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MOTIVATION AMONG CONSTRUCTION WORKERS IN TURKEY

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The role of management is to apply organisational resources to achieve organisational objectives. The nature of commercial enterprise necessitates the desire for increased productivity and efficiency, and workforce motivation is acknowledged to be an influencing factor in these areas. Theory suggests that motivational factors follow a hierarchical format where higher level needs become dominant when lower level needs have been fulfilled, and improvements in motivation are facilitated more effectively through the higher level needs. This study looks at factors affecting the motivation of workers on Turkish construction sites. 370 construction workers were asked in a questionnaire to give examples of positive and negative factors which affect their motivation at work. It was found that money earned is the foremost motivating and de-motivating factor in the eyes of the construction workers. As a result it is suggested that workers on Turkish construction sites are managed in a way which limits their opportunities to fulfil higher level needs, and in order to increase worker motivation, and therefore productivity, the management of such workers should move away from control through external means and towards control through internal and cultural forces.

Keywords: operative, human resource management, motivation, organisational culture, Turkey.

INTRODUCTION

The role of management is to apply organisational resources to achieve organisational objectives. Industry in general, including the construction industry, is aware of the importance of human resources in the achievement of such objectives (Yankov and Kleiner 2001). As a result of the nature of commercial enterprise organisational goals will include increased productivity and efficiency, and it is generally acknowledged that workforce motivation is an influencing factor in these areas.

Management as a discipline has evolved over time as new generations of managers have strived to increase organisational productivity. With regard to human resources, different methods of control have been implemented in order to influence the behaviour of the workforce. For example, the ideas of scientific management focus on the specific control of work activities, while new-wave management relies on the culture of the organisation to direct worker behaviour. McAuley, Duberley and Johnson (2006) provide detailed explanations of these two organisational theories and the evolutionary path that links them. In parallel, motivational theories, some focusing specifically on the management of people, have also developed. Distinctions have

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been made between extrinsic motivation, where the individual is induced to behave in a particular way as a result of external factors (e.g. pay or punishment), and intrinsic motivation, where the drive to act comes from a desire within the individual (Hollyforde and Whiddett 2002).

Management and motivation have been brought together in Douglas McGregor's Theory X and Theory Y. These have since been built upon to produce Theory Z. The development of these theories mirrors the development of the management philosophies, from scientific management with its reliance on extrinsic motivators, to new-wave management with its emphasis on intrinsic motivational factors. Theory X and Theory Y describe the average worker from a management perspective and suggest methods by which management can get the best out of the worker. Theory Z moves the focus from the worker as an individual to look at the management of the workforce as a whole.

Theory X

Theory X draws on the scientific management school of thought and describes management's task as that of directing human energy for organisational purposes. The average worker is described as indolent, lacking ambition, disliking responsibility, self-centred, indifferent to organisational needs, resistant to change and gullible (McGregor 1970). As such, management methods based on Theory X involve coercion and threat, close supervision and tight controls over behaviour – extrinsic motivators.

Theory Y

Building on the principles put forward in Abraham Maslow's Theory of Human Motivation (1970), Theory Y was proposed. This theory supports the idea that a worker's behaviour within the organisational setting is a consequence of management philosophy and practice, and highlights the potential of managing the worker's human nature (McGregor 1970). Within this theory it is believed that intrinsic motivation can be used as a means to promote self-control and self direction, when management concentrates on giving the workers objectives to work towards rather than controlling their activities explicitly.

Theory Z

Theory Z, still relying on intrinsic motivation, looks at the organisation rather than the individual worker, and proposes that the corporate culture should be the means of control. Based on Japanese and American management principles, its aim is to create a strong organisational culture which provides a source of social affiliation and solidarity, thereby promoting worker behaviour that enhances productivity (McAuley *et al.* 2006). Japanese culture, which emphasises collective consensus, is contrasted with that of America, which concentrates on individualism, and the beneficial characteristics of each are combined in Theory Z. The objective is to promote greater organisational commitment among workers and thereby increase job satisfaction, lower rates of absenteeism and turnover, produce higher quality products and improve financial performance.

This study looks at factors affecting the motivation of workers on Turkish construction sites. Information about what motivates workers can give an insight into how those workers are being managed, and how their motivation, and therefore productivity, can be increased.

