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EXPECTANCY AND UNIVERSITY ACADEMICS' MOTIVATION TO PARTICIPATE IN PERFORMANCE ASSESSMENTS

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ABSTRACT

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The literature suggests that many universities under managerial reforms are using performance assessment system to evaluate their academics as part of the evaluation of institutional effectiveness. But the implication of performance assessment activities is far from smooth since it confronts different degrees of opposition and resistance from academics. Consequently, the active participation and meaningful input of academics are critical factors in the success of such performance assessment activities in university management. However, very few studies have looked into academics' motivation to participate in performance assessments from the perspective of academics' expectations. This study employs expectancy theory to evaluate some key factors that may motivate academics to participate in the performance assessments. This study finds out that academics generally consider gaining recognition or respect from others and getting personal career development to be the most attractive outcomes of participating in performance assessments. The least attractive outcomes of performance assessments, from the academics' standpoint, are improving the teaching quality and getting promoted to leadership positions. It is concluded that academics' motivation to participate in performance assessments is affected significantly by their expectations that they will be able to realize from their participation. Since academics' willing participation is an essential antecedent of meaningful assessments to academics' performance effectiveness for university managers or assessors, the practical suggestions at the end of this study could be taken into account as future performance assessment activities are designed, implemented and operated.

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CHAPTER 1 BACKGROUND AND INTRODUCTION

1.1 Background

Nowadays, a series of cumulatively intersecting environmental shifts have pushed universities in most nations into a direction of massification, rationalization, commodification and managerialization (Reed, 2002). Chinese universities are not an exception. It is widely reported that the idea of universities as one part of public services instead of serving the "elite priorities" has been increasingly recognized and emphasized by Chinese educational researchers and policy makers (Gao, 2000; Luo, 2004; Chen, 2006). They began to put Chinese universities under serious ideological, cultural and political critique owing to their endemic lack of external accountability, internal managerial discipline and routine operational efficiency (Gao, 2000). It is insisted that Chinese universities must be reformed by the introduction of newer and more professional management systems. Consequently, New Managerialism as a package of managerial ideology that constitutes an alternative model of governmental and institutional order for higher education has been suggested feasible to meet this demand. With high hope, New managerialism is expected to solve practical problems, meet pressing challenges and help Chinese universities become more competitive and prestigious in worldwide rankings.

In western world, since the 1980s, "New Managerialism" or "New Public Management" (NPM) has become the keyword in Institutional management and governmental policy issues (Reed, 2002). Within higher education context, it especially elevates managerial strategies to a dominant position (Trow, 1994: 11) and deliberately changes the structures and processes of university management with the objective of getting them to perform better. Based on the well-known definition presented by Christopher Hood (1991:4-5) (Reed, 2002), we can expect that a good university management includes: setting clear objectives and communicating them throughout the organization; allocating resources to ensuring their achievement; controlling costs and improving efficiency; motivating staff and enhancing accountability, etc.

In Chinese universities, the introduction of the New Managerialism is through two rounds of national reforms. In early 1980s, when Chinese economy began to recover from the

disastrous “Ten-year Cultural Revolution”, its higher education system was in the explorative process of the first wave of reform: From traditional to entrepreneurial. The policy decree of 1985 by the Chinese Ministry of Education proposed the reform measures including: gradual funding cuts to all research institutes; new R&D funding based on competitive projects; establishment of horizontal linkages (cooperation); creation of technology markets and new approaches to the management of research-centered universities. However, in practice, during this reform, the actual implementation of New Managerialism was in a partial probation stage where its major doctrines were largely modified to adapt to the centralized national higher education system of the time (Chen, 2006).

