

# LUND UNIVERSITY

Master Program in Accounting and Auditing BUSN69 Degree Project in Accounting and Auditing Spring Semester, 2014

An Exploratory Research on Performance Management: From Perspectives of Management Control and Human Resource Management

> Authors: Yuan Gao & Wing Yin Lai Supervisors: Anders Anell & Johan Dergård

### SUMMARY

Seminar date: 2 June 2014

Course: BUSN69 Degree Project in Accounting and Auditing

Authors: Yuan Gao & Wing Yin Lai

Advisors: Anders Anell & Johan Dergård

**Five key words:** Performance Management, Human Resource Management, Management Control, Perspective, Quantitative Research

**Purposes:** In general, we have three purposes. The first purpose is to investigate whether, in reality, management accountants and human resource management staff have different perception of performance management. The second purpose is to investigate whether there is correlation between employees' perception of performance and their understanding of the ideas included in theories about performance management. The third purpose is to investigate whether organizational factors and individual factors affect the correlation, if any, identified in the second purpose.

**Methodology:** In this research, a quantitative research with cross-sectional approach is conducted. We use web-based questionnaires which are distributed to human resource professionals and management control professionals.

**Theoretical perspectives:** Agency theory, transaction cost theory, organizational behavioral theory, resource-based theory, goal- setting theory and expectancy theory.

**Empirical foundation:** Primary empirical data are collected from the questionnaires.

**Conclusions:** We have the following findings. First, in practice management control and human resource management do not differ obviously in their perception of performance management. The only significant difference found in our research is about the purpose of performance management, where human resource staff tends to vote for the evaluative purpose while management accountants tend to agree with the development purpose. Second, organizational behavior theory is the only theory among the six chosen theories to have moderate correlation with total employees' perception of performance management. However, for either HR group or MC group, there is strong correlation between theories and perceptions. Third, company size and length of working experiences do have obvious influence on the correlation between employee's understanding of the ideas in theories about performance management and their perception of performance management. In contrast, level of position and educational background do not seem to obviously affect such correlation.

# **TABLE OF CONTENTS**

Abs	stract		. 1
Ack	nowl	edgement	6
1	Intro 1.1 1.2	duction Purpose of the Research Structure of the Research	9
2	Defin 2.1 2.2 2.3	hition Definition of Human Resource Management Definition of Management Control Definition of Performance Management 2.3.1 From a HRM Perspective 2.3.2 From a Management Control Perspective	11 11 12 12
3	Liter 3.1 3.2 3.3 3.4 3.5 3.6 3.7	ature Review and Theoretical Framework	15 16 17 18 18 19
4.	Prop	osition	21
5	Meth 5.1	odologyResearch Design.5.1.1 Background Questions5.1.2 Perception Questions5.1.3 Theory Questions	23 24 27 29
	5.2 5.3	Data Collection and Analysis Process Validity and Reliability	
6	Resu 6.1 6.2 6.3	ItsResults about Proposition 1Results about Proposition 26.2.1 Total Correlation between Perception and Theories6.2.2 Correlation between Perception and Theories in HR Group6.2.3 Correlation between Perception and Theories in MC group6.2.3 Correlation between Perception and Theories in MC group6.2.1 Company Size6.3.2 Level of Position6.3.3 Working Experience6.3.4 Knowledge about Performance Management in Past Education	<ol> <li>32</li> <li>35</li> <li>36</li> <li>37</li> <li>39</li> <li>41</li> <li>41</li> <li>44</li> <li>46</li> </ol>

7	Disc	ussion		. 54
	7.1	Discu	ussion about Proposition 1	. 54
	7.2	Discu	ussion about Proposition 2	59
		7.2.1	Total Correlation between Perception and Theories	. 60
		7.2.2	Correlation between Perception and Theories in HR Group	61
		7.2.3	Correlation between Perception and Theories in MC group	. 62
	7.3	Discu	ussion about Proposition 3	63
		7.3.1	Company Size	63
		7.3.2		
		7.3.3	Working Experience	65
		7.3.4	•	
8	Conc	lusion	1	. 67
Ref	erence	es		. 69
Apj	pendix	x1 (	Questionnaire (in English)	. 75
Apj	pendix	x 2 (	Questionnaire (in Chinese)	. 79
Арј	pendix		Strength of Total Correlation between Perception and Theories Frequency Fable	. 82
Apj	pendix		Strength of Correlation between Perception and Theories for Respondents Working in Human Resource Professions Frequency Table	. 82
Apj	pendix		Strength of Correlation between Perception and Theories for Respondents Working in Accounting Professions Frequency Table	83

# LIST OF TABLES

Table 1: Source of Perception Idea	28
Table 2: Frequency of Valid Respondents by Country	32
Table 3: Correlation for All the Respondents between Perception and Theories	36
Table 4: Correlation between Perception and Theories for Respondents Working in Human Resource Professions	38
Table 5: Correlation between Perception and Theories for Respondents Working as Accounting Professions	39
Table 6: Correlation between Perception and Theories for Respondents Working in Company Size Over 1000 Employees	42
Table 7: Correlation between Perception and Theories for Respondents Working in Company Size with 251 – 1000 Employees	43
Table 8: Correlation between Perception and Theories for Non-manager Respondents	45
Table 9: Correlation between Perception and Theories for Manager Respondents	46
Table 10: Correlation between Perception and Theories for Respondents with Working Experience 10 Years or Above	47
Table 11: Correlation between Perception and Theories for Respondents with Working Experience 5 to 10 Years	48
Table 12: Correlation between Perception and Theories for Respondents with Working Experience below 5 Years	50
Table 13: Correlation between Perception and Theories for Respondents withoutPerformance Management Education Background	51
Table 14: Correlation between Perception and Theories for Respondents withPerformance Management Education Background	52

# LIST OF GRAPHS

Graph 1: Strength of Total Correlation between Perception and Theories	37
Graph 2: Strength of Correlation between Perception and Theories for Respondents Working in Human Resource Professions	39
Graph 3: Strength of Correlation between Perception and Theories for Respondents Working in Accounting Professions	40
Graph 4: Strength of Correlation between Perception and Theories for Respondents Working in Company Size Over 1000 Employees	43
Graph 5: Strength of Correlation between Perception and Theories for Respondents Working in Company Size with $251 - 1000$ Employees	44
Graph 6: Strength of Correlation between Perception and Theories for Respondents with Working Experience 10 Years or Above	48
Graph 7: Strength of Correlation between Perception and Theories for Respondents with Working Experience 5 to 10 Years	49
Graph 8: Strength of Correlation between Perception and Theories for Respondents with Working Experience below 5 Years	51

### Acknowledgement

We would like to express our sincere gratitude to our supervisors Anders Anell & Johan Dergård for the continuous support of our master thesis, for their patience, motivation, enthusiasm, and immense knowledge. Their guidance helped us in all the time of the research and writing of this thesis.

Our sincere thanks also go to the respondents who have participated in the survey and our connections who have helped us to forward the survey to potential respondents. Without their help the thesis cannot be finished smoothly and efficiently.

As writing the thesis in a team, we would like to thank our own team mate for the support and motivation during the thesis research process and writing.

### **1. Introduction**

Otley (1999) has discussed five central questions about management control. One of the most important questions is the inter-connection between management control and human resource management. Otley (1999) thus emphasizes the need to identify such inter-connection so as to help organizations match its strategies with the specific processes and activities in performance management. From Otley's (1999) opinion one could infer that management control may focus on strategic aspects of performance management while human resource management may focus on the operational aspects and that a combination of the two may actually help improve the organization. There is some research studying the connection between management control and human resource management. Vernadat, Shah, Etienne & Siadat (2013) provide reflection of different financial and non-financial performance indicators and their usefulness in performance management. Choi, Hecht & Tayler (2013) questions whether human factor, such as involvement in decision making, may affect the effectiveness of performance indicators in performance management. Similarly, Ding & Beaulieu (2011) test whether implementation of performance appraisal will be harmed by human factors such as emotions and moods.

It could be seen that management control has been in need of a human resource management perspective. Since performance management serves as the interface between management control and human resource management, we decide to carry out our research in this field. Textbooks may serve as a good source for one to investigate the how management control and human resource management view think about performance management (Strauß & Zecher, 2013). More specific definition of performance management will be presented in Chapter 2.

Most human resource management textbooks generally criticize the problems that may arise when carrying out performance management. Collings & Wood (2009) argue that the claimed benefit of performance management such as performance improvement, employee development, stakeholders' satisfaction and jointly agreed goals and objectives may not be realized. They believe that since top management may unilaterally agree the strategic objectives and then cascaded these down into individual performance targets, such targets may not be achievable for staff at the operational level. Collings & Wood (2009) criticize such error as senior management's failure to "recognize the plurality of interests that are so much a part of

organizational reality" (p.192). Collings & Wood (2009) also present some other factors that may prevent an entity from harvesting the benefits of performance management. For example, performance management may be utilized as political methods to justify reward granted to certain employees rather than a tool to add value to the company (Collings & Wood, 2009). For another example, in practice performance management may not be aligned with strategic planning and thus cannot help achieve the strategic goals of a company. Leopold & Harris (2009) indicate that in most of the cases employees care more about whether they satisfy or exceed the performance expectation of their bosses rather than about whether such expectation is beneficial to the company, especially in a company where employees only have low commitment and sense of ownership of the company. Leopold & Harris (2009) also point out the possible problems of information overload, lack of performance evaluation expertise and high costs of the performance management. By describing performance management as "a collection of folk prescriptions" whose purpose is "to reduce people's anxiety about their problems by giving them something to do" (P.191), Leopold & Harris (2009) claim that performance management is based on theories of doubtful value and empirical researches which are actually "result of cumulative plagiarism" (p.192). Stone (2014), from a possibly more critical perspective, question the effectiveness of performance in the following three aspects. First, difference between individual performances may be due to sampling errors in evaluation processes rather than individual factors of employees (Stone, 2014). Second, variation in individual performances may derive from some factors out the control of employees (Stone, 2014). Third, management may not be able to distinguish variation in performances that are caused by employees or by systems within the company (Stone, 2014). Stone (2014) also mentions some other possible errors within performance management, such as "reliance on subjective measures", "disregard for individual performance objectives", "supervision by untrained managers", "inconsistency in reward allocation" and "lack of top management support" (p.310). It seems that most human resource management textbooks generally take a pessimistic attitude towards performance management, although some possibly positive effects of performance management are sometimes confessed.

Management control textbooks usually pay less attention to the practical problems mentioned above and focus more on the positive effects of performance management. Merchant & Van der Stede (2007) regard performance management as a type of result control which serve as a good way to control behaviors of professional employees, especially those with decision authority.

Results control, according to Merchant & Van der Stede (2007), can help enable decentralization of decision rights to employees and the design of an effective incentive system, both being significant for the organizational architecture of a company. Merchant & Van der Stede (2007) also suggest that, by applying non-financial performance indicators to performance appraisal processes a company could achieve multiple objectives promised by performance management and satisfy different stakeholders. Anthony & Govindarajan (2007) believe that performance management help identify the key success factors which determine the soundness of a company's strategy and thus its success. Anthony & Govindarajan (2007) confess that rapidly changing environment may bring some problems to performance management but they claim that interactive control which makes management aware of strategic troubles and opportunities will enable a company to keep its performance management up with the dynamic environment. Hutzschenreuter (2009) has also recognized that performance management can help management control to enhance organizational behaviors although performance management may sometimes appear to be subjective. It seems that most management control textbooks generally take an optimistic attitude towards performance management, although some problems or negative effects are sometimes admitted.

Obvious differences between attitudes towards performance management from the above two perspectives may indicate the difficulty in connecting management control and human resource management in this field. We attempt to find such differences do exist in reality and management accountants and human resource staff's real perception of performance management.

#### **1.1 Purpose of the Research**

In general, we have three purposes. The first purpose is to investigate whether, in reality, management accountants and human resource management staff have different perception of performance management. The second purpose is to investigate whether there is correlation between the above employees' perception of performance and their understanding of the ideas included in theories about performance management. The third purpose is to investigate whether organizational factors and individual factors affect the correlation, if any, identified in the second purpose.

### **1.2 Structure of the Research**

In this paper, Chapter 1 introduces our research interest in performance management and the specific purposes of the research. Chapter 2 provides definitions of management control and human resource management as well as the definition of performance management. Chapter 3 provides the literature and theoretical framework on which this paper bases. Chapter 4 raises the three propositions this paper will focus on. Chapter 5 explains the methodology this paper follows. Chapter 6 presents the results regarding our research. Chapter 7 presents discussion of the results of our research. Chapter 8 includes the conclusion and limitation of this paper.

### 2. Definition

Definitions related to this research paper are presented in this chapter. Definitions provided by both human resource management (HRM) scholars and management control (MC) scholars may cast some lights on our research results and discussion.

### 2.1 Definition of Human Resource Management

Armstrong (2012) provides a comprehensive definition that "HRM is the managerial utilization of the efforts, knowledge, capabilities and committed behaviors which people contribute to an authoritatively coordinated human enterprise as part of an employment exchange to carry out work task in a way which enables the enterprise to continue into the future (p.4)". One could infer from this definition that HRM actually shares two important characteristics with management control. First, HRM is in essence a series of managerial work. Second, co-ordination throughout the organization is a sort of control. Fombrun, Tichy & Devanna (1984) also points out the importance of keeping the HR system consistent with the organizational strategy. More obviously, Stone (2014) defines that "Human resource management involves the productive use of people in achieving objectives and the satisfaction of individual employee needs."

### 2.2 Definition of Management Control

Anthony (1965) defines management control as "the process by which managers assure that resources are obtained and used effectively and efficiently in the accomplishment of the organization's objectives (p.17)". Hofstede (1981) however defines management control as "a pragmatic concern for results, obtained through people (p.193)". Hofstede's (1981) definition of management control takes a further step than that of Anthony (1965). Developing their own opinion, Anthony & Govindarajan (2007) define management control as "the process by which managers influence other members of the organization to implement the organization's strategies (p.6)". One could read from this definition that human resource has been explicitly considered as an element of management control. By claiming management control to address the general

question of whether employees of a certain organization will behave appropriately, Merchant and Van der Stede (2007) also attach importance to HRM in management control.

From the above analysis, one could detect a trend that the definitions of HRM and those of management control are becoming increasingly connected with each other, though some differences still exist. Therefore, it would be meaningful to find out how HRM and management control defines performance management respectively.

### 2.3 Definition of Performance Management

The definition of performance management in both human resource management (HRM) and management control (MC) textbooks are discussed in the below sections.

#### 2.3.1 From an HRM Perspective

Leopold & Harris (2009) define performance management as the vehicle to relieve staff of the pressure to prove the value of their work to their superiors. Collings & Wood (2009) define performance management as "a strategic management technique that supports the overall business goals of the firm through linking each individual's work goals to the overall mission of the firm (p.190)". This definition is consistent with the trend that HRM is referring to management control. Armstrong (2012) defines performance management as "a systematic process for improving individual, team and organizational performance (p.322)". Stone (2014) believes that "performance management aims to improve organizational, functional unit and individual performance by linking the objectives of each (p.306)"

#### 2.3.2 From a Management Control Perspective

Anthony & Govindarajan (2007) define performance management as "simply a mechanism that improves the likelihood the organization will implement its strategy successfully (p.460)".

Merchant and Van der Stede (2007) does not precisely define performance management but rather analyze this topic according to the different types of management control such as results control, action control, personal control and cultural control. Compared with authors of HRM textbooks, those of management control do not actively define performance management. It seems that management control textbooks authors focus more on the application of performance management rather than the definition of performance management.

### **3. Literature Review and Theoretical Framework**

Management control and human resource management develops at different paces and follow different patterns. Though the human resource management study begins in the late 19<sup>th</sup> century (Porporato, 2011), the development bloom rapidly since 1989 (Storey, 1995). According to Storey (1995), there have been a speedy increasing HRM books and r5esearches in two major journals – The Human Resource Management Journal and the International Journal of Human Resource Management. The development of management control links to the accounting. Otley, Broadbent & Berry (1995) believe that Robert Anthony's work could represent the best in the field. In the 1960s, the management control focus on behavioral, economy theory and budgetary process (Bonini, Jaedicke & Wagner, 1964). In management control literature, traditionally performance management focused on financial indicators dominantly. In the 1970s and 1980s due to the change in industrial and business environment, companies request a broader understanding into their business operation performance to maintain competitive.

Since research on management control began to blossom around 1970s (Porporato, 2011) and research on human resource management grew rapidly around 1990s (Storey, 1995), due to time differences, management control literature and Human resource management literature may take different perspectives and apply different theories when analyzing similar topics. Specifically, when both management control literature and human resource management literature discuss performance management, there is a tendency for either party to apply certain theories instead of others. We have identified six theories related to performance management. These theories are inherently connected and may help us gain a comprehensive view of how management control and human resource management.