MOTIVATION THEORIES

Motivation is considered to be the driving force behind human behaviour (Hollyforde and Whiddett 2002). From a management perspective this is important as, along with a worker's abilities and skills, motivation is a factor which contributes to productivity (Vroom and Deci 1970). The concept of motivation is addressed by different motivational theories which provide their own description of motivation, although they tend to overlap to a greater or lesser extent. There is common agreement, however, that in order for someone to be motivated to act there must be some reason for them to do so – a 'reward'. This reward may be a positive outcome, or the avoidance of a negative outcome (Hollyforde and Whiddett 2002). The following motivational theories provide the basis for this research.

Maslow's hierarchy of needs theory

Abraham Maslow identified five basic human needs (Maslow 1970) which form a hierarchy in terms of the order in which a person will seek to satisfy them. Moving up the hierarchy, the needs are:

1. Physiological Needs – food, shelter, water, sex, sleep, clothing, rest, physical activities, etc.
2. Safety Needs – safety from wild animals, extremes of temperature, criminals, assault, murder and tyranny.
3. Love Needs – love, affection and belongingness; hunger for affectionate relations with people in general – for a place in the group.
4. Esteem Needs – desire for a stable, firmly based, high evaluation of self, for self-respect, or self-esteem, and for the esteem of others – includes ideas of strength, achievement, adequacy, confidence, independence and freedom, as well as reputation, prestige, recognition, attention, importance or appreciation.
5. Need for Self-Actualisation – the individual doing what he is fitted for; the idea that what a man can be, he must be – an artist must paint, a musician must make music, a poet must write.

Although these needs are always in existence, it is only as the lower level needs become satisfied that the higher level needs start to emerge and become motivators of behaviour. Maslow notes that one need does not have to be fully satisfied for another (higher) need to emerge. In addition to this, once a need has been satisfied it ceases to play an active role in motivation. It can be seen that the lower level needs tend to be met through external satisfaction, while the higher level needs tend to be met through internal satisfaction.

Existence-relatedness-growth theory

The relevance of the division of the higher level and lower level needs in the Hierarchy of Needs theory has been expanded on in a theory known as Existence-Relatedness-Growth theory. In this theory the needs fall into three categories: Existence needs, which relate to various forms of material and physiological needs; relatedness needs, which are those experienced in relationships with significant others; and growth needs, which relate to personal creativity and productivity (Hollyforde and Whiddett 2002). As people seek to satisfy their needs they tend to move along a continuum from existence to growth. However, if a person's higher level needs are not being met, they may move their focus back onto lower level needs, even if they have been met. In such cases, lack of satisfaction in one area can be compensated for by an increase in satisfaction in another area.

Herzberg's motivation-hygiene theory

Frederick Herzberg's theory on motivation is based on the idea that a person's needs fall into two categories: animal needs to avoid pain, and human needs to grow psychologically. The theory differentiates between satisfaction and the opposite of dissatisfaction (and vice versa). In relation to work it contends that job satisfaction is not the opposite of job dissatisfaction, and the things that people find satisfying about their work are not always the opposite of the things that they find dissatisfying.

Herzberg identified factors which contribute to job satisfaction (motivating factors): achievement, recognition (for achievement), work itself, responsibility and advancement (Herzberg 1970). These factors describe a person's relationship to what they do – their job content – and, as motivators, lead to job satisfaction because they address a person's need for growth. According to this theory it is the substance of the job which allows achievement of the growth goals, and therefore satisfaction. Lack of such factors does not in itself tend to lead to de-motivation. Herzberg also identified factors which contribute to job dissatisfaction (hygiene factors): company policy and administration, supervision, salary, interpersonal relations and working conditions (Herzberg 1970). These factors describe a person's relationship with the context or environment in which they work, and, although positive experience of them tends not to lead to motivation, negative experience of them leads to de-motivation. While motivation is deemed to be a function of growth, hygiene factors do not motivate, but rather 'move' people because of the need to avoid punishment or failure (Hollyforde and Whiddett 2002). It is also noted that motivating factors tend to correlate with intrinsic rewards, and hygiene factors tend to correlate with extrinsic factors.

Goal-setting theory

Goal-setting theory focuses on the achievement of goals, and its premise is that people are motivated to successfully attain challenging goals. Of particular interest is the influence of incentives on performance addressed in this theory. The achievement of a goal is motivating in itself, however, high-value incentives associated with goals have the effect of encouraging people to work harder (and to set harder goals). It should be noted that value is subjectively determined. Money encourages commitment to a task, but in itself is not motivating beyond a necessary level of income. Likewise, the participation in goal-setting of the person who is to work towards the goal increases their commitment to the goal, but does not itself increase motivation. Although these two factors are indirect means of influencing goals, as they do not direct a person's behaviour explicitly, commitment to a goal is linked to the motivation to reach it (Hollyforde and Whiddett 2002). It is also noted that the cultural context (America) in which goal-setting theory was developed may limit its relevance to similar cultures, e.g. USA and UK.