After 1995, in order to meet the new challenge of massification in Chinese higher education system, a second wave of reform rises. A certain extent of “central” or state control is still maintained, but universities are encouraged to assume much more institutional autonomy than ever. Reciprocally, they are also urged to achieve a better allocation and application of their resources, and show their accountability to both central government and public society. At this time, there appears considerable enthusiasm in promoting the “new managerialism” in major Chinese universities. A significant step that pushes this reform further and deeper has been the merger of higher education institutions during this period to create strong, comprehensive universities (Chen, 2006). By May of 2006, there are altogether 431 newly established universities merged from 1087 previous higher education institutions (Chinese Ministry of Education, 2007). As a result, a series of problematic issues accompanied by these organizational changes finally triggered a real New Managerialism reform in a large range of Chinese universities (Luo, 2004).

One of the major essentials of this reform is to regulate and strengthen personnel management. It means to introduce into considerations of policy and management at personnel level some concrete information on the extent to which the benefits expected from education expenditure are actually secured, and to facilitate comparisons in terms of effectiveness and efficiency and ultimately improve the whole institutional performance. It is believed that the adoption of the performance assessment to academics is a major step toward standardization of university personnel management. By making numerous claims about the benefits derived

from performance assessments, especially the improved working performance and accountability, the university managers or assessors argue that all aspects of academics' work, including teaching, research and public services, should be assessed regularly in order to offer important information for personnel decision-makings and career development. It is asserted that only by closely and actively steering the academic labor market and their working practices and putting them into a much more rigorous regime of external accountability (Stronge, 1995; Ellett, et al., 1996; Hague, 1997) can academics be a supportive part of university managerial improvement.

However, even though performance assessment is becoming an integral part of many effective approaches to university management, the criteria and procedures of performance assessments often will be a controversial issue, while their practical application can also produce undesired side effects. As it has been aware by some western researches (Barzelay1992, Cave & Hanney, 1990; Neal, 1995) that the conduction of personnel performance assessment to university academics in individual institutions have caused more difficulties than the advocators or theorists anticipated. Indeed, university academics often express their reluctance or even resistance to participate in performance assessments when they perceive that they are increasingly caught within a revitalized and refurbished matrix of incentives and controls that significantly changed the institutional fields and organizational settings in which they were used to function (Wholey & Hatry).

Admittedly, academic values of performance effectiveness are supposed to diverge from those of managerial ideology, so presumably this value conflict might provoke some inevitable resistance in academia before a gradual and successful integration is realized. Thus the new managerial concepts like performance indicators, personnel policies and strategic encouragement for greatly enhanced visibility, transparency and accountability are seen to be combined with negative features of self-imposed discipline, closure and control that ran directly counter to more traditional forms of academic collegiality (Reed, 2002). In addition, the most commonly used outcome-based assessment rejects the informal, tacit agreements and understandings on which the negotiated balance of power and influence has historically been based on. Instead, it suggests the legitimating and implementation of much more intrusive and

intensive modes of governance and regulation. It exposes academics much more to the vagaries of external market pressures and direct managerial regulation of professional task performance. Thus, academics are subject to continuous surveillance and policing over each other within a never-ending competitive struggle to survive (Parker and Jary 1994, Ozga 1995, Prichard and Willmott 1997; Newton, 2000).

Chinese researchers express the same concern that there are significant difficulties in pushing forward effective performance assessment to university academics (Gao & Yi, 2006). Traditionally, the appointment of academic staff in Chinese universities was made by Ministry of Education. All the academic positions were tenure and the personnel assessment was purely a political thing. The whole process was used to be top-down with a strong flavor of confidentiality. It did not mean to exert much impact on the real performance of academics since there was only an indirect relationship between personnel decision-making, like salary (or bonus) allocation or promotion, and the results of the assessment.