The inter relationship among the six theories are as follows. Agency theory and transaction cost theory belong to economic theory. Deriving from the risk-sharing view, agency theory arouses in the 1970s and identifies the principal-agent relationship and contract (Jensen & Meckling, 1976 in Eisenhardt, 1989). Transaction cost theory shares similar a perspective with agency theory in self interest and rationality (Burney & Ouchi, 1986 in Eisenhardt, 1989). However, the two theories stem from different economics traditions (Spence, 1975 in Eisenhardt, 1989), Agency theory does not consider organizational boundaries but emphasizes the mind-set of risk between

principal and agent, asymmetry information and uncertainty outcome, while organizational boundary is important in transaction cost theory. Eisenhardt (1989) argues that researchers should go beyond economics literature and use multiple theories. Economic theory such as agency theory cannot represent the organizational complexity sufficiently because economics assumptions are restrictive and single viewed, such as self-interest and efficient market (Eisenhardt, 1989). Cokin (2004) believes that organizational behavior theory identifies factors other than self-interest that make it difficult for employees to understand the economic values they are supposed to add to their companies. Organizational behavior theory thus provides guidance for aligning employee behavior with organizational strategies and facilitates the achievement of economic goals of companies (Cokin, 2004). Barney and Clark (2007) explain that resource-based theory can help reveal, "in economic terms, how a firm's people can provide sustainable competitive advantage and the role that the HR function plays in this process (p.122)". Presslee, Vance & Webb (2013) suggest that goal-setting theories have similar predictive powers as economic theory when it comes to the possible impact of rewards on employees' performance. Besides, Wright (2013) claims that economic benefits of an organization, which are emphasized in the economic theories, are the final test of the effectiveness of goal-setting within the organization. From a psychological point of view, Mitchell (1973) takes the perspective of expectancy theory and emphasizes that employees should be encouraged to "value (p.674)" the organizational outcome rather than being prevented from participating in decision making.

### **3.1 Agency Theory**

Agency theory predicts that performance-related payment can motivate employees to achieve organizational goals. HassabElnaby, Said & Wier (2005) believe that there is a relationship between the conception of agency theory and a company's choice of performance indicators. Given its related costs and risks, a performance indicator, no matter financial or non-financial performance indicators, should be included in the performance management system as long as the indicator can add incremental information about employees' effort in work (HassabElnaby, Said & Wier, 2005). Since human resource staff and management accountants may have different ideas about the costs and risks of certain performance indicators and different ideas about what incremental information is, these two groups may have different perception about the

explanations agency theory provides of performance management. may Moers (2006) questions the validity of the assumption in agency theory that principals are honest and easy to suffer from agent's self-interest intention which may finally results to harm the interest of the principal. Moers (2006) argues that this assumption has lent so much discretion to principles in reality that performance management systems established by principals tends to become diverse and subjective. It may be hard to achieve fairness within such performance management systems and some problems, such as undue tolerance of poor performance may thus arise (Moers, 2006). It may be interesting to see how human resource staff and management accountants add diversity and subjectivity do performance management and whether they are aware of their contribution. It will be meaningful to check whether the problems predicted by Moers (2006) do happen in practice.

### **3.2 Goal-setting Theory**

Employees' perception of performance goals and their abilities to achieve these goals may affect their performance. Cheng, Luckett and Mahama (2007) believe that performance management system usually requires employees to achievement potentially conflicting goals simultaneously. As the goal conflict increases, employees' perception of "goal difficulty (p.222)" will increase, which in turn negatively affect task performance (Cheng, Luckett & Mahama, 2007). Since management accountants and human resource staff may have different understanding of the level of conflict between a set of goals, they may have different understanding of the level of difficulty of the goals and thus conduct different performance. Different perceptions of goals by the above two parties may weaken the effectiveness of performance management and are thus worth studying. Webb (2004) explains that employees' commitment to certain performance goals depends on their understanding of the causal relationship between performance measures and performance goals. Since management accountants and human resource staff may understand such causal relationship differently, presumably due to their past education or working experiences, it may be important to investigate whether such distinction does exist in reality. Burney & Widener (2007) argue that "role ambiguity", the situation "when a manager does not possess adequate information to select the most effective job behaviors or when unclear signals about duties, authority, and responsibilities are present" may negatively affective employee performance (p.48). By providing more "job-relevant information", an organization may be able to solve the problem of "role ambiguity" (Burney & Widener, 2007, p.44 & p. 48). Two questions may thus be raised which may relate to our research. The first question is whether management accountants and human resource staff believe in their abilities to deal with "role ambiguity". The second question is whether the two parties may have similar definition for "adequate information".

### 3.3 Resource-based Theory

A company's capabilities to manage its resources may help build competitive advantage (Barney & Clark, 2007). Performance management plays an important role in affecting such capabilities. Henri (2006) identifies two types of use of performance management. The first type is "diagnostic use (Henri, 2006, p.531)" of performance management, which concerns the traditional role of performance management to ensure the implementation of organizational strategy. The second type is "interactive use (Henri, 2006, p.531)" of performance management, which concerns the active role of performance management to encourage participation of employees throughout the organization in decision-making and innovation. Henri (2006) believes that effectiveness of performance management depends on the balance between the above two types of functions. Based on Henri's (2006) opinion, one could infer that management accountants and human resource staff may differ in their preference between the two functions. Similarly, Grafton, Lillis & Widener (2010) claim that performance management can indirectly affect organizational performance by serving two roles which influence the decision-making patterns of an organization. The first role is called "decision-facilitating role" which "refers to the provision of information to decision makers ex ante to decision making, in order to help resolve uncertainties in decision problems" (Grafton, Lillis & Widener, 2010, p. 690). The second role is called "decision-influencing role", which "refers to the use of information by higher-level management to evaluate the performance of subordinate managers" (Grafton, Lillis & Widener, 2010, p. 690). Grafton, Lillis & Widener (2010) find that the two roles have significantly joint influence over the decision-making pattern and thus recommend future research to focus this joint influence. One could question whether the interconnection between management control and human resource management in performance management may be a possible area where such joint influence works.

### **3.4 Organizational Behavior Theory**

Kinicki, Jacobson, Peterson & Prussia (2013) believe that, since performance management focus on the organization performance of the whole company, organizational behavior theory may provide a perspective to view performance management. Despite a great interest in performance management within the academia, there is not so much literature that studies performance management from the perspective of organizational behavior theory (Kinicki et al, 2013). Besides, "to the extent that performance management has been addressed in the organizational behavior literature, it has been treated as part of other, broader constructs, such as leadership styles or behaviors ranging from transactional and transformational leadership styles (Kinicki et al, 2013, p.3)". As a result, it may be meaningful to contribute some empirical research results to this field. Armstrong (2012) believes that HRM approaches should help shape how individual act within an organization and in turn shape organization design and development which finally relate to the achievement of organizational achievement. Anthony & Govindarajan (2007), in a similar sense, contend that management control systems can influence human behavior and that they should ensure "individual actions taken to achieve personal goals also help to achieve the organization's goals (p.98)". It may be thus worth investigating whether both human resource staff and management accountants have similar or different views on this topic.

### **3.5 Transaction Cost Theory**

Transaction cost theory assumes that individual behavior is opportunistic (Williamson, 1975 in Widener 2004). Individual act is based on self interest which "may manifest itself in neither adverse selection nor moral hazard" (Coff, 1997 in Widener 2004, p.383). Transaction cost study assumes that contracts are mostly incomplete due to the players' irrationality and outcome uncertainty, a control mechanism is required to avoid any opportunistic behavior or self-interest that arise by the employees (Williamson, 1979). Ghoshal & Moran (1996), however, question the effectiveness of transaction cost theory in practice by criticizing its two assumptions. The first

assumption is about the human nature. Human are assumed to be opportunistic and the positive side of human beings are ignored. The second assumption is about the requirement for success. Predefined rules for efficiency within the company may in fact harm the performance of the company. Simon (1991) also suggests that the transaction cost theory prevents an organization from viewing and utilizing the human resources in a positive perspective. It seems that management control tends to learn from HRM in terms of application of transaction costs theory and one could thus expect to find some evidence to support this guessing. An important principle in transaction cost theory is cost minimization (Williamson, 1991). Armstrong (2012) thinks that the costs of transaction are in fact costs that occur for interrelated exchange activities of which the exchange of employee performance and employee payment within HRM is one example. Management control systems can help reduce behavioral uncertainty and thus minimize transaction costs (Widener, 2004). Personnel controls could serve as a useful tool to achieve cost minimization (Spicer & Ballew, 1983 in Widener 2004). Personnel control may be a technical area where human resource management and management accountants are both familiar with and one could thus expect to see each party's opinion on this area.

### **3.6 Expectancy Theory**

Dewettinck & Dijk (2013) prove that expectancy theory help understand the relationship between performance management practice and performance management system effectiveness. As a result this theory is included in our research. Based on Malik's (2012) explanation, expectancy theory anticipates that employees' motivation is connected to their belief in job achievement. The theory includes two elements: 1) incentive relies on a person's belief that efforts give rise to performance and 2) performance will result in rewards. Ferris, Beehr & Gilmore (1978) claim that employees will performance differently when they are working in an isolated situation from when they are working an organizational task situation, depending on the predict rewards for their efforts. The rewards can be divided into extrinsic and intrinsic, extrinsic rewards include items such as social reward or punishment; intrinsic rewards include items such as personal needs' satisfaction in achievement and/or higher order (Ferris, Beehr & Gilmore, 1978). Charlton, (2000, in Malik, 2012) believes that extrinsic and intrinsic rewards bring a mutual motivational effect. Leopold & Harris (2009) argue that the effectiveness of performance-related-payment, an

important tool of performance management in HRM, depends on whether employees have reasonable expectations of their reward as set according to the expectancy theory. From the perspective of management control, Merchant & Van der Stede (2007) also claims that, in management control, expectancy theory could be applied to assess the motivational strength of extrinsic or intrinsic rewards for employees. It is therefore interesting to see how human resource management staff and management accountants view these two elements of the expectancy as well as the two types of rewards. There is a relationship between manager behaviors and subordinate expectancies at work. It is found that manager's certain behaviors such as supportive and instructive and employees' job expectancies is correlated (Malik, 2012). Line Manager is crucial for effective PM due to their attitude that shape and execute the PM practices (Dewettinck & Dijk, 2013). Buchner (2007) states if an attractive context is provided by the managers, employees will probably react with suitable goals statements. There may also be some connection among expectancy theory, goal-setting theory and organizational behavior theory, especially in their influence on employees' perception of performance management.

### 3.7 Review of Textbooks

Strauß & Zecher (2013) remark that taking an "exploratory textbook survey" of an academic field may be a good way to understand the literature in that field, because textbooks always "convey the predominating view on what is considered fundamental knowledge" in that field (Hoffjan & Wömpener, 2006 in Strauß & Zecher, 2013, p.235). We have thus included six human resource management books and three management controls books that discuss performance management in our paper. More information about the textbooks used in our paper will be provided in the Methodology chapter, section 5.1.2 Perception Questions.

### 4. Proposition

In this chapter we introduce three propositions in this paper. Our research survey questions design, results and discussion will be organized around these three propositions.

### **Proposition 1:**

There are differences between human resource staff and management accountants' perception of performance management.

### **Proposition 2:**

Human resource staff and management accountants' understanding of the ideas within performance management theories correlates with their perception of performance management.

### **Proposition 3:**

Other factors such as organizational and individual factors can influence the correlation between employees' understanding of the ideas within performance management theories and their perception of performance management.

The interaction between employees' understanding of the ideas within performance management theories and their perception of performance management may be affected by some organizational or individual factors. Mollick (2012) believes that organizational performance could be affected by both people and process, on individual and organizational levels respectively. Based on this argument, one could infer that factors related to people and processes within an organization may affect the organizational performance and in turn affect the correlation between employees' understanding of the ideas within performance management theories and their perception of performance management. Therefore, four sub-propositions are raised.

3a. Company size affects the correlation between employees' understanding of the ideas within performance management theories and their perception of performance management.

3b. Level of position within an organization affects the correlation between employees' understanding of the ideas within performance management theories and their perception of performance management.

3c. Length of working experiences affects the correlation between employees' understanding of the ideas within performance management theories and their perception of performance management.

3d. Past education about performance management affects the correlation between employees' understanding of the ideas within performance management theories and their perception of performance management.

### 5. Methodology

To answer the research questions, we choose to use questionnaire collect primary data. A quantitative research method is applied. The research sampling will be collect through of non-probability sampling techniques – convenience sampling. Web-based questionnaires are sent to the professionals in accounting and human resources management.

### 5.1 Research Design

The research follows a constructive and interpretive approach in ontological, epistemological and methodological issues. Given that in reality there is an absence of objective truth, patterns and regularities are socially constructed (Moses & Knutsen, 2007).

In this research, a quantitative research approach will be used. Based on Bryman & Bell (2011), we define our study as a "cross-sectional design" (p.53) research. Two groups – accounting professionals and human resources professionals, from which data will be collected through self-completion questionnaires using online survey technique, are included in our research.

Understanding the comparability issue, we aim to design a formally structured questionnaire to ensure the comparability of results from different sources. We choose to use questionnaire instead interviews because we hope to reach larger amount of respondents in the limited time period regardless of the respondents' locations.

We are aware of the disadvantages of using survey research technique (Bryman & Bell, 2011). These disadvantages include misunderstanding of questions and memory problems from the respondents' side and poor questions design, information process error and record error from the researchers' side (Bryman & Bell, 2011). Therefore, we aim to set clear survey questions and provide examples as guidelines to solve the possible problem of question interpretation. To minimize the information process error and record error, we take advantage of the automation data processing function of Survey Monkey online survey software, SPSS software and Microsoft Excel. Besides, since we consider our research area as not sensitive, question threat and social desirability effect could be minimized.

Survey questions will focus on the research questions mentioned later. There are two language versions of the questionnaire: English and Simplified Chinese. We use Simplified Chinese version to minimize the language barrier for the Mainland Chinese respondents. Other respondents answered the English version questionnaire.

The questionnaire consists of 25 questions and it is divided into three major parts. They are background questions, questions about perception of performance management and questions about theories of performance management. The detail research question design is discussed in the following three sub-sections. The English version questionnaire and Chinese version questionnaire can be found in Appendix 1 and Appendix 2 respectively.

### **5.1.1 Background Questions**

In the first section of the questionnaire, 7 out of 25 questions are asked relating to the respondents' background. Respondents' backgrounds include two types of factors, namely organizational factors and individual factors. Organizational factors include the location and size of the company. Individual factors include the department in which one works, level within the organization, length of working experience and pre-knowledge about performance management. In this situation we assume that employees' understanding of practice and theories about performance management depend on the above two types of factors. Organizational factors are usually out of the control of employees, unless those at high levels of the company. Individual factors may be partially controlled by individual employees because department of working, working experience and pre-knowledge about performance management may be of personal choice but level within the company may not follow personal wish.

We can analyze how each of the background factors in our questionnaire may affect respondents' understanding of the theoretical basis of performance management. Questions 1 to Question 7 are explained in more detail in the following paragraphs.

Question 1: Does your company use performance management? For example, performance appraisal, performance indicator(s), balanced scorecard.

This question is designed to screen out those companies which do not explicitly apply performance management. As a result, this question is not included in the analysis part.

Question 2: Which department do you work at?

We expect that the department of working can affect employees' theory storage and practice, possibly in two ways. First, at the recruitment stage, employees newly accepted to both departments should presumably be selected on their theoretical and practical abilities which may differ according the job requirement of either department. Second, different features of tasks in different departments may shape employee practices in work and call for knowledge of different theories.

We have provided three possible choices for this question, namely, "accounting department", "human resources department" and "other". Since our research focuses on accounting department and human resource department, those respondent choosing "other" are not required to answer the rest of the questionnaire and are thus not included in our analysis.

Question 3: At which country do you work?

We expect that the location of a company may affect employees' theory storage and practice. There are many factors related to the location of a company, such as national or regional culture and level of economic development. Culture may influence the mindsets of employees and thus shape their understanding of theories or it may guide the way in which employees carry out performance management in practice. Level of economic development may affect the business model of a company and in turn affect how employees conduct and view performance management.

### Question 4: What is the size of your company?

We expect that the size or scale of a business may affect how the practice and theoretical storage of its employees. Subject matters of performance management should be the performance of an organization and its employees. One could reasonably infer that, as a company grows, performance of both the whole company and its staff may change as well. As a result different performance management practices and theories may be necessary to correspond to such changes.

### Question 5: Are you doing managerial work in your company?

We posit that level of position within an organization may affect an employee's practice and theoretical storage. In terms of practice, one's position in a company may have a direct impact on content and method of his or her work. In terms of theoretical storage, one's position may affect his or her access to on-job training or some other professional education which may serve as important sources of theories about performance management.

Since different companies may use different titles for similar positions or similar titles for different positions, in order to make the research results comparable through all respondents, we ask about the essence of their work rather than the title of their jobs.

Question 6: What is your working experience?

We hypothesize that the length of one's working experience may affect his or her practice and theoretical storage. We expect that length of working experience helps broaden the gap between practice and theories about performance management.

Question 7: Have you ever learned about performance management during your past education?

We expect that past education about performance management may affect how employees view the practice and theoretical basis of performance management. Past education could include training of practice or lectures introducing performance management theories.

