

CULTURE, PARTICIPATIVE DECISION MAKING, AND JOB SATISFACTION

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Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material to which a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

De Wet Van Der Westhuizen

Signed:

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Abstract

This study sets out to empirically examine whether asymmetries in culture differentially affect the job satisfaction and the freedom for individuals to participate in job-related decisions. With globalisation facilitating the cross-country flow of labour, understanding whether cultural diversity can pose a risk to the successful implementation of organisational strategies has become an essential consideration for management strategy.

Using a deductive approach, this study's research design incorporated the use of cross-sectional survey data, which was analysed using a number of techniques, including: (i) principal component analysis, (ii) correlation analysis, and (iii) ordered logistic regression. Data was retrieved from the third wave of the European Values Study (EVS). This study comprised 30 countries; the sample was restricted to only include respondents who were employed, which yielded a final sample of 11,572.

Findings of this study indicated that employees who reported greater levels of freedom for participative decision making (PDM) were generally more satisfied with their jobs. The findings also indicated that employees orientated towards the traditional and survival, traditional and self-expression, or the secular-rational and survival value domain were generally more satisfied with their jobs when compared to employees orientated towards the secular-rational and self-expression value domain. Socio-demographic factors (e.g., gender, age, educational level, marital status, employment status, household income level) also influenced employees' job satisfaction. With regard to how culture influenced the freedom for PDM, the findings indicated that employees orientated towards the traditional and survival, traditional and self-expression, or the secular-rational and survival value domain generally had more freedom for PDM than employees orientated towards the secular-rational and self-expression value domain. Certain job characteristics (e.g., initiative, achievement, job level) and socio-demographic factors (e.g., gender, age, employment status, household income level) also influenced the freedom for PDM.

Asymmetries in culture are likely to differentially affect the job satisfaction and the freedom individuals have for PDM; managers working within a multi-cultural context should therefore be cautious when dealing with human resource practices such as implementing PDM programmes. Future research can either investigate whether asymmetries in culture affect employees' willingness to participate in job-related

decisions, use the fourth wave of the EVS to draw similar cultural comparisons across the European region and investigate whether any notable cultural changes have taken place over the nine-year period between 1999 and 2008, or use simultaneous equation modelling, in addition to longitudinal data, to determine whether causality between the concepts of interest can be established. Although causal inferences cannot be drawn from the results of this study, the findings do provide a useful first step in empirically illustrating the effects asymmetries in culture have on job satisfaction and the freedom for individuals to participate in decision making within the workplace.

Chapter 1: Introduction

With the economic climate remaining relatively uncertain, the retention of quality labour has become a central point of interest for organisations; research in job satisfaction has thus surged. Findings from such research have also highlighted the benefits that satisfied employees can provide organisations, and as a result has become an essential consideration for management strategy. Although such research has been of value within an organisational setting thus far, the effects of external phenomena such as globalisation have been overlooked. Even though globalisation is known to have facilitated the international movement of goods, services, information and financial capital, the cross-country flow of labour has also significantly increased as a result. Consequently, this has resulted in many countries facing a labour force with diverse cultural identities. This can be of potential concern to organisations, as cultural beliefs and values may determine how employees respond to certain organisational changes. Understanding whether asymmetries in culture will differentially affect the behaviour of employees has thus become a strategic necessity for organisations.

In order to facilitate the understanding of how employees respond to certain organisational changes, several theoretical models of job satisfaction have been developed (Hebb, 1949; Morse, 1953). Arguably, the most comprehensive model of job satisfaction was developed by Locke (1969), whereby the concept of job values was used as a foundation in predicting employees' job satisfaction. With job satisfaction being such a subjective concept, empirical research in the social sciences has continually worked towards identifying explanatory variables of job satisfaction. These variables range from socio-demographic variables (e.g., gender, age, marital status, educational qualifications) to more domain-specific variables such as dispositional influences (e.g., personality traits) (Judge & Bono, 2001) and work situational influences (e.g., job challenge, acknowledgment, job security) (Kovach, 1995). Such empirical research has provided insight from which organisations have strategically developed programmes to foster employees' job satisfaction.

One such strategy entails implementing programmes which allow employees to participate in job-related decisions. This has become a popular organisational strategy, as research has shown that employee participation is increasing (Harley, Ramsey, & Scholarios, 2000). Theoretical literature has argued that allowing for PDM will satisfy employees' higher-order needs (Maslow, 1943) such as self-expression (Miller &

Monge, 1986), independence (French, Israel, & As, 1960) and feelings of fate control (Ashforth, 1989; Greenberger, Strasser, Cummings, & Dunham, 1989), which ultimately promotes their job satisfaction (Vroom, 1964). Such claims have also been empirically supported (Alutto & Acito, 1974; Black & Gregersen, 1997; Morse & Reimer, 1956), where findings indicated that higher levels of PDM will generally result in higher levels of job satisfaction.

Cultural explanations of economic occurrences have largely been neglected in current economic literature. Although some modernisation theorists (Bowles, 1998; Inglehart & Baker, 2000) and economic growth theorists (Jones, 2003; Lucas, 1988; Romer, 1986; Schlicht, 1993) have acknowledged the value of culture as an economic variable, empirical literature linking culture to certain economic phenomena (e.g., job satisfaction, PDM) is limited. This is surprising when considering the cultural diversity of labour markets and the implications this may impose on organisations in terms of management strategy. Arguably, one of the potential reasons why cultural explanations of economic phenomena may have been avoided is due to the subjective nature of culture, and thus the difficulty in adequately quantifying the concept. Obtaining data to sufficiently measure culture may also have constricted past empirical research in this area. Although these factors are still present, progress has been made by some researchers in measuring culture (Inglehart, 2006; Inglehart & Baker, 2000), and the availability of cross-country data sets which capture various life domains are now more readily available.

The progress being made in measuring culture and the availability of adequate data has led to some empirical investigations demonstrating the link between culture and job satisfaction (Fargher, Kesting, Lange, & Pacheco, 2008; Lange, 2009; Xu & Van de Vliert, 2003). Unfortunately, there has been little research conducted on the link between culture and PDM, with the exception of Sagie and Aycan (2003),¹ which is surprising when considering the existence of large variations in PDM practices across the world (Hofstede, 2001). Consequently, there seems to be a gap in the current body of knowledge in terms of how asymmetries in culture affect the freedom of individuals to participate in decision making within the workplace.

¹ Provides a theoretical framework on how culture influences the type and level of PDM practices exercised across the world.

This study aims to fill this gap and contribute to the current body of knowledge by empirically investigating whether asymmetries in culture differentially affect the job satisfaction and the freedom of individuals to participate in decision making within the workplace. Such research findings will be of value to organisations, particularly those operating within a culturally diverse labour market or multinational organisations, as they will promote an understanding of the implications that cultural diversity can impose when designing or implementing organisational programmes (e.g., PDM). This study also aims to identify factors that must be taken into account when conducting future research on this topic.

This study will only examine the effects of cultural influences on job satisfaction and PDM within the European region. Countries will only be included in this study if data for all required variables are available; this study will be confined to individuals who are employed only. Furthermore, this study is not concerned with establishing causality, but rather with determining whether relationships exist between job satisfaction, PDM, and culture.

This study proceeds as follows. In Chapter 2, literature linking job satisfaction, PDM, and culture is critically reviewed. Such review entails examining existing theoretical models, as well as clarifying what past empirical research has found the nature of the relationship between these concepts to be. Limitations of the literature are also addressed. Chapter 3 outlines the methodology employed to conduct the empirical analyses within this study; discussions pertaining to the data sample and the measures selected to capture job satisfaction, PDM, and culture are included. Chapter 3 also outlines the data analysis techniques utilised to test the research hypotheses, provides models of job satisfaction and PDM, and summarises the limitations of this study. In Chapter 4, the results from the empirical analyses are provided and further developed to consider their implications to current theory and empirical literature. The implications for organisational management and recommendations to future research are made in Chapter 5, which also concludes this study.

Chapter 2: Literature Review

The objective of this study was to investigate whether there is a relationship between: (i) job satisfaction, (ii) PDM, and (iii) culture. This chapter contributed towards fulfilling this objective by critically reviewing literature which links the three concepts mentioned above. Such review incorporated literature of both a theoretical nature and empirical nature. The aim of this review was to establish the boundaries of current knowledge and in doing so identify factors which must be taken into account when empirically investigating the relationship between job satisfaction, PDM, and culture.

This chapter is organised as follows: Section 2.1 reviews theoretical literature devoted to the study of job satisfaction, PDM, and culture. Empirical studies are critically examined in Section 2.2, with the aim being to clarify what past research has found the nature of the relationship between job satisfaction, PDM, and culture to be, as well as to examine methodological limitations present within the selected studies. Section 2.3 clarifies the nature of this study by providing a specific statement of problem, as well as research questions and hypotheses which are empirically tested in subsequent chapters.

2.1 Theoretical Literature

The purpose of this section was to critically review theoretical studies of job satisfaction, PDM and culture. It must be noted that this section is not focused on providing an answer to which theoretical model works best, but rather on critically outlining different approaches to study the interaction of job satisfaction, PDM and culture. The value of this approach lies in clarifying the strengths and weaknesses of each theoretical model, which will aid in conducting empirical research and consequently provide findings of greater organisational value.

With job satisfaction being at the heart of this study, this section commences by defining job satisfaction. Theoretical models and the organisational value of job satisfaction research are then reviewed. The importance of PDM is then examined through several theoretical models, followed by exploring literature which argues the value of employing culture as an economic variable.

2.1.1 Defining job satisfaction

Although extensively researched, much debate has surrounded 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 his/her 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 his/her job and what the employee perceives his/her job to be offering (Locke, 1969).

Although the concept of values forms the foundation of how job satisfaction is interpreted, not all theorists have consistently used this concept. Historically, two concepts were often used in place of values: (i) the concept of expectations, and (ii) the concept of needs. It is therefore important to explore the potential implications on job satisfaction by using the different concepts. Such exploration will also provide an understanding to why more comprehensive models were developed to identify the causes of job satisfaction. To achieve this, earlier theoretical models of job satisfaction were explored, including the expectations-percept discrepancy model (Hebb, 1949; McClelland, Atkinson, Clark, & Lowell, 1953) and the needs-outcome discrepancy model (Morse, 1953; Porter, 1962). These models were selected as they laid the foundation to the later development of the values-percept discrepancy model of job satisfaction (Locke, 1969).

2.1.2 Expectations-percept discrepancy model

The concept of expectations was used in earlier theoretical models (Hebb, 1949; McClelland et al., 1953) and was applicable in situations where the causes of an employee’s job satisfaction needed to be determined. Within the context of the work environment, the term ‘expectation’ can be logically interpreted as what an employee believes is likely to happen in the future (Locke, 1969). When applied to job satisfaction, the expectations-percept discrepancy model holds that an employee’s job satisfaction will be determined by the discrepancy between what the employee expects to occur within their work environment, relative to what the employee perceives as being available within the work environment. The greater the level of discrepancy, the larger the negative impact will be on job satisfaction. The level of discrepancy occurs in four stages, as outlined in Table 1.

Table 1: Stages of Discrepancy between Expectations and Perception

Stage	Level of Discrepancy	Effect of Discrepancy – Applied to Job Satisfaction
1	Discrepancy is at its largest	Job satisfaction will decrease
2	Moderate discrepancy exists, though there is relatively less than at Stage 1	Job satisfaction will decrease, but the rate of decrease will be relatively lower than that at Stage 1
3	Discrepancy is small, and relatively less than at Stage 2	Job satisfaction will still decrease, but the rate of decrease will be relatively lower than that at Stage 2
4	No discrepancy exists	Job satisfaction will increase

Note. Adapted from Hebb (1949).

The use of expectations to predict the causes of job satisfaction limits the effectiveness of this model. Keeping in mind that job satisfaction is a function of the perceived relationship between what an employee values from his/her job and what the employee perceived his/her job to be offering (Locke, 1969), what an employee expects to happen within the work environment may not correspond to what is valued by the employee. Alternatively, what is valued by the employee may not be expected to occur within the work environment. For example, assume an employee receives an unexpected increase in wages, and that all other factors remain constant (i.e., this employee's only job value is higher wages). Based on these assumptions, applying the expectations-percept discrepancy model would result in job satisfaction decreasing, as an increase in wages was not expected; the magnitude of the decrease would be dependent on the stage of discrepancy between expectations and perception (see Table 1). One would assume that any rational employee will be more satisfied in their job (albeit at different levels) following an increase in wages; however, this is not the outcome when applying the expectations-percept discrepancy model. If one was to consider Locke's definition of job satisfaction within this example, assuming that the employee values higher wages, the employee's job satisfaction would increase regardless of whether the wage increase was expected or not. This example illustrates the weakness in solely using the concept of expectations within a model to predict the causes of job satisfaction.

2.1.3 Needs-outcome discrepancy model

Other theorists (Morse, 1953; Porter, 1962) took a needs-based approach in predicting the causes of job satisfaction. A 'need' can be defined in a number of ways depending on the context of the situation. For the purpose of job satisfaction research, a need can be defined on either a biological or psychological level. Biologically, a need refers to an object or condition necessary to sustain the physical well-being of an individual (e.g., oxygen, food, water, shelter); whereas on a psychological level, a need refers to a

condition necessary for mental well-being (e.g., security, belongingness) (Locke, 1969). The needs-outcome discrepancy model holds that an employee's job satisfaction will be determined by the level of the divergence between the explicit needs of the employee and the level to which such needs are actually satisfied within the work environment (i.e., the outcome). Thus, job satisfaction will decrease as the divergence grows, and increase as the divergence contracts.

Within the literature, it has been argued that needs are relatively stable, and thus are unlikely to change rapidly (Wanous, 1974). Based on such argument, it can be proposed that needs are likely to remain stable across all occupations and job levels. Although in agreement that needs remain stable, this idea has been extended by some theorists (Alderfer, 1972; Argyris, 1957) who argue that need intensities change. To a large extent, this idea formed the basis for the Hierarchy of Human Needs Theory (HHN) (Maslow, 1954). Within HHN theory, lower-order needs must be satisfied before progression can be made to the satisfaction of higher-order needs. As progression through the hierarchy of needs is made, the intensity of higher-order needs grow, while the intensity of lower-order needs diminish (Maslow, 1954). Nonetheless, all needs must be continually satisfied, indicating that needs do remain stable. Taking this into account, it can be postulated that at a higher job level (e.g., top level management) a lower divergence between needs and outcome will be present, as the job characteristics at this level (e.g., responsibility, challenging work, decision making, autonomy) satisfies higher-order needs. This idea has been empirically supported by Porter (1962), who found that job level was related to the amount of perceived deficiencies in needs fulfilment; lower-level jobs indicated larger deficiencies when compared to higher-level jobs.

The use of needs to predict the causes of job satisfaction limits the usefulness of this model. In both preceding definitions, the concept of needs shared a common idea, being that there are certain explicit requirements necessary for the total well-being of an individual. Therefore, an individual must be consciously aware of a certain need in order for the needs-outcome discrepancy model to be applicable, and it is this requirement that limits the effectiveness of this model. For example, complex psychological needs exist (e.g., self-esteem) of which an individual may never become consciously aware of. Accordingly, receiving positive acknowledgement which can satisfy the need for self-esteem (Maslow, 1943), may have no effect on an employee's job satisfaction if the employee is not explicitly aware of his/her need for self-esteem.

One would consider that a positive influence on an employee's job satisfaction would result if his/her contributions were acknowledged and supported. However, this is not the case when applying the needs-outcome discrepancy model unless such employee is consciously aware of his/her need for self-esteem. When considering Locke's (1969) definition of job satisfaction within this example, job acknowledgment will arguably improve an employee's job satisfaction (assuming job acknowledgement is valued), regardless of whether the employee is consciously aware of his/her psychological need for self-esteem. The reason why the concept of values is better suited in this example is that at some level an individual is aware of all he/she seeks to gain or considers beneficial (i.e., what he/she values); whereas in contrast, the same individual may not be consciously aware of all the needs he/she requires to ensure satisfaction within the workplace (e.g., the need to assist others in problem solving²).

2.1.4 Value-percept discrepancy model

Critically analysing earlier theoretical models of job satisfaction (i.e., the expectations-percept discrepancy model and the needs-outcome discrepancy model) led to the realisation that using the concept of values as a foundation to predict the causes of job satisfaction would fill the gaps left by previous models. Consequently, the value-percept discrepancy model of job satisfaction (Locke, 1969) was developed. This model argues that job satisfaction is based on the level to which an employee perceives his/her job values as being achieved within the work environment. Similar approaches have previously been taken in earlier theoretical models of employee attitudes (Likert, 1961; Rosen & Rosen, 1955), which implicitly highlighted the importance of an employee's perception of the work environment, relative to his/her value standards. The point of difference in the value-percept discrepancy model is that the concept of values is explicitly used as a foundation to predict the causes of job satisfaction. The robustness of this model has also been supported in empirical research which found that values have independent and significant effects on job satisfaction (Kalleberg, 1977).

The value-percept discrepancy model of job satisfaction was further expanded by taking into account the content and intensity of values (Rand, as cited in Locke, 1969). What such expansion accomplished was not only to consider what an employee wants to gain or keep (i.e., what he/she values), but also the importance of that value to the employee (Locke, 1969). For example, 'Employee A' and 'Employee B' may both enjoy being

² Being centred on external problem solving is motivated by feelings of personal responsibility and ethics; classified under the self-actualisation needs domain (Maslow, 1943).

involved in job-related decisions within the work environment. However, ‘Employee A’ may place greater importance on such responsibility when compared to ‘Employee B’; thus, different levels of job satisfaction will result if both employees have the same level of decision making responsibility, holding all other factors constant.

Distinguishing between the content and intensity of values is not an entirely new concept. Previous research (Katzell, 1964) captured this idea and argued that job satisfaction will depend on the intensity of the job value (i.e., how important the job value is to the individual). This idea has been incorporated into the following formula:

$$S = 1 - (|X - V|) / V \quad (1)$$

where, S is satisfaction; X is the amount of the stimulus; V is the amount most desired (Katzell, 1964). The weakness in the above formula lies in its reflection of actual discrepancies between the content and the amount desired. Job satisfaction is not determined by the actual amount of discrepancy, but rather the perceived amount when considering the definition of job satisfaction by Locke (1969). Furthermore, the formula indicates that the larger the discrepancy is between the amount of the stimulus and the amount most desired, the higher job satisfaction will be. Such outcome directly contradicts the value-percept discrepancy model of job satisfaction, which holds that the larger the perceived discrepancy is between the job value and its achievement, the lower the level of job satisfaction will be (Locke, 1969).

2.1.5 Job satisfaction as a multi-disciplinary concept

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. Early work on this subject (Hoppock, 1937; Kerr, 1948; Super, 1939) laid the foundations 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, educational level) to more domain-specific variables such as dispositional influences (e.g., personality traits) (Judge & Bono, 2001) and work situational influences (e.g., job challenge, acknowledgment, 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), which highlights the fact that every person’s nature and character is unique. Even though there is a growing body of evidence supporting the notion that differences in job satisfaction between employees can be attributed to differences in their disposition (House, Shane, & Herold, 1996; Judge & 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. Consequently, an array of job satisfaction research has been conducted in the labour economics discipline as both a dependent and independent variable.

As a dependent variable, it has been empirically demonstrated that job satisfaction is influenced by a variety of factors, such as PDM (Alutto & Acito, 1974; Black & Gregersen, 1997; Rodgers & Hunter, 1993), on-the-job training (Georgellis & Lange, 2007), and establishment size (Gazioglu & Tansel, 2006). Empirical findings have also indicated that as an independent variable job satisfaction is a major determinant of labour market mobility (Freeman, 1978), in addition to withdrawal behaviours such as absenteeism, lateness, and drug abuse (Saari & Judge, 2004). It can thus be concluded that low job satisfaction can be costly to an organisation in terms of low job performance, low productivity, and high staff turnover (Hayes, Harter, & Schmidt, 2002; Mirvis & Lawler, 1977). The practical value of job satisfaction research lies in allowing an organisation insight into factors which influence employee behaviour, while simultaneously providing a platform upon which to tailor the work environment in order to foster higher levels of job satisfaction amongst employees.