Given the existing difficulties, great effort still has to be made if the institutions are to be fully informed in making their decisions on various relevant issues. In 1999, Tsinghua University (a leading university in China) took an initiative in transforming its personnel management by the replacement of the long-established tenure system with short renewable contracts and status quo subsidy system. Under this new climate of much higher standards of accountability, the emphasis on the use of performance assessment heralded a major shift in methods, processes and purposes. It recommended explicitly quantitative as well as qualitative judgments. In June of 2003, the announcement that Beijing University (another top university in China) also launched a similar reform and proved that a real upsurge of personnel reform in Chinese universities. One year later, most of major Chinese universities followed the suit, including the case university of this study. Like some others, this case university is a historically prestigious university that is facing a threat of losing its reputation and privilege in the new competitive environment and is seeking breakthroughs from a new round of managerial reform.

Currently the performance assessments to academics in this case university has been elevated to a position of prerequisites or crucial indicator for achieving the continuous

improvement of university management. But from the previous discussion, we have to admit that the performance assessments to academics, as a managerial strategy, is still far from real success in university context until now. There is still an inevitable gap between "goals" and "realities". So it is highly needed that a particular focus be given to systemic researches on further exploring the relationship between motivational factors and university academics participation in performance assessment.

Concerning the aspect of theoretical background, expectancy theory has been recognized as one of the most promising conceptualizations of individual motivation (Ferris, 1977). Many researchers have proposed that expectancy theory can provide an appropriate theoretical framework for research that examines a user's acceptance of and intent to use a system (DeSanctis, 1983). However, empirical research on expectancy theory in the university academics' context has been limited. This study is going to use expectancy theory to examine university academics' acceptance of and motivation to participate in performance assessments.

The present study is based on the assumption that resistance to performance assessments could be minimized if university academics themselves were intrinsically motivated to participate in performance assessments. It is assumed that when academics perceive the potential outcomes of the assessment are attractive enough, the probability of achieving these outcomes is high, and they feel it deserves their effort-making, they are to accept it as a means for measuring their academic and professional effectiveness. Thus, finding out and meeting the university academics' expectations from the performance assessment could prevent causing confusion, arousing irritation, wasting resources, and ultimately substituting the rigidity of regulations for informed judgment.

1.2 Research objective and research questions

It is the aim of this study to investigate the relationships between university academics' expectations and their motivation to participate in performance assessments. To achieve this research objective, this study employs expectancy theory to evaluate some key factors that may motivate university academics to actively participate in performance assessments. Particularly this study is to recommend that university academics will have stronger motivation to

participate in a performance assessment if the outcomes of it are consistent with their expectancy. Through better understanding of academics' needs and behavioral intentions, the results of this study can aid in improving institutional performance assessment system that could truly respond to both of its managerial and developmental goals.

Thus the research questions of this study are two-fold. One is: What are university academics real expectations from participating in performance assessments? The other is: do university academics' expectations influence their motivation to participate in performance assessments?

1.3 Central terms and concepts

For the purpose of this research, the following concepts have been used:

Performance effectiveness: The evidence to prove that university academics are offering effective teaching, and doing relevant research and doing well in other public services to ensure that they met the objectives and goals and demonstrate that they deserve the resource and are accountable to the public and society (Neal, 1995).

Performance assessment: It refers to a structured managerial process to gather evidences and make judgments about individuals' performances. Academics are supposed to be assessed in every relevant working aspect in order to decide whether they should be promoted or rewarded or punished and ultimately the assessment is meant to help improve their performance. (Moses, 1988; Neal, 1995)

Motivation: It can be thought of as an internal need or as goals that impel (or entice) the individual towards action (McClelland, 1961). Most commonly, it is classified into intrinsic motivation and extrinsic motivation. Extrinsic motivation comes from outside coerce or external force (rewards). Intrinsic motivation refers to motivation that comes from inside an individual (satisfaction). It is believed that external contingencies (external rewards that are under the institution's control, such as tenure, salary increases and promotion) shape intrinsically motivated behavior in unanticipated ways. (Meyer & Evans, 2003)

Expectancy: It refers to individuals' continuous evaluation of the outcomes of his or her behavior and subjective assessment of the likelihood that each of his or her possible actions

will lead to various outcomes (Vroom, 1964).

