

# Innovation and Human Resource Management: the Greek Experience

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The purpose of this paper is to investigate the pathways leading from innovation to organisational performance by using structural equation modelling. Specifically, we used this analytical tool to test a research framework that is constituted by a set of causal relationships between organisational contingencies, innovation, HRM policies (resourcing, training, rewards, relations), HRM outcomes (skills, attitudes, behaviour), and organisational performance. Employing data from organisations operating in the Greek manufacturing sector, results indicate that the impact of innovation on organisational performance is positive and mediated through HRM policies and HRM outcomes, and moderated by organisational context (management style, organisational culture).

**Key words:** Innovation strategy; HRM policies; Causality; Structural equation modelling; Greek manufacturing

## 1 Introduction

Although much has been written separately about the concepts of innovation and human resource management in improving organisational performance, the combination of the two in improving organisational performance has received less systematic attention in research literature (Looise & Riemsdijk, 2004). Taking into account that innovation is frequently defined as “deliberate and radical changes in existing products or services, processes or the organisation in order to reach competitive advantage compared with competitors” (Looise & Riemsdijk, 2004: 278), most literature in innovation is concentrated in the so-called ‘technical innovation’, considering the changes that refer to existing products or services, and processes, only (Looise & Riemsdijk, 2004). Moreover, although HRM is usually defined as “all management decisions and activities that affect the nature of the relationship between the organisation and its employees” (Beer, Spector, Lawrence, Quinn Mills, & Walton, 1984: 382), the majority of the literature in HRM distinguishes employee resourcing, development, rewards, and relations as the four key areas of HRM policies and practices.

Within the resource-based view of the firm, which advocates that an organisation can gain competitive advantage by attracting and retaining best human resources, universalistic and contingency HRM-performance linkage models have been either theoretically or empirically developed. The universalistic model suggests that a specified set of HR practices (the so called “best practices”) will always produce superior business results whatever the accompanying circumstances. The contingency model

argues that an organisation’s set of HRM policies and practices will be effective if it is consistent with other organisational strategies. However, there is no consensus amongst researchers regarding which model is the predominant one (Wood, 1999).

Specifically, the relationship between innovation strategy and HRM in improving organisational performance has been generally studied from a contingency perspective (Jimenez-Jimenez & Sanz-Valle, 2005). The contingency perspective in this case advocates ‘sequence’, supporting that innovation strategies are followed by HRM policies in determining business performance. According to this sequence business performance will be improved when the right ‘fit’, or ‘match’, between innovation strategies and HRM policies and practices is achieved. However, some authors have analysed the reverse sequence, advocating that HRM policies are followed by innovation strategies in determining business performance (Damanpour, 1991). Contrary to the contingency perspective, the universalistic perspective advocates ‘independence’, supporting that innovation strategies and HRM policies are mutually independent in determining business performance.

In analysing the impact of HRM on business performance each of the HRM-performance linkage models developed complements the others by adding constructs, variables or relationships (Alcazar, Fernandez, & Gardey, 2005). A serious limitation that recent reviews of the literature points out is that the link between HRM and business performance is considered like a ‘black box’, i.e., lack of clarity regarding ‘what exactly leads to what’ (Gerhart, 2005; Alcazar et al., 2005). In empirically investigating

these models most studies were based on cross-sectional data and the analysis employed was either 'hierarchical regression models' or 'competing regression models' without proving causality. Thus, Fey, Bjorkman & Pavlovskaya (2000) exhorted researchers to use 'structural equation modelling' (SEM) to illuminate the 'black box' (Wright, Gardner & Moynihan, 2003) between HRM systems and business performance. This is because the use of SEM is particularly appropriate when testing direct and indirect relationships between HRM policies and business performance and when testing theoretically derived paths among various exogenous and endogenous variables.

Considering the discussion above and that HRM is scarcely included in innovation strategy studies (Laursen & Foss, 2003) the primary research questions of this paper are:

1. What impact, if any, does innovation strategy and human resource management have upon organizational performance?
2. What is the causal path of this relationship?
3. What is the contingency framework of this relationship?

A supplementary goal in this paper is to empirically investigate the research questions by employing the structural equation modelling methodology, instead of the usual regression equation methodology. Considering further, that there are no studies that test theoretically derived paths among various exogenous and endogenous variables in the Greek context, an attempt has been made in this paper to investigate how innovation strategy and human resource management policies influence organisational performance in the Greek context.

## 2 Research Model and Hypotheses

From the discussion in the preceding section, three models may be identified relating innovation strategy, HRM policies, and organisational performance: the contingency model, the reciprocal contingency model, and the universalistic model. Specifically:

*Contingency model:* The underlying assumption of this model is that innovation strategy is the guiding force for developing specific HRM policies that will have a positive impact on organisational performance. Lists of employee resourcing, development, rewards, and relations HRM policies, connected with innovation strategy, have been proposed by Jimenez-Jimenez & Sanz-Valle (2005). Thus, innovation strategy determines HRM policies that are followed in an organisation.