2.1.6 Defining participative decision making

As in the case of job satisfaction, there has been much debate surrounding the meaning of PDM. Participation is generally defined as a process which allows employees some influence over their work and the conditions under which they work (Heller, Pusic, Strauss, & Wilpert, 1998). For example, Locke, Schweiger, and Latham (1986, p. 66) defines PDM as “joint decision making”. This refers to decisions being made by a manager in collaboration with subordinates. However, this definition does not suffice, as the finality of the decision lies with the manager; thus, employees do not have any real influence over their work or working conditions. It also excludes delegation, which has been explicitly included by other theorists (Cotton, Vollrath, Froggatt, Lengnick-

Hall, & Jennings, 1988; Sagie & Aycan, 2003). One of the most comprehensive definitions of PDM is proposed by Heller et al.:

Participation is the totality of forms, i.e. direct (personal) or indirect (through representatives or institutions) and of intensities, i.e. ranging from minimal to comprehensive, by which individuals, groups, collectives secure their interests or contribute to the choice process through self-determined choices among possible actions during the decision process. (p. 42)

The value of this definition lies in capturing different forms of PDM, including direct (i.e., personal) and indirect (i.e., representative) participation, as well as intensities of participation (i.e., minimal to comprehensive). It also allows employees a certain level of influence over their work or working conditions, which was neglected in the definition proposed by Locke et al. (1986). With this understanding of PDM in mind, the theoretical rationale for implementing PDM programmes was explored from an organisational perspective, as well as a human resource perspective.

2.1.7 Cognitive models of participation

From an organisational perspective, the primary motivation for implementing PDM programmes would be to promote gains in productivity (Greenberg, 1975). Cognitive models of participation (Miller & Monge, 1986) suggest that collaboration with employees is a viable organisational strategy as it enhances the flow and use of important information within the organisation, thus resulting in efficiency and productivity gains. Underlying such rationale is the fact that employees are closer to their work than top management, and thus have a greater understanding of work-related problems within the organisation; employees are able to make decisions with greater pools of information (Anthony, 1978; Rodgers & Hunter, 1993; Frost, Wakely, & Ruh, 1974). Additionally, if employees are involved in designing solutions to work-related problems, they know more about the implementation of such solutions following the decision making process (Ritchie & Miles, 1970). Consequently, by discouraging employees from communicating their work-related issues, and from suggesting potential solutions to such issues, the organisation stands to potentially lose out on innovative suggestions relating to work processes, programmes, and technologies that could enhance organisational efficiency and productivity (Rodgers & Hunter, 1993).

2.1.8 Affective models of participation

Alternatively, from a human resource perspective, the primary motivation for allowing employees to participate in job-related decisions is the potential for job enrichment (Greenberg, 1975). Some theorists (Blake & Mouton, 1964; Likert, 1967; McGregor, 1960) suggest that this is achieved by the effects resulting from the affective models of participation, which hold that there is a crucial link between PDM and job satisfaction. Under the affective models of participation, the primary role of the organisation is to provide a working environment within which employees have PDM responsibilities. Such responsibility is said to be conducive to the healthy development of employees as it leads to the attainment of their higher-order needs (Maslow, 1943), such as self-expression (Miller & Monge, 1986), independence (French et al., 1960) and feelings of fate control (Ashforth, 1989; Greenberger et al., 1989), which ultimately promotes their job satisfaction (Vroom, 1964).

The affective models of participation have come under great scrutiny from those supporting the cognitive effects of participation, stating that managers simply believe in “involvement for the sake of involvement, arguing that as long as subordinates feel they are participating and are being consulted, their ego needs will be satisfied” (Ritchie & Miles, 1970, p. 348). It seems that the affective models of participation only stress the amount of PDM undertaken; thus, as long as employees are involved in PDM, notwithstanding the nature of the issue (i.e., its level of importance), they will gain some satisfaction from the activity. When taking into account the value-percept discrepancy model of job satisfaction (Locke, 1969), simply arguing that PDM will solely lead to higher job satisfaction is an oversimplification of the concept. Employees are only satisfied in their jobs when they achieve their job values, which are numerous in kind (e.g., work, pay, supervision, co-workers). Therefore, PDM is only one of many values that employees hold in their jobs, and thus the attainment of PDM responsibility will only have a proportionate effect on their job satisfaction, depending on its value standard. Furthermore, from an organisational perspective, there are concerns relating to the cost effectiveness in allowing all employees to participate in all decisions (Locke et al., 1986); thus, PDM should be centred on issues of which employees are particularly knowledgeable (Miller & Monge, 1986) to benefit both the organisation (i.e., informed decisions being made) and the employee (i.e., being more satisfied in his/her job by gaining recognition as a competent and valued partner to the organisation) (French et al., 1960).

2.1.9 Contingency models of participation

The exploration of the above two models of participation highlighted that PDM is a complex matter and that it is unlikely for one model to accommodate the best interests of all parties. Consequently, some theorists (Vroom, 1960; Vroom & Deci, 1960; Vroom & Yetton, 1973) developed various contingency models of participation which are centred on personality, particular decision situations, superior-subordinate relationships, job levels, and values (Miller & Monge, 1986).

The notion that personality may mediate the relationship between PDM and job satisfaction was first suggested by Vroom (1960). Underlying this particular contingency model of participation is the idea that PDM will positively impact employees with high needs of independence and personalities of low authoritarianism. These employees are also likely to be those who place a higher value standard on the opportunity for PDM, and thus being assigned PDM responsibility will indirectly promote their job satisfaction (Hulin, 1971; Singer, 1974) through satisfying their higher-order needs (Maslow, 1943).

Alternatively, there are some theorists (Tannenbaum & Schmidt, 1958; Vroom & Yetton, 1973) who argue that different rules are required to accommodate different decisional situations. The primary aim of such contingency model was to establish the optimal level of PDM required for the specific decisional situation, which would protect the quality of the decision being made and its acceptance. This specific contingency model of participation is a direct attempt towards integrating cognitive models of participation with affective models of participation (Miller & Monge, 1986). Protecting the quality of the decision made relates to the cognitive portion of participation (i.e., ensuring cost-effective decisions are made which will promote efficiency and productivity within the organisation), and protecting the acceptance of the decision made relates to the affective portion of participation (i.e., satisfying higher-order needs such as freedom of self-expression).

Some theorists have also proposed alternative mediating variables which intervene in the process of PDM. It has been suggested by Vroom and Deci (1960) that job level may determine whether it is appropriate for employees to be involved in the decision making process. This model holds that PDM is less appropriate for those who are at the lower organisational level as jobs are generally routine, and more appropriate for those at the higher organisational level where jobs more frequently involve addressing complex problems (Vroom & Deci, 1960).

As can be seen from all the theoretical models of participation, the rationale for implementing PDM programmes finds support from a range of varying perspectives. Although somewhat different in their approach, Greenberg (1975) declared that all perspectives relating to the use of PDM possess the same proposition, being that involvement in PDM will eventually result in attitudinal changes of the employees involved (e.g., changes in job satisfaction).

2.1.10 Defining culture as an economic variable

Cultural explanations of economic occurrences have largely been avoided in economic research due to the difficulty of quantifying cultural influences. As with job satisfaction, culture is a subjective concept which poses some challenges when attempting to empirically demonstrate its economic significance. Such challenges can be attributed to how culture is interpreted, and thus measured. For example, culture can be used to describe the intellectual or spiritual development of a civilisation or the entire way of life of a group of people (Throsby, 2001). Both such interpretations would be analytically empty for the purposes of economic analysis, and thus it is important to establish a definition which lends itself well to empirical research. A broad definition of culture is provided within current literature, whereby culture pertains to a set of learned meanings and evaluations shared by a distinct group (Panther, as cited in Fargher et al., 2008), which guides their behaviour. Such a group can be of ethnic, religious or social affiliation (Guiso, Sapienza, & Zingales, 2006). When reference is made to a set of learned meanings and evaluations, what is being referred to is a collection of durable beliefs, values and routines that permeates a group (Cantebury, 1995; Guiso et al., 2006). Defining culture in this manner allows for comparisons to be drawn between distinct groups, which is valuable within this field of organisational research, as one can evaluate whether asymmetries in culture differentially affects the economic behaviour of individuals.

Although not at the forefront of the economics discipline, the argument that culture and economic development is associated has given rise to two opposing perspectives. Modernisation theorists (e.g., Karl Marx, Daniel Bell) claim that “economic development brings pervasive cultural changes” (Inglehart & Baker, 2000, p. 19). Alternatively, other theorists (e.g., Max Weber, Samuel Huntington) argue that “cultural values are an enduring and autonomous influence on society” (Inglehart & Baker, 2000, p. 19). Although the debate surrounding the direction of the influence continues, what these opposing perspectives provide is an opportunity to explore the value of each.

2.1.11 Culture and modernisation theory

Modernisation theory holds that certain linear and predictable cultural changes result from economic development (Bowles, 1998; Inglehart & Baker, 2000). This theory emphasises that a convergence of cultural beliefs and values will result from modernisation (i.e., economic development), where traditional values (e.g., emphasis on religion, family and work) are replaced with modern values (e.g., freedom of self-expression, quality of life). Evidence in support of modernisation theory was provided by Inglehart and Baker who examined the changes in cultural beliefs and values following the development of the industrialisation era and the post-industrialisation era. These cultural changes are outlined in Table 2.

Table 2: Cultural Changes Resulting from Modernisation

Period	Cultural Beliefs and Values
Pre-industrialisation era	<ul style="list-style-type: none"> • Emphasise the importance of religion, respect to authority, parent-child ties, two-parent traditional families, and absolute moral standards • Reject divorce, abortion, euthanasia, and suicide • Are characterised as patriotic and nationalistic
Industrialisation era	<ul style="list-style-type: none"> • Emphasise materialist orientation and traditional gender roles • Are relatively intolerant of foreigners, gays and lesbians, and other out groups • Low levels of interpersonal trust • Considers that hard work, rather than imagination or tolerance, as important things to teach a child
Post-industrialisation era	<ul style="list-style-type: none"> • Emphasise the quality of life over economic growth • Respect personal freedom (i.e., self-expression) • Shows more acceptance of various gender roles, and sexual norms • Changing attitude towards authority • Place high importance on environmental protection

Although modernisation theory has been supported, some theorists (DiMaggio, 1994; Fukuyama, 1995; Putnam, 1993) emphasise the persistence of cultural beliefs and values, such that culture is independent of economic development. In support of this opposing theory, Huntington (1993) stated that the world is divided into eight distinctive cultural zones which have persisted regardless of modernisation.³ Similarly, Hamilton (1994) argued that although capitalism has become a universal way of life, cultures have not converged, but rather reinvented their own beliefs and values in order to incorporate capitalist production methods. It thus seems that economic development does not result in linear or predictable cultural changes, thereby rendering

³ The cultural zones were shaped by religious traditions (i.e., Western Christianity, the Orthodox world, the Islamic world, and the Confucian, Japanese, Hindu, African, and Latin American zones).

modernisation theory somewhat redundant. In response to such criticism, Inglehart and Baker (2000) acknowledged that modernisation theory would be best thought of as a probabilistic model, rather than a deterministic model, as many factors are involved in the cultural transformation of a particular society, such as the historical and cultural heritage of the society in question.

2.1.12 Culture and economic growth theory

Economic growth theorists have criticised modernisation theory for not addressing the possibility of a reverse effect, being that cultural beliefs and values may influence the economic development of a particular society (Haller, 2002). Within economic growth theory, this idea holds that the successful economic development of a society depends on a culture which values competition, innovation, and educational values of achievement (Clark, 1988; Jones, 2003; Lucas, 1988; Romer, 1986). Although not explicitly testing such propositions, Lange (2010) found that asymmetries in culture had differential effects on life satisfaction between developed and less developed nations.

In support of economic growth theory, Schlicht (1993) illustrated how market processes are affected by and dependent on a group's customs. The concept of custom is comparable to that of culture, being defined as a "set of behavioural dispositions inherited from the past" (Schlicht, 1993, p. 178). Customs are psychologically imbedded in individuals and thus guide economic behaviour by inducing certain preferences and expectations (Guiso et al., 2006). This affects the decisions individuals make in a given transaction (Henrich et al., 2001; Jones, 2003; North, 2005), rendering market forces (e.g., price incentives) ineffective, at least in the short or medium run. If culture or customs shape all economic behaviour, the environment in which economic transactions take place is ultimately the product of inherent cultural influences (Law, 2002; Mayhew, 1987); thus, it can be proposed that culture has value as an economic variable. An example of such behaviour is the high savings rate among ethnic Japanese in the United States. The Japanese savings rate tends to be five percentage points higher than all other ethnic groups residing within the United States. With all ethnic groups being subject to the same institutional settings, culture was identified as one of the explanations for such phenomena (Horioka, 1990).

Although both perspectives outlining the interaction of culture and economic development have been explored (i.e., modernisation theory and economic growth theory), there is still no conclusive theory which specifies how culture and economic occurrences are related. Without such theory, the issue of reverse causality remains a

concern. A conclusive theoretical line of reasoning may be developed by integrating both theoretical models. Modernisation theory tends to take a long run approach by exploring cultural changes that are brought about over decades (e.g., transitioning from the industrial to post-industrial eras). Alternatively, some economic growth theorists (e.g., Schlicht, 1993) have acknowledged that cultural beliefs or values are only independent of economic development and affect market processes in the short or medium run. Although different approaches were taken in the two theories, perhaps both theories have some validity. Such proposition has been supported in the literature (Simon, 1974), where it was postulated that in long run analysis, cultural beliefs and values do not have independent lives, but merely serve as indicators of economic conditions (e.g., the effect of income on fertility behaviour). The time period before economic development would create cultural changes was estimated to be around 25 to 30 years (Simon, 1974). Consequently, in the long run, cultural changes will result from economic development, as proposed by modernisation theory; in the short to medium run, cultural beliefs and values are independent of economic development, as proposed by economic growth theory.

2.1.13 Culture and participative decision making

Although the importance of culture in PDM has been acknowledged (Hayes & Kleiner, 1989; Heller, Drenth, Koopman, & Rus, 1988), the influence culture may impose on PDM has not yet been thoroughly investigated. PDM theorists have been criticised for avoiding cultural influences even though clear variations in PDM practices across countries exist (Hofstede, 2001). Finding cultural explanations for such varying PDM practices would be of value within an organisational setting as managers would understand how cultural roots can manifest certain behaviours amongst employees, such as participation avoidance or lack of initiative (Sagie & Aycan, 2003).

The key question to address in this field of organisational research is: “How does culture influence PDM?” It has been proposed (Lytle, Brett, Barsness, Tinsley, & Janssens, 1995) that culture primarily determines the meaning attributed to PDM. Similarly, Sagie and Aycan (2003) suggest that the meaning attributed to PDM will also help determine the reason for PDM (e.g., improve profitability or job satisfaction), who would be involved in PDM (e.g., all or only certain staff), and whether PDM would be based on sharing processes (e.g., expertise, experience) which improves the quality of decisions, or motivation processes (e.g., identification with the manager of organisation) which increases employee acceptance and commitment to decisions.

From Hofstede's (1980) value-based framework of cultural dimensions, Sagie and Aycan (2003) selected power distance and individualism-collectivism as cultural dimensions to show how culture influences PDM. Power distance influences the extent to which PDM is practised, as outlined in Table 3.

Table 3: The Effect of Power Distance on PDM

Power Distance	Effects
High	<ul style="list-style-type: none"> • Decision making vested in the hands of a few at the top • Delegation is avoided • Decision making is perceived as a privilege of management • Believes that parties are unequal – those at the top of the hierarchy are more knowledgeable and experienced. This creates fear of punishment if subordinates question, challenge or disagree with their manager's decision.
Low	<ul style="list-style-type: none"> • Everyone is perceived to have the potential to participate in decision making • Interdependencies between management and subordinates are valued • Everyone is assumed to have equal decision making rights • Participation is encouraged and at times rewarded

Note. Adapted from Sagie and Aycan (2003).

Alternatively, individualism-collectivism works towards determining the participants of PDM. Cultures high on collectivism emphasise group membership, where joint effort is perceived as the most effective tool in decision making (Sagie & Aycan, 2003). Collectivistic cultures are therefore strong proponents of PDM, in particular when collaboration in decision making is involved (e.g., manager-subordinate, or small group). On the contrary, cultures high on individualism emphasise the interests of the individual (Sagie & Aycan, 2003). Consequently, individualistic cultures are strong supporters of individual decision making rights, and are thus more likely to advocate forms of PDM like delegation (i.e., decision making rights transferred to an individual).

When combining the two cultural dimensions, the theoretical framework developed by Sagie and Aycan (2003) provides a clear model of how the culture of a distinct group can influence the extent to which PDM is practised by that group (Sagie & Aycan, 2003). Such a model also allows one to gain an understanding of why different forms of PDM are practised across countries. Ultimately, having such theoretical framework provides the first step in undertaking empirical research on this topic, which could potentially validate the importance of acknowledging cultural differences when designing PDM programmes.

2.1.14 Conclusion

The purpose of this section was to critically review theoretical studies of job satisfaction, PDM and culture. With regard to job satisfaction, the value-percept discrepancy model of job satisfaction filled some gaps resulting from earlier theoretical models. Such models (i.e., expectations-percept discrepancy model, needs-outcome discrepancy model) were unable to accurately predict the causes of job satisfaction as they did not acknowledge the importance of what an employee values as part of his/her job or work environment. The value-percept discrepancy model of job satisfaction not only explicitly uses the concept of values as a foundation to predict the causes of job satisfaction, but also considers the intensity of such values (i.e., how much of the value the employee wants to gain or keep).

Although job satisfaction research has been approached with caution in labour economics, it has offered a valuable insight into what makes workers satisfied in their jobs. Empirical findings have indicated that such factors include job challenge, acknowledgement and job security. The knowledge gained from such research is of practical use within an organisational setting, as mitigating negative worker behaviours (e.g., absenteeism) and reducing employee turnover rates can provide direct cost savings to the organisation.

In terms of PDM, several theoretical approaches are used to motivate the implementation of PDM programmes. Cognitive models of participation take an organisational perspective and argue that collaboration in decision making with employees is a viable organisational strategy as it enhances the flow and use of important information within the organisation, thus promoting gains in productivity. Alternatively, affective models of participation take a human resource perspective and argue that collaboration in decision making with employees will result in job enrichment, as it leads to the attainment of higher-order needs (e.g., self-expression, feelings of fate control). With both approaches having some validity, several contingency models of participation were developed which integrated the best interests of the organisation and the employee. These models focused on personality, particular decision situations, superior-subordinate relationships, job levels, and values. Carefully exploring the varying approaches to PDM brought to light that all perspectives possessed the same proposition, being that involvement in PDM will eventually result in attitudinal changes of the employees involved.

Although cultural explanations of economic occurrences have been largely avoided in economic research, it can be postulated that culture has value as an economic variable. Two opposing perspectives dominate this area of research. There are modernisation theorists who argue that economic development will bring around predictable cultural changes. Opposing modernisation theory are the arguments that cultural beliefs and values are independent of economic development and will thus be persistent through periods of modernisation. Economic growth theorists support the latter argument, and postulate that the successful economic development of a society depends on a culture which values competition, innovation, and educational values of achievement. This view has gained wide support and has been extended by arguing that cultural influences are psychologically imbedded in individuals and thus guide economic behaviour by inducing certain preferences and expectations, rendering market forces ineffective. What became evident was that modernisation theory took a long run approach, where economic growth theory took a short to medium run approach. In essence, both theories are valid to some extent, and this is supported in the literature whereby it is estimated that the time period before economic development would create changes in cultural beliefs or values is approximately 25 to 30 years. Thus, in the short to medium run, culture affects economic outcomes; whereas in the long run, economic development may lead to changes in cultural beliefs and values.