1.4 Organization of the study

This study is organized into five Chapters. The Chapter 1 briefly introduces the research background, research aim, research questions, central terms and general organization of the study. The Chapter 2 provides supporting literature review and justifies the application of the Expectancy Theory as a theoretical framework for designing the empirical survey study. The Chapter 3 deals with Research Methods that mainly includes the information about research subject, research procedure and the limitations and validity of the research. In the Chapter 4, the data collected from the questionnaire survey will be analyzed and main results and findings will be discussed in detail. The last Chapter will be conclusions and suggestions for further research.

CHAPTER 2 THEORETICAL FRAMEWORK

2.1 Supporting literature review

The relevant literature concerning the application of performance assessments in university context and the opposition or resistance from academics has presented a solid foundation and a rational demand for this current study.

2.1.1 University application of performance assessments

The purposes of a performance assessment system to academics might include licensing or credentialing and tenure, extending to self-assessment and professional development (Stronge, 1995; Kyriakides & Campbell, 2003). In Chinese university context, these specific purposes relate to two more general functions of the assessment system, namely personnel decision-makings and institutional performance improvement. The decision-making purpose reflects the need to determine the competence of academics in order to ensure that good performances are encouraged and rewarded and bad performances are identified and remedied before deterioration. This has typically been considered to be summative in nature. The improvement purpose reflects the need for institutional growth and development of the individual academics' career. This typically has been considered to be formative in nature (Beerens, 2000). In summary, the overall purpose of performance assessments to university academics is to enhance the general level of performance effectiveness of academics at all aspects and provide basis for the implementation of managerial strategies, such as, salary raises, promotion and allocation of other career supporting resources.

When analyzing the reasons why universities adopt a specific managerial strategy, Birnbaum (2000) states that it is typically because of external pressures on universities to improve their performance or accountability. It is widely reported that universities are under social and economic pressures to enhance their performance (Welsh & Metcalf, 2003; Bess, 1998; Mortimore, 2001; Jongbloed et al, 1999). The argument in favor of regular performance assessments as an effective managerial strategy to mitigate these pressures is to keep vitality in

universities by encouraging comparison and competition. To stimulate academics' enterprise, it is necessary to institute a system whereby academics are regularly assessed, with the results of those assessments being used as the basis for personnel decision-making and performance improvement. Essentially it stands that without a clear and compulsive performance requirement, the academics cannot be effectively administrated and will lose much of their motivation to improve their work. Instead, if faced with the periodic need to demonstrate their diligence and effectiveness, academics will be forced to increase their attention and dedication to their duties.

When exploring the reasons why in practice "performance effectiveness activities having actually improved 'effectiveness' is sparse" (Welsh & Metcalf, 2003), critique is directly central to the problem that academics are passively subject to performance assessments in which they have little faith and motif. Birnbaum (2000) again reminds us that one of the most significant reasons that makes managerial strategies fail is that they do not succeed in attracting the allegiance or support of large numbers of academics. There is accumulating evidence to prove that the lack of academics commitment is a major factor that impedes the real success of the performance assessment (Ewell, 1989; Palomba & Banta, 1999). It echoes the earlier report by Lonsdale, Dennis, Openshaw and Mullins (1989) in emphasizing the importance of understanding the factors that effectively motivate and severely impede academics' to participate in performance assessments.

2.1.2 Resistance from university academics

There is abundant evidence in the management literature of the failure of performance assessments that have been imposed on a reluctant body of personnel. It is reported that university academics are not satisfied with the assessment outcomes if they have to observe the imposed criteria for their "Performance effectiveness" (Tian & Blackburn, 1996). The debate around meanings associated with effectiveness within academic work encompasses disputes over the privileging of particular methods for evaluating and demonstrating measures of quality. In China, in the wake of increased managerial intervention, the preference has shifted to quantitative forms of quality measurement, often involving the use of performance indicators

(Vidovich, 2001). Quantified evidence is assumed to better provide simple standard information graspable by the assessors (Chen, 2006; Gao, 2006; Li, 2006), such as hours of lectures given, books and articles published in respected journals. Thus, academic activities are open to external scrutiny by higher administrative authorities as they "replace substantive judgments of academic work with formulaic and algorithmic representations" (Polster & Newson, 1998, pp. 175).

