consistent with extant literature. One limitation of ensuring consistency in method and variables across time was the exclusion of education from the investigation. Nonetheless, we would expect to indirectly capture educational attainment through the use of occupational status indicators.

The empirical analyses were extended to include work-related characteristics, where the impact of participatory decision making on job satisfaction stood out; having the freedom to be part of the decision making process appears to be an important determinant of satisfaction at work, and this result is stable to the inclusion of cultural characteristics. This is consistent with recent empirical research by van der Westhuizen *et al*. (2012).

In terms of the impacts of cultural values on job satisfaction, our analysis yielded two important findings: i) the impacts of traditional values on job satisfaction appear to be time-invariant and ii) the significance of survival values declined substantially over the sample period. With respect to the traditional vs. secular-rational based perspective, confidence in church and always respect and love one's parents both had significant impacts on job satisfaction over time. Initially, this supports Hofstede's (1980) notion that culture is considerably stable in nature and therefore a reliable predictor of how individuals within society are likely to think and act. However, the impacts of survival values on job satisfaction were not time-invariant and some may be reinvented across time. Preliminary analysis of a proxy cohort who were born in 1960 corroborated the results of the full sample.

The results presented in this article are important for organisational management and policy formation, as asymmetries in cultural values may be critical to satisfaction in the workplace. Managers working within a multi-cultural environment should not be culture-blind to human resource practices. The generally accepted belief that culture is considerably stable in nature, and would therefore be a reliable predictor as to how individuals within the workplace are likely to think and act, must be called into question, specifically when cultures adopt values within the survival vs. self-expression based perspective. Perhaps more open communication throughout the organisation can facilitate further understanding of the influence of culture on

job satisfaction and how these evolve. Greater understanding of the evolution of cultural values may assist in the development of effective strategies aimed in increasing job satisfaction.

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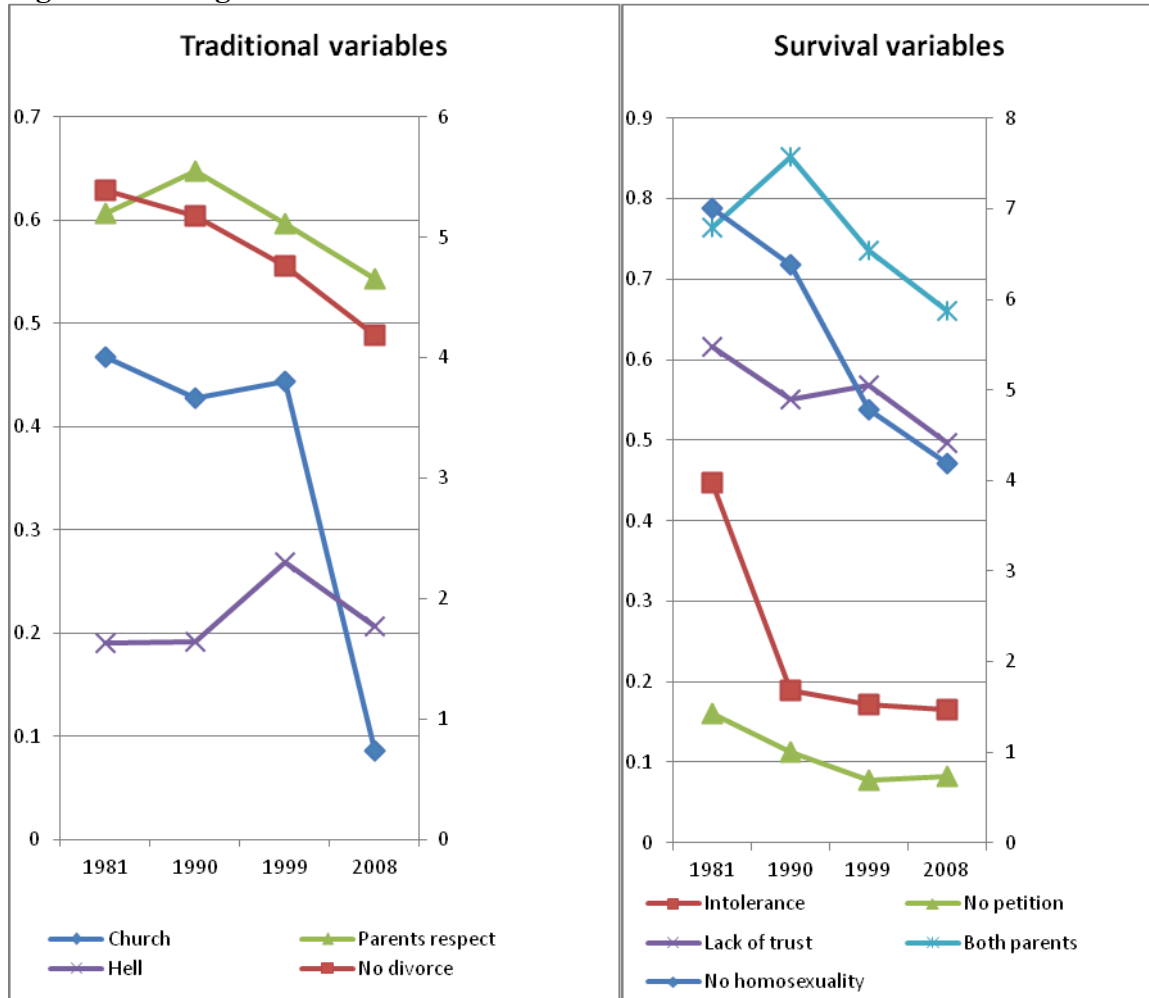**Figure 1: Changes in cultural values over time**