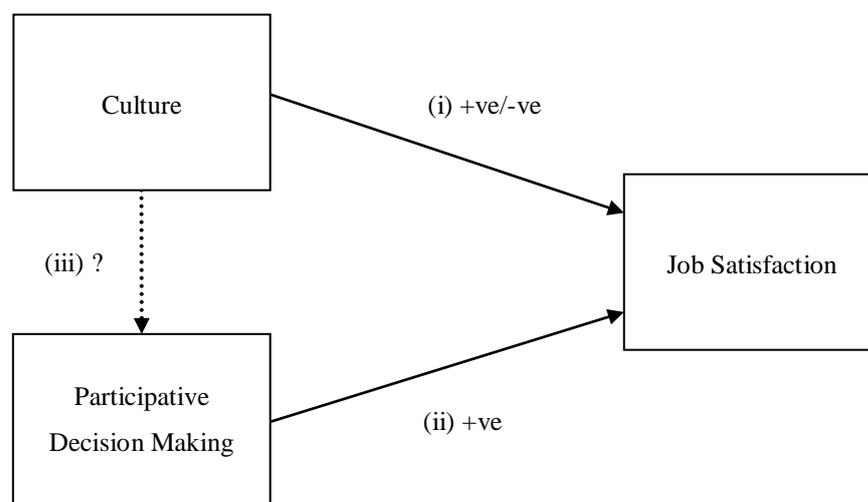
Culture has also been acknowledged as an important factor to consider when designing PDM programmes. The theoretical work on how culture influences PDM is sparse; however, a basic framework has been developed which answers this question. Using two cultural domains (i.e., power distance, individualism-collectivism) it has been postulated that countries high in power distance and individualism prefer decision making to be vested in the hands of a few individuals (e.g., top level management). Alternatively, countries low on power distance and high on collectivism are great proponents of PDM, particularly forms of PDM involving collaboration (e.g., manager-subordinate, or small group). This theoretical framework provides a clear model of how the culture of a distinct group can influence the extent and forms of PDM practised by that group. Empirical research is required in this particular area in order to provide validation to such theoretical ideas.

2.2 Empirical Literature

The purpose of this section was to critically review empirical studies linking job satisfaction, PDM and culture. Such review worked towards clarifying what past research has found the nature of the relationship between these concepts to be, as well as draw attention to any limitations of the studies reviewed. The research setting (e.g., country, organisation), the type and quality of data, the methodology, and the reporting standards were addressed.

Studies linking PDM and job satisfaction were initially reviewed. Empirical literature has indicated the relationship between these variables to generally be of a positive nature.⁴ Studies linking culture to job satisfaction were also reviewed. It has been empirically shown that the nature of the relationship between these variables can be of a positive or negative nature. With culture being a topic which has received relatively little attention in economic research, it must be noted that there is only a sparse set of literature empirically linking culture with job satisfaction, and no empirical literature directly linking culture to PDM. Thus, whether a link of any significance exists between culture and PDM remains to be a question of further research. The proposed relationship between these concepts is diagrammatically presented in Figure 1. The contribution of this review lies in identifying key factors which must be addressed in future empirical research on these topics.

Figure 1: Proposed Relationships between Job Satisfaction, PDM and Culture



⁴ See Miller and Monge (1986) for a meta-analytic review of empirical literature testing the relationship between PDM and job satisfaction.

2.2.1 Participative decision making and job satisfaction

Four empirical studies were selected to be reviewed. These studies were selected as each was unique in its approach in investigating the link between PDM and job satisfaction. For example, Alutto and Acito (1974) studied the effect of decisional discrepancy on job satisfaction; Black and Gregersen (1997) viewed PDM as a multidimensional concept, and investigated the impact of each PDM dimension on job satisfaction; Morse and Reimer (1956) took a longitudinal approach in studying the impact on PDM on job satisfaction; whereas Schuler (1980) used a comparative approach in investigating the impact of PDM programmes across two organisations. The four studies selected were not limited to a single methodological approach, and are therefore more representative of the body of work in this area of organisational research.

It must also be acknowledged that the studies selected are relatively dated. However, there was little evidence of contemporary literature which explicitly investigates the direct link between PDM and job satisfaction, which forms part of this study's research objective. Contemporary research is relatively more concerned with investigating the mediating variables between PDM and job satisfaction.⁵ However, the direct influence of PDM on job satisfaction is still of great interest, as improvement in the availability of data and analysis techniques is allowing empirical research to be more confined to a specific area of focus, thus offering findings of greater organisational value. For example, the availability of data surveys such as the EVS, now allows research to be conducted on areas which would not have previously been possible (e.g., how asymmetries in culture affect PDM and job satisfaction). Research in PDM continues to be of organisational value when considering the ever changing economic environment and effects of globalisation (e.g., increasing labour mobility) which require ongoing cost-effective and strategic decisions to be made by culturally diverse employees. Thus, PDM programmes must be continually monitored and adapted to ensure they meet the diverse cultural needs of employees, in order to promote their job satisfaction.

Although unique in their approach, each study shared a common goal, which was to test whether employees involved in PDM would gain higher job satisfaction as a result. Research by Black and Gregersen (1997) adopted a multidimensional view of PDM. Accordingly, employees who had greater levels of involvement in each of the five decision making processes generally displayed higher levels of job satisfaction. These

⁵ See Scott-Ladd, Travaglione, and Marshall (2006) who investigated causality between PDM, task attributes, work effort, rewards, and job satisfaction.

findings are consistent with those of Schuler (1980) who found positive correlations between PDM and job satisfaction. Findings by Morse and Reimer (1956) indicated a relationship between PDM and job satisfaction; however, due to concerns relating to their methodology (e.g. gender/occupation specific sample, ecological validity, panel conditioning) their findings were somewhat less convincing. Findings within their first experiment did not support a positive relationship between PDM and job satisfaction at a statistically significant level. Their second experiment indicated that decreasing the role of employees in PDM will decrease job satisfaction; however, such effect was only statistically significant in one of the two divisions studied within the experiment.

The study by Alutto and Acito (1974) was of particular interest. It was unique in that the focus of the study was to investigate the effect of decisional discrepancy (i.e., the difference between employees' actual and desired rates of PDM) on job satisfaction. Hence, it assumed PDM to be positively related with job satisfaction as a starting point. This approach was similar to the theoretical model of job satisfaction by Katzell (1964), whereby the content and intensity of certain job values (e.g., PDM) was argued to result in different levels of job satisfaction. The findings by Alutto and Acito indicated that employees who were classified as being in decisional equilibrium (i.e., participating in as many decisions as desired) generally displayed higher levels of job satisfaction than those classified as decisionally deprived (i.e., making fewer decisions than desired). These findings did contradict the equation developed by Katzell,⁶ and thus provided support to the value-percept discrepancy model of job satisfaction developed by Locke (1969), where higher discrepancies between the job value (i.e., PDM) and its achievement (i.e., level of discrepancy) resulted in lower job satisfaction. The key considerations (i.e., data, data availability, methodology, findings, and limitations) of all the studies reviewed are summarised in Table 4.

⁶ See Equation (1), p. 9.

Table 4: Summary of Empirical Research linking PDM and Job Satisfaction

Study	Data, Methodology, Findings, Issues of Concern
Alutto and Acito (1974)	<ul style="list-style-type: none"> • 75 questionnaire responses. Job satisfaction was measured by Cornell Job Description Index.^a PDM was measured by discrepancy between actual number of decisions and preferred number of decisions. • Was tested by: (1) categorising respondents as deprived, saturated or in equilibrium, (2) comparing groups in terms of personal and organisational characteristics, and (3) correlating deprived group with personal and organisational characteristics. • Respondents with decisional equilibrium had higher job satisfaction. Correlations between deprivation and job satisfaction were negative. • Sample was firm/occupations specific, therefore low external validity. Cross-sectional research design; causality cannot be established.
Black and Gregersen (1997)	<ul style="list-style-type: none"> • 370 questionnaire responses (members of EIG^b only). PDM and satisfaction were both measured by Likert scales. • Was tested by: (1) correlating PDM and satisfaction, (2) regressing satisfaction on PDM, and (3) t-test difference of means (level of involvement and satisfaction). • Correlations between PDM and satisfaction were positive. Regression indicated that generating alternatives, planning implementation and evaluating results generally increased satisfaction. Higher overall involvement generally increased satisfaction. • Sample only represents EIG members, therefore low external validity. Cross-sectional research design; causality cannot be established. Disparity exists between interpretation and measurement of satisfaction; measurement validity is a concern.
Morse and Reimer (1956)	<ul style="list-style-type: none"> • Data collected through questionnaires and observation. PDM and job satisfaction were both measured by creating an index for each. • Implemented two PDM programmes: (1) Autonomy, and (2) Hierarchically-orientated. Experiment lasted one and one-half years: Initial measurement, one-half year training, one year experimental conditions, and final measurement. T-test difference of means (PDM programmes and job satisfaction). • The Hierarchical-orientated programme indicated that increased PDM for supervisors decreased the job satisfaction of clerical workers. • Sample was gender/occupation specific, therefore low external validity. Experimental conditions were not representative of natural work environment; ecological validity is a concern. Panel conditioning may have influenced respondents' behaviour over the one and one-half year experiment.
Schuler (1980)	<ul style="list-style-type: none"> • 382 questionnaire responses obtained from Firm A, and 429 questionnaire responses from Firm B. Job satisfaction measured by the Job Descriptive Index.^c PDM measured by a Likert scale.^d • Was tested by computing zero-order correlations between PDM and job satisfaction. This method was employed in both samples. • Correlations between PDM and job satisfaction were positive across both samples. • Cross-sectional research design; causality cannot be established. Description of methodology explicitly highlighted demographic characteristics of respondents; demographics were not reported.

^a See Smith (1974). ^b Employee Involvement Group. ^c See Smith, Kendall, and Hulin (1969). ^d See Siegel and Ruh (1973).

Reviews of empirical studies linking PDM with job satisfaction are nothing new. Previous reviews have generally supported the positive correlations between PDM and job satisfaction (Cotton et al., 1988; Wagner, 1994). The review by Cotton et al. was instrumental in suggesting that different forms of PDM produced different results in terms of job satisfaction. Accordingly, PDM was classified by six categories, including: (i) participation in work decisions, (ii) cumulative participation, (iii) short-term participation, (iv) informal participation, (v) employee ownership, and (vi) representative participation (Cotton et al., 1988). Although valuable to organisational research by introducing a multidimensional view of PDM, its methodological approach has received considerable criticism by Leana, Locke, and Schweiger (1990) as being problematic (e.g., classification system used, selection of studies, reporting of results). It has been suggested that theoretical frameworks need to be developed which indicate how different forms of PDM relate to each other and influence various outcomes (Black & Gregersen, 1997). Such theoretical frameworks will allow future empirical studies to identify whether a specific form of PDM is more valuable in promoting job satisfaction within an organisational setting.

Although this review clarified that past literature generally argued PDM and job satisfaction to be positively related, methodological concerns within the selected studies must be discussed in order to acknowledge the limitations of those studies in providing clear and robust findings. Accordingly, issues relating to the external and internal validity of the studies will be discussed in depth, as these limitations were present in the majority of the selected studies. Limitations such as panel conditioning, ecological validity and face validity will also be examined. Furthermore, there were concerns relating to how results were reported in the study by Schuler (1980); however, this had no effect on the empirical results of the study and will therefore not be discussed herein. These limitations must be addressed in future empirical research to ensure the validity of the results obtained.

External validity relates to whether the findings of a particular study can be generalised beyond the specific research context in which it was conducted (Bryman & Bell, 2007). Low external validity was present within three out of the four studies reviewed; however, the sources of the low external validity were unique to each study. An organisation involved in specialist work (i.e., manufacturing of cutting tools) was selected to partake in the study by Alutto and Acito (1974). Additionally, their sample largely consisted of a single occupation (i.e., production personnel). Alternatively,

Black and Gregersen (1997) only selected employees who were members of the Employee Involvement Group (EIG). No information was provided relating the proportion of employees who were members of the EIG; thus, it can only be assumed that this sample was not a true representation of all the employees at the manufacturing organisation. Similarly, Morse and Reimer (1956) selected a single division of an industrial organisation to participate in their study. Employees of this division were largely young, unmarried woman, with a high-school education. With the studies aiming to investigate whether PDM is related to job satisfaction, it would be assumed that the researchers would attempt to generate a representative sample; however, this was not achieved. In a review of similar organisational experiments, Cummings, Molloy, and Glen (1977) also found the presence of low external validity, and thus concluded that the generalisability across alternative populations was questionable. Based on these limitations, one cannot confidently state that PDM is positively related with job satisfaction across all occupations, gender, or organisations.

Procedures are available, which if implemented, can strengthen the external validity of empirical findings. These procedures can be employed prior to undertaking data collection. For example, using random selection as a means to compile data will provide a more representative sample, and provide findings which are more generalisable to a broader population. The sample used by Schuler (1980) illustrated this point. Even though random selection was not undertaken, asking for volunteers resulted in two samples which represented occupations at different organisational levels, as well as both genders. Accordingly, the positive correlations between PDM and job satisfaction found by Schuler can be generalised across broader populations. Although archival data will be used within this study, the upcoming empirical work will ensure that such data is a representative sample and not specific to one particular factor. Ensuring the data is representative will contribute to this study by providing empirical findings which are more generalisable across broader populations.

Internal validity relates to whether a finding that incorporates a causal relationship between variables is valid (Bryman & Bell, 2007). Low internal validity was present within three out of the four studies reviewed. Cross-sectional research design was employed within each of the three studies. Therefore, with the data for all variables being collected simultaneously through the use of single questionnaires, causality could not be established (Spector, 1994). To assess a relationship of causality, research must be designed to assess variables over time. Additionally, such research must also make

the assumption of *ceteris paribus*, which is an arguably unrealistic assumption to make over an extended period of time. Within studies employing cross-sectional research design, such an unrealistic assumption does not have to be made, and although causal inferences cannot be drawn from these studies (Spector, 1994), they do provide a useful first step in studying areas of interest. The scope of this study does not extend beyond investigating the patterns of association between the concepts of interest; thus, no causal inferences are set to be drawn. Consequently, low internal validity through the use of cross-sectional data will not be a factor of concern in this study.

Additionally, the use of questionnaires may give rise to common method variance (CMV). This is of particular relevance to questionnaires that report on individuals' attitudes, beliefs, or perceptions about a particular situation (Lindell & Whitney, 2001), such as their job satisfaction or their perception about their involvement in PDM. It has been argued that CMV will result in biased estimates of the true association among variables, and is therefore a problem which must be addressed (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003; Podsakoff & Organ, 1986). CMV could potentially result in invalid conclusions being drawn from empirical results, which would be of little practical value within an organisational setting. Although supporting the existence of CMV, findings by Doty and Glick (1998) indicated that CMV is generally not at a level which challenges the interpretation of empirical results, and thus do not pose any implications to organisational research. Such findings have provided support to studies by Spector (1994, 2006), who suggested that CMV is not a severe problem, and Harrison, McLaughlin, and Coalter (1996) who have argued that further investigation is required to substantiate any claim that CMV invalidates the use of questionnaire data.

Investigating the issue of CMV in a meta-analysis of PDM literature, Wagner and Gooding (1987) argued that studies which rely on questionnaire surveys are subject to CMV. With three studies employing this method of data collection, the correlations found between PDM and job satisfaction may have potentially been overestimated. Although acknowledging this limitation, Black and Gregersen (1997) suggested that addressing this issue in future research may present difficulties. With satisfaction being an internal state, individuals alone can report on their level of satisfaction. Additionally, although alternative measures relating to the level of involvement in PDM can be obtained, an individual's perception of their degree of involvement is more relevant than any objective measure (Locke, 1969; Obradovic, French, & Rogers 1970). Consequently, within this field of organisational research, the use of questionnaires can

provide valuable insight into employee behaviour. Therefore, questionnaires should not be dismissed as an inferior method of data collection, assuming that it complements the research questions asked (Spector, 1994).

Panel conditioning refers to a situation where the responses given by a participant, who has previously taken part in the study, may differ from what the response would have been if taking part for the first time (Lynn, 2009). Thus, responses may be conditioned by the previous experiences of the participant in the study. Due to the nature of humans as research subjects, the very act of observation will transform the behaviour of those being observed (Kalton & Citro, 2000). Panel conditioning was identified as a potential limitation in the study by Morse and Reimer (1956), which took place over one and one-half years. Initial measurements of PDM and job satisfaction were taken at the beginning and the end of the experiment. Measurements were also made continually throughout the experimental period; however, what these measurements incorporated (e.g., questionnaires, observation) were not explicitly stated within their study. Since panel conditioning transforms the behaviour of participants, it becomes difficult to draw any accurate conclusions from the research findings (Rose, 2000). Thus, with regard to the study by Morse and Reimer, participants may have only stated that they were less satisfied in their job, from having fewer PDM opportunities, as a conditioned response of continuous participation throughout the experimental period.

Ecological validity relates to whether the findings of a particular study are applicable to people's natural setting (Bryman & Bell, 2007). Low ecological validity was a concern in the study by Morse and Reimer (1956). To create the experimental conditions, it was compulsory for supervisors of participating divisions to partake in one-half year training. Such training was to ensure that the formal changes (i.e., implementation of the Autonomy programme and the Hierarchically-orientated programme) would result in actual changes in relations between people (Morse & Reimer, 1956). Consequently, these procedures disrupted the natural workplace setting which participants had grown accustomed to; thus, the experiment was not conducted in an environment which was representative of the natural workplace setting. Asking whether the intended changes would capture the opinions and attitudes of the participants in their daily work conditions would have been of benefit prior to undertaking the experiment (Cicourel, 1982). Given that the findings by Morse and Reimer did not result from the natural workplace setting of the participants, more concerns were raised to whether the identified relationship between PDM and job satisfaction is valid.

Measurement validity is of crucial importance to any empirical study. Measurement validity relates to whether the measurement of a concept truly captures that concept (Bryman & Bell, 2007). Within the study by Black and Gregersen (1997), the measurement validity of the satisfaction variable was questionable. The discussion of their results indicated that satisfaction related to the participants' satisfaction with work;⁷ however, satisfaction was measured as satisfaction with the EIG.⁸ There is little rationale for utilising participants' satisfaction with their EIG as a measure for work satisfaction, unless high correlation exists between the two constructs. If that was the case, satisfaction with the EIG would arguably reflect work satisfaction. However, such details were not provided by Black and Gregersen, and without further investigation on this issue, such argument only remains a possibility. Thus, if work satisfaction does not reflect satisfaction with the EIG, then the findings which indicated positive correlations between PDM and work satisfaction are invalid. To ensure measurement validity in upcoming research, this study will only select variables which clearly measure the intended concept, and which are well aligned with conceptual definitions.

2.2.2 Culture and job satisfaction

The motivation for employing culture as an economic variable stems from the theoretical proposition that culture guides economic behaviour (Guiso et al., 2006; North, 2005; Schlicht, 1993). Verifying a link between culture and job satisfaction can be of value within an organisational setting, as it would provide an understanding of the need to be culturally sensitive. This is of particular importance when considering the ease of labour mobility and the potential implications which could result from having a culturally diverse group of employees who are dissatisfied in their jobs (e.g., the costs associated with negative worker behaviours such as absenteeism or high staff turnover).

Empirical literature which has investigated the influence of culture and job satisfaction is limited. The few studies which have focused on this issue drew comparisons between unique cultures or cultural domains. Research by Fargher et al. (2008) compared the effect of cultural beliefs and values on job satisfaction between Eastern and Western Europe. Traditional beliefs and values (e.g., the importance of work, religion, family and friends, and deference to authority) seemed more imbedded in Western European culture. Consequently, traditional beliefs and values would generally play a more

⁷ Work satisfaction is interchangeable with job satisfaction (Rose, 2003).

⁸ The items included: (i) personal involvement in EIG, (ii) recognition their EIG receives, (iii) immediate supervisor support of EIG, (iv) working relationships among EIG members, (v) results and outcomes of EIG, and (vi) overall progress of their EIG.

influential role in job satisfaction for Western Europeans, when compared to Eastern Europeans. From a similar standpoint, Lange (2009) illustrated how a legacy constructed on communist industrial relations in Central and Eastern Europe impacted job satisfaction, even after economic and social transition occurred. The cultural belief and value of having freedom to make decisions at work was positively related with job satisfaction; however, using one's own initiative was negatively related with job satisfaction. Such findings suggested that even after decades following the transition to market economies, employees still felt that using their initiative to make decisions within the workplace would be viewed with contempt (Lange, 2009). Taking a different approach, Xu and Van de Vliert (2004) found that job level was positively correlated to job satisfaction within individualistic countries.⁹ Job level had no effect on job satisfaction for employees in collectivistic countries.¹⁰ The key considerations (i.e., data, data selection, methodology, findings, and limitations) of the studies reviewed are summarised in Table 5.

⁹ Countries that promote only the welfare, interests, and goals of the individual and his/her core family (Sagie & Aycan, 2003).

¹⁰ Countries that promote membership within communities or large groups; considers the welfare, interests, and goals of the group to be more important than that of the individual group member (Sagie & Aycan, 2003).