### **5.1.2 Perception Questions**

We have designed 12 out of 25 questions in the second section of the questionnaire. These questions are designed to investigate whether respondents from human resources side and those from management control side perceive performance management differently. In the introduction and literature review chapter, we have explained the two disciplines share some similar and different perspectives in performance management. After understanding these academic textbooks' views, 12 different pairs of performance management statements are selected based on our discussions and judgments. Each pair of statements consists of two opposite statements about performance management; they are named statement A and statement B respectively. A one-to-five scale is available for respondents to rate and express their opinion, these scales are 1. Strongly agree with Statement A; 2. Agree with Statement A; 3. Neither agree nor disagree; 4. Agree with Statement B, and 5. Strongly agree with Statement B. The textbook sources of each perception questions are shown in the following table 1.

Human Resource Management Textbook	Management Control Textbook	
Collings & Wood (2009)	Merchant & Stede (2007)	
Leopold & Harris (2009)	Anthony & Govindarajan (2007)	
Leopold & Harris (2009), Collings & Wood (2009)		
Leopold & Harris (2009)		
	Merchant & Stede (2007)	
Armstrong (2012), Shen & Edward (2006)	Hutzschenreuter (2009)	
Armstrong (2012), Shen & Edward (2006)		
Collings & Wood (2009)	Merchant & Stede (2007)	
Leopold & Harris (2009)	Anthony & Govindarajan (2007)	
Leopold & Harris (2009)		
Mankin (2009)		
Storey (1995)		
	Management TextbookCollings & Wood (2009)Leopold & Harris (2009)Leopold & Harris (2009), Collings & Wood (2009)Leopold & Harris (2009)Leopold & Harris (2009)Armstrong (2012), Shen & Edward (2006)Armstrong (2012), Shen & Edward (2006)Collings & Wood (2009)Leopold & Harris (2009)Leopold & Harris (2009)Leopold & Harris (2009)Leopold & Harris (2009)Mankin (2009)	

 Table 1: Source of Perception Idea

Specifically, Question 8 asks about respondents' preference between qualitative and quantitative performance indicators in performance management. Question 9 aims to find out whether respondents believe that performance management will bring about information overload in practice. Question 10 requires respondents to answer whether they think that performance management measures the right things for a company's good. Question 11 asks respondents for their perception of the level of difficulty in clarifying the roles of different employees within an organization. Question 12 asks respondents to choose between a past-oriented and a future-oriented performance management system. Question 13 is designed to find out how respondent perceive the possible influence of performance management on working relationship between evaluators and the employees evaluated by them. Question 14 attempts to detect the possible meaning of performance manage to employees, asking respondents whether they believe performance management is established to monitor their behaviors or to help them grow. Question 15 asks whether respondents feel it difficult to convert business strategy into clear performance objectives. Question 16 investigates whether respondents agree with the idea to

regularly update performance appraisal scheme of an organization. Question 17 asks respondents whether they believe in the effectiveness of performance management. Question 18 is designed to find out whether respondents feel threatened by the performance management system in their own companies. Question 19 focuses on the psychological side of respondents and asks them to choose the best candidate, between human resource staff and management accountants, to carry out performance management.

### 5.1.3 Theory Questions

In the third section, 6 out of 25 questions are designed in the questionnaire. These six questions are related to the performance management theories in human resources management and management controls from academic textbooks and journals. They are agency theory, organizational behavior theory, resource-based Theory, transaction cost theory, goal-setting theory and expectancy theory. Each theory is presented as a statement. Respondents attitudes are investigated using a Likert scale approach where 1. Strongly disagree; 2. Disagree; 3. Neither agree nor disagree; 4. Agree, and 5. Strongly agree. In the questionnaire we do not specify the theory names, because we aim to avoid misleading respondents.

Specifically, Question 20 is asking about the "self-interest" assumption of agency theory. From the perspective of organizational behavioral theory, question 21 asks about whether performance management may affect individual behaviors of employees. Question 22 in fact asks respondents whether they agree with two messages simultaneously. Message 1 is that human resource is a source of competitive advantage for an organization. Message 2 is that performance management should pay special attention to the non-financial aspects of human resources. Admittedly, transaction cost theory may share some common points with agency theory but Kaplan Financial Knowledge Bank (2012) believes that transaction cost theory focuses especially on the opportunistic behavior of employees. Therefore, question 23, from the perspective of transaction cost theory, asks whether performance management can prevent opportunistic behaviors or encourage positive behaviors. Question 24 takes the perspective of goal-setting theory and is designed to find out how respondents view the relationship between clear performance goals and the effectiveness of performance management. Although Franco-Santos, Lucianetti & Bourne

(2012) mainly refers to goals set by individuals when it comes to goal-setting theory, in question 24 we choose to focus on the goals imposed by an organization on its employees because in this way we can distinguish goal-setting theory from the expectancy theory. Questions 25 takes a perspective of expectancy theory and asks respondents whether they believe their effort will result in achievement. Behling & Starke (1973) have identified nine assumptions on which expectancy theory bases.

### 5.2 Data Collection & Analysis Process

The questionnaire is conducted through online survey software Survey Monkey. We created the questionnaire through <u>www.surveymonkey.com</u> website. Two hyperlinks (English version and Chinese version) of the surveys are obtained and we sent them to our target respondents through email and social media such as Facebook. We also use our connection to spread the questionnaire link. After the two weeks data collection period, we obtained respondents' data results from the online survey software and exported the data into an excel file.

The data is analyzed using quantitative method. IBM SPSS software is used. The data analysis method includes mean, standard deviation, Pearson correlation with significant level at 0.05 (2-tailed) and 0.01 (2-tailed). We also use Microsoft Excel to produce frequency charts to illustrate the strength of correlations.

### 5.3 Validity and Reliability

Validity is related to what we are measuring and reliability is linked to how we are measuring in the research. Since we use questionnaire, it may be difficult for us to verify the validity and reliability of the responses. Therefore, when we design the questionnaire, we set the first two questions related to the occupation of the respondents and whether their companies are using performance management. It is important for us to research on the right respondents who are accounting and human resources professional and using performance management. Respondents not belonging to the target group are screened out and not included in our research. Further, when we send out the questionnaire, we inform the recipients' that we are looking for human resources professionals and accounting professional to participate in the research. As there is no face to face interview, the power-structure, communication/language barrier could also be minimized.

### 6. Results

In total we have received 52 responses from the online questionnaire. The questionnaire is answered by individuals who work in accounting department or human resources department. After screening out the invalid data, the valid data response number is 47. The result consists of 10 responses from the English version questionnaire and 37 responses from the Chinese version questionnaire. The 10 responses from the English version questionnaire include 5 respondents from Hong Kong and 5 respondents from Sweden. The 37 responses are from Mainland China. We use our personal connection to find respondents and ensure that each recipient will respond to our questionnaire. As a result, it may be impossible to calculate a real response rate. Or if possible, the response rate may not add much meaning to our work.

Number of Respondents	Sweden	Hong Kong	Mainland China	Total
Accounting Department	4	4	16	24
Human Resource Department	1	1	21	23
	5	5	37	47

 Table 2: Frequency of Valid Respondents by Country

### 6.1 Results about Proposition 1

Generally, our empirical research results have shown that human resource staff and management accountants are consistent in their perception of performance management but there is still some minor difference. Questions 8 to 19 ask about respondents' perception of performance management and results about these questions will be presented as follows. Since questions in this section are scaled from 1 to 5 with 1 meaning "strongly agree with statement A" and 5 meaning "strongly agree with statement B", the number 3 will be used as a test number to distinguish between respondents that tend to agree with statement A and those tend to agree with statement B. Based on respondents' choice on the scale, we have calculated mean and standard deviation for both of the respondents from Human Resource department (HR) and respondents from management control department (MC). We will mainly focus on the mean numbers either party has for each question and make necessary explanation when there is obvious differences between the deviations of both group. In general, respondents from HR and MC group give

similar answers to all questions except for question 14. Specific answers to each question are as follows.

### Question 8

In this question, answers of HR have a mean number of 3.78, which is higher than the 3.04 of MC by 0.74. This finding has shown that both HR and MC agree with the statement B that quantitative measures are more effective than qualitative ones for performance management. However, since 3.04 is quite close to 3 and 3.78 could be rounded up to 4, it seems that MC actually tends to take a neutral stance regarding this question while HR tends to agree with statement B.

### Question 9

In this question, HR and MC have similar mean numbers of 3.22 and 3.21 respectively. Both parties, in average, agree with statement B that performance management rarely cause information overload. Since 3.22 and 3.21 are very close to 3, both parties actually take a relatively neutral stance in this question.

### Question 10

In this question, both HR and MC show a similar tendency to agree with the statement A that performance management measures the right things for an organization. With a mean of 1.91, which is smaller than the 2.38 of MC, HR seems to slightly more agree with the statement than MC.

### Question 11

Regarding this question, HR and MC both agree with the statement A that it is feasible to clarify roles of different employees within an organization. HR has a mean of 1.87 while MC has a mean of 2.42. Besides, HR and MC have standard deviations of 0.626 and 1.100 respectively. There is a difference of 0.474, denoting that the HR respondents have more concentrated opinions on this question than the MC respondents.

### Question 12

In this question, HR has a mean of 2.48 while MC has a mean of 2.67. Both parties tend to agree with the statement A that performance management should focus on the future performance of an organization and its employees. Compared with 2.67, 2.48 is a number closer to 2, meaning that HR has a stronger willingness to agree with the statement.

### Question 13

HR and MC show a mean of 2.57 and 2.88 respectively, denoting agreement with statement A that performance management can enhance the relationship between evaluators and those evaluated.

### Question 14

With a mean of 3.17 and 2.67 respectively, HR and MC disagree over the question. HR tends to agree with statement B that performance management helps evaluate employees while MC tends to agree with statement A that performance management helps develop employees.

### Question 15

In this question, HR has a mean of 3.61 while MC has a mean of 3.29. Both parties have a mean higher than 3 which indicates that HR and MC tend to agree with statement B that it is hard to convert business strategy into clear performance objectives. Nevertheless, since 3.29 is rounded down to 3 and 3.61 is rounded up to 4, it is more likely that HR does show a tendency to agree with statement B while MC has a tendency to stay neutral for this question.

#### Question 16

For this question, HR and MC have mean numbers of 2.09 and 1.88 respectively. Since 1.88 is very close to 2.00, in this question both parties almost precisely agree with statement A that performance appraisal scheme should be updated according to changes in organizational strategy, even if the scheme is still effective. Besides, HR and MC have standard deviations of 0.949 and 0.537 respectively. There is a difference of 0.412, denoting that in this question MC respondents have a more concentrated opinion than the HR respondents.

### Question 17

Although HR and MC both agree with statement A that performance management is a genuine aid to organizational growth, they differ in their extent of agreement. There is a difference of 0.26 between the mean numbers 1.78 and 2.04 of HR and MC respectively. Additionally, HR and MC have standard deviations of 0.671 and 1.122 respectively. There is a difference of 0.451, denoting that the HR respondents have more concentrated opinions on this question than the MC respondents.

### Question 18

In this question, both HR and MC show a tendency to agree with statement B that they do not feel threatened when being evaluated in performance appraisal. The extent of agreement is similar for both parties since HR has a mean of 3.57 and MC has a mean of 3.67.

### Question 19

In this question HR and MC have means of 3.39 and 3.25 respectively. This indicates that both parties agree with statement B that human resources staffs are better candidates than accountants to carry out performance management. Since 3.39 and 3.25 are very close to 3, both parties actually take a relatively neutral stance in this question.

### 6.2 Results about Proposition 2

We also aim to find out whether there is correlation between respondents' understanding of theories about performance management and their perception of performance management. In order to check our proposition, we have done the following calculations. First, we have calculated the overall correlation between answers to each perception question and those to each theory question. In this calculation we include the answers from both HR and MC. Second, we have separately the correlation between answers to perception questions and those to theory questions in HR and MC groups respectively. We conduct this calculation in order to find out whether theories that correlate with perception of performance management are different in HR and MC groups. It should be emphasized that, when we design the perceptions questions we do not predict specific correlation between these questions and theory questions because we believe that each

perception question may be correlated with several theory questions and vice versa. In our research results, we find some correlations that may help add new perspectives to understand performance management. For each correlation coefficient, we will present another table to show the direction and strength of this correlation. We use the absolute value of each correlation coefficient to decide their strength. The level of strength will be based on the suggestion by Evans (1996, in Statstutor, n.d.). In this section, the correlation between answers to perception questions and those to theory questions is presented in the following tables.

## 6.2.1 Total Correlation between Perception and Theories

	Mean	Std. Deviation	Q20	Q21	Q22	Q23	Q24	Q25
Q8	3.40	1.136	-0.047	364*	0.165	-0.128	0.078	-0.011
Q9	3.21	0.750	-0.06	0.032	.290*	0.101	0.148	0.116
Q10	2.15	0.751	-0.188	-0.193	-0.199	0.006	-0.266	-0.161
Q11	2.15	0.932	-0.176	-0.235	-0.124	0.087	-0.262	-0.24
Q12	2.57	1.118	0.183	.357*	-0.052	-0.067	0.119	0.048
Q13	2.72	0.772	-0.037	0.04	447**	-0.157	0	-0.195
Q14	2.91	1.018	307*	-0.034	0.002	-0.035	-0.218	-0.144
Q15	3.45	0.928	-0.26	574**	-0.04	-0.151	-0.072	-0.235
Q16	1.98	0.766	-0.042	0.013	-0.055	0.147	0.058	-0.055
Q17	1.91	0.929	-0.188	-0.117	331*	0.265	-0.192	-0.024
Q18	3.62	0.990	0.248	0.207	0.062	-0.019	0	0.138
Q19	3.32	1.024	0.158	0.047	0.218	301*	0.174	-0.236

Results related to total correlation between perception and theories are presented as follows.

Number of Respondents: 47

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*. Correlation is significant at the 0.01 level (2-tailed).

Table 3: Correlation for All the Respondents between Perception and Theories

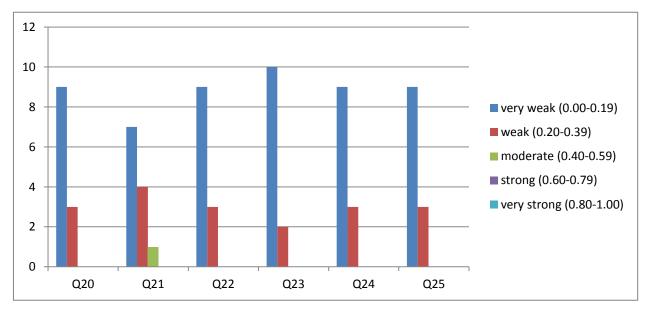
We have calculated the Pearson correlation between perception questions and theory questions for the total group of our respondents. Since we have 12 perception questions and 6 theory questions, we have calculated 72 pairs of questions and their Pearson correlation.

Correlations within the following 6 pairs of questions are significant at the 0.05 level (2-tailed). Q8 and Q21 have a Pearson correlation of -0.364. Q9 and Q22 have a Pearson correlation of

0.290. Q12 and Q21 have a Pearson correlation of 0.357. Q14 and Q20 have a Pearson correlation of -0.307. Q17 and Q22 have a Pearson correlation of -0.331. Q19 and Q23 have a Pearson correlation of -0.301.

Correlations within the following 2 pairs of questions are significant at the 0.01 level (2-tailed). Q13 and Q22 have a Pearson correlation of -0.447. Q15 and Q21 have a Pearson correlation of -0.574.

The strength of each correlation is illustrated in the following graph 1. For more information, please refer to the Appendix 3.



**Graph 1: Strength of Total Correlation between Perception and Theories** 

# 6.2.2 Correlation between Perception and Theories in HR Group

Results related to correlation between perception and theories in HR group are presented as follows.

	Mean	Std. Deviation	Q20	Q21	Q22	Q23	Q24	Q25
Q8	3.78	0.951	-0.187	-0.357	0.182	0	0.089	0.162
Q9	3.22	0.671	-0.051	-0.105	0.227	0	-0.273	-0.044
Q10	1.91	0.596	-0.12	-0.144	0.259	0.226	0.127	0.197
Q11	1.87	0.626	-0.075	-0.04	0.078	0.284	0.08	0.035
Q12	2.48	1.082	0.249	.601**	457*	-0.285	0.177	0.009
Q13	2.57	0.662	0.114	0.127	-0.285	-0.185	0.296	-0.285
Q14	3.17	0.937	524*	0.008	0.157	0.061	-0.211	-0.045
Q15	3.61	0.839	-0.322	806**	0.287	0	-0.052	-0.282
Q16	2.09	0.949	0.062	0.262	0	0.091	0.161	0.172
Q17	1.78	0.671	0.1	0.02	0.053	.461*	0.08	0.098
Q18	3.57	0.843	0.198	-0.092	-0.136	-0.343	-0.268	-0.178
Q19	3.39	0.988	0.283	0.049	-0.236	-0.354	0.009	-0.22

Number of Respondents: 23

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*. Correlation is significant at the 0.01 level (2-tailed).