Table 1: Descriptive statistics

	Definition	Mean (Stddev)			
		1981	**1990**	**1999**	**2008**
Socio-demographic characteristics					
Job satisfaction	Ordinal categorical variable on a scale 1 to 10 (1=extremely dissatisfied, 10=extremely satisfied) minus average country job satisfaction.	-0.165 (2.050)	0.013 (1.942)	-0.085 (1.829)	0.017 (1.791)
Male	Dummy variable: 1 for male; 0 otherwise	0.602 (0.490)	0.589 (0.492)	0.551 (0.497)	0.505 (0.500)
Age	Age in years	35.109 (12.349)	37.988 (11.600)	38.982 (10.763)	41.545 (11.235)
Married	Dummy variable: 1 for married or registered partnership; 0 otherwise	0.682 (0.466)	0.707 (0.455)	0.600 (0.490)	0.583 (0.493)
Widowed	Dummy variable:1 for widowed; 0 otherwise	0.017 (0.128)	0.018 (0.133)	0.013 (0.112)	0.015 (0.121)
Med income	Dummy variable: 1 for middle income; 0 otherwise	0.526 (0.499)	0.468 (0.499)	0.553 (0.497)	0.546 (0.498)
High income	Dummy variable: 1 for high income; 0 otherwise	0.407 (0.491)	0.307 (0.461)	0.282 (0.450)	0.395 (0.489)
Part time	Dummy variable: 1 for employed part time; 0 otherwise	0.145 (0.353)	0.122 (0.327)	0.174 (0.379)	0.166 (0.372)
Skilled	Dummy variable: 1 for skilled; 0 otherwise	0.384 (0.487)	0.379 (0.485)	0.404 (0.491)	0.331 (0.471)
Less skilled	Dummy variable: 1 for less skilled; 0 otherwise	0.327 (0.469)	0.331 (0.471)	0.289 (0.453)	0.245 (0.430)
Manual	Dummy variable : 1 for manual; 0 otherwise	0.185 (0.388)	0.124 (0.329)	0.101 (0.302)	0.133 (0.340)
Work-related characteristics					
PDM	Participative decision making. Ordinal categorical variable on a scale 1 to 10. (1=no decision making freedom in job, 10=great deal of decision making freedom in job)	6.270 (2.627)	6.636 (2.481)	6.795 (2.397)	6.900 (2.264)
Good pay	Dummy variable: 1 if individual thinks good pay is an important job characteristic; 0 otherwise	0.686 (0.464)	0.732 (0.443)	0.794 (0.405)	0.717 (0.451)
Pleasant people	Dummy variable: 1 if individual thinks sense of belonging/pleasant co-workers is an important job characteristic; 0 otherwise	0.735 (0.442)	0.738 (0.440)	0.787 (0.409)	0.764 (0.425)
Job security	Dummy variable: 1 if individual thinks job security is an important job characteristic; 0 otherwise	0.579 (0.494)	0.601 (0.490)	0.581 (0.493)	0.514 (0.500)
Good hours	Dummy variable: 1 if individual thinks good working hours is an important job characteristic; 0 otherwise	0.465 (0.499)	0.457 (0.498)	0.526 (0.499)	0.427 (0.495)
Use initiative	Dummy variable: 1 if individual thinks opportunity to use initiative (freedom for self-expression) is an important job characteristic; 0 otherwise	0.472 (0.499)	0.553 (0.497)	0.564 (0.496)	0.504 (0.500)
Achieve something	Dummy variable: 1 if individual thinks potential to achieve something (ego motivation) is an important job characteristic; 0 otherwise	0.523 (0.500)	0.601 (0.490)	0.614 (0.487)	0.537 (0.499)