Table 5: Summary of Empirical Research linking Culture and Job Satisfaction

Study	Data, Methodology, Findings, Issues of Concern
Fargher et al. (2008)	<ul style="list-style-type: none"> • Sub-samples ($n = 6,507$) of Eastern and Western European countries used from the third wave (1999) of the EVS. Job satisfaction was measured by a self-reported ordinal variable. Culture was measured by distinguishing between traditional vs. secular and survival vs. self-expression domains.^a • Was tested by: (1) computing bi-variate correlations between culture and job satisfaction, and (2) regressing cultural variables on job satisfaction by undertaking a multi-variate regression analysis in the form of an ordinal probit model. • Cross-cultural differences existed. Results indicated work as important for males in both regions; religion, family and friends as important in Western Europe, and parent-child ties in Eastern Europe. Also, lacking interpersonal trust was negatively associated with job satisfaction across both regions. • Cross-sectional research design; causality cannot be established. EVS questionnaire may be inconsistent due to translations; measurement validity is a concern.
Lange (2009)	<ul style="list-style-type: none"> • Pooled data sample ($n = 3,853$) of Central and Eastern European countries used from the third wave of the EVS. Job satisfaction was measured by a self-reported ordinal variable. Culture was measured by variables relating to competition, the state, work decision making, and inequality elimination. • Was tested by: (1) calculating cross-tabulations between job aspects and gender, (2) regressing cultural variables on job satisfaction by undertaking a multi-variate regression analysis in the form of an ordinal probit model. • Results indicated that males value pay, initiative, responsibility, and promotion as important job aspects. Interestingly, making decisions at work was positively associated with job satisfaction; however, using initiative (arguably to make such decisions) was negatively associated with job satisfaction. • Cross-sectional research design; causality cannot be established. EVS questionnaire may be inconsistent due to translations; measurement validity is a concern.
Xu and Van de Vliert (2004)	<ul style="list-style-type: none"> • 129, 087 questionnaire responses (across 39 countries). Job satisfaction was measured by averages - questions on fairness/respect, recognition, benefits, career opportunities, job security, and training. Culture was measured by combining three measures:^b (i) individualism vs. collectivism,^c (ii) individualism ranking, and (iii) average divorce rate (1995-1998). • Was tested by: (1) correlating all key variables, and (2) undertaking a stepwise multi-level analysis between culture and job satisfaction. • Correlations indicated that culture had some association to job satisfaction. Further analysis indicated that in individualistic countries job level was positively associated with job satisfaction. • Cross-sectional research design; causality cannot be established. Questionnaire may be inconsistent due to translations; measurement validity is a concern.

^a See Inglehart and Baker (2000). ^b See Diener, Diener, and Diener (1995). ^c See Hofstede (1991).

Although this review clarified that past literature generally found the pattern of association between culture and job satisfaction to be of a positive nature, methodological concerns within the selected studies must be discussed in order to acknowledge the limitations of those studies. Accordingly, issues relating to internal validity and measurement validity will be discussed, as these limitations were present in all three of the selected studies. These limitations must be addressed in future empirical research to ensure the validity of the results obtained.

With all three studies having utilised data collected through questionnaire surveys, the internal validity of the findings was relatively low; thus, no causal inferences could be drawn. Although this approach only allows patterns of association to be identified, the findings of these studies have made a valuable contribution to the current body of knowledge, and have provided a platform from which to derive hypotheses for future empirical research. Furthermore, before dismissing the use of questionnaire surveys, the needs of the studies must be taken into account (Spector, 1994). When comparing the effects of different cultures on job satisfaction, the use of data collected through questionnaire surveys seems to be the most feasible approach. With the EVS, and the study by Xu and Van de Vliert (2004) including over 30 countries, data collection by any other approach would seem impractical when considering the costs, time, and logistics involved.

The use of questionnaires may also have resulted in CMV, particularly since the EVS questionnaire was largely focused on reporting individuals' attitudes, beliefs, or perceptions about situations, which makes the findings more susceptible to biased estimates (Lindell & Whitney, 2001). Consequently, there is a risk that the reported associations between the cultural variables and job satisfaction were overestimated. However, based on findings by Doty and Glick (1998) CMV was not detected to be at a level which would challenge the interpretations of empirical findings. Nonetheless, it is important to acknowledge the possibility of this limitation in order to allow the reader to draw their own conclusions.

With numerous countries participating in the EVS and the study by Xu and Van de Vliert (2004), concerns must be raised whether the questionnaires were equivalent across countries. In order to make data collection feasible, questionnaires needed to be translated into different official languages or dialects. Such translations, although necessary, may have had a bearing on whether questionnaire surveys were equivalent

across countries which differ in culture or language. In order to make successful cross-country comparisons, questionnaires must be equivalent on both a linguistic and conceptual basis (Hui & Triandis, 1985). Conceptual equivalence refers to a situation where a concept can be discussed and has a similar meaning across cultures (Brett, Tinsley, Janssens, Barsness, & Lytle, 1997). Thus, if questions are not equivalent across cultures, the resulting variables will suffer from low measurement validity, which can lead to invalid conclusions being drawn from the research findings. This is of importance in an organisational setting, as invalid conclusions can result in misguided programmes being implemented.

Questionnaires used within the EVS were translated by following official guidelines developed by the coordinating organisation at Tilburg University (European Values Study, n.d.). In terms of the questionnaire used within the study by Xu and Van de Vliert (2004), professional translation agencies were used. In this instance, no statements were made whether the agencies followed the same guidelines. If the same guidelines were not followed, potential inconsistencies could have resulted. Furthermore, the criteria of what constitutes a professional translation agency may differ between countries; thus, the quality of the translations may not be consistent. Both sets of data seem to focus on making the questionnaires equivalent on a linguistic basis; no explicit discussion was included on whether the questionnaires were conceptually equivalent. One would assume that professional agencies will take this factor into account, but without evidence, this would only be an assumption. It has been illustrated that linguistic factors alone can result in measurement errors and thus render empirical findings invalid (Ryan, Chan, Ployhart, & Slade, 1999). Thus, without ensuring that questionnaires were equivalent on both a linguistic and conceptual basis, inferences drawn within the selected studies can potentially be inaccurate. However, considering the scale of the EVS and the study by Xu and Van de Vliert, ensuring linguistic and conceptual equivalence across all participating countries may present some difficulties in terms of time and cost factors.

2.2.3 Conclusion

In terms of PDM and job satisfaction, the results of the empirical studies reviewed generally indicated that PDM was positively related with job satisfaction. Of particular interest were findings which indicated that an employee's decisional discrepancy (i.e., the difference between actual and desired rate of PDM) would affect their job satisfaction. These findings were consistent with the value-percept discrepancy model

of job satisfaction. As part of the review process, methodological problems of the studies were discussed in order to acknowledge the limitations of the studies. Of particular concern was the low external validity of three out of the four studies selected. The samples employed within these studies were specific to particular organisations, occupations, or gender; thus, were not generalisable across broader populations. Furthermore, low internal validity resulted from the cross-sectional research design used within three out of the four studies. Consequently, no causal inferences were able to be drawn from the results of the studies. CMV was also an area of concern; however, research has shown that CMV does not significantly inflate the association between variables (e.g., PDM, job satisfaction) to render findings invalid. Further issues discussed included panel conditioning, low ecological validity, and low measurement validity; however, these limitations were unique to two studies only.

The results from the empirical studies linking culture and job satisfaction suggested that culture has an association with job satisfaction in a number of ways. In a comparative study of Eastern and Western European cultures, it was shown that traditional beliefs and values were more imbedded in Western European culture. In Central and Eastern Europe, it was shown that employees valued the freedom to make decisions at work; however, the influence of past communist beliefs and values constrained their behaviour, as taking initiative had a negative association with job satisfaction. Also, employees' job level had a positive association with job satisfaction in individualistic countries; however, this was not the case in collectivistic countries. As part of the review process, methodological problems of the studies were discussed in order to acknowledge the limitations of the studies. The use of questionnaire surveys resulted in low internal validity; however, when considering the scale of the projects, data collection by any other approach seemed impractical. CMV was also an area of concern in these studies; however, as previously stated, research has shown that CMV does not significantly inflate the association between variables, (e.g., cultural variables, job satisfaction) to render the findings invalid. Low measurement validity was also a limitation in these studies. With data being collected from over 30 countries, researchers had to ensure questionnaires were equivalent on both a linguistic and conceptual basis in order to draw valid cross-country comparisons. Although official guidelines were used and professional translation agencies employed, it seemed that linguistic factors were solely addressed; thus omitting conceptual factors which may have constrained the inferences being drawn.

2.3 Statement of Problem

With the economic climate remaining relatively uncertain, the retention of quality labour has become a central point of interest for organisations; research in job satisfaction has thus surged. Findings from such research have also highlighted the benefits that satisfied employees can provide the organisation, and as a result has become an essential consideration for management strategy. Such benefits include cost savings resulting from lower staff turnover and absenteeism (Mirvis & Lawler, 1977), as well as improved employee performance (Wright & Cropanzano, 2004).

To capitalise on such benefits, organisational research has worked towards identifying factors which promote employee job satisfaction. One such factor is providing programmes which allow employees to participate in job-related decisions. It is argued that providing employees the opportunity to participate in job-related decisions satisfies their higher-order needs (Maslow, 1943), such as self-expression (Miller & Monge, 1986), independence (French et al., 1960) and feelings of fate control (Ashforth, 1989; Greenberger et al., 1989) which ultimately promotes their job satisfaction (Vroom, 1964). Implementing PDM programmes also provide organisational benefits beyond those resulting from satisfied employees. Strategies centred on PDM enhance the flow and use of important information within the organisation because employees are closer to their work; therefore, employees have a greater understanding of work-related problems and are able to make decisions with greater pools of information (Anthony, 1978; Rodgers & Hunter, 1993; Frost et al., 1974). PDM ultimately benefits the organisation through gains in efficiency and productivity (Miller & Monge, 1986).

Within this field of organisational research, a factor which has been largely overlooked is an individual's culture. This is of interest, as although globalisation has facilitated the international movement of goods, services, information, and financial capital, it has also promoted the cross-country flow of labour. Consequently, countries are now facing the dilemma of having a culturally diverse labour force. Such diversity can be of risk to organisations, as implementing changes within the workplace may differentially affect employees depending on their cultural beliefs and values (Sagie & Aycan, 2003). This position has been supported in the literature, where suggestions have been made that culture guides economic behaviour by inducing certain preferences and expectations (Guiso et al., 2006). Such a hypothesis has been empirically supported, where culture was shown to differentially affect employee job satisfaction (Fargher et al., 2008; Lange, 2009; Xu and Van de Vliert, 2004).

Empirical literature has supported a relationship between culture and job satisfaction, though this is not the case for the relationship between culture and PDM;¹¹ no empirical research has been conducted. The aim of this study is to combine these two sets of literature, and in the process determine whether asymmetries in culture will differentially affect the freedom of employees (i.e., with regard to PDM) and attitudes (i.e., with regard to job satisfaction) of individuals in the workplace. In order to facilitate the process, this study will work towards answering the following questions, and test the accompanying hypotheses:

Research question 1: Does having the opportunity to participate in job-related decisions affect the job satisfaction of employees?

Affective models of participation hold that engagement in PDM will satisfy employees' higher-order needs (Maslow, 1943), such as self-expression (Miller & Monge, 1986), independence (French et al., 1960) and feelings of fate control, which ultimately promotes their job satisfaction (Vroom, 1964). Therefore, the working hypothesis to research question 1 is:

Hypothesis 1: Employees will experience increased levels of job satisfaction as their freedom to participate in job-related decisions increases.

Research question 2: Do asymmetries in culture differentially affect the job satisfaction of employees?

Countries that are more orientated towards traditional values emphasise social conformity and take a nationalistic outlook (Inglehart & Baker, 2000), such that individuals' satisfaction in the workplace may not be given priority. Alternatively, countries orientated towards secular-rational values have opposing preferences to these issues. Therefore, the first two working hypotheses to this research question are:

Hypothesis 2(a): Traditional values decrease an employee's job satisfaction.

Hypothesis 2(b): Secular-rational values increase an employee's job satisfaction.

¹¹ See Sagie and Aycan (2003) for a theoretical exploration; no empirical studies are currently available.

Countries that are more orientated towards survival values tend to prioritise economic and political security over individual well-being (Inglehart & Baker, 2000), and thus display relatively low levels of subjective well-being. Countries which adopt self-expression values tend to prioritise individual well-being, and thus display relatively higher levels of subjective well-being. Consequently, the next two hypotheses are:

Hypothesis 2(c): Survival values decrease an employee's job satisfaction.

Hypothesis 2(d): Self-expression values increase an employee's job satisfaction.

Research question 3: Do asymmetries in culture affect the freedom employees have to participate in job-related decisions?

Countries that are more orientated towards traditional values tend to be high on power distance. Such countries respect authority and accept it passively (Inglehart & Baker, 2000). In comparison, countries orientated towards secular-rational values have opposing preferences to these issues. Therefore, the first two working hypotheses to this research question are:

Hypothesis 3(a): Traditional values decrease an employee's freedom for PDM.

Hypothesis 3(b): Secular-rational values increase an employee's freedom for PDM.

Countries that are more orientated towards survival values tend to favour authoritarianism (Inglehart & Baker, 2000) and thus collaboration in decision making is avoided; PDM is considered to be an infringement on the rights of management. Countries that are more orientated towards self-expression values have rising demands to participate in economic decision making. This leads us to the final two hypotheses under consideration in this research:

Hypothesis 3(c): Survival values decrease an employee's freedom for PDM.

Hypothesis 3(d): Self-expression values increase an employee's freedom for PDM.

Chapter 3: Methodology

The objective of this study was to investigate whether there is a relationship between: (i) job satisfaction, (ii) PDM, and (iii) culture. Although job satisfaction and PDM are topics of wide research, the contribution of this research lies in empirically investigating the relationship of these two concepts when taking into account cultural beliefs and values. Having used a deductive approach, this study's research design incorporated the use of cross-sectional survey data, which was analysed using a number of techniques, including: (i) principal component analysis, (ii) correlation analysis, and (iii) ordered logistic regression. The dependent variables in such regression analyses were job satisfaction and PDM. The purpose of this design was to correlate variables of interest (i.e., PDM, culture, job characteristics, individual characteristics, socio-demographic factors) with job satisfaction and PDM, as well as measure the relationship between these variables. Such research is of value within an organisational setting, as it provides an insight into whether asymmetries in culture differentially affect the job satisfaction and the freedom of individuals to participate in job-related decisions.

This chapter is organised as follows: Section 3.1 summarises the data source for this study, as well as the sampling design and a description of the data selected. Section 3.2 then discusses the variables that were selected to capture job satisfaction, PDM, and culture, and examine the reliability and validity of these variables as measures for the concepts of interest. The data analyses techniques, as well as the proposed models of job satisfaction and PDM are outlined in Section 3.3, with the limitations and delimitations of this methodological approach being considered in Section 3.4.

3.1 Data Sample

The EVS was selected as the data source for this study. The EVS is a large-scale, cross-national research programme on human values, which provides a unique insight into the beliefs, values, and attitudes of people across Europe. The first wave of the EVS was undertaken in 1981, and has subsequently been conducted every nine years.

The data selected for this study represents a sample from the third wave (1999) of the EVS. Data for the third wave of the EVS was collected through face-to-face interviews, where questionnaire surveys were administered to national representative samples for each of the participating countries. Professional survey organisations conducted the surveys following specific guidelines provided by the co-ordinating organisation at

Tilburg University. Sampling was restricted to adult citizens 18 years and over (European Values Study, n.d.). To provide standardised information across countries, survey organisations were required to supply detailed information regarding translation of questionnaires, sampling procedures, and weightings; details of such procedures are available within the source book of the 1999 EVS survey (Halman, 2001).

This study selected data from the third wave of the EVS as it was the most recent data available. Although the fourth wave (2008) of the EVS would have been of great interest, its first release was scheduled for June 2010, and thus data retrieval did not fit within the time frame of this study. Nonetheless, the fourth wave of the EVS will provide an opportunity for future research to draw similar cultural comparisons across countries to investigate whether any notable cultural changes have taken place over the nine-year period between 1999 and 2008.

Following data collection, the data set was cleaned by removing all cases with missing entries. Overall, three countries were removed from the sample due to the unavailability of data for certain variables. The three countries removed were Great Britain, Portugal, and Greece. With regard to Great Britain, no data was available for the variable ‘level of happiness’, which was one of the variables required to capture the survival vs. self-expression value domain. For Portugal, all data relating to household income was missing. In the case of Greece, all data relating to household composition was missing. This resulted in a final count of 30 participating countries,¹² including: France, Germany West, Germany East, Austria, Italy, Spain, Netherlands, Belgium, Denmark, Sweden, Finland, Iceland, Northern Ireland, Ireland, Estonia, Latvia, Lithuania, Poland, Czech Republic, Slovakia, Hungary, Romania, Bulgaria, Russia, Malta, Luxembourg, Slovenia, Ukraine, Belarus, and Turkey. The selected sample was further restricted by only including respondents who classified their status as employed.¹³ This restriction was imposed as one of the concepts included in this study is PDM; thus, one cannot participate in job-related decisions if one is not employed. Respondents were retained whether or not they were classified as being within the working age population.¹⁴ Such restriction resulted in a final sample of 11,572

¹² Germany is divided into Germany West and Germany East. This division is consistent with Inglehart and Baker (2000), and will provide an insight into whether past communist legacies have shifted cultural beliefs and values in a different direction within the Eastern region.

¹³ Includes both full-time employees (i.e., those working 30 hours or more per week), part-time employees (i.e., those working less than 30 hours per week), and the self-employed.

¹⁴ Respondents between the ages of 18-65; 21 (0.3%) respondents are below age 18; 146 (1.3%) respondents are above age 65.

respondents, of which 6,332 represent males, and 5,240 represent females. The total number of cases for each of the participating countries is outlined in Appendix A.

3.2 Measures

This section outlines the variables which were selected to capture job satisfaction, PDM, and culture; in addition it examines their reliability and validity as measures of these concepts. This section also draws on past literature, both theoretical and empirical, to support the selection of variables, while acknowledging the potential limitations of some. Although the remainder of this section focuses on the variables selected to measure the concepts that are of most interest (i.e., job satisfaction, PDM, culture), it is important to also note the standard socio-demographic variables which were included in this study. These variables include: (i) gender, (ii) age, (iii) marital status (i.e., married, separated, widowed or divorced), (iv) number of household dependants (i.e., below the age of 5, between the ages of 5-17), (v) education level (i.e., higher, middle, lower), (vi) employment status (i.e., full-time, part-time, self-employed), and (vii) household income (i.e., higher, middle, lower).

3.2.1 Job satisfaction

To measure job satisfaction within this study, the variable selected relates to the question: "Overall, how satisfied or dissatisfied are you with your job?" This variable is categorical and is ordered on a Likert scale of 1-10, with 1 representing 'complete dissatisfaction' and 10 representing 'complete satisfaction' with the respondent's current job.

It is worth noting that the job satisfaction variable available in the EVS focuses on 'overall job satisfaction' as a single-item measure. Acknowledging this as a potential limitation of this study is important, as concerns have been raised about the internal consistency of single-item measures (Loo, 2002; Rose, 2005), with some arguing that a single-item measure of job satisfaction tends to overestimate the percentage of people satisfied in their jobs (Oshagbemi, 1999). Multi-item measures of job satisfaction have been shown not to be limited in this regard. Multi-item measures also have the advantage of identifying specific factors which may be negatively influencing job satisfaction (e.g., pay, co-workers, job challenge), thereby providing management with the ability to target specific areas for improvement (Loo, 2002). Alternatively, single-item measures of job satisfaction are of value in comparative studies where the satisfaction of employees in different occupations is investigated. As such, a single-

item measure of job satisfaction will eliminate the unique characteristics of a specific job (Oshagbemi, 1999). Some have also refuted the claims of low internal consistency (Scarpello & Campbell, 1983), which has been supported by the results of a meta-analysis of job satisfaction research (Wanous, Reichers, & Hudy, 1997). The results of the meta-analysis indicated that single-item measures are adequate when investigating influences of job satisfaction (Wanous et al., 1997). Based on such evidence, this study is confident in the reliability of the job satisfaction variable selected.

Even though a multiple-item measure of job satisfaction was not available within the EVS, a single-item measure of job satisfaction remained to be more appropriate to meet the demands of this study. With the influence of culture on job satisfaction investigated across different occupations, a single-item measure of job satisfaction was more valid, as the unique characteristics of specific occupations across countries were eliminated. This also acted as a point of differentiation when compared to the studies reviewed in Chapter 2, where the majority employed multiple-item measures of job satisfaction.