*Reciprocal contingency model:* The underlying assumption of this model is that innovation strategy will have a positive impact on organisational performance if it has been formalised in relationship with some specific HRM policies that have already been developed in the organisation (Damanpour, 1991; Jimenez-Jimenez & Sanz-Valle, 2005; Zhao & Liu, 2006). Thus, HRM policies determine innovation strategy that is followed in an organisation.

*Universalistic model:* The underlying assumption of this model is that the formulation of innovation strategy does not depend on the formulation of HRM policies in an organisation, and vice versa, the formulation of HRM policies does not depend on the formulation of innovation strategy in an organisation. Thus, innovation strategy and HRM policies are completely independent in determining organisational performance.

Considering furthermore that regardless the innovation-HRM-performance linkage model followed, literature highlights that the organisation's innovative behaviour depends on the organisational context of the firm described by factors such as management-style (with respect to centralised or decentralised decision making) and organisational culture (with respect to task-oriented forms followed) (Damanpour & Gopalakrishnan, 1998; Murphy & Southey, 2003), Figure 1 presents the three innovation-HRM-performance linkage hypothesised causal models.

The hypotheses that go after the three models may be stated as follows:

(a) Contingency model:

HC:1 *Organisational context factors moderate innovation strategy.*

HC:2 *Innovation strategy is positively related with HRM policies.*

HC:3 *HRM policies are positively related with organisational performance.*

(b) Reciprocal contingency model:

HR:1 *Organisational context factors moderate HRM policies.*

HR:2 *HRM policies are positively related with innovation strategy.*

HR:3 *Innovation strategy is positively related with organisational performance.*

(c) Universalistic model:

HU:1 *Organisational context factors moderate innovation strategy.*

HU:2 *Organisational context factors moderate HRM policies.*

HU:3 *Innovation strategy is positively related with organisational performance.*

HU:4 *HRM policies are positively related with organisational performance.*

Although various lists of HRM policies that the innovating organisations should employ have been proposed, still, there is no consensus both in theoretical and empirical literature about the number and the type of HRM policies to be included in these lists. Specifically, there is a compromise that recruitment, performance appraisal, and incentives may constitute important HRM policies for innovating organisations, and there is no agreement if training and development, career paths, flexible contracts, and employee participation, represent important HRM policies for innovating organisations (Jimenez-Jimenez, & Sanz-Valle, 2005).

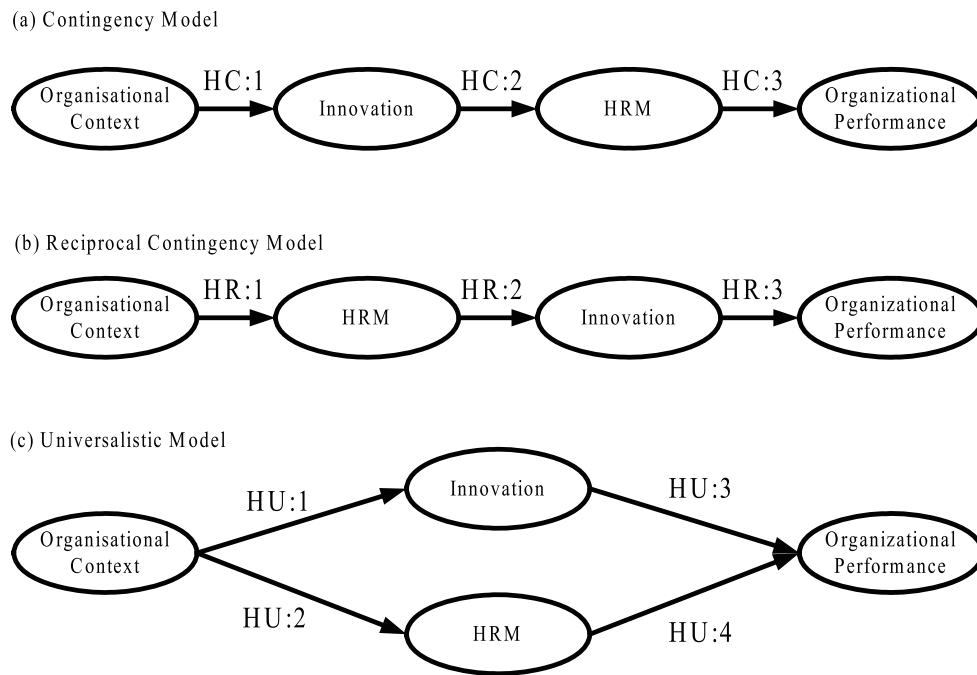


Figure 1: Innovation-*HRM-Performance linkage hypothesised causal models*

However, irrespectively of which specific HRM policies should be included in a relevant HRM list, the core philosophy of the Becker & Huselid (1998) HRM-performance linkage model, which has been categorised as the “most logical and definite model of the processes through which HR practices affect firm performance” (Wright et al., 2003: 25), suggests that the HRM policies of resourcing and development have an impact on employee skills, that together with employee rewards influence employee attitudes, that together with employee relations affect employee behaviours, which are subsequently translated into improved organisational performance. This HRM policies-*HRM outcomes linkage hypothesised causal model* is presented in Figure 2. Thus, the hypotheses that accompany the model in Figure 2 may be stated as follows:

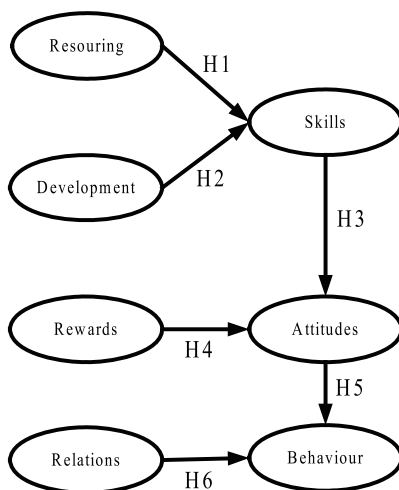


Figure 2: *HRM policies-*HRM outcomes linkage hypothesised causal model**

- H1: *Employees’ resourcing is positively related with employees’ skills.*
- H2: *Employees’ development is positively related with employees’ skills.*
- H3: *Employees’ skills are positively related with employees’ attitudes.*
- H4: *Employees’ rewards are positively related with employees’ attitudes.*
- H5: *Employees’ attitudes are positively related with employees’ behaviour.*
- H6: *Employees’ relations are positively related with employees’ behaviour.*

Incorporating the model presented in Figure 2 in the block indicated by HRM in the models presented in Figure 1 respectively, the basic characteristics of the three models proposed in Figure 1, may be available as follows:

*Contingency model:* Organisational context moderates innovation. Innovation affects resourcing, development, rewards, and relations. These HRM policies in conjunction with skills and attitudes influence behaviour. Behaviour affects organisational performance.

*Reciprocal contingency model:* Organisational context moderates resourcing, development, rewards, and relations. These HRM policies in conjunction with skills and attitudes influence behaviour. Behaviour affects innovation. Innovation affects organisational performance.

*Universalistic model:* Organisational context moderates resourcing, development, rewards, and relations. These HRM policies in conjunction with skills and attitudes influence behaviour. Behaviour affects organisational performance. Organisational context moderates innovation. Innovation affects organisational performance.

Table 1: Characteristics of all the variables used in the study

<b>Variable / Construct</b>	<b>Items and dimensions</b>	<b>Cronbach Alpha</b>	<b>Percent of variance explained</b>
Innovation strategy	<ul style="list-style-type: none"> <li>• Innovation processes</li> <li>• Improvement of goods</li> <li>• Wide range of goods</li> </ul> [Measured on a Likert-scale ranging from 1=not very important to 5=totally essential]	0.55	53.9
Organisational performance	<ul style="list-style-type: none"> <li>• Effectiveness</li> <li>• Efficiency</li> <li>• Development</li> <li>• Satisfaction</li> <li>• Innovation results</li> <li>• Quality</li> </ul> [Measured on a Likert-scale ranging from 1=very bad to 5=very good]	0.93	74.1
Skills	<ul style="list-style-type: none"> <li>• Competences</li> <li>• Co-operation between management and employees</li> <li>• Co-operation among employees</li> </ul> [Measured on a Likert-scale ranging from 1=very bad to 5=very good]	0.91	84.2
Attitudes	<ul style="list-style-type: none"> <li>• Motivation</li> <li>• Commitment</li> <li>• Satisfaction</li> </ul> [Measured on a Likert-scale ranging from 1=very bad to 5=very good]	0.90	83.8
Behaviour	<ul style="list-style-type: none"> <li>• Retention (counterpart of turnover)</li> <li>• Presence (Counterpart of absenteeism)</li> </ul> [Measured on a Likert-scale ranging from 1=very bad to 5=very good]	0.83	85.8
Resourcing	<ul style="list-style-type: none"> <li>• Recruitment</li> <li>• Selection</li> <li>• Separation</li> <li>• Flexible work arrangements</li> </ul> [Measured on a Likert-scale ranging from 1=not at all effective to 5=highly effective]	0.80	63.2
Development	<ul style="list-style-type: none"> <li>• Training and development</li> <li>• Monitoring training and development</li> <li>• Careers</li> <li>• Work design</li> <li>• Performance appraisal</li> </ul> [Measured on a Likert-scale ranging from 1=not at all effective to 5=highly effective]	0.88	67.2
Rewards	<ul style="list-style-type: none"> <li>• Job evaluation</li> <li>• Compensation</li> <li>• Promotion</li> <li>• Incentives</li> <li>• Benefits</li> </ul> [Measured on a Likert-scale ranging from 1=not at all effective to 5=highly effective]	0.87	65.2
Relations	<ul style="list-style-type: none"> <li>• Participation</li> <li>• Involvement</li> <li>• Communication</li> <li>• Health and safety</li> </ul> [Measured on a Likert-scale ranging from 1=not at all effective to 5=highly effective]	0.82	65.1
Organisational context	<ul style="list-style-type: none"> <li>• Management style [Measured on a Likert-scale ranging from 1= heavily centralised to 5=highly decentralised]</li> <li>• Organizational culture [Measured as 1 = power-oriented, 2 = role-oriented, 3 = project-oriented, 4 = fulfilment-oriented]</li> </ul>	0.60	71.7