 Table 4: Correlation between Perception and Theories for Respondents Working in Human Resource

 Professions

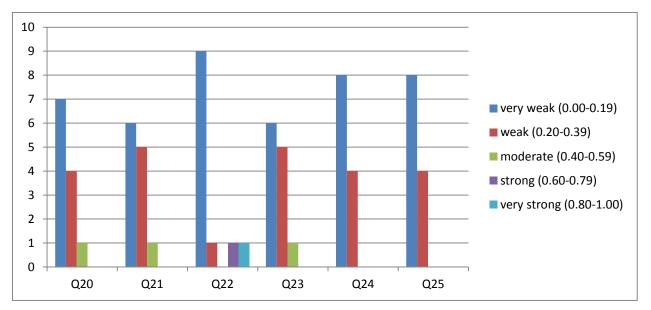
Correlations within the following 3 pairs of questions are significant at the 0.05 level (2-tailed).

Q12 and Q22 have a Pearson correlation of -0.457. Q14 and Q20 have a Pearson correlation of -

0.524. Q17 and Q23 have a Pearson correlation of 0.461.

Correlations within the following 2 pairs of questions are significant at the 0.01 level (2-tailed). Q12 and Q21 have a Pearson correlation of 0.601. Q15 and Q21 have a Pearson correlation of - 0.806.

The strength of each correlation in HR group is summarized in the following graph 2. For more detailed information please refer to the Appendix 4.



Graph 2: Strength of Correlation between Perception and Theories for Respondents Working in Human Resource Professions

# 6.2.3 Correlation between Perception and Theories in MC group

Results related to correlation between perception and theories in MC group are presented as follows.

	Mean	Std. Deviation	Q20	Q21	Q22	Q23	Q24	Q25
Q8	3.04	1.197	0.071	-0.374	0.126	-0.194	0.062	-0.149
Q9	3.21	0.833	-0.095	0.141	0.34	0.23	.569**	0.31
Q10	2.38	0.824	-0.228	-0.242	459*	-0.175	658**	519**
Q11	2.42	1.100	-0.269	455*	-0.277	-0.11	740**	645**
Q12	2.67	1.167	0.066	0.07	0.243	0.211	0.023	0.193
Q13	2.88	0.850	-0.108	-0.049	508*	-0.368	-0.347	-0.297
Q14	2.67	1.050	-0.03	-0.087	-0.116	-0.175	-0.228	-0.331
Q15	3.29	0.999	-0.143	-0.278	-0.31	457*	-0.094	-0.304
Q16	1.88	0.537	-0.158	-0.233	-0.137	0.245	-0.07	-0.274
Q17	2.04	1.122	-0.306	-0.27	-0.348	-0.139	492*	464*
Q18	3.67	1.129	0.299	.523**	0.217	0.252	0.349	.528**
Q19	3.25	1.073	-0.151	0.073	0.287	0.08	.412*	0.053

Number of Respondents: 24

\*. Correlation is significant at the 0.05 level (2-tailed).

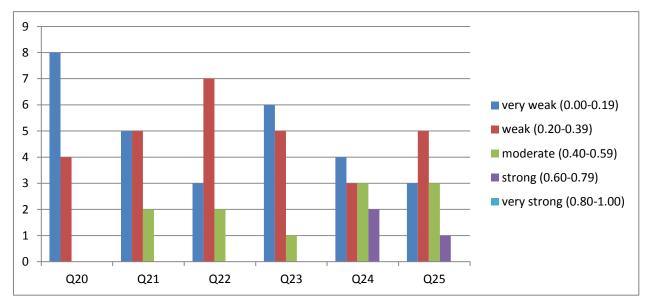
\*\*. Correlation is significant at the 0.01 level (2-tailed).

Table 5: Correlation between Perception and Theories for Respondents Working in Accounting Professions

Correlations within the following 7 pairs of questions are significant at the 0.05 level (2-tailed). Q10 and Q22 have a Pearson correlation of -0.459. Q11 and Q21 have a Pearson correlation of -0.455. Q13 and Q22 have a Pearson correlation of -0.508. Q15 and Q23 have a Pearson correlation of -0.457. Q17 and Q24 have a Pearson correlation of -0.492. Q17 and Q25 have a Pearson correlation of -0.464. And Q19 and Q24 have a Pearson correlation of 0.412.

Correlations within the following 6 pairs of questions are significant at the 0.01 level (2-tailed). Q9 and Q24 have a Pearson correlation of 0.569. Q10 and Q24 have a Pearson correlation of - 0.658. Q10 and Q25 have a Pearson correlation of -0.519. Q11 and Q24 have a Pearson correlation of -0.740. Q11 and Q25 have a Pearson correlation of -0.645. Q18 and Q21 have a Pearson correlation of 0.523. Q18 and Q25 have a Pearson correlation of 0.528.

The strength of each correlation in MC group is illustrated in the following graph 3. For more information, please refer to the Appendix 5.



Graph 3: Strength of Correlation between Perception and Theories for Respondents Working in Accounting Professions

### 6.3 Results about Proposition 3

We are aware that some other factors, such as the background of our respondents, may affect their perception of performance management. Therefore, the possible impact of company size, level of position, working experience and knowledge about performance management in past education on the correlation between perceptions and theories of performance management is presented.

## 6.3.1 Company Size

The following tables show the correlation between perceptions of performance and theories based on the size of companies in our research.

In the questionnaire we provide respondents with five choices about the size of their companies, namely, "10 or below 10 employees", "11-50 employees", 51-250 employees", "251-1000 employees" and "above 1000 employees". However, answers to this question mainly focus on the last two choices, with one respondent choosing the first choice, no respondent choosing the second choice and four respondents choosing the third choice. Since there are only few answers for the first choice, conclusion drawn from these answers may not be generalized. We therefore decide to mainly focus on answers to the last two choices, namely companies that have "251-1000 employees" and "above 1000 employees". Consequentially, we include 42 answers in analysis in this section.

	Mean	Std. Deviation	Q20	Q21	Q22	Q23	Q24	Q25
Q8	3.27	1.241	0.189	630**	0.109	-0.168	0.164	-0.222
Q9	3.23	0.813	-0.151	0.096	0.233	0.161	0.19	0.339
Q10	2.36	0.848	602**	-0.308	-0.272	-0.246	436*	-0.398
Q11	2.00	0.873	-0.257	-0.299	521*	0	563**	570**
Q12	2.14	0.941	.423*	0.139	0.245	-0.083	0.06	-0.267
Q13	2.73	0.827	-0.216	-0.189	714**	-0.252	-0.138	-0.214
Q14	2.91	1.065	0.014	0	-0.083	-0.147	-0.134	-0.282
Q15	3.64	0.953	-0.348	492*	-0.372	-0.164	0.2	-0.121
Q16	1.95	0.653	-0.289	-0.04	-0.018	0.28	-0.006	0.082
Q17	2.05	1.090	-0.342	-0.215	466*	0.167	-0.324	-0.298
Q18	3.86	0.990	0.392	.553**	0.227	0.026	0.213	0.253
Q19	3.23	1.020	-0.01	0.077	0.376	-0.077	0.02	-0.306

Companies with Above 1000 Employees

Number of Respondents: 22

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*. Correlation is significant at the 0.01 level (2-tailed).

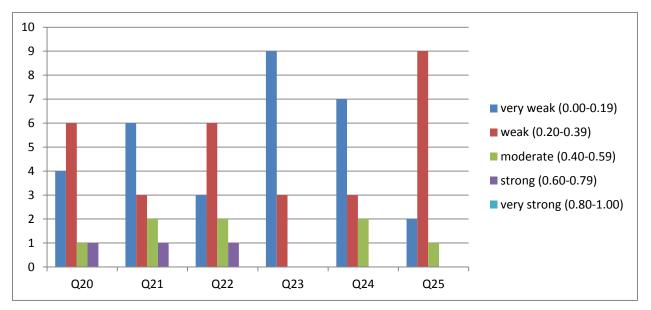
 Table 6: Correlation between Perception and Theories for Respondents Working in Company Size Over 1000

 Employees

Correlations within the following 5 pairs of questions are significant at the 0.05 level (2-tailed). Q10 and Q24 have a Pearson correlation of -0.436. Q11 and Q22 have a Pearson correlation of -0.521. Q12 and Q20 have a Pearson correlation of 0.423. Q15 and Q21 have a Pearson correlation of -0.492. Q17 and Q22 have a Pearson correlation of -0.466.

Correlations within the following 6 pairs of questions are significant at the 0.01 level (2-tailed). Q8 and Q21 have a Pearson correlation of -0.630. Q10 and Q20 have a Pearson correlation of -0.602. Q11 and Q24 have a Pearson correlation of -0.563. Q11 and Q25 have a Pearson correlation of -0.570. Q13 and Q22 have a Pearson correlation of -0.714. Q18 and Q21 have a Pearson correlation of 0.553.

The following graph 4 illustrates the strength of correlation with in this group.



Graph 4: Strength of Correlation between Perception and Theories for Respondents Working in Company Size Over 1000 Employees

	Mean	Std. Deviation	Q20	Q21	Q22	Q23	Q24	Q25
Q8	3.50	1.147	-0.313	-0.135	0.351	-0.029	-0.05	0.249
Q9	3.35	0.587	0.151	0.026	0.069	0.028	0.029	0.032
Q10	1.80	0.410	0.093	-0.151	0.049	0.163	0.197	0.023
Q11	2.20	0.894	-0.15	0	0.427	0	0.039	0.202
Q12	2.95	1.146	0.019	.661**	-0.193	0.248	0.106	0.324
Q13	2.70	0.801	0.042	0.27	-0.151	-0.042	0.115	-0.19
Q14	2.90	1.071	675**	-0.144	0.056	0.094	-0.42	0.027
Q15	3.35	0.933	-0.162	713**	0.259	-0.341	-0.414	-0.388
Q16	2.00	0.918	0.157	0.202	-0.11	-0.073	0.252	-0.104
Q17	1.75	0.786	-0.046	0.098	-0.128	0.277	0.183	0.363
Q18	3.45	0.887	0.051	-0.366	-0.25	0.132	514*	-0.172
Q19	3.60	0.821	0.385	-0.151	-0.074	-0.326	0.127	-0.383

## Companies with 251-1000 Employees

Number of Respondents: 20

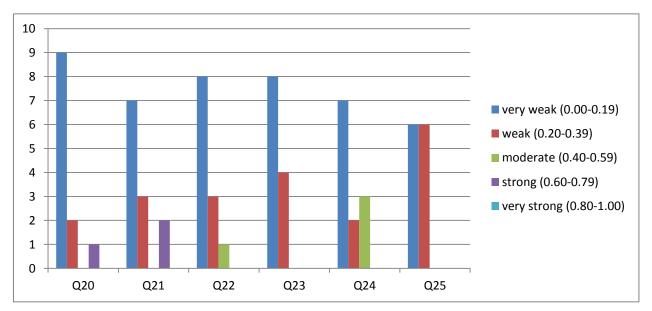
\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*. Correlation is significant at the 0.01 level (2-tailed).

Table 7: Correlation between Perception and Theories for Respondents Working in Company Size with 251 –1000 Employees

Correlations within the following pair of questions are significant at the 0.05 level (2-tailed). Q18 and Q24 have a Pearson correlation of -0.514.

Correlations within the following 3 pairs of questions are significant at the 0.01 level (2-tailed). Q12 and Q21 have a Pearson correlation of 0.661. Q14 and Q20 have a Pearson correlation of -0.675. Q15 and Q21 have a Pearson correlation of -0.713.



The following graph 5 illustrates the strength of correlation with in this group.

Graph 5: Strength of Correlation between Perception and Theories for Respondents Working in Company Size with 251 – 1000 Employees

## 6.3.2 Level of Position

The following tables show the correlation between perceptions and theories based on whether the respondents' level of position within their organizations. We make a simple separation between managers and non-managers by asking respondents whether they conduct managerial work or not.

### Non-managers

	Mean	Std. Deviation	Q20	Q21	Q22	Q23	Q24	Q25
Q8	2.83	0.924	-0.066	530*	0.129	0.151	0.203	0.393
Q9	3.00	0.840	-0.361	-0.076	.487*	0.214	0.356	0.07
Q10	2.06	0.539	-0.187	-0.171	0.243	-0.271	717**	-0.115
Q11	1.94	0.725	-0.195	-0.313	0.243	0.202	-0.396	0.005
Q12	2.44	1.149	0.299	0.358	-0.069	-0.341	0.304	-0.279
Q13	2.78	0.808	0.275	0.14	-0.394	-0.238	0.062	640**
Q14	2.72	1.179	-0.292	-0.042	-0.034	-0.09	519*	0.064
Q15	3.39	0.916	-0.11	634**	0.106	-0.007	-0.177	-0.154
Q16	2.11	0.963	-0.21	0.074	-0.047	0.255	0.129	-0.129
Q17	2.06	0.938	-0.431	-0.098	0.03	0.227	-0.412	0.311
Q18	3.83	0.924	0.131	0.299	-0.092	-0.108	-0.203	0.011
Q19	3.50	0.985	0.185	0	0.156	-0.304	.494*	-0.269

Number of Respondents: 18

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*. Correlation is significant at the 0.01 level (2-tailed).

Table 8: Correlation between Perception and Theories for Non-Manager Respondents

Correlations within the following 4 pairs of questions are significant at the 0.05 level (2-tailed). Q8 and Q21 have a Pearson correlation of -0.530. Q9 and Q22 have a Pearson correlation of -0.487. Q14 and Q24 have a Pearson correlation of -0.519. Q19 and Q24 have a Pearson correlation of 0.494.

Correlations within the following 3 pairs of questions are significant at the 0.01 level (2-tailed). Q10 and Q24 have a Pearson correlation of -0.717. Q13 and Q25 have a Pearson correlation of -0.640. Q15 and Q21 have a Pearson correlation of -0.634.

### Managers

	Mean	Std. Deviation	Q20	Q21	Q22	Q23	Q24	Q25
Q8	3.76	1.123	-0.005	-0.308	0.167	-0.301	0.126	-0.159
Q9	3.34	0.670	0.196	0.136	0.163	0.014	0.1	0.179
Q10	2.21	0.861	-0.189	-0.206	-0.354	0.146	-0.13	-0.173
Q11	2.28	1.032	-0.161	-0.202	-0.274	0.043	-0.198	-0.329
Q12	2.66	1.111	0.119	0.365	-0.051	0.157	0.058	0.243
Q13	2.69	0.761	-0.249	-0.032	477**	-0.096	-0.04	0.059
Q14	3.03	0.906	-0.314	-0.017	0.012	0.032	-0.033	-0.284
Q15	3.48	0.949	-0.346	537**	-0.117	-0.258	-0.019	-0.275
Q16	1.90	0.618	0.101	-0.058	-0.053	0.01	-0.017	-0.011
Q17	1.83	0.928	-0.05	-0.138	515**	0.293	-0.125	-0.222
Q18	3.48	1.022	0.305	0.15	0.15	0.031	0.047	0.19
Q19	3.21	1.048	0.133	0.068	0.265	-0.32	0.02	-0.235

Number of Respondents: 29

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*. Correlation is significant at the 0.01 level (2-tailed).

 Table 9: Correlation between Perception and Theories for Manager Respondents

There is no correlation within the following pair of questions is significant at the 0.05 level (2-tailed).

Correlations within the following 3 pairs of questions are significant at the 0.01 level (2-tailed). Q13 and Q22 have a Pearson correlation of -0.477. Q15 and Q21 have a Pearson correlation of -0.537. Q17 and Q22 have a Pearson correlation of -0.515.

## 6.3.3 Working Experience

The following tables show the correlation between perceptions of performance and theories based on the length of working experiences of our respondents. The categories of length of experience are "10 years of above", "5 to 10 years" and "below 5 years".

	Mean	Std. Deviation	Q20	Q21	Q22	Q23	Q24	Q25
Q8	3.58	1.259	-0.087	440*	0.26	-0.073	0.082	0.066
Q9	3.23	0.762	0.017	-0.008	0.254	0.105	.408*	0.225
Q10	2.19	0.873	-0.196	-0.212	411*	0.114	-0.277	-0.153
Q11	2.32	1.045	-0.229	-0.207	-0.245	0.103	-0.33	-0.203
Q12	2.71	1.131	0.197	0.28	-0.049	0.194	0.092	0.137
Q13	2.84	0.860	-0.172	0.012	511**	-0.34	-0.16	-0.227
Q14	2.94	1.031	389*	-0.042	0.134	-0.046	-0.335	-0.181
Q15	3.45	0.961	356*	462**	0.009	421*	-0.216	-0.24
Q16	1.97	0.752	0.067	-0.185	0.056	-0.032	0.092	-0.164
Q17	1.87	0.922	-0.179	-0.136	463**	0.226	374*	-0.111
Q18	3.52	1.061	0.213	0.25	0.031	0.073	-0.033	0.214
Q19	2.94	0.892	0.076	0.084	0.336	-0.199	0.348	-0.277

10 Years or Above Working Experience

Number of Respondents: 31

\*. Correlation is significant at the 0.05 level (2-tailed).