Furthermore, the variable selected to measure job satisfaction refers to the respondent's current job, rather than satisfaction with work in general. Distinguishing between these types of satisfaction domains is important, as it could potentially result in drawing inaccurate conclusions from the empirical results. This implication has been addressed in the literature (Rose, 2003), whereby it was argued that although any given job is unique in terms of contractual arrangements and experiences, such factors generally fit with specific occupations or career paths. Thus, although the variable selected represents job satisfaction with the respondent's current job, it can still be considered valid as a measure of job satisfaction in general.

3.2.2 Participative decision making

To measure PDM within this study, the variable selected relates to the question: "How free are you to make decisions in your job?" This variable is categorical and is ordered on a Likert scale of 1-10, with 1 representing 'no freedom for decision making' and 10 representing 'a great deal of freedom for decision making' in the respondent's current job. This variable is unique in that it captures two considerations: (i) whether PDM exists within the respondent's current job, and (ii) to what extent management allows PDM to be practised. The former consideration is of interest, as it may reflect the influence of asymmetries in cultural beliefs and values (Sagie & Aycan, 2003). This variable is well aligned with the definition of PDM provided by Heller et al. (1998),

which extends to capture all forms of PDM (i.e., direct, indirect) as well as the intensities of PDM. Based on such considerations, this variable was considered to be a valid measure of PDM.

Using the affective models of participation as a foundation, this study postulated PDM to be a function of certain job characteristics, as well as individual characteristics. On that basis, it was determined that job characteristics such as task knowledge, ego motivation, and freedom for self-expression were factors which influence the freedom for PDM. A respondent's job level was considered to be the primary individual characteristic that influences the freedom for PDM. The variables selected as proxies for these factors and the studies which advocate their use are outlined in Table 6.

Table 6: Job Characteristics which Influence PDM

Factor	Variable Selected	Study
Task knowledge	A job that meets one's abilities is important	Sagie and Aycan (2003)
Ego motivation	A job where one can achieve something important	Maslow (1943); Ruh, White, and Wood (1975)
Freedom for self-expression	A job where one can use initiative is important	Miller and Monge (1986)
Job level	Current occupation ^a	Vroom and Deci (1960)

^a Adopted the approach of Kalmijn and Kraaykamp (2007) who employed data from the 1999 EVS and categorised occupations to the following groups: (i) managers/employers, (ii) professionals, (iii) lower white collar, (iv) higher blue collar, (v) lower blue collar, and (vi) others – primarily represents farmers.

3.2.3 Culture

As noted earlier, cultural explanations of economic occurrences have largely been avoided in economic research due to the difficulty in quantifying cultural influences. Thus, in order to empirically demonstrate whether culture has any influence over economic phenomena, this study adopted the approach of Inglehart and Baker (2000), which demonstrated cross-cultural differences between countries based on their orientation towards traditional vs. secular-rational values and survival vs. self-expression values. Traditional value orientation emphasises male dominance in economic and political life, shows little tolerance towards abortion, and stresses the importance of religion; secular-rational value orientation emphasises the opposite (Inglehart & Baker, 2000). Countries orientated towards survival values tend to display relatively low subjective well-being, interpersonal trust, and are intolerant of outgroups; countries orientated towards self-expression values tend to display the opposite preferences (Inglehart & Baker, 2000).

In order to draw the distinction between the traditional vs. secular-rational, and the survival vs. self-expression value domains, the variables outlined in Table 7 were selected. It must be noted that the data employed by Inglehart and Baker (2000) originated from several waves of the World Values Survey and therefore not all the variables they utilised were available within the third wave of the EVS.¹⁵ Nonetheless, the variables which were available are comparable to those employed by Inglehart and Baker, and thus the distinction between the two value domains was sufficiently drawn.

Table 7: Cultural Variables

Value Domains	Variables Selected
Traditional vs. Secular-rational	<ul style="list-style-type: none"> • God is very important • Abortion is never justifiable • Level of national pride • Favours more respect for authority
Survival vs. Self-expression	<ul style="list-style-type: none"> • Level of happiness • Would never sign a petition • Homosexuality is never justifiable • You have to be careful when trusting people

Using the selected variables, two cultural variables were created by means of principal component analysis. The rationale for employing this approach in measuring culture is twofold: (i) it aligns with existing theoretical and empirical work (Inglehart, 2006; Inglehart & Baker, 2000), and (ii) influences of a country's culture will be captured by a group of factors, rather than being attributed to a singular factor (i.e., importance of God or level of happiness). Early developments in the technique of principal component analysis originated from the work by Pearson (1901). The advantages of this technique lie in its ability to extract meaningful information from a large set of variables, reduce the number of variables, and simplify the interpretability of the data set (Abdi & Williams, 2010). The resulting principal components were also used to create several independent variables for subsequent regression analyses.

¹⁵ No variable or proxy was available for: (i) it is more important for a child to learn obedience and religious faith than independence and determination, and (ii) priority is given to economic and physical security over self-expression and quality of life.

Two principal component analyses were conducted, each on a separate group of variables.¹⁶ Four principal components (PC) were initially extracted from Group 1; the first PC accounted for the largest percentage of total variance at approximately 38%. Similarly, four PCs were also extracted from Group 2; the first PC accounted for the largest percentage of total variance at approximately 42%.

Using the Kaiser criterion,¹⁷ it was determined that only the first PC should be retained from Group 1, as its eigenvalue was 1.524. The results from Group 2 were largely similar, with only the first PC being retained, with an eigenvalue of 1.660. The Scree test¹⁸ (Cattell, 1966) was also used to determine the number of PCs to retain. The scree plot indicated that the first two PCs from each group should be retained. Due to such conflicting results, it was decided that the Kaiser criterion will solely be used to determine and justify the number of PCs to retain. The retention of only one PC from each group allowed for greater comparability of cultures, aligned well with existing theoretical and empirical work (Inglehart, 2006; Inglehart & Baker, 2000) and improved the interpretability of the empirical results.

Using SPSS 17, rotation of the PCs was not possible through traditional methods (e.g., Varimax rotation) as only one PC was retained from each group. However, it was important for the two PCs to be orthogonal to one another. Therefore, the Gram-Schmidt orthogonalisation process¹⁹ was selected to orthogonalise the two PCs. Following this process, PC 1 (i.e., traditional vs. secular-rational values) was orthogonalised to PC 2 (i.e., survival vs. self-expression values).

The results (i.e., loadings²⁰) of the two principal component analyses are presented in Table 8. PC 1 shared a relatively large amount of information with the variables relating to ‘God’ and ‘Abortion’ when compared to those relating to ‘National Pride’ and ‘Respect for Authority’. In contrast, PC 2 shared a relatively large amount of information with all four of the variables.

¹⁶ Variables in Group 1 reflect traditional vs. secular-rational values; variables in Group 2 reflect survival vs. self-expression values. Refer to Table 7 for a summary of the variables.

¹⁷ The Kaiser criterion holds that a component should be retained if its eigenvalue is greater than 1 (Kaiser, 1960).

¹⁸ The Scree test plots the eigenvalues associated with each component and identifies the point at which the scree plot becomes horizontal. Components above the break are meaningful and should be retained; those below the break are not important and can be disposed of (Suhr, 2005).

¹⁹ Several studies (Clayton, 1971; Draper & Smith, 1981, pp. 275-278; Farebrother, 1974) outline the Gram-Schmidt orthogonalisation process.

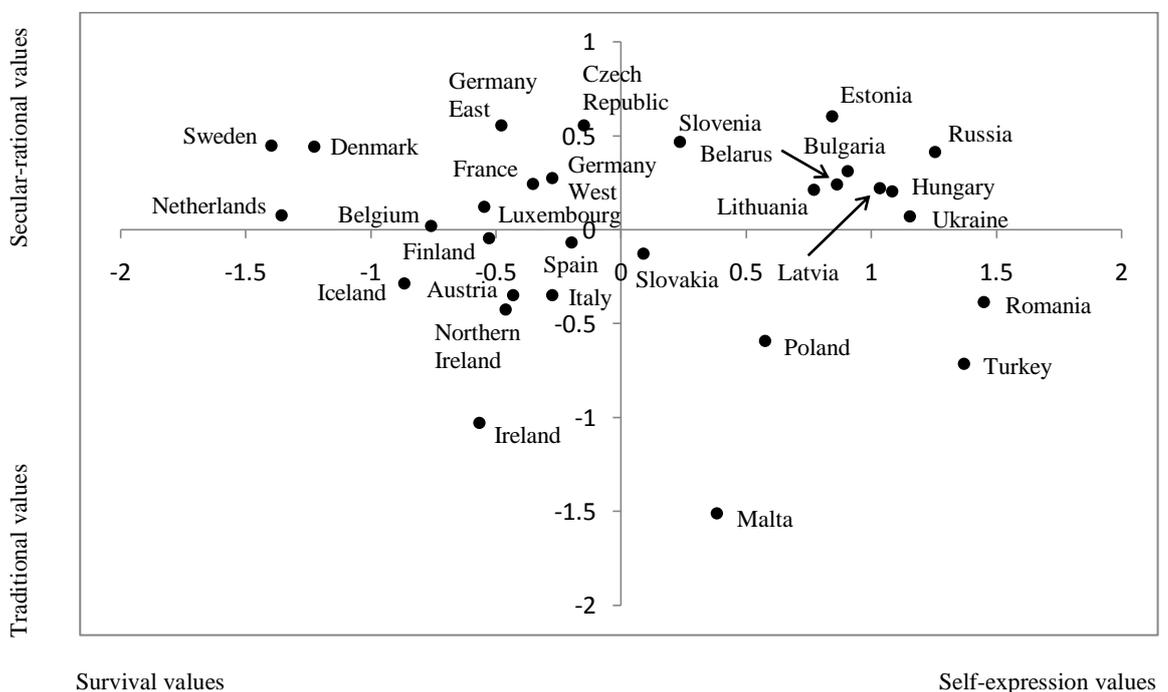
²⁰ Equivalent to the correlations between a component and a variable which estimates the information they share (Abdi & Williams, 2010).

Table 8: Variable Loadings on Principal Components

Components Retained (i.e., Value Domains)	Variables	Loadings
(1) Traditional vs. Secular-rational	• God is very important	-.764
	• Abortion is never justifiable	.748
	• Level of national pride	.452
	• Favours more respect for authority	.420
(2) Survival vs. Self-expression	• Level of happiness	.585
	• Would never sign a petition	.563
	• Homosexuality is never justifiable	.683
	• You have to be careful when trusting people	-.730

Undertaking a principal component analysis was also of interest to this study, as measuring culture with two distinct variables allowed a cultural map of Europe to be created. This was achieved by calculating country level means for the two cultural domains and subsequently placing each country at a specific point on the traditional vs. secular-rational, and the survival vs. self-expression value continuums. Such a cultural map of Europe served as a visual examination to whether any substantial cultural differences exist between countries. Evidence in the affirmative would act as an indication that further and more sophisticated empirical analysis must be undertaken to investigate whether asymmetries in culture differentially affect the job satisfaction and the freedom of individuals to participate in decision making within the workplace. The cultural map of Europe is presented in Figure 2.

Figure 2: Cultural Map of Europe



The cultural map of Europe provided a unique insight into how countries' cultures compare across the European region. Overall, culture across European countries did seem to differ substantially, with four clearly defined cultural groups being present across the European region. Although this study only investigated culture across Europe, the four groups were consistent with those identified by Inglehart and Baker (2000) who investigated culture across the world. These groups included countries that were more orientated towards beliefs and values that are: (i) secular-rational and survival in nature ($n = 3,007$), (ii) secular-rational and self-expression in nature ($n = 2,826$), (iii) traditional and survival in nature ($n = 2,822$), and (iv) traditional and self-expression in nature ($n = 2,917$). The number in the parentheses represent the sample size within each of the cultural groups, indicating that clear differences in culture exist across the European region; culture was not concentrated in one specific set of beliefs and values. This called for a more sophisticated empirical analysis to be undertaken to investigate the extent and direction to which asymmetries in culture differentially affect the job satisfaction and the freedom of individuals to participate in decision making within the workplace. The four cultural groups identified in the cultural map of Europe will act as cultural variables in upcoming empirical analyses.

3.3 Data Analysis Techniques

To investigate the relationship between job satisfaction, PDM, and culture, this study took the following empirical approach using SPSS 17. Before the models of job satisfaction, PDM, and culture are outlined, it is important to summarise the techniques that were utilised throughout the empirical analysis to test the hypotheses. For a preliminary investigation, bivariate correlations between the above concepts were examined. With relatively little empirical research on the impact of culture on job satisfaction and PDM, such correlations provided an initial indication to whether there were any patterns of association between the concepts which may be of interest. The correlation analysis also acted as an opportunity to examine whether there were any apparent concerns relating to multicollinearity amongst the independent variables. Subsequent to the correlation analysis, ordered logistic regression analyses were undertaken for a more detailed and sophisticated investigation. This method of analysis was selected as the dependent variables (i.e., job satisfaction, PDM) were parameterised in the EVS as ordinal and categorical; thus, an ordinal logistic regression analysis was considered to be the most appropriate econometric estimation technique between these concepts. The benefit of using this technique as opposed to the standard linear

regression technique lies in its superior ability to analyse ordinal data (Tarling, 2009). The proportional odds model was first introduced by McCullagh (1980) and is the most commonly used ordinal logistic model. The equation for the proportional odds model is conceptualised in the following manner:

$$\text{Log} \left[\frac{\Pr(y \leq m | x)}{\Pr(y > m | x)} \right] = \tau_m - x\beta \quad (1 \leq m < M), \quad (2)$$

where m is a category, x is a vector of independent variables, τ is a cut point, and β is a vector of logit coefficients. The negative sign in front of the logit coefficient facilitates interpretation, such that a positive coefficient indicates that a unit increase in x leads to higher levels of y ; cut points are ordered so that $\tau_1 < \tau_2 \dots < \tau_{M-1}$ (Fullerton, 2009). The proportional odds model assumes equal β s exist across all logit equations; thus, the effect of each independent variable is the same across all cut points. Only τ changes across the logit equations. This assumption was tested through SPSS 17, by including the test for parallel lines.²¹ The probability for any given outcome category (m) in the proportional odds model is:

$$\Pr(y = m | x) = \begin{cases} F(\tau_1 - x\beta) & m = 1, \\ F(\tau_m - x\beta) - F(\tau_{m-1} - x\beta) & 1 < m \leq M - 1, \\ 1 - F(\tau_{M-1} - x\beta) & m = M, \end{cases} \quad (3)$$

where F is the logistic cumulative density function, τ is a cut point, x is a vector of independent variables, β is a vector of logit coefficients that do not vary across cut points, and m is the category and its corresponding logit equation (Fullerton, 2009). Having outlined the theoretical model, the following section outlines the models which were used to test the hypotheses, and investigate the relationship between job satisfaction, PDM, and culture.

²¹ The null hypothesis states that equal β s exist across all cut points. A statistically significant chi-square value rejects the null hypothesis (Tarling, 2009).

3.3.1 Models of job satisfaction, participative decision making and culture

This study postulated job satisfaction to be a function of PDM, culture, and socio-demographic factors, such that:

$$\begin{aligned} \text{Job Satisfaction} &= f(\text{PDM, Culture, Gender, Age, Education Level, Marital Status,} \\ &\quad \text{Employment Status, Household Income, Number of Household} \\ &\quad \text{Dependants}) \end{aligned} \quad (4)$$

In line with existing literature (Maslow, 1943; Miller & Monge, 1986; Ruh et al., 1975; Sagie & Aycan, 2003; Vroom & Deci, 1960), PDM was postulated to be a function of culture, job characteristics, and individual characteristics. Socio-demographic factors were also included, such that:

$$\begin{aligned} \text{PDM} &= f(\text{Culture, Freedom of Self-expression, Ego Motivation, Task Knowledge,} \\ &\quad \text{Job Level, Gender, Age, Education Level, Employment Status}) \end{aligned} \quad (5)$$

3.4 Limitations

The methodological approach adopted in this study gave rise to several limitations which must be acknowledged. These limitations primarily stemmed from the use of archival type data, which suffered from missing observations and variables for some countries. This was of particular relevance to the variables selected for job satisfaction and PDM, where 19,715 and 19,859 represented missing responses, respectively. In total, there were 29,553 respondents with missing entries to some of the questions relevant to this study. Once these respondents were removed, the final sample totalled 11,572. Nonetheless, this study is confident that the sample size was adequate to continue this investigation.²² Furthermore, the use of archival data removed any input one would have over considerations such as the sampling process, questionnaire design, or the interview process. Although such lack of input was somewhat limiting, when considering the scope of this study it is unlikely that data which provide such a unique insight into the beliefs, values, and attitudes of people across Europe would have been obtained through alternative methods.

²² Past studies investigating the effects of culture on job satisfaction utilised sub-samples from the third wave of the EVS totalling between 3,000-7,000 (Fargher et al., 2008; Lange, 2009).

The use of cross-sectional questionnaire data also gave rise to the potential limitation of CMV, as identified in the review empirical literature. CMV may have been a concern within this study, as it has previously been argued that the use of questionnaire data may result in associations which are inflated (Wagner & Gooding, 1987). However, this study took comfort in results of existing empirical literature which indicated that CMV is not at a level which challenges the interpretation of empirical results (Doty & Glick, 1998; Spector, 1994, 2006).

Furthermore, studies which measure culture across a number of countries may be subject to issues concerning measurement validity. In order to make data collection across countries feasible, questionnaires were translated into different official languages or dialects. Such translation, although necessary, may have had a bearing on whether questionnaire surveys were equivalent across countries which differ in culture or language. With data being selected from the EVS, this study had no control over the procedures implemented to ensure standardisation of data across countries. Nonetheless, the co-ordinating organisation of the EVS provided guidelines to the survey organisations, which required detailed information to be supplied regarding the translation of the questionnaire, the sampling procedures, and the weightings. Such procedures arguably mitigated any potential negative effects which could weaken the measurement validity of the data.

There were also self-imposed limitations stemming from this methodological approach. The sample was restricted to only include respondents who classified themselves as employed at the time of the survey. Although it can be argued that information was lost by excluding the unemployed or retired from the sample (e.g., capturing past experiences), these groups only represented 0.7% of the final sample and thus their exclusion was likely to have minimal effects on the empirical results.

Chapter 4: Empirical Results and Discussion

The objective of this study was to investigate whether there is a relationship between: (i) job satisfaction, (ii) PDM, and (iii) culture. This chapter presents results from the empirical analyses which were undertaken to test the research hypotheses developed in Section 2.3. The results of the empirical analyses were also considered in light of existing empirical studies and integrated with current theory.

This chapter is organised as follows: Section 4.1 describes the sample by providing descriptive statistics. The results of the correlation analysis are provided in Section 4.2, which is followed by examining the results of the ordered logistic regression analyses in Section 4.3. Such examination also addresses the research questions and hypotheses.

4.1 Describing the Sample

The corresponding numbers, definitions, means, and standard deviations for the variables used within the empirical analyses are outlined in Table 9. In summary, there was a relatively high level of job satisfaction across the sample, as indicated by the sample mean of 7.18. This was further supported by the level of job satisfaction reported,²³ with approximately 53% of respondents listing their job satisfaction at category 8 or above. In terms of PDM, it seemed that employees within this sample did have freedom to participate in job-related decisions, with the sample mean being 6.46. Approximately 56% of respondents reported their freedom for PDM at category 7 or above. In terms of culture, it was clear that respondents were evenly spread across the four cultural groups, indicating that distinct cultural differences exist within this sample.

In terms of demographics, from a final sample of 11,572,²⁴ there were 6,332 males and 5,240 females. The mean age was approximately 40 years of age. Respondents were predominantly educated at the middle level, and likely to be employed on a full-time basis in a job classified as lower white collar, higher blue collar, or lower blue collar. Respondents were also likely to be married and earning a combined household income within the middle income bracket. Approximately 83% of respondents were members of households with no dependants under the age of 5 living at home; 57% of respondents were members of households with no dependants between the ages of 5-17 living at home. The majority of households consisted of one to two dependants.

²³ See Appendix B.

²⁴ See Section 3.1 for the methodological approach followed to obtain the final sample.