### 3 Methodology

#### Sample

A large questionnaire survey in 23 sector industries in the Greek manufacturing sector was carried out between March 2002 and September 2002. A sample of 600 Greek organisations was used from the main Greek directory ICAP (2001). The sample was obtained by employing the stratified methodology. The strata were the 23 manufacturing sector industries including organisations with more than 20 employees. 20 percent of the approximately 3000 organisations were randomly chosen from each stratum of the directory. One hundred and sixty nine (169) usable self-administered questionnaires were received, a response rate of approximately 28 percent.

#### Measures

Table 1 presents the dimensions of all the variables used in the study. For the classification of these variables I followed Katou and Budhwar (2006; 2007).

#### Consistency of the survey instrument

Construct internal consistency was checked computing Cronbach alphas. The figures in Table 1 indicate that the survey instrument is a reliable instrument for checking the model presented in Figure 1, because the vast majority of Cronbach alphas are much higher than 0.70 (Nunnally, 1978). Construct validity was examined by evaluating the percent of the total variance explained per dimension obtained by applying confirmatory factor analysis using varimax rotation and eigenvalues greater than one. The percent of total variance explained values reported in Table 1, are much higher than 50.0% indicating acceptable survey instrument construct validity (Hair, Anderson, Tatham & Black, 1995).

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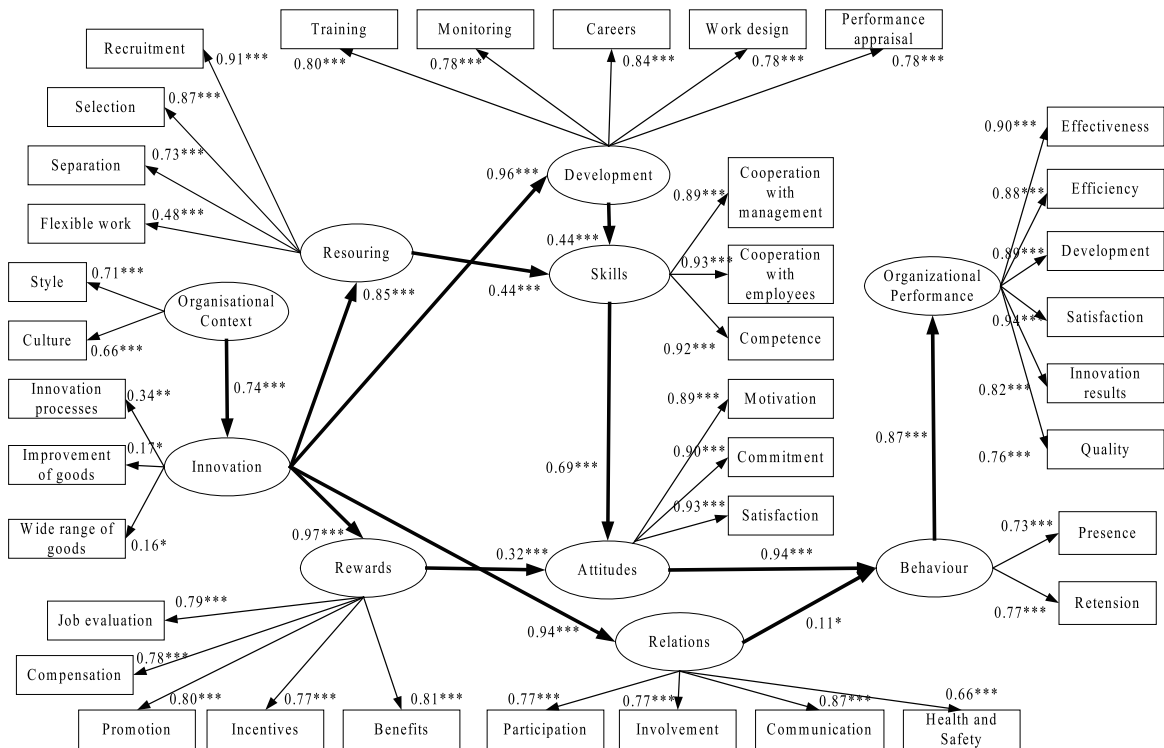
#### Statistical analysis

To test the raised research questions of the proposed framework the methodology of 'structural equation models' or 'latent variable models' was used, that is much more powerful in investigating causal relationships between categorical variables than regression analysis (Hair et al., 1995).