Additionally, it is particularly true in the instance where academics do not perceive enough attractiveness from the outcomes of the performance assessment system and thus feel reluctant to exert great efforts to participate in it. The statement "If you don't have any goals, you don't have anything to assess" expresses the close relationship between goals and effective assessment. It is goal achievement that effective performance assessment is generally designed to detect. An effectiveness assessment helps both the assessors and academics understand the outcomes (or the results) that their efforts are producing and the specific ways in which these efforts are having their effects.

Anderson (2006) concludes similar concern when he conducts 30 interviews to understand academics' resistance to performance assessment. He finds out that a number of academics in the study highlight the potential for control in the performance assessment process by the perception that the results of the assessments might be used in an inappropriate way. Others feel that assessment outcomes are unnecessary, even insulting, and impugned their own sense of professionalism and thus bring stress and wastefulness because of the obvious power and imposing relations they represented. For them, the performance assessment has become, to use Newton's (2000) term, a 'beast' to be fed through ritualistic and largely meaningless practices.

Other considerable efforts also have been made to illustrate that strong motivation requires the security of benefits plus an array of incentives for which improvement is a prerequisite. In a detailed case study conducted by Moses (1988), she summarizes the potential disadvantages identified by academics themselves, including: threat and insecurity to individuals; pressure for conformity; mistrust and competition within academics; and negative influence on the focus of the individual's activity, to show the worry that the potential loss of participating in performance assessments will overweigh its benefits.

In UK, Shore and Wright (2000) note that ensuring visibility of auditable structures has required great investments of time from academics as more time was devoted to satisfying quantitative indicators, otherwise they could spend this time on research and teaching. In Australia, McInnis (1999) has noted that the workload generated by 'non-core' tasks, including compliance with assessment requirements, is significant, but that the addition of these tasks also causes a fragmentation of work time, resulting in frustration and undermining the satisfaction academics derive from their work. In China, It has been argued that the existing evaluation system for assessing university academics work fails to locate the most effective academics or contribute to their professional development (Li, et al., 2006). Academics in such assessment system have to comply with the claimed assessment mechanisms by sacrificing their own incentives to improve. Their compliance generally reflects the 'dramaturgical performance' and 'impression management' identified by Trowler (1998) and Newton (2002) in UK, rather than any commitment to their validity or usefulness.

2.1.3 University academics' expectations

Some empirical researches support that academics' receptivity to comments and decisions derived from the assessments is predicated upon their perception and expectation to benefit from the assessment outcomes (Chen & Hoshower, 1998). Specifically, it is believed that individuals adopt a more positive attitude towards assessment results when their intrinsic (or spiritual) needs are met (Chen, Gupta & Hoshower, 2006; Meyer & Evans, 2003). For example, university academics are found not intrinsically motivated to participate in any "Top-down" assessments that are "done to them"(Taylor, 2001) without considering their expectations (Welsh & Metcalf, 2003). But unfortunately, outcome-based (performance) assessments begin on many campuses as a top-down approach (Schilling & Schilling, 1998) by elevating the role of administrators〔assessors〕at the expense of academics participation (Burgher, 1998; Richardson, 1988). In China the prevalent performance assessments are usually enforced through bureaucratic methods of control, therefore, they ultimately reduce motivation. As Deci and Ryan (1985, pp. 298-299) note "Assessment that tends to be experienced as controlling always induce pressure and tension and undermine motivation to participate." Since motivation

that largely drives the perception to the availability of performance assessments in the academic sector (where work is complex and challenging) thrives only in an atmosphere of freedom (Bess, 1998; Ma, et al, 2006).