Table 9: Variable Numbers, Definitions, Means and Standard Deviations

Variable Number/Name	Definition	<i>M</i>	<i>SD</i>
1 Job satisfaction ^a	Ordinal categorical variable (1 = complete dissatisfaction, 10 = complete satisfaction)	7.18	2.155
2 PDM ^b	Ordinal categorical variable (1 = no freedom, 10 = a great deal of freedom)	6.46	2.671
<i>Culture</i>			
3 Traditional/survival	Dummy variable (1 = yes, 0 = otherwise)	.244	.429
4 Traditional/self-expression	Dummy variable (1 = yes, 0 = otherwise)	.252	.434
5 Secular-rational/survival	Dummy variable (1 = yes, 0 = otherwise)	.260	.439
6 Secular-rational/self-expression	Dummy variable (1 = yes, 0 = otherwise)	.244	.430
7 Initiative	Dummy variable (1 = yes, 0 = no)	.540	.498
8 Achieve	Dummy variable (1 = yes, 0 = no)	.600	.490
9 Abilities	Dummy variable (1 = yes, 0 = no)	.639	.480
<i>Job Level</i>			
10 Manager/employer ^c	Dummy variable (1 = yes, 0 = otherwise)	.089	.284
11 Professional ^d	Dummy variable (1 = yes, 0 = otherwise)	.152	.359
12 Lower white collar ^e	Dummy variable (1 = yes, 0 = otherwise)	.316	.465
13 Higher blue collar ^f	Dummy variable (1 = yes, 0 = otherwise)	.226	.418
14 Lower blue collar ^g	Dummy variable (1 = yes, 0 = otherwise)	.184	.387
15 Other ^h	Dummy variable (1 = yes, 0 = otherwise)	.034	.182
16 Gender	Dummy variable (1 = male, 0 = otherwise)	.547	.498
17 Age	Age in years	39.6	11.428
<i>Educational Level</i>			
18 Higher ⁱ	Dummy variable (1 = higher, 0 = otherwise)	.256	.436
19 Middle ^j	Dummy variable (1 = middle, 0 = otherwise)	.484	.500
20 Lower ^k	Dummy variable (1 = lower, 0 = otherwise)	.240	.427
<i>Marital Status</i>			
21 Married	Dummy variable (1 = married, 0 = otherwise)	.634	.482
22 Widowed	Dummy variable (1 = widowed, 0 = otherwise)	.024	.152
23 Separated/Divorced	Dummy variable (1 = separate/divorced, 0 = otherwise)	.097	.296
<i>Employment Status</i>			
24 Self-employed	Dummy variable (1 = self-employed, 0 = otherwise)	.085	.279
25 Full-time	Dummy variable (1 = working 30 hours of more per week, 0 = otherwise)	.795	.404
26 Part-time	Dummy variable (1 = working less than 30 hours per week, 0 = otherwise)	.120	.325
<i>Household Income Level</i>			
27 Higher	Dummy variable (1 = higher, 0 = otherwise)	.267	.443
28 Middle	Dummy variable (1 = middle, 0 = otherwise)	.531	.499
29 Lower	Dummy variable (1 = lower, 0 = otherwise)	.201	.401
30 Dependants under the age of 5 ^l	Number of dependants under 5 residing in household	.210	.523
31 Dependants between the ages of 5-17 ^m	Number of dependants between 5-17 residing in household	.692	.957

Note. *N* = 11,572; *M* = Mean; *SD* = Standard deviation.

^{a, b} *n* for job satisfaction and PDM categories is provided in Appendix B. ^c Manager/employer of establishment. ^d Lawyer, accountant, teacher. ^e Office worker. ^f Foreman, supervisor, skilled manual worker. ^g Semi-skilled/unskilled manual worker, agricultural worker. ^h Farmer: employer, manager on own account. ⁱ Lower/upper tertiary. ^j Secondary (with vocational qualification), full secondary. ^k Complete elementary. ^{l, m} *n* for number of dependants is provided in Appendix B.

4.2 A Preliminary Investigation of Job Satisfaction, Participative Decision Making, and Culture

With relatively little empirical research on the impact of culture on job satisfaction and PDM, bivariate correlations were calculated prior to undertaking more sophisticated empirical analyses. The purpose of the correlations was to provide a preliminary insight into whether there are any patterns of association which may be of interest; results are provided in Table 10. Correlations between all variables were also included to examine whether multicollinearity was present amongst the independent variables. By using the Heise criterion²⁵ (Heise, 1969), no apparent reasons to suspect multicollinearity amongst any independent variables appeared. Only 1.6% of correlations were greater than $r = .50$ and none breached the upper limit of the Heise criterion. Although this approach has been criticised for somewhat oversimplifying the diagnosis of multicollinearity (Rockwell, 1975), given the absence of strong correlations, no additional assessments were undertaken.

With regard to the patterns of association between job satisfaction and the independent variables included in Equation (4), the majority of the correlations were small; only 4 out of the 21 correlations displayed a value greater than $r = .10$. Although the correlation values were small, 14 were statistically significant at the 1% level. With regard to the variables of interest, the correlation between PDM and job satisfaction was positive and statistically significant ($r = .42, p < .01$). The results also confirmed several strong correlations between job satisfaction and the cultural variables. Beliefs and values which are traditional and self-expression in nature were not correlated with job satisfaction at a statistically significant level ($r = -.01, p = .211$). Alternatively, beliefs and values which are traditional and survival in nature, or secular-rational and survival in nature were positively correlated with job satisfaction ($r = .15; r = .04$; respectively) and statistically significant at the 1% level. In contrast, beliefs and values which are secular-rational and self-expression in nature had a negative and statistically significant correlation with job satisfaction ($r = -.17, p < .01$). The correlation coefficients also suggested statistically significant correlations between age and job satisfaction ($r = .07, p < .01$), higher education and job satisfaction ($r = .05, p < .01$), and being married and job satisfaction ($r = .03, p < .01$). There was also a positive and statistically significant correlation between being a member of a higher income earning household and job satisfaction ($r = .10, p < .01$).

²⁵ The Heise criterion holds that any correlation coefficient greater than .80 is an unacceptable level of multicollinearity.

With regard to the patterns of association between PDM and the independent variables included in Equation (5), the correlations were also generally small. Almost half of the 21 correlations displayed a value greater than $r = .10$; all but two correlations were statistically significant at the 1% level. These results also identified several strong correlations between PDM and all four of the cultural variables. Cultural beliefs and values which are traditional and survival in nature, or secular-rational and survival in nature were positively correlated with PDM ($r = .13$; $r = .10$; respectively) and statistically significant at the 1% level. Alternatively, cultural beliefs and values which are traditional and self-expression in nature, or secular-rational and self-expression in nature were negatively correlated with PDM ($r = -.09$; $r = -.14$; respectively) and statistically significant at the 1% level. Being able to use initiative appeared to be an important component to PDM, as it was positively correlated with PDM at a statistically significant level ($r = .11$, $p < .01$). As to be expected, having a job as a manager or employer, or alternatively being self-employed, entails continuous decision making responsibility, and thus such variables were positively correlated with PDM ($r = .20$; $r = .20$; respectively) and statistically significant at the 1% level. In contrast, being employed on a full-time basis had a negative correlation with PDM ($r = -.11$, $p < .01$). Furthermore, it seemed that employees with higher levels of education had more freedom to participate in job-related decisions, as indicated by the positive correlation ($r = .14$), which was statistically significant at the 1% level.

In terms of the patterns of association between all independent variables, there were some interesting correlations worth noting. It appeared as though respondents who considered using initiative within their job as important also considered achievement within their job as important ($r = .42$, $p < .05$). The correlations also suggested gender effects with regard to job level and employment status. Males appeared more likely to be employed in a higher blue collar job ($r = .21$, $p < .01$) and less likely to be employed on a part-time basis ($r = -.24$, $p < .01$). Furthermore, respondents with higher levels of education were more likely to be employed in a job classified as professional ($r = .46$, $p < .01$). The correlations with regard to age indicated a positive pattern of association with marriage ($r = .32$, $p < .01$), and being a member of a higher income earning household ($r = .25$, $p < .01$).

Table 10: Bivariate Correlations (Spearman Rho)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31					
1	1																																			
2	.42	1																																		
3	.15	.13	1																																	
4	-.01	-.09	-.33	1																																
5	.04	.10	-.34	-.33	1																															
6	-.17	-.14	-.32	-.33	-.34	1																														
7	.08	.11	.08	.01	.02	-.11	1																													
8	.05	.08	.05	.05	-.03	-.07	.42	1																												
9	.04	.03	.02	.07	-.07	-.02	.35	.33	1																											
10	.08	.20	.04	-.01	-.01	-.02	.08	.07	.03	1																										
11	.04	.10	.03	-.06	.04	-.01	.06	.03	.04	-.13	1																									
12	.03	.01	.05	-.09	.13	-.09	.02	.01	-.04	-.21	-.29	1																								
13	-.02	-.06	-.06	.04	.04	.06	-.03	-.01	-.00	-.17	-.23	-.37	1																							
14	-.11	-.19	-.06	.08	-.10	.08	-.12	-.10	-.03	-.15	-.20	-.32	-.26	1																						
15	.01	.04	.02	.08	-.07	-.03	.03	.04	.03	-.06	-.08	-.13	-.10	-.09	1																					
16	.03	.08	-.04	.03	-.01	.02	.04	.03	.01	.10	-.08	-.22	.21	.01	.09	1																				
17	.07	.09	.00	.04	-.04	-.01	-.06	-.08	-.01	.08	.04	-.02	-.04	-.03	.00	.00	1																			
18	.05	.14	.05	-.11	.12	-.06	.12	.07	.05	.09	.46	.03	-.23	-.24	-.07	-.06	.05	1																		
19	-.05	-.07	-.05	.02	-.05	.08	-.06	-.05	-.02	-.05	-.20	.10	.09	.01	-.02	-.02	-.14	-.57	1																	
20	.00	-.05	.01	.07	-.06	-.02	-.05	-.01	-.02	-.03	-.21	-.14	.13	.21	.07	.07	.07	-.33	-.54	1																
21	.03	.03	.03	.07	-.09	-.00	-.01	-.02	.03	.06	.02	-.04	.02	-.05	.04	.07	.32	.02	-.03	.02	1															
22	-.01	-.02	-.05	.03	-.04	.05	-.05	-.03	-.02	-.02	-.00	.01	-.01	.03	-.10	-.11	.15	-.02	.00	.01	-.20	1														
23	-.02	.00	-.04	-.03	.03	.05	-.03	-.03	-.03	.00	-.01	.03	-.03	.02	-.04	-.12	.11	-.00	.01	.00	-.43	-.05	1													
24	.04	.20	.02	.06	-.02	-.05	.09	.07	.06	.37	-.01	-.17	-.09	-.10	.28	.12	.05	-.03	-.04	.06	.05	-.01	-.02	1												
25	-.01	-.11	-.05	-.04	.01	.07	-.05	-.02	-.03	-.21	-.03	.08	.14	.01	-.15	.11	-.04	.01	.03	-.04	-.03	-.02	.01	-.60	1											
26	-.03	-.03	.04	.00	.00	-.04	-.02	-.04	-.01	-.07	.05	.05	-.09	.07	-.06	-.24	.00	.01	-.01	-.01	.00	.04	.00	-.11	-.73	1										
27	.10	.16	.06	-.10	.07	-.04	.08	.04	.03	.10	.12	.05	-.10	-.12	-.04	-.00	.02	.25	-.04	-.19	.10	-.06	-.07	.00	.03	-.04	1									
28	.00	-.03	.01	.01	-.01	-.01	-.04	-.03	-.03	-.05	-.05	.03	.06	-.02	-.01	.02	-.01	-.10	.04	.05	.03	-.02	-.02	-.03	.03	-.01	-.64	1								
29	-.11	-.14	-.09	.10	-.07	.06	-.04	-.01	.00	-.05	-.07	-.09	.03	.16	.05	-.02	-.01	-.16	-.00	.14	-.15	.08	.11	.04	-.07	.06	-.30	-.54	1							
30	.00	.01	.05	-.00	-.01	-.04	.04	.04	.02	.01	-.01	-.02	.02	-.01	.02	.07	-.25	.01	-.02	.03	.16	-.04	-.08	.04	-.03	.00	.01	.01	-.02	1						
31	-.03	-.01	.01	.07	-.05	-.01	-.01	.01	.02	.02	-.02	-.03	.00	.02	.03	-.03	-.03	-.03	.02	.01	.27	-.05	-.03	.02	-.02	.02	.03	.01	-.04	.01	-.04	.01	1			

Note. $N = 11,572$; Significance levels are reported throughout the discussion in Section 4.2.

4.3 Testing the Relationship between Job Satisfaction, Participative Decision Making, and Culture

Although the correlation analysis provided a valuable insight into how job satisfaction, PDM, and culture are related, a more sophisticated analysis technique was required to test the research hypotheses. Accordingly, by following the models developed in Section 3.3.1, ordered logistic regression analyses were undertaken to satisfy such requirement; results are provided in Table 11. For the purposes of comparison, and to test the robustness of the coefficient estimates, both regression models were re-estimated by excluding the cultural variables; results for the re-estimated models are provided in Appendix C.

Table 11: Predictors of Job Satisfaction and PDM

Variable	Job Satisfaction ^{a, b}		PDM ^{c, d}	
	β	Std. Error	β	Std. Error
PDM	0.338**	0.007	-	-
Traditional/survival	0.691**	0.049	0.685**	0.048
Traditional/self-expression	0.517**	0.047	0.127**	0.047
Secular-rational/survival	0.392**	0.047	0.616**	0.047
Initiative	-	-	0.177**	0.038
Achieve	-	-	0.103**	0.038
Abilities	-	-	-0.044	0.037
Professional	-	-	-0.502**	0.074
Lower white collar	-	-	-0.751**	0.070
Higher blue collar	-	-	-0.930**	0.072
Lower blue collar	-	-	-1.374**	0.075
Other	-	-	-0.769**	0.106
Male	-0.082*	0.035	-0.358**	0.133
Age	-0.059**	0.009	0.012**	0.001
Age ²	0.001**	0.000	-	-
Higher education	-0.233**	0.049	-	-
Middle education	-0.144**	0.041	-	-
Widowed	-0.126	0.112	-	-
Separated/divorced	-0.087	0.057	-	-
Self-employed	-0.329**	0.061	-	-
Full-time	-	-	-1.591**	0.122
Male full-time	-	-	0.693**	0.138
Part-time	-0.214**	0.053	-1.457**	0.131
Male part-time	-	-	0.484**	0.174
Higher household income	0.327**	0.052	0.624**	0.051
Middle household income	0.241**	0.044	0.289**	0.043
Dependants under the age of 5	-0.017	0.032	-	-
Dependants between the aged of 5-17	-0.025	0.018	-	-
<i>Cuts</i>	-	-	-	-
When job satisfaction or PDM = 1	-2.683**	0.198	-3.640**	0.152
= 2	-2.105**	0.194	-3.124**	0.150
= 3	-1.394**	0.191	-2.570**	0.149
= 4	-0.859**	0.190	-2.155**	0.149

= 5	0.068	0.190	-1.528**	0.149
= 6	0.655**	0.190	-1.085**	0.149
= 7	1.532**	0.191	-0.496**	0.149
= 8	2.743**	0.192	0.427**	0.148
= 9	3.681**	0.193	1.259**	0.149
Pseudo <i>R</i> -square	.170	-	.119	-
<i>Test of Parallel Lines</i>	-	-	-	-
Chi-square	642.036**	-	744.563**	-

Note. $N = 11,572$.

^a Chi-square = 2910.360, $df = 17$, $p < .000$. ^b Control variables: Secular-rational/self-expression, lower educational level, married, full-time employment, lower household income level. ^c Chi-square = 1995.015, $df = 19$, $p < .000$. ^d Control variables: Secular-rational/self-expression, manager/employer, self-employed, lower household income level. ** Correlation is significant at the 1 percent level (2-tailed); * Correlation is significant at the 5 percent level (2-tailed).

4.3.1 The job satisfaction model

The regression model for job satisfaction tested whether PDM, asymmetries in culture, and socio-demographic factors influences job satisfaction. The explanatory power of the specified model was significant (Chi-square = 2910.4, $df = 17$, $p < .01$), with a pseudo *R*-square of 17%. Results from the test of parallel lines indicated that the assumption of equal beta coefficients across all logit equations should be rejected, as the statistically significant chi-square value (Chi-square = 642, $p < .01$) suggested that different beta coefficients were required at each level. When job satisfaction equalled five, its corresponding value for the intercept was not statistically significant ($p = .719$). This indicated that job satisfaction may not have been correctly measured in terms of a 10-point Likert scale. Alternatively, such results may have been a feature of the particular sample used within this study, which would seem as a more likely cause given the reputable nature of the EVS. Consequently, no remedial measures were employed in terms of collapsing the Likert scale, and thus this study accepted the 10-point Likert scale used to measure job satisfaction. The results relating to the coefficient estimates were examined in light of existing empirical studies and the value-percept discrepancy model of job satisfaction (Locke, 1969).

In terms of gender, the regression results did highlight some differences between the job satisfaction of males and females. The results indicated that males were less likely to report higher categories of job satisfaction ($\beta = -0.082$, $p < .05$), while holding all other variables constant. When taking into account that an employee's job values will explicitly determine their level of satisfaction (Locke, 1969),²⁶ gender differences may simply result from asymmetries in the job values of men when compared to those of

²⁶ See Section 2.1.4 to further examine this concept.

women. Gender differences have been a prominent feature in empirical studies of job satisfaction (Clark, 1997; Gazioglu & Tansel, 2006; Lange, 2009), which has indicated that women are generally more satisfied in their jobs than their male counterparts. Potential reasons for the gender effect have been attributed to job types, qualifications, as well as in some situations a woman's status as a secondary provider to the family (Gazioglu & Tansel, 2006). As secondary providers, women may have greater freedom in selecting jobs which meet their job values; thus, there would arguably be a lower proportion of employed women with large discrepancies between their job values and what they gain from their jobs. In contrast, Clark has contended that the gender effect cannot be explained by job values, but by differences in the expectations of men and women.²⁷ Although this line of reasoning has merit, the use of expectations to predict employee job satisfaction has been deemed as theoretically ineffective (Locke, 1969), as discrepancies between what an employee values as opposed to what an employee expects to occur within the work environment are always present.

The regression results also supported both the linear and U-shaped relationship between age and job satisfaction ($\beta = -0.059, p < .01$; $\beta = 0.001, p < .01$; respectively). Although the U-shaped relationship has been supported in empirical studies (Clark, Oswald, & Warr, 1996; Gazioglu & Tansel, 2006; Fargher et al. 2008), when the size of the coefficient was considered, it became clear that the linear relationship would provide greater value for the purposes of interpretation. Consequently, this study observed a linear relationship between age and job satisfaction, suggesting that employees from older age groups were more likely to report lower categories of job satisfaction, while holding all other variables constant. Such results are directly contradictory to the generally accepted U-shaped relationship between age and job satisfaction. Nonetheless, potential explanations for the linear relationship could be attributed to changes in value intensities during later life stages. It may be that the values of older workers are no longer predominantly attached to work outcomes, but rather to gaining satisfaction from alternative sources; thus, their values are no longer being met to the same extent within their jobs. This line of reasoning finds support in empirical literature, whereby Kalleberg and Loscocco (1983) found that intrinsic values were negatively related to job satisfaction for older age groups.

²⁷ Although strong correlations resulted between job values and job satisfaction (Clark, 1997).

In terms of education, the regression results suggested that as the level of educational achievement increases, job satisfaction was likely to decrease. More specifically, employees with middle or higher levels of education were more likely to report lower categories of job satisfaction ($\beta = -0.144, p < .01$; $\beta = -0.233, p < .01$; respectively) when compared to employees with lower levels of education, while holding all other variables constant. Although surprising, this effect has been well established within the literature (Clark et al., 1996; Gazioglu & Tansel, 2006). With higher education, the importance of certain job values may change such that values aimed at achievement or the level of influence within a job may become more intense (Gazioglu & Tansel, 2006). If applying the value-percept discrepancy model of job satisfaction (Locke, 1969), such change in value intensity would result in a greater discrepancy between job values and the perceived achievement of such values within the work environment. Greater discrepancy will thus lower job satisfaction, unless an individual's current job or job opportunities adapt to meet such changes in value intensity.