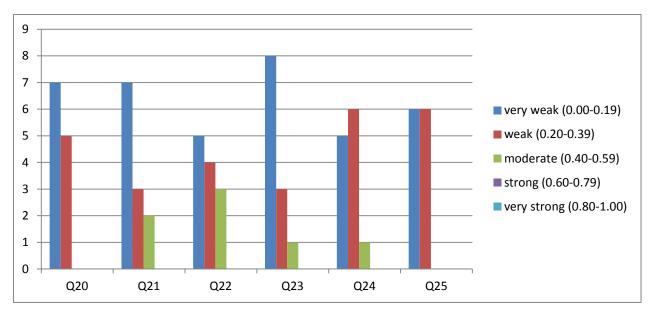
\*\*. Correlation is significant at the 0.01 level (2-tailed).

 Table 10: Correlation between Perception and Theories for Respondents with Working Experience 10 Years or Above

Correlations within the following 7 pairs of questions are significant at the 0.05 level (2-tailed). Q8 and Q21 have a Pearson correlation of -0.440. Q9 and Q24 have a Pearson correlation of 0.408. Q10 and Q22 have a Pearson correlation of -0.411. Q14 and Q20 have a Pearson correlation of -0.389. Q15 and Q20 have a Pearson correlation of -0.356. Q15 and Q23 have a Pearson correlation of -0.374.

Correlations within the following 3 pairs of questions are significant at the 0.01 level (2-tailed). Q13 and Q22 have a Pearson correlation of -0.511. Q15 and Q21 have a Pearson correlation of -0.462. Q17 and Q22 have a Pearson correlation of -0.463.

The following graph 6 illustrates the strength of correlation with in this group.



Graph 6: Strength of Correlation between Perception and Theories for Respondents with Working Experience 10 Years or Above

	Mean	Std. Deviation	Q20	Q21	Q22	Q23	Q24	Q25
Q8	3.00	0.756	-0.535	-0.426	0	-0.679	-0.318	-0.572
Q9	3.25	0.707	-0.429	0.114	0.079	-0.303	-0.553	-0.153
Q10	2.00	0.000	a	a	a	a	a	a
Q11	2.13	0.354	0.143	-0.57	0.079	-0.545	0.128	764*
Q12	2.25	0.886	-0.342	0.455	-0.189	-0.048	0.237	0.041
Q13	2.50	0.535	0.378	0	-0.209	0.16	0.563	-0.135
Q14	2.75	1.035	-0.488	-0.234	-0.054	786*	0.145	731*
Q15	3.25	0.886	0.114	818*	-0.189	-0.241	0.373	-0.61
Q16	2.00	0.756	-0.535	0.64	-0.295	0	0	0
Q17	2.13	1.126	0.404	0.25	-0.371	.741*	0.574	0.272
Q18	3.50	0.756	0.267	-0.213	0.147	0.113	-0.239	-0.095
Q19	4.00	0.926	-0.436	-0.174	0	-0.555	-0.26	-0.623

# 5 to 10 Years Working Experience

Number of Respondents: 8

a. Cannot be computed because at least one of the variables is constant.

\*. Correlation is significant at the 0.05 level (2-tailed).

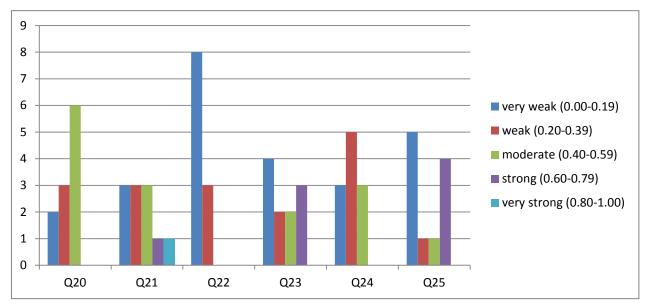
\*\*. Correlation is significant at the 0.01 level (2-tailed).

 Table 11: Correlation between Perception and Theories for Respondents with Working Experience 5 to 10

 Years

Correlations within the following 5 pairs of questions are significant at the 0.05 level (2-tailed). Q11 and Q25 have a Pearson correlation of -0.764. Q14 and Q23 have a Pearson correlation of -0.786. Q14 and Q25 have a Pearson correlation of -0.731. Q15 and Q21 have a Pearson correlation of -0.818. Q17 and Q23 have a Pearson correlation of 0.741.

There is no correlation within the following pair of questions is significant at the 0.01 level (2-tailed).



The following graph 7 illustrates the strength of correlation with in this group.

Graph 7: Strength of Correlation between Perception and Theories for Respondents with Working Experience 5 to 10 Years

Below 5 Years Working Experience
----------------------------------

	Mean	Std. Deviation	Q20	Q21	Q22	Q23	Q24	Q25
Q8	3.13	0.835	0.486	-0.222	-0.144	-0.215	0.604	0.117
Q9	3.13	0.835	-0.234	0.101	0.546	0.358	-0.086	-0.07
Q10	2.13	0.641	-0.117	-0.289	.712*	-0.466	712*	-0.335
Q11	1.50	0.535	0.113	-0.63	0.18	0.447	0.18	0.146
Q12	2.38	1.302	0.381	0.504	0.018	780*	0.129	-0.254
Q13	2.50	0.535	.788*	0.126	-0.539	0.224	0.539	0.146
Q14	3.00	1.069	0	0.126	-0.359	0.447	-0.359	0.583
Q15	3.63	0.916	-0.016	864**	-0.026	0.587	-0.183	0.021
Q16	2.00	0.926	-0.26	0.145	-0.207	0.645	0	0.337
Q17	1.88	0.835	-0.631	-0.424	0.144	0.072	-0.604	0.07
Q18	4.13	0.835	0.486	0.424	0.316	-0.501	0.144	-0.444
Q19	4.13	0.835	0.486	0.424	0.316	-0.501	0.144	-0.444

Number of Respondents: 8

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*. Correlation is significant at the 0.01 level (2-tailed).

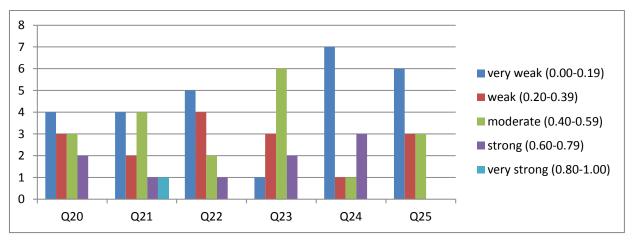
 Table 12: Correlation between Perception and Theories for Respondents with Working Experience below 5

 Years

Correlations within the following 4 pairs of questions are significant at the 0.05 level (2-tailed). Q10 and Q22 have a Pearson correlation of 0.712. Q10 and Q24 have a Pearson correlation of -0.712. Q12 and Q23 have a Pearson correlation of -0.780. Q13 and Q20 have a Pearson correlation of -0.788.

Correlations within the following pair of questions are significant at the 0.01 level (2-tailed). Q15 and Q21 have a Pearson correlation of -0.864.

The following graph 8 illustrates the strength of correlation with in this group.



Graph 8: Strength of Correlation between Perception and Theories for Respondents with Working Experience below 5 Years

## 6.3.4 Knowledge about Performance Management in Past Education

The following tables show the correlation between perceptions of performance and theories based on whether respondents have learned about performance management in their past education.

	Mean	Std. Deviation	Q20	Q21	Q22	Q23	Q24	Q25
Q8	3.35	1.26803	-0.057	-0.228	0.114	0.1	-0.02	0.049
Q9	3.25	0.63867	-0.187	0.041	0.304	0.09	-0.266	-0.069
Q10	2.15	0.87509	-0.355	-0.211	448*	0.074	-0.213	-0.07
Q11	2.05	0.94451	582**	585**	-0.213	0.158	-0.396	-0.41
Q12	2.5	1.19208	0.441	0.442	-0.03	-0.418	0.249	-0.185
Q13	2.95	0.88704	-0.081	-0.03	649**	-0.169	0.182	-0.357
Q14	3.05	1.05006	-0.387	-0.226	0.212	-0.004	-0.073	-0.117
Q15	3.55	1.05006	478*	576**	-0.158	-0.113	-0.113	-0.117
Q16	1.9	0.91191	0	-0.058	-0.023	0.177	0.028	-0.26
Q17	1.85	1.13671	-0.231	-0.394	-0.277	0.213	-0.134	-0.101
Q18	3.45	1.2763	0.206	0.351	0.13	-0.327	-0.007	0.303
Q19	3.5	0.94591	0.101	0.223	-0.037	446*	-0.045	-0.047

Number of Respondents: 20

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*. Correlation is significant at the 0.01 level (2-tailed).

 Table 13: Correlation between Perception and Theories for Respondents without Performance Management

 Education Background

Correlations within the following 3 pairs of questions are significant at the 0.05 level (2-tailed). Q10 and Q22 have a Pearson correlation of -0.448. Q15 and Q20 have a Pearson correlation of -0.478. Q19 and Q23 have a Pearson correlation of -0.446.

Correlations within the following 4 pairs of questions are significant at the 0.01 level (2-tailed). Q11 and Q20 have a Pearson correlation of -0.582. Q11 and Q21 have a Pearson correlation of -0.585. Q13 and Q22 have a Pearson correlation of -0.649. Q15 and Q21 have a Pearson correlation of -0.576.

	Mean	Std. Deviation	Q20	Q21	Q22	Q23	Q24	Q25
Q8	3.44	1.050	-0.044	514**	0.24	-0.334	0.215	-0.092
Q9	3.19	0.834	0.037	0.02	0.296	0.14	.595**	0.269
Q10	2.15	0.662	0.023	-0.173	0.127	-0.044	-0.371	-0.276
Q11	2.22	0.934	0.198	0.105	-0.017	0	-0.166	-0.118
Q12	2.63	1.079	-0.1	0.288	-0.063	0.108	-0.075	0.271
Q13	2.56	0.641	0.072	0.077	-0.283	0	-0.186	0.086
Q14	2.81	1.001	-0.215	0.131	-0.247	0.015	388*	-0.142
Q15	3.37	0.839	0.018	604**	0.082	-0.139	0.033	-0.349
Q16	2.04	0.649	-0.119	0.126	-0.077	0.09	0.07	0.183
Q17	1.96	0.759	-0.142	0.28	402*	0.328	-0.343	0.06
Q18	3.74	0.712	0.303	0.023	-0.007	0.164	-0.072	-0.186
Q19	3.19	1.076	0.244	-0.122	.428*	-0.177	.511**	-0.366

With Performance Management Education

Number of Respondents: 27

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*. Correlation is significant at the 0.01 level (2-tailed).

 Table 14: Correlation between Perception and Theories for Respondents with Performance Management

 Education Background

Correlations within the following 3 pairs of questions are significant at the 0.05 level (2-tailed). Q14 and Q24 have a Pearson correlation of -0.388. Q17 and Q22 have a Pearson correlation of -0.402. Q19 and Q22 have a Pearson correlation of 0.428.

Correlations within the following 4 pairs of questions are significant at the 0.01 level (2-tailed). Q8 and Q21 have a Pearson correlation of -0.514. Q9 and Q24 have a Pearson correlation of

0.595. Q15 and Q21 have a Pearson correlation of -0.604. Q19 and Q24 have a Pearson correlation of 0.511.

## 7. Discussion

According to the above results, we provide the following discussion about our propositions.

#### 7.1 Discussion about Proposition 1

In general, we aim to find out whether there are differences or similarities between human resource staff (HR) and management control staff (MC) perception of performance management. We will discuss why some differences or similarities may arise and, when appropriate, provide our suggestions to consolidate the connection between HR and MC in their perception of performance management. It should be noted that the obvious difference in human resource management textbooks and management control textbooks are not spotted in our findings.

### Question 8

Both HR and MC respondents believe that quantitative measures are more effective than qualitative measures in performance management, with HR even showing stronger support for quantitative measures. Since according to some HR textbook writers such as Collings & Wood (2009), quantitative measures may prevent an organization from obtaining full pictures of its performance, one could question why HR tends to prefer quantitative measures. There may be two approaches to explain this finding. First, HR professionals may not have read HR text books that criticize quantitative measures in performance management. Second, HR professionals do not believe in these negative claims about quantitative measures made in HR textbooks.

### Question 9

HR and MC respondents agree that performance management rarely cause information overload. Leopold & Harris (2009) argue that, since employees usually worry about whether they can prove the worth or their work to their superiors, they tend to provide more than needed information to the performance management system, which will thus be overloaded. However, given this argument and our findings, one could infer that employees included in the respondent companies may not have so much sense of danger that makes them provide excessive information to the performance management system. Nevertheless, one should notice that both 3.22 and 3.21 are very close to 3, which indicates a neutral stance regarding question 9. Van Dooren (2011) raises a

possible dilemma called "Paralysis by Analysis" (p.422). In this dilemma, huge amount of information, which is created to help decision, requires for "superhuman" analytical abilities from managers, eventually harms the decision processes within organizations (Van Dooren, 2011, p.422). It is therefore possible that the neutral stance of both HR and MC in the question of information overload derives from their awareness of such dilemma.

### Question 10

HR and MC respondents both believe that performance management measures the rights for an organization. Leopold & Harris (2009) claim there is a controversy over whether performance management can measure the right things for a company. However, our findings do not show obvious controversy over this topic. One could presumably infer that may be it is due to the small size of our sample. Or one could infer that may be it is because we have not defined clearly what "rights things" are in our question and that HR and MC may have different ideas of "rights things" which they believe performance management system can measure. Possibly the "right things" for them are not the right things for their organization. Liberman (2013) argues that sometimes the ideas of "management by objective" and results control is so strong that people working within the performance management system forget to check whether the expected objectives and results are worth chasing (p.57).

## Question 11

In this question, HR and MC agree that it is feasible to clarify roles of different employees within an organization. De Waal, Kourtit & Nijkamp (2009) believe that "More clarity for organizational members about their roles and goals to be achieved (p.1245)" is one of the qualitative advantages of performance management. Our findings seem to support this belief. However, one should notice that question 11 does not explicitly ask for the impact of a performance management system on organizational performance.

## Question 12

HR and MC respondents both think that performance management should focus on the future performance of an organization and its employees. Merchant & Van der Stede (2007) classify performance management as a kind of management control and believe that good control should have a future orientation. Our findings are consistent with Merchant & Van der Stede's (2007) opinions and thus may provide some evidence that our respondent know how an effective

performance management system should look like. However, performance management may not necessary need a future orientation to become effective. Sometimes, too much future orientation may cause problems. For example, when a manager expects good future performance from his inferiors, he may be placing excessive pressures on them by introducing too much uncertainty, which is always out of employees' control, into their work. (Focus on the past, not the future, to lift performance, 2012) As a result, our findings may not necessarily provide an optimistic view of performance management in our respondent companies.

#### Question 13

HR and MC both tend to believe that performance management can enhance the relationship between evaluators and those evaluated. However, since both 2.57 and 2.88 are closer to 3 than to 2, perhaps both parties find the statement controversial. There is evidence of controversy over this topic from the textbooks about performance management. One the one hand, for example, Armstrong (2012) claim that the relationship built within performance appraisal may help both evaluators and those evaluated stick with each other in chasing for the performance goals. However, on the other hand, Armstrong (2012) also confesses that sometimes the intention to maintain harmonious working relationship may sacrifice the effectiveness of performance management. In discussing Chinese performance management, Shen and Edward (2006) also emphasize that possible consequences on working relationship will be one of the considerations of those responsible for performance appraisal. Our research results have reflected such controversy. Haines and St-Onge (2012) claim that a positive working relationship indicates the existence of a positive leader-member relationship which may help maintain an effective performance management system. Since both HR and MC respondents believe performance management can enhance working relationship, one could infer that there is a virtuous cycle between effective performance management and positive working relationship.

#### Question 14

In this question, HR tends to agree with statement B that performance management helps evaluate employees while MC tends to agree with statement A that performance management helps develop employees. Armstrong (2012) has predicted that it is hard to strike a balance between the development purpose and evaluative purpose of performance management. Our findings have indicated that the difficulty in striking such balance may be due to the different

opinions of HR and MC over the true purpose of performance management. Bourguignon (2004) argues that, when employees are "evaluated" (p.668), they will care about whether their performances are fully represented by the criteria used to evaluate these performances (Bourguignon, 2004). Since MC mainly focuses on quantitative criteria while HR balances the usage of quantitative and qualitative criteria, employees may feel more comprehensively evaluated by the HR than by the MC (Bourguignon, 2004). One could thus infer that, maybe it is because HR wins a better reputation than MC in the evaluative aspects of performance management that the former tends to choose the evaluative purposes instead of the development purpose. Field (2009) has criticized traditional performance management system for taking too much accounting view and does not focus on the connection between the past and future of organizational and individual performance. Field (2009) thus requires performance management to take a perspective of development and to move to a "cause and effect picture (p.40)". It is therefore possible that MC may have accepted Field's (2009) criticism and tends to or appears to consider how to help develop rather than report on performance of employees.