Interesting work	Dummy variable: 1 if individual thinks interesting work is an important job characteristic; 0 otherwise	0.590 (0.492)	0.661 (0.473)	0.701 (0.458)	0.633 (0.482)
Task knowledge	Dummy variable: 1 if individual thinks task knowledge (job that meets one's abilities) is an important job characteristic; 0 otherwise	0.513 (0.500)	0.571 (0.495)	0.600 (0.490)	0.493 (0.500)
Traditional cultural values					
Confident in church	Dummy variable: 1 if great deal or quite a lot of confidence in church; 0 otherwise	0.467 (0.499)	0.428 (0.495)	0.444 (0.497)	0.086 (0.280)
Divorce is never justifiable	Ordinal categorical variable on a scale 1 to 10 (1= divorce is always justifiable; 10= divorce is never justifiable	5.388 (2.932)	5.174 (2.716)	4.760 (2.841)	4.188 (2.682)
Always love and respect ones parents	Dummy variable: 1 if always love and respect parents; 0 otherwise	0.607 (0.488)	0.647 (0.478)	0.597 (0.491)	0.543 (0.498)
Believes in hell	Dummy variable: 1 if believes in hell; 0 otherwise	0.190 (0.392)	0.191 (0.393)	0.268 (0.443)	0.207 (0.406)
Survival cultural values					
Homosexuality is never justifiable	Ordinal categorical variable on a scale 1 to 10 (1= homosexuality is always justifiable; 10= homosexuality is never justifiable	7.001 (3.255)	6.386 (3.260)	4.786 (3.328)	4.182 (3.143)
Tolerance and respect are unimportant to teach at home	Dummy variable: 1 if individual didn't mention teaching tolerance and respect at home as being important; 0 otherwise	0.448 (0.497)	0.189 (0.392)	0.171 (0.376)	0.166 (0.372)
Would never sign a petition	Dummy variable: 1 if would never sign a petition; 0 otherwise	0.160 (0.367)	0.112 (0.315)	0.077 (0.267)	0.083 (0.275)
Have to be careful when trusting people	Dummy variable: 1 if have to be careful when trusting people; 0 otherwise	0.616 (0.486)	0.551 (0.497)	0.569 (0.495)	0.497 (0.500)
Child needs both parents to be happy	Dummy variable: 1 if child needs both parents to grow up happy; 0 otherwise	0.765 (0.424)	0.852 (0.355)	0.735 (0.442)	0.660 (0.474)
Sample size		3128	5295	4309	4868

Note: Standard deviations in parenthesis.

Reference categories for socio-demographic characteristics are Female, Non-married or widowed, Low income, Full time, Professionals.