Job characteristics theory

This theory proposes that there are three psychological states which, if an individual experiences positively in relation to their work, will lead to beneficial outcomes for them personally, and their work. These psychological states are brought about through work with certain job characteristics, or dimensions. The psychological states are defined as (Hollyforde and Whiddett 2002):

- Experienced meaningfulness of the work – whether the worker feels the job is generally worthwhile.
- Experienced responsibility for the outcomes of the work – how much the worker feels responsible for the results of their work.

- Knowledge of the results of the work – the level of knowledge the worker has about their own effectiveness.

Positive experience of these states intrinsically motivates the worker to perform well in the future. This is because they have received intrinsic rewards through good performance and want more, or, if they have previously performed poorly, because they want to regain those intrinsic rewards. It is highlighted that whether these states are experienced by the individual will depend on how they perceive their work. This perception is heavily influenced by social standards and norms.

Aware that two people may be motivated to a different extent by the same job, the theory also acknowledges that individuals experience their own levels of need for growth and development, and this in turn will have an impact on the motivating potential of the same job.

Motivation in the workplace

Motivation is a complex concept and there are many different theories which look at the subject from different perspectives. There do, however, seem to be some common themes. The Hierarchy of Needs theory addresses extrinsic motivating factors in the lower level needs, while the Motivation-Hygiene theory sees them as the causes of dissatisfaction at work. The use of such external drivers may be seen as a bad way to motivate people, however, the Goal-Setting theory advocates the use of valuable incentives (e.g. money) to encourage commitment to achieve goals. Management of workers using solely extrinsic motivating techniques would be consistent with Theory X above.

Intrinsic motivating factors are also addressed by the Hierarchy of Needs theory and the Motivation-Hygiene theory in terms of the higher level needs and the motivating factors respectively. Intrinsic factors deal with how the worker feels about their job, and are deemed to be better motivators as the drive they create, like motivation itself, comes from within the person. These factors tend to revolve around giving the individual the opportunity to grow and develop, however, their effectiveness seems to be tempered by the person's perception of the motivating factors. The Job Characteristics theory relies on the worker's perception of the job dimensions for the attainment of the psychological states that lead to increased motivation, and in the Goal-Setting theory it is the worker's perception of the value of the incentives that is important in trying to improve performance. Management of workers using solely intrinsic motivating factors would be consistent with Theory Y above.

The Hierarchy of Needs theory proposed by Maslow has been identified as a major influencing factor in the development of other motivation and management work, such as that of McGregor (Theory X and Theory Y) and Herzberg (Motivation-Hygiene theory) (Whittington and Evans 2005). It has been widely used as a basis for much research into, among other things, workforce commitment (Stum 2001), management theory (Dye, Mills and Weatherbee 2005; Whittington and Evans 2005; Elliot and Williams 1995), consumerism (Trigg 2004), job satisfaction (Roberts, Walter and Miles 1971) and quality of life (Gratton 1980; Sirgy 1986). However, despite the popularity of the Hierarchy of Needs theory flaws within it have been identified. Many have pointed to the lack of empirical evidence supporting the theory (Elliot and Williams 1995; Roberts *et al.* 1971), and it is claimed that the theory focuses too much on the individual at the expense of the inclusion of environmental factors (Whittington and Evans 2005; Trigg 2004; Elliot and Williams 1995). Indeed, the environment in which an individual exists, including such things as social norms

(Elliot and Williams 1995; Gratton 1980) and culture (Trigg 2004), has been identified as an important influencing factor in the behaviour of people.

In response to such criticism Dye *et al.* (2005), while acknowledging the lack of empirical evidence, suggest that the Hierarchy of Needs theory is widely misinterpreted as it has become an over-simplified version of Maslow's body of work which includes consideration of more complex influencing factors such as cultural and environmental issues. The complexity of the subject has encouraged the development of the theory including the proposition that different conceptions of satisfaction exist within the different levels of the hierarchy of needs (Roberts *et al.* 1971), and that the needs of individuals should be viewed as dynamic; varying constantly with the situations in which the individual is involved (Whittington and Evans 2005). However, despite the developments in motivation and management theory Whittington and Evans (2005, p.121) conclude that "the road to building high-commitment organisations requires the solid foundation laid by Maslow, McGregor and Herzberg".