### 4 Results

We tested the theoretical models presented in Figure 1 using the structural equation modelling (SEM) via the Statistical Package LISREL (Linear Structural Relations) and the maximum likelihood estimation (MLE) (see Jöreskog & Sörbom, 2004). We used MLE because tests of departure from normality, skewness and kurtosis for all variables used were all within acceptable statistical limits (Hair et al., 1995).

We assessed the overall model fit employing the chi-square test and the normed-chi-square test and examining the root mean squared error of approximation (RMSEA), the comparative fit index (CFI), and the nor-



Chi-Square = 1925.99 df = 617 p-value = 0.000 Normed Chi-Square = 3.121 RMSEA = 0.109 CFI = 0.94 NFI = 0.92  
 + p < 0.20, ++ p < 0.10, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

Figure 3: Estimation results of the contingency model

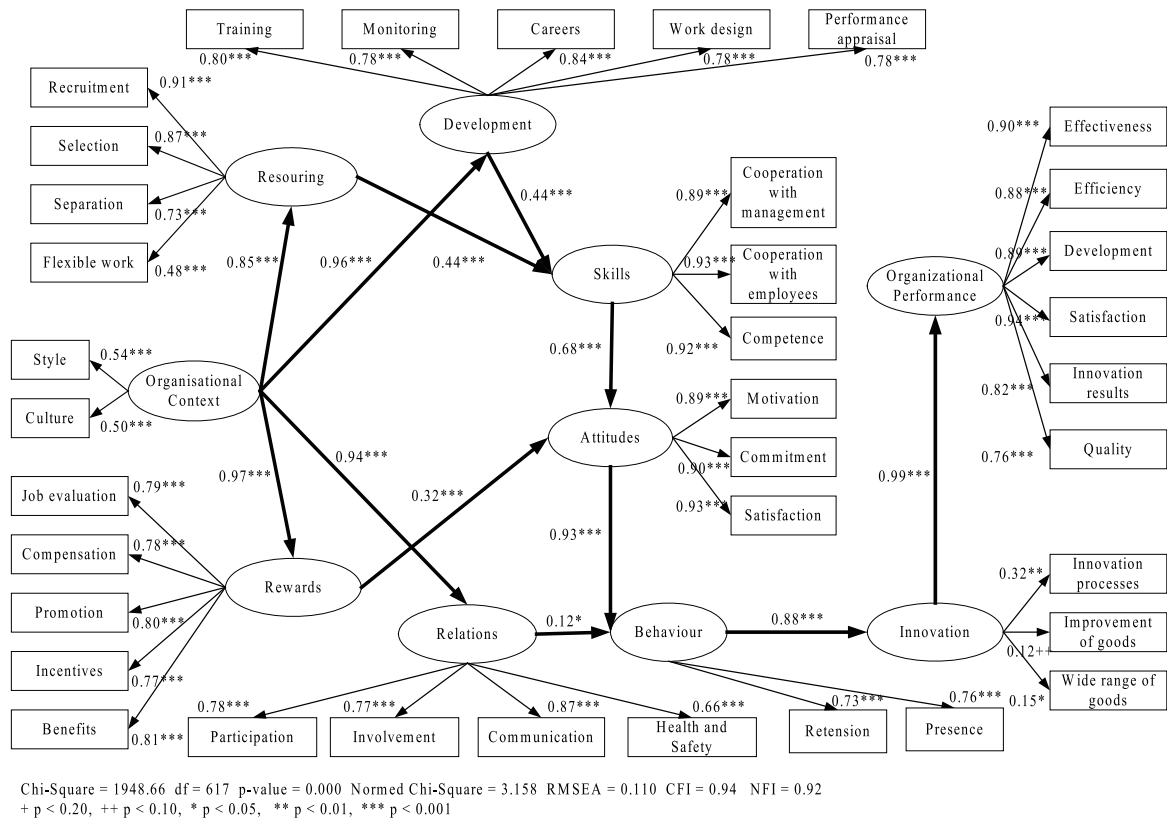


Figure 4: Estimation results of the reciprocal contingency model

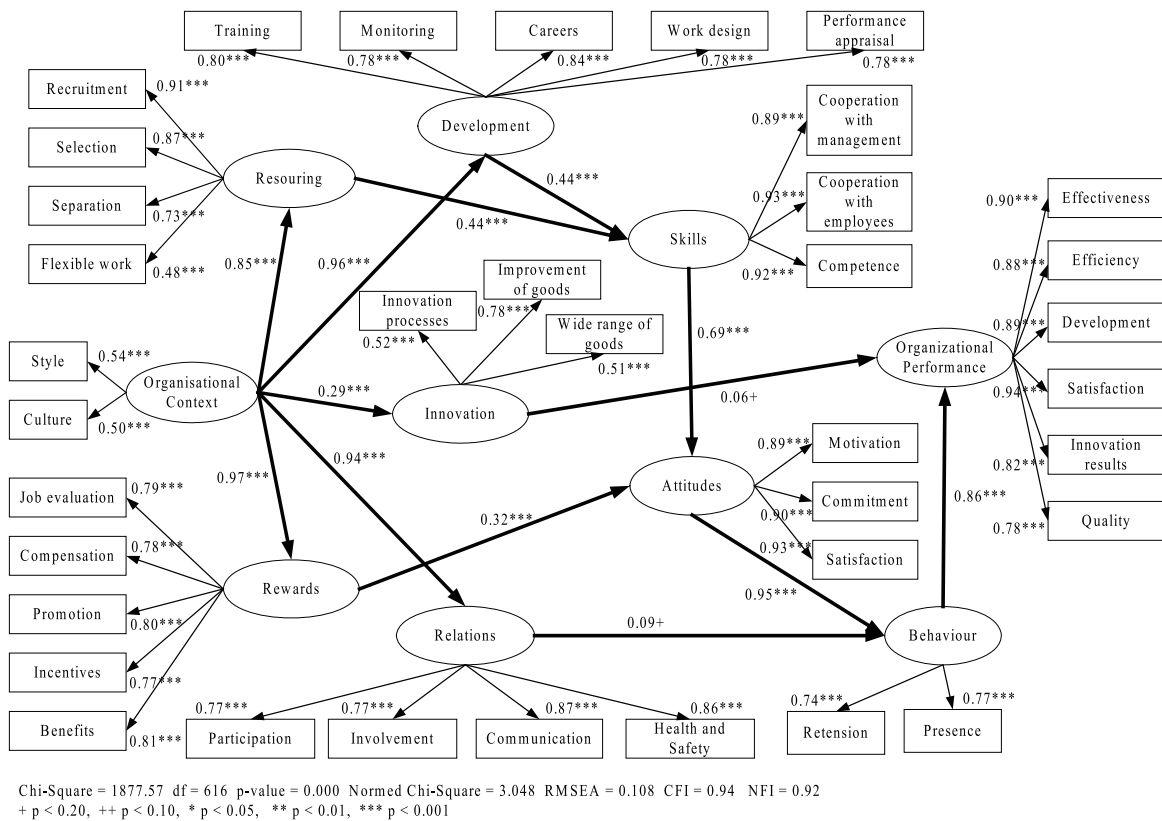


Figure 5: Estimation results of the universalistic model

med fit index (NFI). The path diagrams for the estimated Innovation-HRM-Performance linkage models proposed in Figure 1, indicating all the causal relationships between the variables involved, are presented in Figures 3, 4 and 5 for the contingency, reciprocal contingency, and the universalistic model, respectively. In these figures the boxes represent exogenous or endogenous observed variables and the circles represent the related latent variables. The light arrows indicate the observed variables that constitute the related latent variable and the bold arrows indicate the structural relationships between the corresponding variables. The figures that are assigned to each arrow show the estimated standardised coefficients.

In view of the results for the contingency, reciprocal contingency, and universalistic models presented in Figures 3, 4, and 5 respectively, the statistics suggest that the estimated models possess a satisfactory degree of fit with the data. Furthermore, considering the significance of the estimated standardised coefficients of the structural equations, it is seen that the vast majority of the hypotheses for the three models are supported, and only hypotheses H6 and HU:3 for the universalistic model are not supported. However, comparing the results in Figures 3 and 4 it may be supported that the contingency model is preferable than the reciprocal contingency model, because the values of the Normed Chi-Square and the RMSEA of the contingency model are slightly smaller than the corresponding values of the reciprocal contingency model. Furthermore, the "improvement of goods" construct in the innovation latent variable in the reciprocal contingency model is significant at a 0.10 level, whilst the same construct is significant at a 0.05 level in the contingency model. The results in Figure 5 do not support the universalistic model, because the direct effects of innovation on organisational performance and employee relations on employee behaviour are not significant.