Table 2: Job satisfaction model

Variable	1981			1990			1999			2008		
Socio-demographic characteristics	Model I	Model II	Model III	Model I	Model II	Model III	Model I	Model II	Model III	Model I	Model II	Model III
Male	-0.018	-0.128	-0.098	0.040*	-0.071*	-0.077	0.109**	-0.033	-0.063	-0.047	-0.152**	-0.170***
	(0.068)	(0.079)	(0.096)	(0.030)	(0.043)	(0.075)	(0.056)	(0.064)	(0.072)	(0.061)	(0.061)	(0.056)
Age	0.035***	-0.001	0.008	-0.011	-0.034***	-0.017	-0.050**	-0.086***	-0.086***	-0.040***	-0.052***	-0.049***
	(0.013)	(0.012)	(0.014)	(0.012)	(0.013)	(0.012)	(0.024)	(0.026)	(0.027)	(0.014)	(0.010)	(0.012)
Age^2	-0.0002	0.0002	0.0000	0.0003**	0.001***	0.0003**	0.0008***	0.001***	0.001***	0.001***	0.001***	0.001***
	(0.0002)	(0.0001)	(0.0002)	(0.0001)	(0.0002)	(0.002)	(0.0003)	(0.0003)	(0.0003)	(0.0002)	(0.0001)	(0.0002)
Married	0.124	0.114	0.115	0.130*	0.097	0.056	0.160***	0.208***	0.159**	0.157**	0.099*	0.076
	(0.079)	(0.083)	(0.125)	(0.079)	(0.073)	(0.106)	(0.055)	(0.062)	(0.066)	(0.071)	(0.060)	(0.060)
Widowed	0.373*	0.369**	0.247	0.028	0.048	-0.009	0.222	0.114	0.154	0.069	0.163	0.147
	(0.231)	(0.167)	(0.273)	(0.184)	(0.225)	(0.259)	(0.237)	(0.191)	(0.272)	(0.234)	(0.193)	(0.183)
Med income	0.206	0.098	0.126	0.135**	0.090	0.030	0.126	-0.055	-0.058	0.175	-0.098	-0.115
	(0.102)	(0.119)	(0.182)	(0.052)	(0.092)	(0.123)	(0.124)	(0.140)	(0.158)	(0.129)	(0.157)	(0.143)
High income	0.333	0.088	0.122	0.234**	-0.077	-0.153	0.238	-0.125	-0.058	0.375	-0.134	-0.121
	(0.206)	(0.205)	(0.265)	(0.095)	(0.102)	(0.154)	(0.156)	(0.167)	(0.172)	(0.231)	(0.223)	(0.203)
Work-related characteristics												
Part time		-0.031	0.023		-0.040	0.043		-0.138	-0.156*		0.056	0.070
		(0.104)	(0.099)		(0.124)	(0.096)		(0.091)	(0.069)		(0.130)	(0.127)
Skilled		0.835	0.099		-0.005	-0.039		-0.033	-0.019		-0.078	-0.114
		(0.143)	(0.127)		(0.110)	(0.093)		(0.088)	(0.073)		(0.086)	(0.070)
Less skilled		0.178	0.051		0.129	0.097		-0.031	-0.029		0.028	0.027
		(0.149)	(0.124)		(0.115)	(0.112)		(0.069)	(0.085)		(0.081)	(0.093)
Manual		-0.147	-0.293*		-0.050	-0.132		0.015	-0.068		0.004	0.025
		(0.156)	(0.150)		(0.159)	(0.159)		(0.191)	(0.189)		(0.124)	(0.142)
PDM		0.350***	0.340***		0.361***	0.359***		0.345***	0.338***		0.412***	0.412***
		(0.028)	(0.026)		(0.023)	(0.012)		(0.020)	(0.020)		(0.021)	(0.017)
Good pay		-0.285***	-0.245***		-0.105*	-0.109		-0.124**	-0.165***		-0.039	-0.074
		(0.067)	(0.056)		(0.059)	(0.063)		(0.061)	(0.065)		(0.061)	(0.058)
Pleasant people		0.087	0.095		0.075	0.135*		-0.062	0.074		0.155	0.202**
		(0.107)	(0.125)		(0.059)	(0.078)		(0.083)	(0.069)		(0.090)	(0.085)
Job security		0.243***	0.273***		0.181***	0.114		0.215*	0.136		0.137	0.159
		(0.082)	(0.068)		(0.066)	(0.095)		(0.124)	(0.127)		(0.148)	(0.152)
Good hours		-0.006	-0.033		-0.156***	-0.114**		-0.043	-0.035		-0.165**	-0.193**
		(0.060)	(0.061)		(0.050)	(0.057)		(0.060)	(0.050)		(0.082)	(0.076)
Use initiative		0.004	0.090		-0.021	0.027		-0.048	0.010		-0.209***	-0.125**
		(0.076)	(0.056)		(0.046)	(0.057)		(0.070)	(0.081)		(0.078)	(0.060)
Achieve something		0.072	0.045		0.083	0.103		0.112	0.109		0.031	0.038
		(0.067)	(0.081)		(0.086)	(0.090)		(0.098)	(0.094)		(0.084)	(0.086)
Interesting work		0.082	0.099		0.006	-0.023		0.054	0.034		0.042	0.059
		(0.086)	(0.093)		(0.061)	(0.057)		(0.042)	(0.053)		(0.091)	(0.097)
Task knowledge		0.004	-0.022		0.0061	0.053		0.024	-0.095		0.235***	0.170**
		(0.079)	(0.082)		(0.056)	(0.055)		(0.097)	(0.104)		(0.093)	(0.082)