In the reality of the workplace it will be necessary to implement some extrinsic motivators to explicitly control workers' behaviour in order that activities may be coordinated. However, the value of appealing to the human side of the worker has not been lost on the construction industry. Yankov and Kleiner (2001) cite a number of examples of construction companies improving worker productivity through such means, and research into the effects of worker empowerment on quantity surveyors found that as perception of work empowerment increases so does organisational commitment (Liu, Chiu and Fellows 2007). As indicated above, however, the behaviour and psychology of workers does not always strictly conform to accepted motivational theories. A study testing the Motivation-Hygiene theory in the Thai construction industry found that the theory is not entirely applicable in that context, and concluded that the motivation pattern of employees depends on various contextual factors (Ruthankoon and Ogunlana 2003). Another study looking at worker motivation on construction sites in Bangkok, including a comparison with workers in Nigeria, concluded that a motivation technique that is useful in one country may not be appropriate in another as motivators are not universal and should be interpreted in relation to the cultural and environmental context (Ogunlana and Chang 1998). Theory Z addresses the management of people through culture.

RESEARCH PROBLEM

Human resources contribute significantly to the productivity of a construction company, and the strategy used to manage human resources has an impact on worker motivation. Workers on construction sites can be motivated to be more productive through extrinsic and intrinsic means. An understanding of what motivates workers can help management to develop strategies to increase worker motivation.

The aim of this research was to identify factors affecting the motivation of workers on Turkish construction sites, and to use this information to suggest methods for improvement in motivation and productivity.

In order to achieve the aim, the following objectives were pursued:

- To determine what factors affect the motivation of Turkish construction workers; and
- To analyse this information in the light of the motivation and management theories discussed above.

METHODS EMPLOYED

In light of the apparent bi-polar nature of motivation, Turkish construction workers were asked to respond to the two following questions:

- What is the most important factor that motivates you in your job?
- What is the most important factor that de-motivates you in your job?

Responses from 370 construction workers were obtained. The sample consisted of workers from four tunnel projects, six building projects, four transportation projects and one bridge project. 15 Turkish construction companies were randomly selected to participate in this study. For each company a conveniently located, current, Turkish construction site was identified. Data was collected from the workers on site during one lunchtime visit to each construction site. All the workers available at that time were asked to respond to the two questions in a questionnaire. The responses were then categorised according to common themes.

RESULTS AND DISCUSSION

Table 1: Categories of motivating and de-motivating factors

Motivating factors	De-motivating factors
Money – earning money	Money – not earning enough money
Enjoyment – of the work	Enjoyment – not enjoying the work
Food – getting a good quality meal	Food – getting a poor quality meal
Relationships – having a good relationship with management and colleagues	Relationships – having a bad relationship with management or colleagues
Home life – having a good home life	Home life – having a bad home life
Responsibility – being given responsibility by management	Responsibility – lack of belief in the worker
Expectancy – belief that effort will lead to the achievement of a target	Environment – bad working conditions
Recognition – received for doing the job	Safety – accidents and lack of site safety
Equality – being treated fairly	
Achievement – felt from doing the job well	

All workers answered the first question, but five did not answer the second question. The resulting information was categorised as in Table 1 (Büyükalp 2008). The first six factors in Table 1 elicited both motivating and de-motivating responses. Expectancy, recognition, equality and achievement were solely linked to motivation, while environment and safety factors were solely linked to de-motivation. The number of responses that fell into each category was counted. The results can be seen in Figure 1 (motivational factors) and Figure 2 (de-motivational factors) (Büyükalp 2008).

In the case of both motivating and de-motivating factors, issues surrounding money and pay were identified as the most important reason by the most respondents. Aside from money, the low percentage of external, or environmental, issues raised suggests that the lower level physiological and safety needs of the workers, as described in Maslow's Hierarchy of Needs theory above, are generally satisfied, and the workers are open to being motivated by appealing to their higher level needs. However, the Existence-Relatedness-Growth theory above notes that where higher level (internal)

needs are not being met, a person may move their focus back onto lower level (external) needs and strive to compensate for lack of satisfaction in one area by increasing satisfaction in another area. If the construction workers ability to satisfy their higher level needs is being impeded, this may account for the high percentage of money related motivating and de-motivating factors raised.