## 5 Discussion and Conclusions

In the present study we have adopted the structural equation modelling methodology, which is much more powerful than hierarchical or competing regression analysis, in investigating causal relationships between categorical variables. Furthermore, the proposed and tested conceptual innovation-HRM-performance linkage framework put some light into the 'black box' mediating innovation strategy and organisational performance, by also considering the moderating effects of organisational context variables such as managerial style and organisational culture. Thus, the contribution of this study is two-fold. First on the analytical level, adopting a more sophisticated method of analysis, and second on the conceptual level, introducing an innovation-HRM-performance linkage model.

Specifically, the study provides support for the contingency perspective. Analytically, Table 2 shows the direct, indirect and total effects of statistically significant relationships expressed in the tested contingency model. Results shown in Table 2 reveal that innovation strategy is

positively influenced by the 'organisational context' variable. This means that the more heavily decentralised the management style is, and the more fulfilment – oriented (i.e. emphasis on expertise and orientation toward the person) organisational culture is, the more positive is the influence of organisational context variables on innovation. Furthermore, although there is no any direct impact of organisational context on the other mediating variables of the model, total effects indicate that all variables are strongly and positively influenced by organisational context variables. This result seems to be very important because it reveals that the internal environment of the organisation influences innovation strategy, the HRM policies, the HRM outcomes, and organisational performance (Murphy & Southey, 2003). Moreover, it is worth mentioning that the variables of employee retention and presence fit into the model, supporting the findings of other researchers such as Boselie, Paauwe & Jansen (2001) and Fey et al. (2000), who advocate that they affect organisational performance. With respect to the latent variable of 'organisational performance' it is seen that all the variables used to constitute this construct fit properly into the model.