Traditional vs secular-rational

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Confident in church			0.108*** (0.035)			0.131*** (0.045)			0.124*** (0.048)			0.173*** (0.059)
Divorce is never justifiable			0.029 (0.044)			0.120*** (0.023)			0.021 (0.035)			0.051 (0.062)
Always love and respect ones parents			0.067* (0.037)			0.098*** (0.034)			0.153*** (0.040)			0.100** (0.040)
Believes in hell			-0.017 (0.043)			-0.023 (0.047)			0.0003 (0.035)			0.014 (0.059)

Survival vs self-expression

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Homosexuality is never justifiable			0.121*** (0.042)			0.006 (0.037)			0.163*** (0.051)			-0.006 (0.064)
Tolerance and respect are unimportant to teach at home			0.080*** (0.025)			0.020 (0.032)			0.005 (0.021)			-0.016 (0.027)
Would never sign a petition			0.123*** (0.032)			0.052*** (0.019)			0.071** (0.034)			-0.005 (0.044)
Have to be careful when trusting people			-0.024 (0.032)			-0.082** (0.032)			-0.063 (0.043)			-0.005 (0.049)
Child needs both parents to be happy			0.043 (0.028)			-0.055* (0.032)			0.049 (0.037)			0.030 (0.036)
When job satisfaction = 1	-3.842** (0.317)	-2.858** (0.279)	-2.784** (0.344)	-5.581** (0.518)	-4.309** (0.658)	-4.099** (0.724)	-5.435** (0.295)	-4.458** (0.414)	-4.601** (0.370)	-5.722** (0.483)	-3.993** (0.611)	-4.159** (0.647)
= 2	-2.473** (0.331)	-1.497** (0.243)	-1.369** (0.302)	-3.854** (0.215)	-2.547** (0.258)	-2.356** (0.292)	-4.557** (0.443)	-3.577** (0.446)	-3.787** (0.403)	-4.676** (0.366)	-2.966** (0.430)	-3.047** (0.417)
= 3	-1.874** (0.286)	-0.894** (0.227)	-0.751** (0.274)	-3.192** (0.221)	-1.829** (0.290)	-1.569** (0.357)	-3.939** (0.425)	-2.949** (0.434)	-3.125** (0.406)	-3.877** (0.361)	-2.122** (0.427)	-2.206** (0.419)
= 4	-1.319** (0.285)	-0.279 (0.255)	-0.107 (0.320)	-2.450** (0.171)	-1.039** (0.260)	-0.815** (0.326)	-3.380** (0.448)	-2.342** (0.472)	-2.528** (0.432)	-3.207** (0.343)	-1.415** (0.403)	-1.467** (0.389)
= 5	-0.628** (0.267)	0.501** (0.235)	0.656** (0.313)	-1.772** (0.164)	-0.288 (0.274)	-0.078 (0.358)	-2.681** (0.445)	-1.580** (0.461)	-1.789** (0.420)	-2.581** (0.336)	-0.721 (0.409)	-0.789** (0.400)
= 6	0.021 (0.265)	1.275** (0.270)	1.448** (0.344)	-1.085** (0.164)	0.506 (0.265)	0.683** (0.342)	-1.943** (0.454)	-0.752 (0.473)	-0.944** (0.441)	-1.928** (0.315)	0.029 (0.392)	-0.041 (0.384)
= 7	0.689** (0.259)	2.056** (0.261)	2.247** (0.336)	-0.413** (0.178)	1.295** (0.277)	1.490** (0.361)	-1.092 (0.427)	-0.217 (0.439)	0.059 (0.390)	-1.106** (0.322)	0.986** (0.434)	0.897** (0.437)
= 8	1.614** (0.262)	3.094** (0.249)	3.319** (0.319)	0.532** (0.191)	2.394** (0.301)	2.596** (0.401)	-0.016 (0.432)	1.423** (0.441)	1.323** (0.392)	-0.013 (0.345)	2.279** (0.481)	2.204** (0.487)
= 9	2.585** (0.275)	4.187** (0.300)	4.404** (0.361)	1.630** (0.165)	3.627** (0.306)	3.830** (0.378)	1.029** (0.471)	2.568** (0.477)	2.475** (0.418)	1.241** (0.336)	3.650** (0.501)	3.598** (0.515)
=10	4.327** (0.442)	5.926** (0.362)	6.066** (0.405)	3.065** (0.334)	5.113** (0.449)	5.358** (0.557)	2.833** (0.534)	4.482** (0.491)	4.281** (0.513)	2.986** (0.573)	5.440** (0.716)	5.396** (0.753)
Pseudo R-square	0.006	0.061	0.064	0.003	0.056	0.060	0.004	0.049	0.054	0.003	0.059	0.061
Sample size	5363	4597	3128	7845	7445	5295	6348	6043	4309	6281	5983	4868