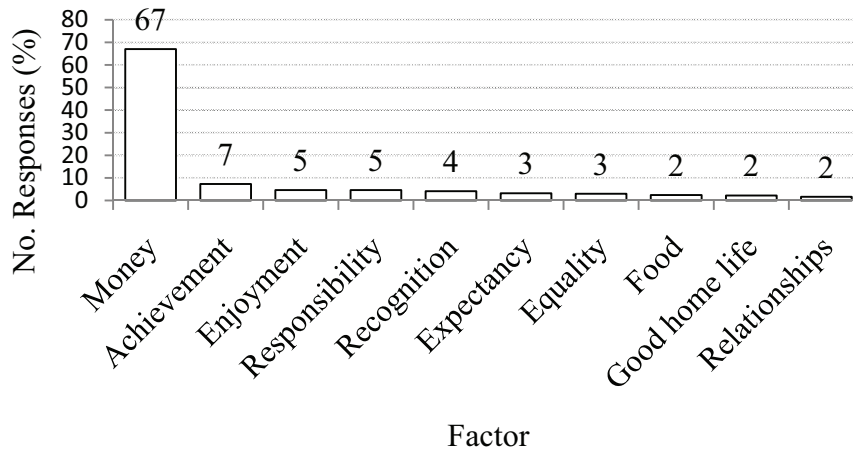


Figure 1: Factors that motivate construction workers

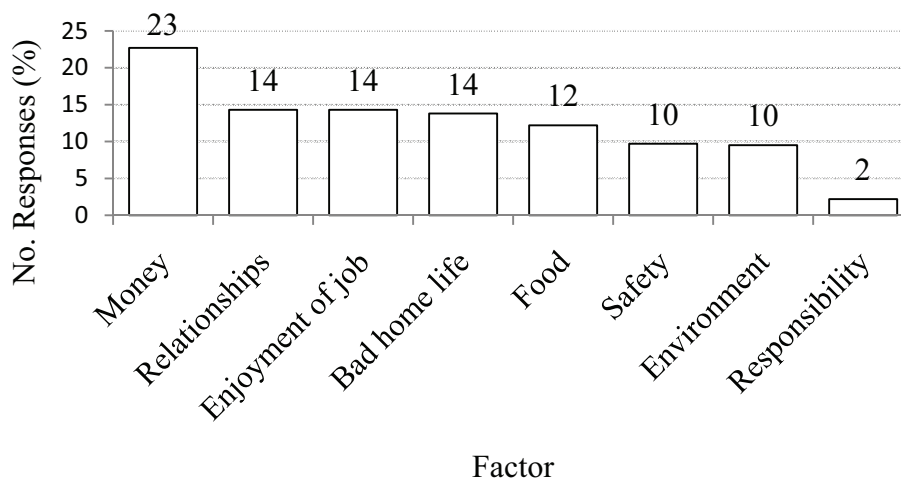


Figure 2: Factors that de-motivate construction workers

The pattern of the motivating and de-motivating factors raised by the respondents is in general agreement with Herzberg’s Hygiene-Motivation theory. The solely motivating factors deal with internal issues linked to the desire for growth and development, while the solely de-motivating factors deal with the external issues linked to the environment in which the respondents work. The factors that were deemed to be motivating and de-motivating are a mixture of internal and external issues. As discussed above in the Goal-Setting theory and the Job Characteristics theory, the perception of the individual plays a large role in determining what is motivating or what is not. Also, previous research into the motivation of workers (Ruthankoon and Ogunlana 2003; Ogunlana and Chang 1998) has found that cultural and contextual factors have implications on the extent to which workers’ patterns of motivation correspond to established motivation theories. This may account for the slight

deviation of the Turkish workers' responses from the model proposed in Herzberg's Motivation-Hygiene theory.

It appears that intrinsic and extrinsic factors do impact construction workers in different ways, and in order to get the best out of workers both the workers themselves and their working conditions need to be considered. As mentioned previously a certain level of extrinsic control is required for the necessary coordination of the workforce, however, it seems that care should be taken in the implementation of this control to ensure that it does not have an adverse effect on worker motivation. Pay rises or financial incentives may provide extrinsic means to increase commitment to the employer, but further investigation would need to be undertaken to determine how well, and for how long, this strategy could work.

Another area for further investigation is that of worker perception, and linked to this workforce culture. The worker's perception of their work, and their working environment, seems to be an important element in their motivation, and this appears to be further moderated by the culture of the workforce and that of the wider community. Although intrinsic factors have the potential to provide the best means for motivating the workforce, the impact on these of culture and perception need to be better understood before this potential can be realised.