Findings within the literature on the effects of marital status on job satisfaction have been quite mixed. Some have suggested that married individuals are less satisfied in their jobs (Gazioglu & Tansel, 2006), while others such as Clark (1996) identified married employees to display the highest overall levels of job satisfaction. The results of this study were also mixed. In the original model, variables relating to marital status (i.e., widowed: $\beta = -0.126, p = .260$; separated/divorced: $\beta = -0.087, p = .126$) were not statistically significant. Upon removing the cultural variables from the analysis, the results indicated that respondents who are either separated or divorced were less likely to report higher categories of job satisfaction ($\beta = -0.128, p < .05$) when compared to respondents who are married, while holding all other variables constant. Although it appeared that cultural effects may have been present, mixed results were also evident in other empirical studies which incorporated culture (Fargher et al., 2008²⁸).

The regression results indicated that an individual's employment status would differentially affect their job satisfaction. It appeared that part-time employees and those who are self-employed were more likely to report lower categories of job satisfaction ($\beta = -0.214, p < .01$; $\beta = -0.329, p < .01$; respectively) when compared to full-time employees, while holding all other factors constant. The results have found support in current empirical studies, whereby Miller and Terborg (1979) found that part-

²⁸ Married, divorced/separated men in Western Europe display higher levels of job satisfaction when compared to Western European women, and Eastern Europeans in general. Widowhood has a positive impact on job satisfaction for Eastern European men only.

time employees express lower job satisfaction than their full-time counterparts. Such effect was postulated to be the result of partial inclusion within the organisation; part-time employees are only partially exposed to the organisation's dynamics and therefore have lower tolerance for organisational demands (Miller & Terborg, 1979). With regard to self-employed, the findings of this study were contradictory to those of existing empirical studies (Benz & Frey, 2008; Blanchflower & Oswald, 1998). Such contradictory findings were not due to cultural effects, as the re-estimated model of job satisfaction showed similar results ($\beta = -0.299, p < .01$). Alternatively, this effect could perhaps be explained by findings which have shown that the self-employed work longer hours and earn relatively less than the employed (Hamilton, 2000). With both of these factors ranking as important job values (Kovach, 1995), the application of the value-percept discrepancy model of job satisfaction (Locke, 1969) suggests that the discrepancy between job values and the perception about what is being achieved may be larger for the self-employed when compared to full-time employees; a larger discrepancy will result in lower job satisfaction.

In terms of household income level, the regression results suggested that respondents who are members of middle or higher income earning households were more likely to report higher categories of job satisfaction ($\beta = 0.241, p < .01$; $\beta = 0.327, p < .01$; respectively) when compared to members of lower income earning households, while holding all other variables constant. Although job satisfaction literature generally utilises the personal income variable, no such variable was available within the EVS. Nonetheless, the household income variable gave a unique insight into employee behaviour. The results of this study were consistent with other empirical studies (Fargher et al., 2008; van Praag & Frijters, 2001) which also supported that higher levels of household income would generally increase job satisfaction. If a large household income is present, members of such households have greater freedom to be selective on the jobs they will engage in; household members will also be able to leave unsatisfactory jobs more easily (van Praag & Frijters, 2001). Thus, there will generally be a low discrepancy between job values and the achievement of such values within the workplace for members of middle to higher income earning households.

4.3.2 The re-estimated job satisfaction model

For the purposes of comparison, and to test the robustness of the coefficient estimates, the model of job satisfaction was re-estimated by excluding all the cultural variables. Consequently, the re-estimated model tested whether PDM and socio-demographic

factors influence an employee's job satisfaction. In comparison to the original model (see Table 11), the re-estimated model (see Appendix C) yielded relatively similar results. The explanatory power of the re-estimated model was significant (Chi-square = 2687.885, $df = 14$, $p < .01$), though yielded a lower pseudo R -square of approximately 16%. The test for parallel lines also indicated that the assumption of equal beta coefficients across all logit equations should be rejected (Chi-square = 418, $p < .01$). The re-estimated model also called into question the measurement of job satisfaction in terms of a 10-point Likert scale at cut points five and six; the same conclusion was drawn in terms of the potential cause of such phenomena.

In terms of the coefficients, both the original model and re-estimated model provided relatively consistent results. However, there were some noteworthy differences when culture was excluded. For the majority of the coefficient estimates, their marginal effects on job satisfaction were larger when culture was excluded. This indicated that studies which neglected to take into account cultural effects may have overestimated the importance of certain factors on job satisfaction.

This effect was particularly relevant in terms of marital status. Although not statistically significant in either model, the coefficient estimate for widowed was substantially larger when culture was excluded ($\beta = -0.213$, $p = .056$) than when culture was included in the analysis ($\beta = -0.126$, $p = .260$). Furthermore, being separated or divorced had a statistically significant relationship with job satisfaction when culture was excluded ($\beta = -0.128$, $p < .05$). When culture was included in the analysis, being separated or divorced had a substantially smaller effect on job satisfaction and was not statistically significant ($\beta = -0.087$, $p = .126$). However, it must be noted that findings within the literature on the effects of marital status on job satisfaction have been quite mixed. An exception to the trend was the coefficient estimates for employment status. When culture was included in the analysis, the coefficient estimate for being self-employed or being employed on a part-time basis was larger ($\beta = -0.329$, $p < .01$; $\beta = -0.214$, $p < .01$; respectively) than when culture was excluded from the analysis ($\beta = -0.299$, $p < .01$; $\beta = -0.176$, $p < .01$; respectively).

Regardless of whether the coefficients were overestimated or underestimated, the comparison of the two models indicated that excluding culture from an analysis may result in biased estimates. Furthermore, the statistical significance of the cultural variables, and the improved model fit statistics, suggested that culture is an important factor to consider when investigating the influences of job satisfaction.

4.3.3 The participative decision making model

The regression model for PDM tested whether certain job and individual characteristics, asymmetries in culture, and socio-demographic factors influences PDM. The explanatory power of the specified model was significant (Chi-square = 1995, $df = 19$, $p < .01$), with a pseudo R -square of approximately 12%. Results from the test of parallel lines indicated that the assumption of equal beta coefficients across all logit equations should be rejected, as the statistically significant chi-square value (Chi-square = 745, $p < .01$) suggested that different beta coefficients are needed at each level. The results relating to the coefficient estimates were examined in light of existing empirical studies and theoretical models of PDM, such as the cognitive models of participation (Miller & Monge, 1986) or the affective models of participation (McGregor, 1960).

Based on the regression results, certain job characteristics (i.e., initiative, achieve) had a positive impact on the freedom for PDM, with having a job that meets one's abilities being the exception. Organisations generally allow employees who use initiative and who are achievement driven greater freedom for PDM, due to the potential efficiency and productivity gains.²⁹ Although such relationships are well grounded within theoretical literature (Davis, 1963; Miller & Monge, 1986), empirical support of their effect is less readily available. Nonetheless, the results of this model will be examined with comparisons being drawn to any available empirical literature and integrated with theoretical models where appropriate.

The results pertaining to initiative suggested that having opportunities to use initiative as part of a job meant that employees were more likely to report higher categories of job satisfaction ($\beta = 0.177$, $p < .01$), while holding all other variables constant. The cognitive models of participation support employee initiative, as it holds that employees are closer to their work and can thus make decisions with greater pools of information (Anthony, 1978). However, such freedom for initiative is to be supported with channels of open communication to enhance the flow and use of important information (Miller & Monge, 1986). Such theory has found empirical support by Dickson (1980) whose findings indicated that opportunities for more open and greater levels of communication encourage PDM.

²⁹ See Section 2.1.7 to further examine this concept.

Furthermore, believing that it is important to be able to achieve something within a job meant that employees were more likely to report higher categories of freedom for PDM ($\beta = 0.103, p < .01$), while holding all other variables constant. Such results are reflected within the affective models of participation, whereby being achievement driven acts as a motivating factor for PDM. Engaging in greater levels of PDM allows employees to attain their higher-order needs (Maslow, 1943) by gaining feelings of fate control (Ashforth, 1989; Greenberger et al., 1989).

The variable relating to task-relevant knowledge (i.e., abilities) performed unexpectedly within the regression model. Task-relevant knowledge is generally considered to be conducive to PDM, as shown by Nyhan (2000), though the findings in this study have suggested otherwise. Within the first model, the result relating to the abilities coefficient was not statistically significant. Upon removing the cultural variables from the analysis, employees who believed that it is important for their job to meet their abilities were more likely to report lower categories of freedom for PDM ($\beta = -0.077, p < .05$), while holding all other variables constant. With no theoretical³⁰ or empirical support for the results, the only logical conclusion to be drawn is that although respondents may consider a job which meets their abilities to be important, such respondents may not be presently employed in such a job and thus may experience lower freedom for PDM.

In terms of job level, employees whose jobs were classified as professional, lower white collar, higher blue collar, lower blue collar, or other job level were more likely to report lower categories of freedom for PDM ($\beta = -0.502, p < .01$; $\beta = -0.751, p < .01$; $\beta = -0.930, p < .01$; $\beta = -1.374, p < .01$; $\beta = -0.769, p < .01$; respectively) when compared to management and employers, while holding all other variables constant. Job level is generally considered to be positively related to freedom for PDM, as it has been shown that those in senior positions are perceived as being more competent in their decision making capabilities (Rosen & Jerdee, 1976). Findings by Alutto and Belasco (1972) supported notion, where individuals in senior positions were more likely to be decisionally saturated (i.e., making more decisions than desired), when compared to individuals in junior positions who were largely decisionally deprived (i.e., making fewer decisions than desired). Thus, higher job levels generally comprise greater freedom for PDM.

³⁰ Cognitive models of participation suggest that collaboration with employees in decision making is a viable strategy, as employees have greater knowledge of the work processes and can thus make more informed and profitable decisions (Rodgers & Hunter, 1993).

The results also suggested gender differences to be present in terms of freedom for PDM. It appeared as though males were more likely to report lower categories of freedom for PDM ($\beta = -0.358, p < .01$), while holding all other factors constant. Additionally, the results also supported the linear relationship between age and PDM ($\beta = 0.012, p < .01$) indicating that employees from older age groups were more likely to report higher categories of freedom for PDM, while holding all other factors constant. Both of these results are consistent with findings by Alutto and Belasco (1972), which found that young males were more likely to be decisionally deprived when compared to older females, who were more likely to be decisionally saturated.

When compared to those who are self-employed, respondents employed on a full-time or part-time basis were more likely to report lower categories of freedom for PDM ($\beta = -1.591, p < .01$; $\beta = -1.457, p < .01$; respectively), while holding all other factors constant. Such results seem logical, as one of the attractions of self-employment is the independence enjoyed (Rees & Shah, 1986); thus, it is probable that the self-employed are independently free to make decisions as they see fit, unlike those employed on a full-time or part-time basis whose freedom for PDM is generally governed by organisational structures or processes. Furthermore, part-time employees are only partially exposed to the organisation's dynamics (Miller & Terborg, 1979) and therefore may not enjoy the same level of freedom for PDM as what full-time employees do.

Within existing empirical studies, household income levels have not generally featured as a factor that influences an employee's freedom for PDM. Nonetheless, the results from this study indicate that respondents who are members of middle to higher income earning households were more likely to report higher categories of freedom for PDM ($\beta = 0.289, p < .01$; $\beta = 0.624, p < .01$; respectively) when compared to members of lower income earning households, while holding all other factors constant. Perhaps such findings indicated that members of lower income earning households could generally be categorised as being employed within lower level positions, or on a part-time basis. Assuming such categorisation is generalisable, it would support the results of this study, as lower job levels and part-time employment status will generally result in lower freedom for PDM, while holding all other variables constant.

4.3.4 The re-estimated participative decision making model

For the purposes of comparison, and to test the robustness of the coefficient estimates, the model of job satisfaction was re-estimated by excluding all the cultural variables. Consequently, the re-estimated model of PDM tested whether job and individual

characteristics and socio-demographic factors influence PDM. In comparison to the original model (see Table 11), the re-estimated model (see Appendix C) yielded relatively similar results. The explanatory power of the re-estimated model was significant (Chi-square = 1689, $df = 16$, $p < .01$). The pseudo *R*-square of this model was relatively lower at approximately 10%. The test for parallel lines in the re-estimated model also indicated that the assumption of equal beta coefficients across all logit equations should be rejected (Chi-square = 456, $p < .01$). One notable point of difference was that the value for the cut point at category 8 was not statistically significant ($p = .988$), which called into question whether PDM was correctly measured in terms of a 10-point Likert scale. Given that this result was only present on one of the models of PDM, and that similar results were obtained in the model of job satisfaction, no remedial measures were undertaken as it was deemed to only be a feature of this particular sample.

In terms of the coefficients, both the original model and re-estimated model provided relatively consistent results. However, there were some noteworthy differences when culture was excluded. For the majority of the coefficient estimates, the size of their marginal effects on job satisfaction changed when culture was excluded. This indicated that studies which neglected to take into account cultural effects may have inaccurately estimated the importance of certain factors on PDM. Such argument finds further support through the statistical significance of the cultural variables.

It seemed that the majority of socio-demographic factors (i.e., gender, employment status, household income levels) were overestimated when culture was excluded from the analysis. Interestingly, the importance of a respondent's job level seemed to have been inaccurately estimated when culture was excluded from the analysis. The importance of middle to higher job levels (i.e., professional, lower white collar) were underestimated, whereas the importance of lower job levels (i.e., higher blue collar, lower blue collar) were overestimated when culture was excluded from the analysis.

Regardless of whether the coefficients were overestimated or underestimated, the comparison of the two models indicated that excluding culture from an analysis may result in biased estimates. Furthermore, the statistical significance of the cultural variables, and the improved model fit statistics suggested that culture is an important factor to consider when investigating the influences of PDM.

4.3.5 The relationship between job satisfaction and participative decision making

To test whether having freedom to engage in PDM would affect the job satisfaction of employees, research hypothesis 1 was constructed. Hypothesis 1 predicted that employees would experience increased levels of job satisfaction as their freedom to participate in job-related decisions increases. The results from the ordered logistic regression presented in Table 11 supported the hypothesis at a statistically significant level ($\beta = 0.338, p < .01$). This suggests that as freedom for PDM increases, so does the probability of a respondent reporting a higher category of job satisfaction. Consequently, by utilising the odds ratio³¹ of this coefficient, it can be stated that for an employee whose freedom to participate in job-related decisions rises to the next highest category, the odds of reporting a higher category of job satisfaction is 1.4 greater, holding all other variables constant.

These results were consistent with findings from existing empirical literature (Black & Gregersen, 1997; Schuler, 1980; Scott-Ladd et al., 2006), which have suggested that when employees can engage in higher levels of PDM, their job satisfaction would also be likely to increase. From a theoretical perspective, encouraging PDM is provided under the affective models of participation, whereby facilitating employee engagement in job-related decisions will lead to the attainment of their higher-order needs (Maslow, 1943), which will ultimately promote their job satisfaction (Vroom, 1964). Moreover, employees may place value on fate control (Ashforth, 1989; Greenberger et al., 1989); thus, engaging in PDM will facilitate the achievement of such a job value. Within the context of these findings, organisations would be encouraged to allow for PDM, as the practical value of job satisfaction lies in gaining organisational benefits such as mitigating withdrawal behaviours (e.g., absenteeism, lateness, drug abuse) (Saari & Judge, 2004), direct cost savings resulting from lower staff turnover (Mirvis & Lawler, 1977), and improved employee performance (Wright & Cropanzano, 2004). Cognitive models of PDM also state that PDM is likely to result in efficiency and productivity gains as decisions are made with greater pools of information (Miller & Monge, 1986).

4.3.6 The relationship between job satisfaction and culture

To test whether asymmetries in culture would differentially affect the job satisfaction of employees, several research hypotheses were constructed. Hypothesis 2(a) predicted that traditional values decrease an employee's job satisfaction; hypothesis 2(b) predicted

³¹ Calculated by estimating e^{β} (Tarling, 2009). See Appendix D for all odds ratios.

that secular-rational values increase an employee's job satisfaction; hypothesis 2(c) predicted that survival values decrease an employee's job satisfaction; hypothesis 2(d) predicted that self-expression values increase an employee's job satisfaction.

The results from the ordered logistic regression presented in Table 11 only partially supported the research hypotheses. Based on the results, employees who are orientated towards the traditional and survival, traditional and self-expression, or the secular-rational and survival value domain were more likely to report higher categories of job satisfaction ($\beta = 0.691, p < .01$; $\beta = 0.517, p < .01$; $\beta = 0.392, p < .01$; respectively) when compared to employees who are orientated towards the secular-rational and self-expression value domain, while holding all other variables constant. By utilising the odds ratios, it can be stated that for an employee who becomes more orientated towards the traditional and survival value domain, the odds of reporting a higher category of job satisfaction is approximately two times greater than that of an employee who is orientated towards the secular-rational and self-expression value domain, while holding all other variables constant. Alternatively, for an employee who becomes more orientated towards the traditional and self-expression value domain, the odds of reporting a higher category of job satisfaction is approximately 1.7 times greater than that of an employee who is orientated towards the secular-rational and self-expression value domain, while holding all other variables constant. Also, for an employee who becomes more orientated towards the secular-rational and survival value domain, the odds of reporting a higher category of job satisfaction is approximately one and one-half times greater than that of an employee who is orientated towards the secular-rational and self-expression value domain, while holding all other variables constant.

Although the results were somewhat unexpected, they did find some support within existing empirical studies (Fargher et al., 2008) which indicated that traditional vs. secular-rational values had a positive effect on job satisfaction. Although when compared to this study, Fargher et al. selected different variables to distinguish between the two value domains; all the variables selected were in accordance with what was proposed by Inglehart and Baker (2000).

With traditional values advocating the importance of work in an individual's life (Inglehart & Baker, 2000), it seems logical that such an individual would gain greater satisfaction from their job when compared to an individual who is primarily orientated towards his/her rights of self-expression. With the value-percept discrepancy model of job satisfaction suggesting that job satisfaction will be determined by the extent to

which an individual perceives his/her values to be achieved within the work environment (Locke, 1969), simply having a job in itself may achieve traditional values (e.g., being employed), thus promoting job satisfaction. Although individuals who are orientated towards self-expression values are said to display higher levels of subjective well-being (Inglehart & Baker, 2000), if such individuals do not achieve their values within the work environment (e.g., opportunities for self-expression), low job satisfaction is likely to result.

In contrast to the findings of this study, Diener et al. (1995) provided empirical evidence that values based on individualism will generally result in higher levels of overall subjective well-being. It has been empirically substantiated by Inglehart (2006) that individualism and survival vs. self-expression values represent a common value dimension. Thus, it would be expected that this value domain would be conducive to higher levels of job satisfaction, as individualism advocates concern for oneself, self-fulfilment (Hofstede, 1980), and priority to be given to personal goals and desires (Triandis, 1989). With such empirical findings only relating to overall subjective well-being, unless personal goals are aimed at achievement within the work environment, individuals with individualistic type values are not as likely to be satisfied within their jobs when compared to individuals with traditionally orientated values.

4.3.7 The relationship between participative decision making and culture

To examine whether asymmetries in culture would determine the extent to which an employee is free to participate in job-related decisions, several research hypotheses were constructed. Hypothesis 3(a) predicted that traditional values decrease an employee's freedom for PDM; hypothesis 3(b) predicted that secular-rational values increase an employee's freedom for PDM; hypothesis 3(c) predicted that survival values decrease an employee's freedom for PDM; hypothesis 3(d) predicted that self-expression values increase an employee's freedom for PDM.

The results from the ordered logistic regression presented in Table 11 only partially supported the research hypotheses. Based on the results, employees who are orientated towards the traditional and survival, traditional and self-expression, or the secular-rational and survival value domain were more likely to report higher categories of freedom for PDM ($\beta = 0.685, p < .01$; $\beta = 0.127, p < .01$; $\beta = 0.616, p < .01$; respectively) when compared to employees who are orientated towards the secular-rational and self-expression value domain, while holding all other variables constant. By interpreting the odds ratios, it can be stated that for an employee who becomes more

orientated towards the traditional and survival value domain, the odds of reporting a higher category of freedom for PDM is approximately two times greater than that of an employee who is orientated towards the secular-rational and self-expression value domain, while holding all other variables constant. Alternatively, for an employee who becomes more orientated towards the traditional and self-expression value domain, the odds of reporting a higher category of freedom for PDM is approximately 1.1 times greater than that of an employee who is orientated towards the secular-rational and self-expression value domain, while holding all other variables constant. The odds ratios also suggested that for an employee who becomes more orientated towards the secular-rational and survival value domain, the odds of reporting a higher category of freedom for PDM is approximately 1.9 times greater than that of an employee who is orientated towards the secular-rational and self-expression value domain, while holding all other variables constant.