### Question 15

Both HR and MC respondents think that it is hard to convert business strategy into clear performance objectives. Nevertheless, since 3.29 is rounded down to 3 and 3.61 is rounded up to 4, it is more likely that MC does show a tendency to agree with statement B while HR has a tendency to stay neutral for this question. Collings & Wood (2009) explain that, since a company's strategy may not necessarily result from rational plan but may rather relate to changes in environment, it may be difficult to transfer strategies into specific performance goals. According to Collings and Wood's (2009) argument, one could infer that MC is more aware, than HR, of the dynamic and complex environments in which companies nowadays operate. Besides, Wright (2013) explains that the difficulties that arise when transferring organizational strategies into performance goals actually derive from two sources. First, it is hard to ensure that organizational strategies are "clearly and effectively communicated" to employees (Wright, 2013, p.56). Second, employees may not be able to interpret the organizational strategy and act accordingly (Wright, 2013). Both sources may lead to misunderstanding by employees of organizational strategies. Consequentially, one could also infer that maybe HR and MC are both aware of these two possible sources of difficulty.

### Question 16

Both HR and MC respondents agree that performance appraisal scheme should be updated according to changes in organizational strategy, even if the scheme is still effective. Leopold & Harris (2009) have introduced a debate over whether most performance appraisal schemes fall into disuse and thus require re-launch after a few years of their operation. However, our research results do not reflect such debate. One could find some explanation from Neely & Al Najjar's (2006) argument. In redefining the role of performance management as "management learning (p.101)", Neely & Al Najjar (2006) explain that performance measures do not only serve to ensure the implementation of organizational strategy but also enable managers to challenge the ways in which they believe their companies are operating. Based on Neely & Al Najjar's (2006) argument, one could infer that HR and MC are both aware of the importance of regular rethinking about their organization's operation. This inference may shed some positive lights on the cooperation between HR and MC in performance management. Besides, the empirical results provided by Rock, Davis & Jones (2013) also support our findings. In their survey, 86 percent of the responding HR executives are not satisfied with their current performance appraisal schemes and ask for a change because they think the current schemes are not reflecting employees' contribution nor helping enhance organizational performance.

## Question 17

Although HR and MC both agree with statement A that performance management is a genuine aid to organizational growth, they differ in their extent of agreement. There is a difference of 0.26 between the mean numbers 1.78 and 2.04 of HR and MC respectively. Selden and Sowa (2011) suggest that the importance of performance management system should "resonate with staff (p.260)" and organizations should regularly check employees' perception of such importance. It seems that most of our respondents have been well aware of the importance of performance management system, with HR showing a higher level of awareness.

#### Question 18

Neither HR nor MC respondents claim to feel threatened by performance management. From a perspective of human resource, Mankin (2009) doubts the effectiveness of performance management since he believes that employees may feel threatened when their performances are evaluated. However, our research results do not agree with Mankin's (2009) opinion.

## Question 19

Both HR and MC agree that human resource staffs are better candidates than accountants to carry out performance management. Rock, Davis and Jones's (2013) study about the ways of thinking of employees within organizations may shed some lights on this interesting finding. Employees usually have two beliefs about their talent or intelligence, namely a "fixed mindset" and a "growth mindset" (Rock, Davis & Jones, 2013, p.16). The fixed mindset means that employees believe their ability to perform a certain task well is born (Rock, Davis & Jones, 2013). The growth mindset means that employees believe they need to put effort into their work to perform well (Rock, Davis & Jones, 2013). One could thus infer that maybe HR has a fixed mindset while MC has a growth mindset. Rock, Davis & Jones (2013) however conclude that a fixed mindset may negatively affect organizational performance because of the following reasons. First, employees with fixed mindset tend to response ineffectively to feedback for their performance. If the feedback is positive, these employees tend to think about how smart they are rather than learn from the success and if the feedback is negative they spend short time to learn from the failure (Rock, Davis & Jones, 2013). One may thus conclude that HR's preference for itself may mean it cannot effectively learn from success and failure in carrying out performance management. Second, stretch goals, which are important to motivate employees, may serve as threats to those with fixed mindsets. Since fixed-mindset employees tend to link failure to achieving challenging goals to their inherent lack of talent, these people usually try to avoid being imposed stretch goals (Rock, Davis & Jones, 2013). According to this line of reasoning, it seems that HR tends not to accept stretch goals, let alone persuading other employees to accept stretch goals in performance management. Third, other's success may be seen as a threat by those with fixed mindsets because this shows that "someone else is better than you (Rock, Davis & Jones, 2013, p.18)". Presumably, HR may thus not show respect for MC's success in performance management and this problem may prevent good practice and knowledge in performance management from flowing between HR and MC.

## 7.2 Discussion about Proposition 2

Discussion about the total correlation between perception and theories is provided as follows.

### 7.2.1 Total Correlation between Perception and Theories

From the above table 3, one could see that correlations between answers to perception questions and those to theory questions are not strong. Most of the correlation coefficients fall into the "very weak" or "weak" groups. The only exception is the correlation coefficient between Q21 and Q15, -0.574, which falls into the "moderate" group and is significant at the 0.01 level (2tailed). Q21 is a question based on organizational behavior theory and states that performance management can shape the individual behaviors of employees within an organization. This finding indicates that, among the six theories chosen in our paper, organizational theory generally has the most obvious impact on respondents' perception of performance management. Q15 presents two opposites statements A and B. Since our research results have shown that there should be a moderate negative correlation between Q21 and Q15 we could infer that those agree with the statement in Q21 tend to agree with statement A in Q15 and those disagree with the statement in Q21 tend to agree with statement B in Q15. Specifically, respondents who believe that performance management can shape the individual behaviors of employees find it easy to convert business strategy into clear performance objectives. Those who do not think performance management can shape the individual behaviors of employees find it hard to convert business strategy into clear performance objectives.

Organizational behavior theories believe that the purpose of controls within organizations is to help achieve organizational goals, which are also the main responsibility of performance management. Besides performance management systems are usually characterized by behavior control which can shape employees' individual behaviors. (Liu & Dooren, 2013) One could therefore infer that there is an inherent link between organizational goals and the behaviors of individuals. However, the specific relationship between organizational goals and employee behaviors can be complex. It is possible that the inability to shape employees' behavior makes it hard to transfer organizational strategy into performance goals. Or possibly it is so difficult to transfer organizational strategy into performance goals that performance management system cannot effectively shape employees' behaviors. Or it could also be that third party factors make it both difficult to shape employees' behavior and transfer organizational strategy into performance goals. Discussion about the correlation between perception and theories in HR group is provided as follows.

### 7.2.2 Correlation between Perception and Theories in HR Group

Unlike the results for correlation for all respondents, correlation coefficients within the HR group show stronger correlation. Possessing a very strong correlation with Q15 and a strong correlation with Q12, Q22 shows the strongest correlation with perception questions in the HR group. Q22 is a question derived from resource-based theory. Our research result may thus indicate that, among the chosen theories, resource-based theory is the most influential theory for HR respondents. Besides, there are also moderate correlations in pairs Q20:Q14, Q21:Q14 and Q23:Q12. One could thus infer that agency theory, organizational behavior theory and transaction cost theory, on which Q20, Q21 and Q23 respectively base, may have moderate influence on HR's perception of performance management. In contrast, Q24 and Q25 do not show any moderate nor strong correlation with any perception questions. Since Q24 and Q25 base on goal-setting theory and expectancy theory respectively, we think these two theories may be the least powerful theories to affect HR's perception of performance.

Our findings may seem to be against intuition, because agency theories and transaction cost theories are more often found in textbooks of management control than in those of human resource management. On contrary, goal-setting theory and expectancy theory are more easily spotted in human resource management textbooks than in the management control ones. For example, agency theory and transaction cost theory are frequently mentioned in management control textbooks written by Merchant & Stede (2007) and Anthony & Govindarajan (2007). Expectancy and goal-setting theories are frequently mentioned in human resource management textbooks written by Armstrong (2012), Collings & Wood (2009) and Leopold & Harris (2009).

One may thus question why HR seems to be affected more by theories they are not expected to know well. Storey (1995) believes that human resource management staffs are not able to understand theories, such as agency theory, that are self-evident for accounting professionals. Based on this belief, Storey (1995) predicts that future functions of human resource managers should "either make sense in the management accounting context or they must constitute credible

alternatives to it" and that "the appropriation of these functions" depends on how "they overlap with the work performed by other managers" (pp.143-144). Our findings have however contradicted with Storey's belief. Possibly Storey (1995) has underestimated the ability of human resource management staff to understand these theories. Or possibly agency theory is not as self-evident as Storey expects, for accounting professionals. Storey (1995) mentions different education backgrounds for HR and MC as an important reason for this pessimistic prediction about HR. Based on our findings, one may question whether education does make a difference between HR and MC's understanding of performance management theories. Or one could also question whether there is any big difference between today's education of HR and MC.

However, the consistency between literatures and practice in performance management seems to be smaller than that between textbooks and practice. De Waal & Kourtit (2013) have carried out a research to study whether the advantages and disadvantages claimed in literature about performance management do exist in practice. The research results shows that most of the advantages and disadvantages included in literatures about performance management are also spotted in practice, although the importance of these advantages and disadvantages is ranked differently in literature and in practice. (De Waal & Kourtit, 2013)

Discussion about the correlation between perception and theories in MC group is provided as follows.

### 7.2.3 Correlation between Perception and Theories in MC Group

Correlation between perception and theories in the MC group is also different from that in the total group. Q24 has strong correlation with Q10 and Q11. Q25 has strong correlation with Q11. In the MC group, goal-setting theory and expectancy theory seems to be the most influential theories among the six theories chosen. Q21, Q22 and Q23 all have moderate correlation with certain perception questions, indicating that organizational behavior theory, resource-based theory and transaction cost theory also have moderate impact on MC's perception of performance management. Q20, the question based on agency theory, however shows the weakest correlation with perception questions.

Similar to the HR situation above, one could question why MC seems to be affected more by the theories they are not expected to know well. Storey (1995) believes that accounting professionals have the ability to obtain knowledge necessary to carry out human resource management work as well as accounting knowledge. Based on Storey's (1995) claim, one could infer that maybe it is because MC is aware of their privilege over HR to obtain knowledge from both fields and act accordingly.

In sum, we have found that HR and MC differ in the theories that may affect their perception of performance manage. Organizational theory, the only theory that show moderate correlation with perception questions in both HR and MC groups, becomes the only theory that have a moderate correlation with perception questions in the total respondents group.

#### 7.3 Discussion about Proposition 3

The following analysis will mainly base on the numbers of correlations that are significant at 0.01 and 0.05 levels (2-tailed) and the strength of these correlations.

### 7.3.1 Company Size

Generally, we have found that the size of companies does influence the correlation between theory and perception of performance management. For companies with more than 1000 employees, we have found 5 out of the overall 72 pairs of questions to have significant correlations at the level of 0.05 and 6 out of 72 at the level of 0.01. By contrast, for companies with 251 to 1000 employees, the corresponding numbers of pairs of questions are 1 and 3 respectively. Our results have indicated that it may be easier to spot correlation between theory and perception of performance management in large companies than in smaller companies. Our findings may help answer the questions raised by Allen, Ericksen & Collins (2013) that why most of the recent researches on performance management mainly focus on large companies instead of small companies. We infer that maybe it is because the ease with which to detect a link between theories and the performance management in large companies that motivates most researchers to

focus on these companies. Allen, Ericksen & Collins (2013) refer to Barber, Wesson, Roberson, and Taylor's (1999) study as a good example to view how size may affect the performance management within a company. Barber, Wesson, Roberson & Taylor (1999) claim that large companies are more likely than small companies to carry out performance management in a systematic way by assigning dedicated staff to performance management work and using plans to enhance performance management. Mintz & Currim's (2013) explanation may support Barber et al (1999) argument. Mintz & Currim (2013) believe that, from a perspective of resource-based theory, managers in large companies have more access to financial and market resources than managers in small companies and may thus more likely to apply financial and market metrics, which are suitable for systematic performance management, to evaluate employee performance. As a result, one could expect that resource-based theory may play an important role in employees' perception of performance in large companies. In our questionnaire, question 22 derives from resource-based theory and our research results could prove such expectation. Q22 have a Pearson correlation of -0,411 with Q10 at the 0.05 level and has Pearson correlations of -0.511 and -0.463 with Q13 and Q17 respectively at the 0.01 level. Compared with other theory questions asked in large companies, Q22 has the most correlations on both levels of significance.

Admittedly, since we use the European standard for company sizes but most of the respondents come from Chinese companies, the classification of company sizes maybe questioned. According to the European standard, companies with 11 to 50 employees are small companies, those with 51 to 250 employees are medium companies, those with 251-1000 employees are large companies and those with more than 1000 employees are enterprises (De Raffele Jr, 2012). However, Chinese companies may generally have more employees than European companies and some companies classified as large companies in Europe may be regarded as small and medium companies in China.

### 7.3.2 Level of Position

The impact of level of position on correlation between theory and perception is not obvious. As shown in the above results, we have separately calculated Pearson correlations for both respondents conducting managerial work and those not conducting managerial work. For convenience of discussion, we name the former group of respondents "manager group" and the latter group "non-manager group".

In terms of number of correlations, non-manager group has three correlations significant at the 0.05 level and four correlations significant at the 0.01 level. Similarly, manager group also has three correlations significant at the 0.05 level and four at the 0.01 level. The numbers of correlations are the same for both groups and may not reveal any obvious impact of managerial work on employee's perception of performance management.

In terms of the strength of correlations, non-manager group has generally shown slightly stronger significant correlations than has the manager group. Significant correlations in both groups fall in the moderate or strong correlation group.

## 7.3.3 Working Experience

Length of working experience does affect the correlations between theory and perception of performance management. We have divided our respondents into three groups, with working experiences of more than 10 years, 5 to 10 years and below 5 years. The most obvious influence is found in group with more than 10 years experiences which has ten correlations significant at the 0.05 level and three at the 0.01 level. In contrast, respondents groups with 5 to 10 years or below 5 years working experiences both have five correlations significant at the 0.05 level and none at the 0.01 level. One could thus infer that 10 years of working experience may be a level above which employee's understanding of the assumptions made in theories strongly correlated with their perception of performance management.

Župerkienė & Žilinskas (2008) claims that newly employed staff usually find it difficult to solve the conflict between their personal development and "settled tradition" (p.87) within their companies. However, as they accumulate more working experiences, employees tend to harmonize the need for self-actualization and the achievement of organizational goals (Župerkienė & Žilinskas, 2008). This claim may explain our findings. It is possible that after ten years of work, employees begin to consciously align their individual interest with organizational interests and consequentially obtain a more objective and comprehensive understanding of the meaning of performance management. Such improved perception of performance management may provide chance for employees to really understand or refute assumptions made in theories about performance management.

# 7.3.4 Knowledge about Performance Management in Past Education

We do not find past education about performance management to obviously influence correlation between theory and perception of performance management. For convenience of discussion, we name the group of respondents who have pre-knowledge as "pre-knowledge group" and the rest as "non-pre-knowledge group"

In terms of number of correlations, non-pre-knowledge group has three correlations significant at the 0.05 level and four correlations significant at the 0.01 level. Similarly, pre-knowledge group also has three correlations significant at the 0.05 level and four at the 0.01 level. The numbers of correlations are the same for both groups and may not reveal any obvious impact of pre-knowledge on employee's perception of performance management.

In terms of the strength of correlations, non-pre-knowledge group has generally shown slightly stronger significant correlations than the pre-knowledge group.

## 8. Conclusion

We have investigated how management control and human resource management perceive performance management and the theories that may correlate with these perceptions. We have found that in practice management control and human resource management do not differ obviously in their perception of performance management. The only significant difference found in our research is about the purpose of performance management, where human resource staff tends to vote for the evaluative purpose while management accountants tend to agree with the development purpose. Our findings actually put into question the different attitudes towards performance management in textbooks of human resource management and those of management control. We thus posit that these textbooks may not precisely reflect the real life situation. In contrast, literature on performance management seems to gain the whole picture of performance management.

Additionally, we have investigated the correlation between theories about performance management and employees' perception of performance management. We have found that, generally, organizational behavior theory is the only theory among the six chosen theories to have moderate correlation with total employees' perception of performance management. However, for either HR group or MC group, there is strong correlation between theories and perceptions. For human resource management respondents, agency theory and transaction cost theory are the most correlated theories while for management control respondents, goal-setting theory and expectancy theory seem to be the most influential theories.

Finally, we have investigated whether organizational or individual factors such as company size, level of position within an organization, length of working experiences and educational background about performance management will affect the correlations identified above. We have found that company size and length of working experiences do have obvious influence on the correlation between employee's understanding of the ideas in theories about performance management and their perception of performance management. In contrast, level of position and educational background do not seem to obviously affect such correlation.

However, we are also aware of the limitations of our work. First, our research has a small sample of only 47 respondents. The size of our sample may limit our ability to generalize the research

results. Besides, for some groups of respondents, such as those with "below 5 years" and "5 to 10 years" working experience, there are only 8 respondents in both group. The results may thus not be representative. Second, our research lacks diversity. Most of our respondents are from Mainland China, a geographic region with strong cultural homogeneity. We have not discussed the possible cultural impact or biases within this sample. Third, the statement about perception and theories of performance management may not be exhaustive. There may be some other topics or statements and theories that are controversial about performance management but we may not cover all of them. Fourth, although we invite accountants to respondents to our questionnaire, we have not investigated whether they actually work as management accountants. We confess that results regarding management accountants may not actually reflect what management accountants think.