It is seen in Table 2 that behaviour is strongly and positively related to attitudes. This direct relation between attitudes and behaviour (0.94) is transferred to organisational performance, depicted by the total effect of behaviour on performance (0.87) that is almost equal to the total effect of attitudes on performance (0.82). This result supports the job performance theory, advocating that it is employee's attitudes that have an impact on the behaviour of employees that subsequently has an impact on organisational performance (Wright et al., 2003). The policies of resourcing and development provided an equivalent direct effect (0.44) on skills, which subsequently it is translated to increased organisational performance (0.25) through attitudes and behaviour. Similarly, the policies of rewards and relations provided direct effects on attitudes (0.32) and behaviour (0.11) respectively, which subsequently they were translated to increased organisational performance (0.26 for rewards and 0.10 for relations) (Wright et al., 2003).

Moreover, the results shown in Table 2 reveal that organisational performance is positively influenced (0.79) by innovation strategy. This result verifies findings of Jimenez-Jimenez & Sanz-Valle (2005) and Zhao & Liu (2006). Considering that the loading factor of the innovation processes construct is double in size than the loading factors of the other two constructs, it means that innovation processes have a more influential role in determining organisational performance than improvement and wide range of goods. Furthermore, the results shown in Table 2 reveal that innovation directly and positively affects resourcing (0.85), development (0.96), rewards (0.97), and relations (0.94). It is worth noting that innovation indirectly and positively influences behaviour (0.91), attitudes (0.86), and skills (0.80), indicating thus that the further from organisational performance the HRM outcomes are the lower their influence on organisational performance.

Table 2: Standardised total, direct and indirect effects

Descriptions		Direct effects	Indirect effects	Total effects
Organisational context	• Organisational performance	0.00	0.59	0.59
Organisational context	• Behaviour	0.00	0.67	0.67
Organisational context	• Attitudes	0.00	0.63	0.63
Organisational context	• Skills	0.00	0.59	0.59
Organisational context	• Resourcing	0.00	0.63	0.63
Organisational context	• Development	0.00	0.71	0.71
Organisational context	• Rewards	0.00	0.72	0.72
Organisational context	• Relations	0.00	0.70	0.70
Organisational context	• Innovation	0.74	0.00	0.74
Behaviour	• Organisational performance	0.87	0.00	0.87
Attitudes	• Organisational performance	0.00	0.82	0.82
Attitudes	• Behaviour	0.94	0.00	0.94
Skills	• Organisational performance	0.00	0.56	0.56
Skills	• Behaviour	0.00	0.64	0.64
Skills	• Attitudes	0.69	0.00	0.69
Resourcing	• Organisational performance	0.00	0.25	0.25
Resourcing	• Behaviour	0.00	0.28	0.28
Resourcing	• Attitudes	0.00	0.30	0.30
Resourcing	• Skills	0.44	0.00	0.44
Development	• Organisational performance	0.00	0.25	0.25
Development	• Behaviour	0.00	0.29	0.29
Development	• Attitudes	0.00	0.30	0.30
Development	• Skills	0.44	0.00	0.44
Rewards	• Organisational performance	0.00	0.26	0.26
Rewards	• Behaviour	0.00	0.30	0.30
Rewards	• Attitudes	0.32	0.00	0.32
Relations	• Organisational performance	0.00	0.10	0.10
Relations	• Behaviour	0.11	0.00	0.11
Innovation	• Organisational performance	0.00	0.79	0.79
Innovation	• Behaviour	0.00	0.91	0.91
Innovation	• Attitudes	0.00	0.86	0.86
Innovation	• Skills	0.00	0.80	0.80
Innovation	• Resourcing	0.85	0.00	0.85
Innovation	• Development	0.96	0.00	0.96
Innovation	• Rewards	0.97	0.00	0.97
Innovation	• Relations	0.94	0.00	0.94

In terms of mediation we found that skills, attitudes, and behaviour serially mediate the relationship between HRM policies and organisational performance. This finding coincides with Delery & Doty (1996) who argued that HRM policies influence organisational performance by creating a workforce that is skilled and has the right attitudes and behaviour. It also partially supports Guest (2001) for satisfaction and commitment, Boselie et al. (2001) for satisfaction and motivation, Horwitz (1999) for obtaining competencies in an ever-expanding collection of skills, and Paul & Anantharaman (2003) for competence and commitment, arguing that these HRM outcomes affect organisational performance. Furthermore, our results support Purcell, Kinnie, Hutchinson, Rayton, & Swart (2003) who advocate that employee commitment and motivation are important mediators between training and firm performance.