No empirical literature is currently available which investigates whether culture influences PDM practices; thus, the results were only examined in light of theoretical literature. It is important to note that this discussion does not relate to how much an employee participates in job-related decisions, but rather to how much freedom an employee perceives he/she is granted for PDM.

The theoretical approach of Inglehart and Baker (2000) holds that values which are of a secular-rational or self-expression nature include rising demands for participation in decision making in economic and political life. Culture has been shown to be an influential factor in the structure of institutions (Greif, 1994), and thus culture will arguably also influence the design of organisational processes (e.g., PDM programmes). Based on such considerations, it could be postulated that organisations influenced by secular-rational, self-expression, or individualist values (Inglehart, 2006) will allow greater levels of freedom for PDM when compared to organisations influenced by values which are of a traditional or survival nature.

In contrast, the theoretical model of culture and PDM developed by Sagie and Aycan (2003) supports the results from this ordered logistic regression analysis. The model suggests that collectivistic countries are more likely to engage in PDM practices, as joint effort (e.g., through collaboration between manager and subordinate) is perceived as the only way to bring about meaningful change (Sagie & Aycan, 2003). Although not empirically tested, values orientated towards the traditional vs. secular-rational domain seem to capture the same dimensions as collectivistic values, such as group

conformity (Inglehart & Baker, 2000), and prioritising collective goals (Triandis, 1989). Thus, employees from collectivistic cultures are generally more likely to experience greater freedom for PDM, when compared to employees from individualistic cultures.

The regression results from this analysis indicated that all cultures within this study value the freedom to make job-related decisions. Acknowledging that all cultures within this study practise PDM, the issue now becomes whether asymmetries in culture will determine the form of PDM practised within organisations. By selecting power distance and individualism-collectivism as cultural dimensions, Sagie and Aycan (2003) identified four forms of PDM, being: (i) face-to-face PDM, (ii) collective PDM, (iii) paternalistic PDM, and (iv) pseudo PDM. An outline of each form of PDM is provided in Appendix E. Although this may be an interesting avenue for research, the data within the EVS did not provide the variables necessary to examine such query; thus, this may be a topic of interest for future research.

Chapter 5: Conclusion and Recommendations

5.1 Summary

With the economic climate remaining relatively uncertain, the retention of quality labour has become a central point of interest for organisations; research in job satisfaction has thus surged. Such research has also highlighted the benefits that satisfied employees can provide the organisation (e.g., lower staff turnover, lower absenteeism, and improved employee performance), and as a result has become an essential consideration for management strategy. One such strategy is providing programmes which grant employees freedom to participate in job-related decisions. It is argued that providing employees freedom for PDM will satisfy their higher-order needs (e.g., self-expression, independence, feelings of fate control) which ultimately promotes their job satisfaction.

Within this field of organisational research, a factor which has been largely overlooked is an individual's culture. This is of interest, as globalisation has not only facilitated the international movement of goods, services, information, and financial capital, but has also promoted the cross-country flow of labour. As a result, countries are now facing the dilemma of having a culturally diverse labour force. Such diversity can be of risk to organisations, as implementing changes within the workplace may differentially affect employees depending on their cultural beliefs and values. Consequently, the aim of this study was to fill this gap and contribute to the current body of knowledge by empirically investigating whether asymmetries in culture would differentially affect the job satisfaction and the freedom for individuals to participate in job-related decisions.

In order to conduct the required empirical analyses, a sample from the third wave of the EVS was selected; 30 countries across Europe were included. In order to distinguish between different cultural beliefs and values, an approach was adopted whereby a distinction was drawn between traditional vs. secular-rational, and survival vs. self-expression value domains. Such approach included selecting variables which were representative of those domains, and then conducting two separate principal component analyses in order to create two representative variables for the purposes of further analyses. The principal component analyses also provided the opportunity to construct a cultural map of Europe where each country was placed at a specific point on the traditional vs. secular-rational, and survival vs. self-expression value continuums. Asymmetries in culture across European countries were present, with four clearly

defined cultural groups being visible. These groups included countries that are more orientated towards beliefs and values that are: (i) secular-rational and survival in nature, (ii) secular-rational and self-expression in nature, (iii) traditional and survival in nature, and (iv) traditional and self-expression in nature.

To test whether asymmetries in culture differentially affect the job satisfaction and the freedom for individuals to participate in job-related decisions, bivariate correlations were initially calculated. The correlations supported the proposed positive relationship between PDM and job satisfaction, and also confirmed several strong correlations between job satisfaction and the cultural variables. Similarly, the correlations indicated that asymmetries in culture may differentially influence the freedom employees are granted to participate in job-related decisions.

Although the correlation analysis provided a valuable insight into the patterns of association between job satisfaction, PDM, and culture, a more sophisticated analysis technique was required to test the research hypotheses. Accordingly, due to the ordered and categorical nature of the dependent variables (i.e., job satisfaction, PDM), ordered logistic regression analyses were undertaken to provide a more empirically sound examination of how the variables relate to one another. For the purposes of comparison, and to test the robustness of the coefficient estimates, both regression models were re-estimated by excluding the cultural variables.

5.2 Major Significant Results

The model for job satisfaction tested whether PDM, asymmetries in culture, and socio-demographic factors influences job satisfaction. In terms of the variables of interest, the results supported the positive relationship between PDM and job satisfaction. The results were not as clear with regard to how culture influences job satisfaction. The results indicated that employees who are orientated towards the traditional and survival, traditional and self-expression, or the secular-rational and survival value domain were more likely to report higher categories of job satisfaction when compared to employees who are orientated towards the secular-rational and self-expression value domain. Although supported by existing empirical literature, the results were somewhat inconsistent on a theoretical basis. Nonetheless, by applying the value-percept discrepancy model of job satisfaction, the results seemed logical in their outcome. For example, with traditional values advocating the importance of work in an individual's life, it seems that such an individual would gain greater satisfaction from their job when

compared to an individual who is primarily orientated towards his/her rights of self-expression. Although individuals who are orientated towards self-expression values are said to display higher levels of subjective well-being, unless their personal goals or values are aimed at fulfilment in the work environment, such individuals are likely to experience lower levels of job satisfaction. Although the results were unexpected, they did illustrate that asymmetries in culture influence the level of job satisfaction employees are likely to report.

The socio-demographic factors indicated that females were generally more satisfied in their jobs when compared to their male counterparts. The linear relationship between age and job satisfaction was also supported, whereby younger workers were more likely to report higher categories of job satisfaction. Furthermore, respondents with higher educational achievement generally reported lower categories of job satisfaction, perhaps influenced by changes in the intensity of certain job values which accompany higher education (e.g., level of influence). Although the results were somewhat mixed, respondents who were married reported higher categories of job satisfaction, as did respondents who were currently employed on a full-time basis. Finally, respondents who were members of lower income earning households reported lower categories of job satisfaction. It was postulated that this effect could result from the freedom to be selective of the kinds of jobs to engage in, which members of higher income earning households enjoy.

The model for PDM tested whether certain job and individual characteristics, asymmetries in culture, and socio-demographic factors influences PDM. The results to whether asymmetries in culture differentially affect the freedom for PDM were somewhat unexpected. The results suggested that employees who are orientated towards the traditional and survival, traditional and self-expression, or the secular-rational and survival value domain were more likely to report higher categories of freedom for PDM when compared to employees who are orientated towards the secular-rational and self-expression value domain. With no empirical literature currently available which investigates whether culture influences PDM practices, the results were examined in light of theoretical literature only. Although inconsistent with one theoretical position, the results were consistent with a theoretical model of culture and PDM. This model holds that collectivistic countries (e.g., those orientated towards the traditional vs. secular-rational value domain) are more likely to engage in PDM practices, as joint effort is perceived as the only way to bring about meaningful change.

Thus, with culture being an influential factor in the structure of institutions, it can be postulated that organisations influenced by collectivistic type values are more likely to provide greater freedom for their employees to engage in PDM. What also became apparent is that all cultures within this study valued the freedom to make job-related decisions. Thus, acknowledging such observation, the issue now becomes whether asymmetries in culture will determine the form of PDM practised within organisations (e.g., face-to-face PDM, collective PDM, paternalistic PDM, pseudo PDM).

The job and individual characteristics, and socio-demographic factors indicated that respondents who considered initiative and achievement as important job aspects were more likely to report higher categories of freedom for PDM. In contrast, respondents who considered task-relevant knowledge (i.e., abilities) as an important aspect of a job generally reported lower categories of freedom for PDM; perhaps such respondents were not employed in a job which met their abilities. Furthermore, respondents employed in senior positions (i.e., managers/employers) were more likely to report higher categories of freedom for PDM when compared to respondents employed in lower job levels. Supported by current empirical studies, the results indicated that females and employees in older age groups generally reported higher categories of freedom for PDM. With independence being one of the attractions of self-employment, the self-employed generally reported higher categories of freedom to participate in job-related decisions when compared to those who are employed. Finally, members of lower income earning households were more likely to report lower categories of freedom for PDM when compared to members of middle to higher income earning households. Perhaps this is an indication that members of lower income earning households can generally be categorised as being employed within lower level positions, or on a part-time basis.

The re-estimated models of job satisfaction and PDM provided support to the important role culture plays in an employee's job satisfaction and their freedom for PDM. With the job satisfaction model, the coefficient estimates for marital status were overestimated, whereas those for employment status were underestimated when culture was excluded from the analysis. In terms of the PDM model, the majority of the coefficient estimates for the socio-demographic variables were overestimated when culture was excluded from the analysis. Additionally, the coefficients for middle to higher job levels were underestimated, whereas those for lower job levels were overestimated when culture was excluded from the analysis. Regardless of whether the

coefficients were overestimated or underestimated, both of the re-estimated models indicated that excluding culture from an analysis may result in inaccurate estimates. The statistical significance of the cultural variables, and the improved model fit statistics, suggested that culture is an important factor to consider when investigating the influences of job satisfaction or PDM.

5.3 Implications for Organisational Management

Although the results of this study may be a function of this sample, being that certain regions within Europe have gone through some unique and complex historical developments (e.g., the communist regime), the implications of the results are clear for organisational management. Asymmetries in culture are likely to differentially affect the job satisfaction and the freedom for individuals to participate in decision making within the workplace. Thus, managers working within a multi-cultural context should be cautious when dealing with human resource practices such as implementing PDM programmes. The generally accepted belief that PDM will increase employee job satisfaction must be called into question when considering that participation in one cultural environment may be interpreted as non-participation in another. Perhaps open communication throughout the organisation can facilitate understanding of how asymmetries in culture impact on job satisfaction and PDM. Such an understanding can then assist in the development of effective strategies aimed at increasing job satisfaction (e.g., using PDM programmes), by acknowledging potential barriers to successful design and implementation.

5.4 Recommendations for Future Research

By using data selected from the EVS, this study was restricted in what variables were available to measure the concepts of interest. To measure PDM, this study selected a variable relating to how much freedom an employee perceives he/she has in making job-related decisions. Although this variable was valuable in that it provided an insight into how culture affects organisational processes, future research may want to investigate whether asymmetries in culture also affect employees' willingness to participate in job-related decisions.

Furthermore, the release of the fourth wave of the EVS did not fit within the time frame of this study. Nonetheless, it will provide an opportunity for future research to draw similar cultural comparisons across the European region and investigate whether any notable cultural changes have taken place over the nine-year period between 1999 and

2008. If cultural changes are observed, future research can also examine whether such changes had any notable influence on employee job satisfaction and freedom for PDM within the workplace.

Additionally, future research can adopt an alternative approach in the analysis of the data. Simultaneous equation modelling will allow the job satisfaction and PDM models to be considered jointly. Considering the equations in this manner will also mitigate potential biases in the estimates, which is likely to result when only estimating one equation at a time. Furthermore, by using the simultaneous equation modelling technique, and incorporating longitudinal data, future research may also be able to establish causality between the concepts of interest. For example, does greater freedom for PDM cause higher levels of job satisfaction? Do asymmetries in culture cause differential levels of job satisfaction? Do asymmetries in culture cause different levels of freedom to be granted for employees to engage in PDM? Although causal inferences cannot be drawn from the results of this study, the findings do provide a useful first step in the empirical analysis of how asymmetries in culture impact job satisfaction and the freedom for PDM within the workplace.

5.5 Concluding Remarks

The aim of this study was to contribute to the current body of knowledge by empirically investigating whether asymmetries in culture differentially affect job satisfaction and the freedom for individuals to participate in job-related decisions. Through applying various empirical analysis techniques, this study concludes that an employee who is orientated towards the traditional and survival, traditional and self-expression, or the secular-rational and survival value domain will generally be more satisfied in his/her job when compared to an employee who is orientated towards the secular-rational and self-expression value domain. Additionally, an employee who is orientated towards the traditional and survival, traditional and self-expression, or the secular-rational and survival value domain will generally have greater freedom for PDM when compared to an employee who is orientated towards the secular-rational and self-expression value domain. Such empirical findings offer a first step to the development of effective strategies aimed at increasing job satisfaction through PDM programmes, by acknowledging potential cultural barriers to successful implementation.

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Appendix A: Total Number of Cases by Country

Country	<i>n</i>
France	476
Germany West	245
Germany East	218
Austria	495
Italy	669
Spain	229
Netherlands	531
Belgium	540
Denmark	399
Sweden	519
Finland	356
Iceland	588
Northern Ireland	180
Ireland	317
Estonia	284
Latvia	220
Lithuania	221
Poland	363
Czech Republic	682
Slovakia	518
Hungary	294
Romania	269
Bulgaria	281
Russia	808
Malta	340
Luxembourg	151
Slovenia	310
Ukraine	315
Belarus	385
Turkey	369
Total	11,572

Note. *n* = Number of cases per country.

Appendix B: Number of Cases for Job Satisfaction, Participative Decision Making, and Household Dependants

Category	Job Satisfaction			PDM		
	<i>n</i>	%	Cumulative %	<i>n</i>	%	Cumulative %
1	262	2.3	2.3	804	6.9	6.9
2	184	1.6	3.9	456	3.9	10.9
3	383	3.3	7.2	709	6.1	17.0
4	448	3.9	11.0	704	6.1	23.1
5	1,198	10.4	21.4	1,324	11.4	34.5
6	1,062	9.2	30.6	1,080	9.3	43.9
7	1,970	17.0	47.6	1,494	12.9	56.8
8	2,820	24.4	72.0	2,096	18.1	74.9
9	1,589	13.7	85.7	1,334	11.5	86.4
10	1,656	14.3	100	1,571	13.6	100

Children	Dependants (Age < 5)			Dependants (5 < Age < 17)		
	<i>n</i>	%	Cumulative %	<i>n</i>	%	Cumulative %
0	9,636	83.3	83.3	6,600	57.0	57.0
1	1,534	13.3	96.5	2,634	22.8	79.8
2	353	3.1	99.6	1,816	15.7	95.5
3	32	0.3	99.9	409	3.5	99.0
4	9	0.1	99.9	80	0.7	99.7
5	4	0.0	100	16	0.1	99.9
6	3	0.0	100	9	0.1	99.9
7	-	-	-	2	0.0	99.9
8	-	-	-	4	0.0	100
9	1	0.0	100	-	-	-
10	-	-	-	2	0.0	100

Note. *n* = Number of cases per category. Percentages are rounded to 1 decimal place.

Appendix C: Predictors of Job Satisfaction and Participative Decision Making (Excluding Culture)

Variable	Job Satisfaction ^{a, b}		PDM ^{c, d}	
	β	Std. Error	β	Std. Error
PDM	0.348**	0.007	-	-
Initiative	-	-	0.231**	0.037
Achieve	-	-	0.100**	0.038
Abilities	-	-	-0.077*	0.037
Professional	-	-	-0.482**	0.074
Lower white collar	-	-	-0.698**	0.070
Higher blue collar	-	-	-0.971**	0.072
Lower blue collar	-	-	-1.430**	0.075
Other	-	-	-0.797**	0.106
Male	-0.108**	0.035	-0.420**	0.133
Age	-0.063**	0.009	0.011**	0.001
Age ²	0.001**	0.000	-	-
Higher education	-0.242**	0.049	-	-
Middle education	-0.171**	0.041	-	-
Widowed	-0.213	0.112	-	-
Separated/divorced	-0.128*	0.057	-	-
Self-employed	-0.299**	0.061	-	-
Full-time	-	-	-1.661**	0.122
Male full-time	-	-	0.771**	0.138
Part-time	-0.176**	0.053	-1.455**	0.130
Male part-time	-	-	0.455**	0.174
Higher household income	0.347**	0.052	0.712**	0.050
Middle household income	0.260**	0.044	0.346**	0.043
Dependants under the age of 5	0.006	0.032	-	-
Dependants between the aged of 5-17	-0.015	0.018	-	-
<i>Cuts</i>	-	-	-	-
When job satisfaction or PDM = 1	-3.045**	0.195	-3.995**	0.149
= 2	-2.470**	0.191	-3.484**	0.148
= 3	-1.764**	0.189	-2.939**	0.147
= 4	-1.233**	0.188	-2.531**	0.146
= 5	-0.317	0.187	-1.917**	0.146
= 6	0.261	0.187	-1.484**	0.146
= 7	1.124**	0.188	-0.908**	0.146
= 8	2.323**	0.189	0.002	0.145
= 9	3.254**	0.189	0.829**	.0145
Pseudo R-square	.158	-	0.102	-
<i>Test of Parallel Lines</i>	-	-	-	-
Chi-square	417.855**	-	456.288**	-

Note. $N = 11,572$.

^a Chi-square = 2687.885, $df = 14$, $p < .000$. ^b Control variables: Lower educational level, married, full-time employment, lower household income level. ^c Chi-square = 1688.899, $df = 16$, $p < .000$. ^d Control variables: Manager/employer, self-employed, lower household income level.

** Correlation is significant at the 1 percent level (2-tailed); * Correlation is significant at the 5 percent level (2-tailed).

Appendix D: Odds Ratios

Variable	Job Satisfaction		PDM	
	<i>B</i>	Exp(<i>B</i>)	<i>B</i>	Exp(<i>B</i>)
PDM	0.338	1.40	-	-
Traditional/survival	0.691	2.00	0.685	1.98
Traditional/self-expression	0.517	1.68	0.127	1.14
Secular-rational/survival	0.392	1.48	0.616	1.85
Initiative	-	-	0.177	1.19
Achieve	-	-	0.103	1.11
Abilities	-	-	-0.044	0.96
Professional	-	-	-0.502	0.61
Lower white collar	-	-	-0.751	0.47
Higher blue collar	-	-	-0.930	0.39
Lower blue collar	-	-	-1.374	0.25
Other	-	-	-0.769	0.46
Male	-0.082	0.92	-0.358	0.70
Age	-0.059	0.94	0.012	1.01
Age ²	0.001	1.00	-	-
Higher education	-0.233	0.79	-	-
Middle education	-0.144	0.87	-	-
Widowed	-0.126	0.88	-	-
Separated/divorced	-0.087	0.92	-	-
Self-employed	-0.329	0.72	-	-
Full-time	-	-	-1.591	0.20
Male full-time	-	-	0.693	2.00
Part-time	-0.214	0.81	-1.457	0.23
Male part-time	-	-	0.484	1.62
Higher household income	0.327	1.39	0.624	1.87
Middle household income	0.241	1.27	0.289	1.34
Dependants under the age of 5	-0.017	0.98	-	-
Dependants between the ages of 5-	-0.025	0.98	-	-

Appendix E: Forms of Participative Decision Making

	Individualism	Collectivism
High/Moderate power distance	<p><u>Pseudo PDM</u>: Directive management covered with a mask of participation. This form of PDM is somewhat manipulative, in that subordinates express their ideas, but management will always make the decision.</p>	<p><u>Paternalistic PDM</u>: Management does not genuinely transfer decision making power to employees. Management provides guidance, protection, nurturance, and care to subordinates, and in return subordinates are loyal and deferent to the management. Employees seldom take part in decision making.</p>
Low power distance	<p><u>Face-to-Face PDM</u>: Decision making involving a boss (i.e., leader, manager, supervisor) and one (or at most, a few) of his/her subordinates. Employees have direct PDM rights.</p>	<p><u>Collective PDM</u>: Management and the workers' group (i.e., employee representatives) share tangible power and authority during the decision making process. Employees have indirect PDM rights.</p>

Note. Adapted from Sagie and Aycan (2003).