Future researchers could consider carrying out empirical researches that include larger samples of respondents than ours to test our conclusions. Researchers could also test whether factors not included in our research may also affect the correlation between employees' perception of performance management and their understanding of the different theories. Cross-country research could also be considered.

Overall, our research is exploratory and cannot be perfectly designed. Any limitation with this paper and potential areas not dedicatedly investigated may be left to future researches.

# References

Allen, M.R., Ericksen, J., & Collins, C.J. (2013). Human Resource Management, Employee Exchange Relationships, and Performance in Small Businesses, *Human Resource Management*, Vol. 52, No.2, pp. 153 – 173.

Anthony R.N. & Govindarajan, V. (2007). *Management Control Systems*, Boston, Mass.: McGraw Hill.

Anthony, R.N. (1965). *Planning and Control Systems: A Framework for Analysis*, Graduate School of Business Administration, Harvard Business School.

Armstrong, M. (2012). Armstrong's Handbook of Human Resource Management Practice, London: Kogan Page.

Barber, A.E., Wesson, M.J., Roberson, Q.M. & Taylor, M.S. (1999). A Tale of Two Job Markets: Organizational Size and Its Effects on Hiring Practices and Job Search Behavior, *Personnel Psychology*, Vol. 52, pp. 841 – 867.

Barney, J.B. & Clark, D.N. (2007). *Resource-based Theory: Creating and Sustaining Competitive Advantage*, Oxford : Oxford University Press.

Barney, J.B. & Ouchi. W.G. (Eds.) (1986). Organizational Economics: Toward a New Paradigm for Understanding and Studying Organizations, San Francisco: Jossey-Bass.

Behling, O. & Starke, F.A. (1973). The Postulates of Expectancy Theory, *Academy of Management Journal*. Vol. 16, Issue 3, pp. 373 – 388.

Bonini C.P., Jaedicke, R.K. & Wagner, H.M. (1964). *Management Controls : New Directions in Basic Research*. New York: Mac-Graw Hill.

Bourguignon, A. (2004). Performance Management and Management Control: Evaluated Managers' Point of View, *European Accounting Review*, Vol. 13, No. 4, pp. 659 – 687.

Bryman, A. & Bell, E. (2011) Business Research Methods, Oxford: Oxford University Press.

Buchner T.W. (2007). Performance Management Theory: A Look from the Performer's Perspective with Implications for HRD, *Human Resource Development International*, Vol. 10, No. 1, pp. 59 – 73.

Burney L. & Widener, S.K. (2007). Strategic Performance Measurement Systems, Job-Relevant Information, and Managerial Behavioral Responses – Role Stress and Performance, *Behavioral Research in Accounting*. Vol. 19, pp. 43 – 69.

Charlton, G. (2000). Human Habits of Effective Organizations. Pretoria: Van Schaik.

Cheng, M.M., Luckett P.F. & Mahama, H. (2007). Effect of Perceived Conflict Among Multiple Performance Goals and Goal Difficulty on Task Performance. *Accounting and Finance*, Vol. 47, No. 2, pp. 221 – 242.

Choi, J.W., Hecht, G.W. & Tayler, W.B. (2013). Strategy Selection, Surrogation, and Strategic Performance Measurement Systems. *Journal of Accounting Research*. vol. 51, no. 1, pp. 105-133.

Coff, R. W. (1997). Human Assets and Management Dilemmas: Coping with Hazards on the Road to Resource-based Theory. *Academy of Management Review*, Vol. 22, pp. 374 – 402.

Cokin, G. (2004). Performance Management: Finding the Missing Pieces (to Close the Intelligence Gap), N.J.: John Wiley, cop.

Collings, D. G. & Wood, G. (2009). *Human Resource Management: A Critical Approach*, Oxford and New York: Routledge.

De Raffele Jr., F.J. (2012). Micro, Small, Medium, Large: Which Are You? Available Online: <u>http://ezinearticles.com/?Micro,-Small,-Medium,-Large:-Which-Are-You?&id=6946328</u> [Accessed 25 April 2014]

De Waal, A. & Kourtit, K. (2013). Performance Measurement and Management in Practice: Advantages, Disadvantages and Reasons for Use, *International Journal of Productivity & Performance Management*, Vol. 62, Issue 5, pp. 446 – 473.

De Waal, A., Kourtit, K. & Nijkamp, P. (2009), The Relationship Between the Level of Completeness of a Strategic Performance Management System and Perceived Advantages and Disadvantages, *International Journal of Operations & Production Management*, Vol. 29, No. 12, pp. 1242 – 1265.

Dewettinck, K. & Van Dijk, H. (2013). Linking Belgian Employee Performance Management System Characteristics with Performance Management System Effectiveness: Exploring the Mediating Role of Fairness, International Journal of Human Resource Management, Vol. 24, No. 4, pp. 806 – 825.

Ding, S. & Beaulieu, P. (2011). The Role of Financial Incentives in Balanced Scorecard-Based Performance Evaluations: Correcting Mood Congruency Biases. Journal of Accounting Research, Vol. 49, no. 5, pp. 1223-1247.

Eisenhardt, K.M. (1989). Agency Theory: An Assessment and Review, *Academy of Management Review*, Vol. 14, Issue 1, pp.57 – 74.

Evans, J. D. (1996). Straightforward Statistics for the Behavioral Sciences. Pacific Grove, CA: Brooks/Cole Publishing.

Ferris, G.R., Beehr, T.A. & Gilmore, D.C. (1978). Social Facilitation: A Review and Alternative Conceptual Model, *Academy of Management Review*, Vol. 3, Issue 2, pp. 338 – 347.

Field, C. (2009). Performance Management. *Financial Management*, May 2009, pp. 40 – 41.

Focus on the Past, Not the future, To Lift Performance (2012), *Managing People At Work*, Issue 361, p. 5.

Fombrun C.J., Tichy, N.M. & Devanna, M.A. (1984). *Strategic Human Resource Management*. New York: Wiley, cop.

Franco-Santos, M., Lucianetti, L. & Bourne, M. (2012). Contemporary Performance Measurement Systems: A Review of Their Consequences and a Framework for Research, *Management Accounting Research*, Vol. 23, No. 2, pp. 79 – 119.

Ghoshal, S. & Moran, P. (1996). Bad for Practice: A Critique of the Transaction Cost Theory. *Academy of Management Review*, Vol. 21, No. 1, pp.13 – 47.

Grafton, J., Lillis, A.M. & Widener, S.K. (2010). The Role of Performance Measurement and Evaluation in Building Organizational Capabilities and Performance, *Accounting, Organizations and Society*, Vol. 35, No. 7, pp. 689 – 706.

Haines, V.Y. & St-Onge, S. (2012). Performance Management Effectiveness: Practices or Context? *International Journal of Human Resource Management*, Vol. 23, Issue 6, pp. 1158 – 1175.

HassabElnaby, H.R., Said, A.A. & Wier, B. (2005). The Retention of Nonfinancial Performance Measures in Compensation Contracts. Journal of Management Accounting Research, Vol. 17, pp. 23-42.

Henri, J.F. (2006). Management Control Systems and Strategy: A Resource-based Perspective, *Accounting, Organizations and Society*, Vol. 31, No. 6, pp. 529 – 558.

Hoffjan, A., & Wömpener, A. (2006). Comparative Analysis of Strategic Management Accounting in German- and English-language General Management Accounting Textbooks, *Schmalenbach Business Review*, Vol. 58, pp. 234 – 258.

Hofstede, G. (1981). Management Control of Public and Not-For-Profit Activities, *Accounting, Organizations and Society*, Vol. 6, Issue 3, pp- 193 – 212.

Hutzschenreuter, J. (2009). Management Control in Small and Medium-Sized Enterprises. Wiesbaden: Gabler.

Jensen, M., & Meckling. W. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure, *Journal of Financial Economics*, Vol. 3, pp. 305 – 360.

Kaplan Financial Knowledge Bank (2012). Agency Theory. Available Online: <u>http://kfknowledgebank.kaplan.co.uk/KFKB/Wiki%20Pages/Agency%20theory.aspx</u> [Accessed 1 May 2014]

Kinicki, A.J., Jacobson, K.J.L., Peterson S.J. & Prussia, G.E. (2013). Development and Validation of the Performance Management Behavior Questionnaire, *Personnel Psychology*, Vol. 66, No. 1, pp. 1-45.

Leopold, J. & Harris, L. (2009). *The Strategic Management of Human Resources*, Harlow: Prentice Hall/Financial Times.

Liberman V. (2013). Performance Mismanagement, Conference Board Review, Vol. 50, Issue 3, pp. 56–63.

Liu, X. & Dooren, W.V. (2013). Use of Performance Information as an Organizational Routine in Management Control, *Performance Improvement*, Vol. 52, Issue 10, pp. 28 – 36.

Malik, S.H. (2012). A Study of Relationship between Leader Behaviors and Subordinate Job Expectancies: A Path-Goal Approach, *Pakistan Journal of Commerce & Social Sciences*, Vol. 6, Issue 2, pp. 357 – 371.

Mankin, D. (2009). Human Resource Development. Oxford: Oxford University Press.

Merchant, K.A. & Van der Stede, W.A. (2007). *Management Control Systems: Performance Measurement, Evaluation and Incentives*. 2<sup>nd</sup> edn, New York : Financial Times/Prentice Hall.

Mintz, O. & Currim, I.S. (2013). What Drives Managerial Use of Marketing and Financial Metrics and Does Metric Use Affect Performance of Marketing-Mix Activities, *Journal of Marketing*, Vol. 77, Issue, 2, pp. 17 - 40.

Mitchell, T. R. (1973). Motivation and participation: An Integration. *Academy of Management Journal*, Vol. 16, No. 4, pp. 670–679.

Moers, F. (2006). Performance Measure Properties and Delegation. *The Accounting Review*, Vol. 81, No. 4, pp. 897 – 924.

Mollick, E. (2012). People and Process, Suits and Innovators: The Role of Individuals in Firm Performance, *Strategic Management Journal*, Vol. 33, Issue 9, pp. 1001 – 1015.

Moses, J. & Knutsen, T. (2007). Ways of Knowing: Competing Methodologies in Social and Political Research. Houndmills: Palgrave Macmillan.

Neely, A. & Al Najjar, M. (2006), Management Learning Not Management Control: The True Role of Performance Measurement? *California Management Review*, Vol. 48, Issue 3, pp. 101 – 114.

Otley, D. (1999). Performance management: A Framework for Management Control Systems Research. *Management Accounting Research*, Vol. 10, pp. 363-382.

Otley, D. Broadbent, J. & Berry, A. (1995) A Research in Management Control: An Overview of its Development. *British Journal of Management*, Vol. 6, Special Issue, pp. 31 – 44.

Porporato, M. (2011). Management Control Systems' Literature Development: Theoretical Approaches and Critiques within the Functionalist Paradigm. *Revista Universo Contábil*, Vol. 7, Issue 2, pp. 146 – 173.

Presslee, A., Vance, T.W. & Webb, R.A. (2013). The Effects of Reward Type on Employee Goal Setting, Goal Commitment, and Performance, *Accounting Review*, Vol. 88, No. 5, pp. 1805 – 1831.

Rock, D., Davis, J. & Jones, E. (2013). One Simple Idea That Can Transform Performance Management, *People & Strategy*, Vol. 36, Issue 2, pp. 16–19.

Selden, S. & Sowa, J.E. (2011). Performance Management and Appraisal in Human Service Organizations: Management and Staff Perspectives, *Public Personnel Management*, Vol. 40, No.3, pp. 251 – 264.

Shen, J. & Edward, V. (2006). International Human Resource Management in Chinese Multinationals. New York : Routledge.

Simon, H.A. (1991). Organization and Markets. *Journal of Economic Perspectives*, Vol. 5, No. 2, pp 25 – 44.

Spence, A.M. (1975). The Economics of Internal Organization: An Introduction, *Bell Journal of Economics*, Vol. 6, pp. 163 – 172.

Spicer, B. H. & Ballew, V. (1983). Management Accounting Systems and the Economics of Internal Organization. *Accounting, Organizations and Society*, Vol. 8, pp. 73 – 96.

Statstutor(n.d.).Pearson'sCorrelation.AvailableOnline:http://www.statstutor.ac.uk/resources/uploaded/pearsons.pdf[Accessed 5 May 2014]Online:

Stone, R.J. (2014). Human Resource Management, Milton, Qld.: John Wiley & Sons.

Storey, J. (1995). Human Resource Management: A Critical Text, London: Routledge.

Strauß, E. & Zecher, C. (2013). Management Control Systems: A Review. Journal of Management Control, Vol. 23, pp. 233 – 268.

The Local (2012). Swedes 'Best in the World' at English, Available Online: http://www.thelocal.se/20121026/44062 [Accessed 1 May 2014]

Van Dooren, W. (2011). Better Performance Management: Some Single- and Double-Loop Strategies, *Public Performance & Management Review*, Vol. 34, No. 3, pp. 420 – 433.

Vernadat, F., Shah, L., Etienne, A. & Siadat, A. (2013). VR-PMS: A New Approach for Performance Measurement and Management of Industrial Systems, *International Journal of Production Research*, Vol. 51, No. 23-24, pp. 7420 – 7438.

Webb, R.A. (2004). Managers' Commitment to the Goals Contained in a Strategic Performance Measurement System. *Contemporary Accounting Research*, Vol. 21, Issue 4, pp. 925 – 958.

Widener, S.K. (2004). An Empirical Investigation of the Relation Between the Use of Strategic Human Capital and the Design of the Management Control System, *Accounting, Organizations and Society*, Vol. 29, pp.377 – 399.

Williamson, O.E. (1975). *Markets and Hierarchies: Analysis and Antitrust Implications*. New York: The Free Press.

Williamson, O.E. (1979). Transaction-cost Economics: The Governance of Contractual Relations. *Journal of Law and Economics*, Vol.22, pp. 233 – 261.

Williamson, O.E. (1991). Strategizing, Economizing, and Economic Organization. *Strategic Management Journal*, Vol. 12, pp. 75 – 94.

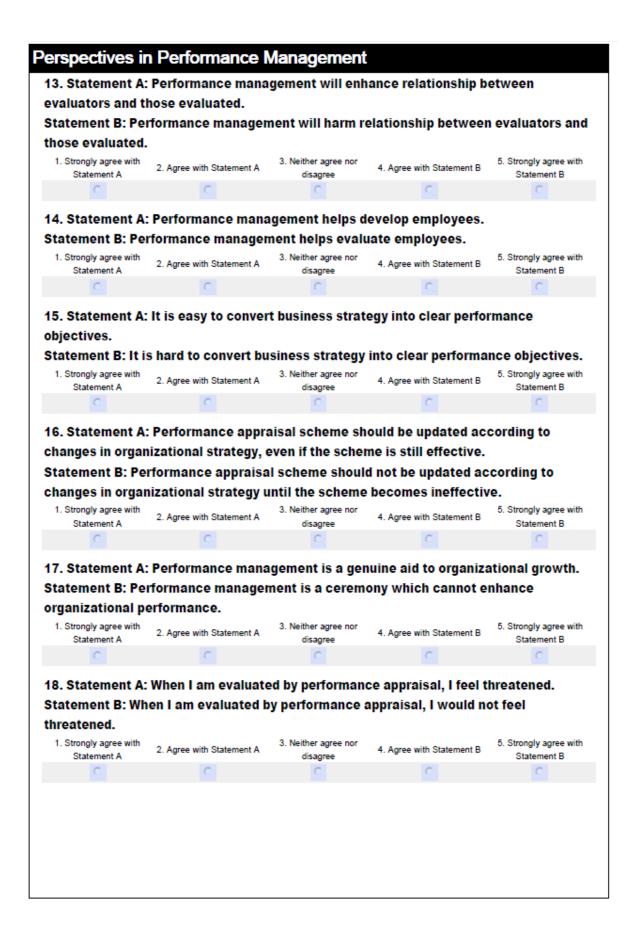
Wright, P. (2013). Some Practical Thoughts on Annual Performance Management Process, *People & Strategy*, Vol. 36, Issue 2, pp- 54 – 57.

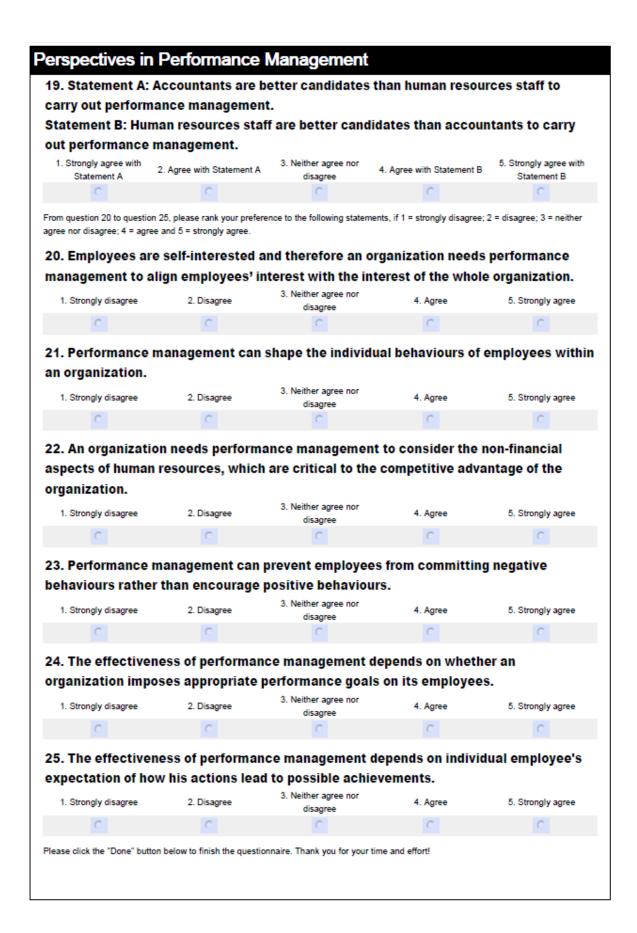
Župerkienė. E. & Žilinskas, V.J. (2008). Analysis of Factors Motivating the Managers Career, *Engineering Economics*, Vol. 57, Issue 2, pp. 85 – 91.