Note: Standard errors adjusted for clusters of country affiliations. Control variables: Female, Non-married or widowed, Low household income, Full-time, Professionals.

***, **, and * denotes significance at 1 percent, 5 percent and 10 percent levels, respectively.

Table 3: Odds ratios of cultural values

Variable	1981	1990	1999	2008
Traditional vs secular-rational				
Confident in church	1.114***	1.140***	1.132***	1.188***
Divorce is never justifiable	1.029	1.128***	1.021	1.052
Always love and respect ones parents	1.069*	1.103***	1.165***	1.106**
Believes in hell	0.983	0.977	1.000	1.014
Survival vs self-expression				
Homosexuality is never justifiable	1.128***	1.006	1.177***	0.994
Tolerance and respect are unimportant to teach at home	1.083***	1.020	1.005	0.984
Would never sign a petition	1.130***	1.053***	1.074**	0.995
Have to be careful when trusting people	0.976	0.921**	0.939	0.995
Child needs both parents to be happy	1.044	0.946*	1.050	1.030
Pseudo R-square	0.064	0.060	0.054	0.061
Sample size	3128	5295	4309	4868

Note: All socio-demographic and work-related characteristics also included, but not reported here.
***, **, and * denotes significance at 1 percent, 5 percent and 10 percent levels, respectively.

Endnotes:

i   Clan typologies are comprised of attributes such as cohesiveness, participation, teamwork and a sense of family whereas adhocracy typologies are comprised of attributes such as entrepreneurship, creativity and adaptability (Lund, 2003).

ii   The framework presented by Hofstede (1991) includes the following dimensions: i) power distance, ii) uncertainty avoidance, iii) individualism vs. collectivism, iv) masculinity vs. femininity, and v) long-term orientations vs. short-term orientation.

iii   Cultural values were parameterised using principal component analysis (Traditional: Views on the importance of work and religion, political engagement and child-parent ties; Survival: Views on tolerance and respect, interpersonal trust and family values).

iv   Cultural domains represented by several variables (Traditional: importance of work, religion and family/friends, political engagement and child-parent ties; Survival: tolerance and respect interpersonal trust, job security and family values).

v   Individualistic cultural values promote the welfare, interests and goals of the individual and his/her core family (Sagie and Aycan, 2003) while collectivist cultural values are ones that advocate membership within communities or large groups and considers the welfare, interests and goals of the group to be more important than that of the individual group member (Sagie and Aycan, 2003).

vi   The vast majority of extant research makes use of the 3rd or 4th wave of the European Values Study only.

vii   This includes Belgium, Denmark, France, Germany, Great Britain, Iceland, Ireland, Italy, Malta, Netherlands, Northern Ireland, Spain and Sweden.

viii   We also adjust standard errors in the empirical analysis for clusters of 13 country affiliations.

ix   The four categories of occupational status used in this paper (Professionals, Skilled, Less skilled and Manual) correspond to the ISCO-08 classifications of major groups (1 and 2, 3 and 4, 5 to 7, 8 and 9, respectively). See ILO (2010).

x   Odds ratios are presented to aid interpretation of the effects of all variables on job satisfaction. Confidence in church and always love and respect one's parents can be interpreted accordingly. However, interpretation of odds-ratio magnitudes for the other cultural values should be strongly discouraged due to their construction using the orthogonalisation process.

xi   Various analyses of the World Values Survey have found that self-expression values are on the rise throughout all countries for which longitudinal data are available (Welzel, 2010).

xii   Data was sourced from the International Social Survey Program (30 countries across the time period 1991 to 2008). See Smith (2012) for further details.