CONCLUSION

It is apparent that the culture and context within which people work is an important factor in their motivation. As such, before trying to implement new management strategies in the pursuit of improved motivation it may be advisable to conduct an investigation into the present culture of the workforce, in particular to uncover their values. With an understanding of the existing workforce culture and values, combined with knowledge of the importance of intrinsic and extrinsic motivating factors, it may be more viable to develop and implement measures which will encourage the development of a workforce culture which increases worker motivation.

The results of this research suggest that:

- Turkish construction workers studied are limited in their ability to satisfy their higher level needs in their work;
- In order to improve the motivation of these workers they should be managed in a way that focuses less on control through external factors, as is consistent with Theory X, and more on providing opportunities for internal growth and development, as is consistent with Theory Y; and
- In trying to improve productivity through motivational techniques, the personally and culturally subjective nature of motivation, as well as contextual issues, should be taken into consideration. The development of an appropriate culture within the construction organisation, consistent with Theory Z, may be the best way management can improve the motivation of the workforce.

REFERENCES

- Büyükalp, A I (2008) *Factors affecting the motivation of Turkish employees in construction*, Unpublished MSc Dissertation, Department of Civil Engineering, University of Portsmouth.
- Dye, K, Mills, A J and Weatherbee, T (2005) Maslow: man interrupted: reading management theory in context. *Management Decision*, **43**(10) 1375-1395.

- Elliot, E M and Williams, F P (1995) When you no longer need Maslow: exchange, professionalism, and decentralisation in the management of criminal justice agencies. *Public Administration Quarterly*, **19**(1) 74-88.
- Gratton, L C (1980) Analysis of Maslow's need hierarchy with three social class groups. *Social Indicators Research*, **7**(1-4) 463-476.
- Herzberg, F (1970) The Motivation-Hygiene Theory. In: V. H. Vroom and E. L. Deci, (Eds.) *Management and Motivation*. Middlesex: Penguin.
- Hollyforde, S and Whiddett, S (2002) *The Motivation Handbook*. London: Chartered Institute of Personnel and Development.
- Liu, A M M, Chiu, W M and Fellows, R (2007) Enhancing commitment through work empowerment. *Engineering, Construction and Architectural Management*, **14**(6) 568-580.
- Maslow, A H (1970) A Theory of Human Motivation. In: V. H. Vroom and E. L. Deci (Eds.) *Management and Motivation*. Middlesex: Penguin.
- McAuley, J, Duberley, J and Johnson, P (2006) *Organisation Theory: challenges and perspectives*. Harlow: Financial Times Prentice Hall.
- McGregor, D M (1970) The Human Side of Enterprise. In: V. H. Vroom, and E. L. Deci (Eds.) *Management and Motivation*. Middlesex: Penguin.
- Ogunlana, S O and Chang, W P (1998) Worker motivation on selected construction sites in Bangkok, Thailand. *Engineering Construction and Architectural Management*, **5**(1) 68-81.
- Roberts, K H, Walter, G A and Miles, R E (1971) A factor analytic study of job satisfaction items designed to measure Maslow need categories. *Personnel Psychology*, **24**, 205-220.
- Ruthankoon, R and Ogunlana, O S (2003) Testing Hertzberg's two-factor theory in the Thai construction industry. *Engineering, Construction and Architectural Management*, **10**(5) 333-341.
- Sirgy, M J (1986) A quality-of-life theory derived from Maslow's developmental perspective: 'quality' is related to progressive satisfaction of a hierarchy of needs, lower order and higher. *American Journal of Economics and Sociology*, **45**(3) 329-342.
- Stum, D L (2001) Maslow revisited: building the employee commitment pyramid. *Strategy and Leadership*, **29**(4) 4-9.
- Trigg, A B (2004) Deriving the Engel Curve: Pierre Bourdieu and the social critique of Maslow's hierarchy of needs. *Review of Social Economy*, **62**(3) 393-406.
- Vroom, V H and Deci, E D (Eds.) (1970) *Management and Motivation*. Middlesex: Penguin.
- Whittington, J L and Evans, B (2005) General issues in management: the enduring impact of great ideas. *Problems and Perspectives in Management*, **2**, 114-122.
- Yankov, L and Kleiner, B H (2001) Human resources issues in the construction industry. *Management Research News*, **24**(3/4) 101-105.