## Appendix 1: Questionnaire (in English)

Perspectives in Performance Management
We are master students studying the inter-connection between management control and human resources management in performance management. We really appreciate if you could spend a couple of minutes answering to our questionnaire. Your answers are really important to us!
1. Does your company use performance management? For example, performance
appraisal, performance indicator(s), balanced scorecard.
C Yes
C No (End of questionnaire, thank you!)
2. Which department do you work at?
C Accounting Department
C Human Resources Department
O Other (End of questionnaire, thank you!)
3. At which country do you work?
C Hong Kong
C Mainland China
C Sweden
C Other
Other (please specify)
4. What is the size of your company?
C 10 or below 10 employees
C 11-50 employees
C 51-250 employees
C 251-1000 employees
C above 1000 employees
5. Are you doing managerial work in your company?
C Yes
C No
6. What is your working experience?
C Below 5 years
C 5 to 10 years
C 10 years of above

Perspectives in Performance Management							
7. Have you ever learned about performance management during your past education?							
C Yes							
C No							
	n 19, please select your position at A; 3 = neither agree nor disage						
8. Statement A: 0	Qualitative measures	s are more effec	tive than quantitativ	ve ones for			
performance ma	nagement.						
	antitative measures	are more effect	ive than qualitative	ones for			
performance ma	nagement.						
1. Strongly agree with		3. Neither agree nor		5. Strongly agree with			
Statement A	2. Agree with Statement A	disagree	4. Agree with Statement B	Statement B			
C	C	C	0	C			
9. Statement A: I	Performance manag	ement always c	auses information o	overload.			
Statement B: Per	rformance managem	nent rarely caus	es information over	rload.			
<ol> <li>Strongly agree with Statement A</li> </ol>	2. Agree with Statement A	<ol> <li>Neither agree nor disagree</li> </ol>	4. Agree with Statement B	<ol> <li>Strongly agree with Statement B</li> </ol>			
C	С	C	C	C			
organization.	Performance managem formance managem 2. Agree with Statement A	-					
C	С	C	0	C			
11. Statement A: It is feasible to clarify roles of different employees within an organization. Statement B: It is impossible to clarify roles of different employees within an organization.							
1. Strongly agree with Statement A	2. Agree with Statement A	<ol> <li>Neither agree nor disagree</li> </ol>	4. Agree with Statement B	5. Strongly agree with Statement B			
0	C	С	0	C			
12. Statement A:	Performance mana	gement should	focus on the future	performance of			
an organization a	and its employees.						
Statement B: Pe	rformance managen	nent should foc	us on the past perfo	ormance of an			
organization and	its employees.						
1. Strongly agree with Statement A	2. Agree with Statement A	<ol> <li>Neither agree nor disagree</li> </ol>	4. Agree with Statement B	5. Strongly agree with Statement B			
0	C	C	0	0			





Appendix 2: Questionnaire (in Chinese)

您好,我们正在开展一项关于企业绩效管理的调查,该调查涉及管理会计以及人力资源方面的问题,非常感谢您能抽出一些时 间来回答我们的问题。您的回答对我们的调查十分重要!
1.您的公司是否对员工进行绩效管理? (如,绩效评估,绩效指标,平衡计分卡等)
0 是
○ 否(您可以不必回答后续的问题)
2. 您在哪个部门工作?
○ 财务部门
○ 人力资源部门
○ 其它(您可以不必回答后续的问题)
3. 您的工作地点是?
○ 香港
○ 中国大陆
○ 瑞典
C 其它
其它(请注明)
4. 您所在公司的规模是?
0 10人或10人以下
0 11-50人
6 51-250人
251-1000人
C 1000人以上
5. 您在公司中从事管理性的工作吗?
C 是
C 否
6. 您有多长时间的工作经验?
○ 五年以下
C 五年至十年
○ 十年以上
7. 您在过去的教育经历中是否学习过关于绩效管理的知识?
C 是
C 否

	]将会提供两个意思相反的 A与B中保持中立,4代表}		的判断选择相应的数字,1代 非常同意句子B。	表非常同意句子A,2代表比
	牧管理中,定性标:			
	<b>管理中,定量标准</b>			
○ 1.完全同意A	C 2.比较同意A	0 3.中立	C 4.比较同意B	○ 5.完全同意B
	管理经常导致信息;			
句子 <b>B:</b> 绩效管理	里基本不会导致信	<b>恳过量</b> 。		
C 1.完全同意A	C 2.比较同意A	0 3.中立	C 4.比较同意B	○ 5.完全同意B
	管理测量的指标对			
句子 <b>B</b> :绩效管理	里测量的指标对企	业而言是错误的	指标。	
○ 1.完全同意A	C 2.比较同意A	0 3.中立	C 4.比较同意B	○ 5.完全同意B
	管理能够明确企业			
句子B: 绩效管理	里不可能明确企业	中各个员工的职	责。	
0 1.完全同意A	C 2.比较同意A	0 3.中立	○ 4.比较同意B	○ 5.完全同意B
12. 句子A:绩效	管理应当关注一个	企业以及其员工	二未来的表现。	
句子B: 绩效管理	里应当关注一个企	业以及其员工过	去的表现。	
○ 1.完全同意A	C 2.比较同意A	0 3.中立	C 4.比较同意B	○ 5.完全同意B
13. 句子A: 绩效	评估会改进评估者	6.与被评估者之间	的关系。	
	古会损害评估者与			
○ 。1.完全同意A	C 2.比较同意A	0 3.中立	C 4.比较同意B	○ 5.完全同意B
14. 句子A: 绩效	管理有助于员工成	<b>花长。</b>		
	里有助于评价员工			
C 1.完全同意A	C 2.比较同意A	C 3.中立	○ 4.比较同意B	○ 5.完全同意B
45 <b>句子A</b> 。收公	司战略转化为清晰	的结为日标具领	1 灾县的	
	战略转化为清晰的			
○ 1.完全同意A	C 2.比较同意A	0 3.中立	C 4.比较同意B	○ 5.完全同意B
16. 句子A: 绩效	评估计划应该根据	居公司战略的变化	と 定期更新,即使该i	平估计划依然有
效。				
句子 <b>B:</b> 绩效评值	古计划不应该根据	公司战略的变化	定期更新,除非该评	估计划已经失效。
C 1.完全同意A	C 2.比较同意A	0 3.中立	C 4.比较同意B	○ 5.完全同意B
17. 句子A: 绩效	管理确实能够帮助	协公司成长。		
句子B: 绩效管理	里只是一个形式,	并不能帮助公司	成长。	
C 1.完全同意A	C 2.比较同意A	0 3.中立	C 4.比较同意B	○ 5.完全同意B

18. 句子A: 当我	的绩效被评估时,	我感到不安。				
句子B: 当我的绩效被评估时,我没有感到不安。						
C 1.完全同意A	C 2.比较同意A	6 3.中立	6 4.比较同意B	○ 5.完全同意B		
19. 句子A: 财务	人员比人力资源员	员工更适合从事绩	被管理的工作。			
句子B: 人力资	源员工比财务人员	更适合从事绩效的	管理的工作。			
	C 2.比较同意A	3.中立	<ul> <li>4.比较同意B</li> </ul>	○ 5.完全同意B		
20至25题,请您阅读一 代表完全同意。	段语句,并根据您的想法	选择相应的数字,1代表	完全不同意,2代表不同意。	,3代表中立,4代表同意,5		
20.员工是自利的 来。	的,因此公司需要	绩效管理系统将与	员工的利益与公司的	整体利益统一起		
C 1. 完全不同意	2. 不同意	6 3.中立	6 4. 同意	5. 完全同意		
21. 绩效管理能制	多塑造企业中单个	员工的行为。				
1. 完全不同意	2. 不同意	6 3. 中立	6 4. 同意	5. 完全同意		
22. 一个企业需要 作用。	要通过绩效评估,	从非财务的角度到	来考察人力资源对企	业竞争优势的关键		
0 1. 完全不同意	2. 不同意	3. 中立	6 4. 同意	5. 完全同意		
23. 绩效管理能	多防止员工在工作	中的消极行为,而	而不是鼓励积极行为	•		
1. 完全不同意	2. 不同意	3. 中立	6 4. 同意	5. 完全同意		
24. 绩效管理的有	有效性取决于公司	是否能给员工制定	定合理的绩效目标。			
1. 完全不同意	2. 不同意	3. 中立	6 4. 问意	5. 完全同意		
25. 绩效管理的7	有效性取决于单个	员工的预期,即自	单个员工在多大程度	上相信自己的行为		
能够带来相应的	成就。					
C 1. 完全不同意	2. 不同意	6 3. 中立	4. 同意	5. 完全同意		
请点击下方 "Done" 按钮	日来完成本次问卷。非常属	感谢您宝贵的时间!				

Correlation	Very weak	Weak	Moderate	Strong	Very strong
	0.00-0.19	0.20-0.39	0.40-0.59	0.60-0.79	0.80-1.00
Positive (+)	Q12,Q19	Q18			
Negative (-)	Q8,Q9,Q10,	Q14,Q15			
	Q11,Q13,Q16,				
	Q17				
Positive (+)	Q9,Q13,Q16,Q19	Q12,Q18,			
Negative (-)	Q10,Q14,Q17	Q8,Q11	Q15		
Positive (+)	Q8,Q12,Q15,	Q9			
	Q18,Q19				
Negative (-)	Q10,Q11,Q14,	Q13,Q17,			
	Q16,				
Positive (+)	Q9,Q10,Q11,	Q17			
	Q16,				
Negative (-)	Q8,Q12,Q13,	Q19			
	Q14,Q15,Q18,				
Positive (+)	Q8,Q9,Q12,				
	Q13,Q16,Q18,				
	Q19				
Negative (-)	Q15,Q17	Q10,Q11,Q14			
Positive (+)	Q9,Q12,Q18				
Negative (-)	Q8,Q10,Q13,	Q11,Q15,Q19			
	Q14,Q16,Q17				
	Positive (+)Negative (-)Positive (+)Negative (-)Positive (+)Negative (-)Positive (+)Negative (-)Positive (+)Negative (-)Positive (+)	0.00-0.19           Positive (+)         Q12,Q19           Negative (-)         Q8,Q9,Q10, Q11,Q13,Q16, Q17           Positive (+)         Q9,Q13,Q16,Q19           Negative (-)         Q10,Q14,Q17           Positive (+)         Q8,Q12,Q15, Q18,Q19           Negative (-)         Q10,Q11,Q14, Q16,           Positive (+)         Q9,Q10,Q11, Q16,           Positive (+)         Q8,Q12,Q13, Q14,Q15,Q18,           Positive (+)         Q8,Q9,Q12, Q13,Q16,Q18, Q19           Negative (-)         Q15,Q17           Positive (+)         Q9,Q12,Q18           Negative (-)         Q15,Q17           Positive (+)         Q9,Q12,Q13,	0.00-0.19 $0.20-0.39$ Positive (+)Q12,Q19Q18Negative (-)Q8,Q9,Q10, Q11,Q13,Q16, Q17Q14,Q15Positive (+)Q9,Q13,Q16,Q19Q12,Q18,Negative (-)Q10,Q14,Q17Q8,Q11Positive (+)Q9,Q12,Q15, Q9Negative (-)Q10,Q11,Q14, Q13,Q17, Negative (-)Q8,Q12,Q13, Q17Positive (+)Q9,Q10,Q11,Q14,Q17Q18Negative (-)Q8,Q12,Q13,Q19Q19Negative (-)Q8,Q9,Q12,Q13,Q19Q19Negative (-)Q15,Q17Q10,Q11,Q14Positive (+)Q9,Q12,Q18Q10,Q11,Q14Negative (-)Q15,Q17Q10,Q11,Q14	0.00-0.19 $0.20-0.39$ $0.40-0.59$ Positive (+)Q12,Q19Q18Negative (-)Q8,Q9,Q10, Q11,Q13,Q16, Q17Q14,Q15Positive (+)Q9,Q13,Q16,Q19Q12,Q18,Negative (-)Q10,Q14,Q17Q8,Q11Q15Positive (+)Q8,Q12,Q15, Q18,Q19Q9Negative (-)Q10,Q11,Q14, Q16,Q13,Q17, Q16,Negative (-)Q8,Q12,Q13, Q16,Q19Negative (-)Q8,Q12,Q13, Q14,Q15,Q18,Q19Negative (-)Q8,Q9,Q12, Q13,Q16,Q18, Q19Q10,Q11,Q14Positive (+)Q9,Q12,Q18Q10,Q11,Q14Negative (-)Q15,Q17Q10,Q11,Q14Positive (+)Q9,Q12,Q18Q10,Q11,Q14Negative (-)Q15,Q17Q10,Q11,Q14Positive (+)Q9,Q12,Q18Q10,Q11,Q14Negative (-)Q15,Q17Q10,Q11,Q14	0.00-0.19 $0.20-0.39$ $0.40-0.59$ $0.60-0.79$ Positive (+)Q12,Q19Q18Negative (-)Q8,Q9,Q10, Q11,Q13,Q16,Q19Q14,Q15Q11,Q13,Q16,Q19Q12,Q18,Positive (+)Q9,Q13,Q16,Q19Q12,Q18,Negative (-)Q10,Q14,Q17Q8,Q11Q15Positive (+)Q8,Q12,Q15, Q18,Q19Q9Negative (-)Q10,Q11,Q14, Q16,Q13,Q17,Positive (+)Q9,Q10,Q11, Q16,Q17Negative (-)Q8,Q12,Q13, 

**Appendix 3: Strength of Total Correlation between Perception and Theories Frequency Table** 

## **Appendix 4: Strength of Correlation between Perception and Theories for Respondents Working in Human Resource Professions Frequency Table**

HR	Correlation	Very weak	Weak	Moderate	Strong	Very strong
		0.00-0.19	0.20-0.39	0.40-0.59	0.60-0.79	0.80-1.00
Q20	Positive (+)	Q13, Q16, Q17	Q12, Q18, Q19			
	Negative (-)	Q8, Q9, Q10, Q11,	Q15	Q14		
Q21	Positive (+)	Q13, Q16, Q17	Q12, Q18, Q19			
	Negative (-)	Q9, Q10, Q11	Q8, Q15	Q14		
Q22	Positive (+)	Q8, Q13, Q14, Q17, Q19	Q16		Q12	
	Negative (-)	Q9, Q10, Q11, Q18				Q15
Q23	Positive (+)	Q8, Q11, Q14, Q16, Q17	Q9, Q10, Q15			
	Negative (-)	Q18	Q13, Q19	Q12		
Q24	Positive (+)	Q8, Q10, Q11, Q12, Q16, Q17, Q19				
	Negative (-)	Q15	Q9, Q13, Q14, Q18			
Q25	Positive (+)	Q8, Q11, Q12, Q16, Q17	Q10			
	Negative (-)	Q9, Q14, Q18	Q13, Q15, Q19			

MC	Correlation	Very weak	Weak	Moderate	Strong	Very strong
		0.00-0.19	0.20-0.39	0.40-0.59	0.60-0.79	0.80-1.00
Q20	Positive (+)	Q8, Q12	Q18			
	Negative (-)	Q9, Q13, Q14, Q15,	Q10, Q11, Q17			
		Q16, Q19				
Q21	Positive (+)	Q9, Q12, Q19		Q18		
	Negative (-)	Q13, Q14	Q8, Q10, Q15, Q16, Q17	Q11		
Q22	Positive (+)	Q8	Q9, Q12, Q18, Q19			
	Negative (-)	Q14, Q16	Q11, Q15, Q17	Q10, Q13		
Q23	Positive (+)	Q19	Q9, Q12, Q16, Q18			
	Negative (-)	Q8, Q10, Q11, Q14, Q17	Q13	Q15		
Q24	Positive (+)	Q8, Q12	Q18	Q9, Q19		
	Negative (-)	Q15, Q16	Q13, Q14	Q17	Q10, Q11	
Q25	Positive (+)	Q12, Q19	Q9	Q18		
	Negative (-)	Q8	Q13, Q14, Q15, Q16	Q10, Q17	Q11	

**Appendix 5: Strength of Correlation between Perception and Theories for Respondents Working in Accounting Professions Frequency Table**