Furthermore, in terms of mediation we found that HRM policies mediate the relationship between innovation and organisational performance. However, it is worth mentioning here that although Becker & Gerhart (1996)

have identified only three HRM policies that influence organisational performance to be common among various empirical studies, we decided to include in this study as many HRM policies as possible, considering that the proposed research model is tested for the first time in the Greek context using structural equation modelling. Employing the factor loadings of the HRM policies of the estimated contingency model presented in Figure 3 we may make inferences concerning the fit between innovation strategy and HRM policies. Thus, from the resourcing latent variable it is seen that recruitment (0.91) and selection (0.87) have the highest loadings, in contrast with flexible work contracts that have the lowest loading (0.48). This result may support the findings of Raghuram & Arvey (1994) who found that there exists a fit between innovation and recruitment and the result of Storey, Quintas, Taylor, & Fowle (2002) who found that there is no fit between innovation and flexible work contracts. With respect to the training and development latent variable it is seen that training (0.80) and careers (0.84) have the highest loadings, although the loadings of performance appraisal,



work design, and monitoring training are also high (0.78). This result may support the findings of Ding & Akhtar (2001), Mark & Akhtar (2003) and Zhao & Liu (2006) who found that training fits with innovation, the result of Petroni (1999) who found that broad career paths maintain innovation, and the result of Mark & Akhtar (2003) who stress the importance of performance appraisal in innovation. With respect to the rewards latent variable it is seen that benefits (0.81) and promotion (0.80) have the highest loadings, although the loadings of job evaluation (0.79), compensation (0.78), and incentives (0.77) are also high. This result may support similar findings of Laursen (2002) and Laursen & Foss (2003). With respect to the relations latent variable it is seen that communication (0.87) has the highest loading, although the loadings of participation (0.77), and involvement (0.77) are also high. This result may support similar findings of Damanpour (1991) for communication, and Damanpour (1991), Hurley & Hult (1998), and Mark & Akhtar (2003) for participation and involvement.

Summarising, we may say that although past research has demonstrated that there exists a relationship between innovation strategy and organisational performance (Damanpour & Gopalakrishnan, 1998; Jimenez-Jimenez, & Sanz-Valle, 2005), it has neglected to investigate the mediating mechanisms, usually called the "black box", through which HRM policies are hypothesised to affect organisational performance (Gerhart, 2005). The results of this study support that innovation strategy positively affects organisational performance of Greek manufacturing companies. Specifically, the relationship between innovation and organisational performance, is serially mediated through the HRM policies of resourcing, training and development, rewards, and relations, the HRM outcomes of skills, attitudes and behaviour, and is moderated by organisational context. Moreover, there is a fit of innovation strategy with the HRM policies of recruitment, selection, training, careers, monitoring training, work design, performance appraisal, benefits, promotion, job evaluation, compensation, incentives, communication, participation, and involvement.

The conclusions above, nonetheless, should be treated with caution. This is mainly because a single respondent from each organisation provided information on innovation strategy, HRM policies, HRM outcomes, organisational context, and perceived measures of organisational performance, respondent bias may have set in the form of upward or downward reporting of the measures (Katou & Budhwar, 2007). In spite of such limitations, the study makes some important contributions. It tests theoretical assumptions in smaller firms and in a non- USA/UK context. It provides support to the fit perspective between innovation and HRM, and the mediation perspective. The study supports for the use of HRM policies, and HRM outcomes as mediating variables between innovation and organisational performance.

Considering the limitations of the study we may propose paths for future research. Specifically, in this study we tried to explore the question of causality using cross-

section data. However, causality can only really be tested with data collected at different points in time. Thus, the field would greatly benefit from some time-series or longitudinal studies in the future (Katou & Budhwar, 2006). Further, considering the pace of globalisation and competition, there is a strong need for investigating whether innovation strategy fits with specific HRM policies that allow organisations to improve their performance (Jimenez-Jimenez, & Sanz-Valle, 2005).

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### Inoviranje in management človeških virov: Grški primer

Cilj tega prispevka je raziskava načinov, ki vodijo od inovacije do organizacijske učinkovitosti s pomočjo modeliranja s strukturno enačbo. To analitično orodje smo še prav posebej uporabili za testiranje raziskovalnega okvira, ki ga predstavlja vrsta vzročnih odnosov med organizacijskimi možnostmi, inovacijami, politikami managementa človeških virov (viri, usposabljanje, nagrajevanje, odnosi), rezultati managementa človeških virov (veščine, drža, obnašanje) in organizacijsko učinkovitostjo. Z uporabo podatkov organizacij, ki poslujejo v grškem proizvodnem sektorju, smo prišli do rezultatov, ki kažejo, da obstaja pozitiven učinek inoviranja na organizacijsko učinkovitost. Ta je posredovan prek politik in rezultatov managementa človeških virov, a je ublažen v organizacijskem kontekstu (stil managementa, organizacijska kultura).

**Ključne besede:** strategija inoviranja, politike managementa človeških virov, vzročnost, modeliranje s strukturno enačbo, grška proizvodnja