Besides, social goals of wanting to be liked and accepted by peers, wishing to share, and enjoyment of respectability impact academic achievement in complex ways. Thus, academic contexts that favor individual competition and autonomy may not suit well those individuals who, perhaps by virtue of gender or culture, have much more social and less individualistic values. Winter and Sarros (2002) provide evidence that the key to improving motivation towards desired research and teaching goals lies not so much in measurement of productivity as it does in constructive, supportive and empowering feedback on expectations within the context of academic values. Doring's (2002) research suggests that annual performance reviews confidential to the individual will be more likely to be associated with positive impact on academic behavior than strategies that risk public humiliation or loss of status.

Academics find performance assessments acceptable if they lead to satisfaction, to suggestions for improvement, or to rewards. Whatever sources will be used it is stressed by academics that a reward system should not be overly bureaucratic—and needs to be transparent. Suggested types of acceptable outcomes or rewards are: financial, recognition or appreciation and opportunities for career development, etc. Each of the specific rewards derived from these results may be purely personal and internalized (internal rewards) or may involve the plaudits of others and tangible recognition or economic gain (external rewards). An analysis of these considerations provides further insight into academics' motivation to participate in performance assessments. In this respect, the academic's perceptions about the attractiveness of the outcomes from participating in performance assessment activities and the probability of benefiting from them are critical.

Obviously, the previous researches have tried to emphasize the common preferred outcomes of performance assessments from different perspectives, including external versus internal, material versus spiritual, institutional based outcomes versus personal based outcomes. Especially the survey conducted by Maurer, et. al (2001) provides a clearer listing of the most important potential outcomes of performance assessments as the following:

1. Provide an opportunity to present activities and accomplishments
2. Identify ways to enhance job satisfaction/performance
3. Identify career opportunities and develop a plan to achieve them
4. Foster closer communication between staff members and other related groups.
5. Provide a consistent opportunity to build a record on performance for use in promotion and merit recommendations

More importantly, in the specific context of the case university in this study, its official documents (Performance assessment policy, 2007) clearly claim that the goals or the anticipated outcomes of the performance assessment to academics are to review teaching and other relevant activities for the preceding one year period for generating recommendations for improvement; goal and task setting for the following period; role clarification in the context of ongoing institutional and individual needs and requirements; facilitation of professional interests and academics' development opportunities and provision of supporting information for student course selection, etc. It should be noted these possible outcomes are directed towards both institutional requirement and individual's needs.

Thus, based on the previous literature discussion and the documentary information from the case university, eight potential outcomes from the performance assessment to academics have been summarized for further testing in the following empirical study. These outcomes integrate both institutional and personal goals, concerning both internal (A-D) and external (E-H) rewards:

A, Improve the quality of teaching-related activities
B, Improve the quality of research-related activities
C, Achieve peer recognition
D, Win students' respect
E, Get better salary raises
F, Get promoted to higher professional titles (e.g. full professor)
G, Get promoted to (more) important leadership positions
H, Get other competitive career development resources or opportunities (e.g. Supported traveling to high-level academic conferences or supported studying or training abroad)

This study suggests that until there are some collaborative approaches (Klein & Dunlap, 1994) that mean to link the expectations of university academics with the practical goals of performance assessments in order to intrinsically motivate them to actively participate in and

willingly cooperate with the performance assessment, there seems little likelihood that performance assessment to university academics could fulfill its anticipated task.

2.2 Theoretical framework: Expectancy Theory

2.2.1 Relevant theories

A common form of motivational theory in psychology argues that motivation can be thought of as an internal need that impels the individual towards action. Achievement motivation in particular is thought to be the result of a conflict between striving for success and avoiding failure. An alternative and more recent form of motivational theory is the idea of motives as goals that entice individuals towards action. It is well demonstrated that when individuals espouse *performance* goals they are more likely to use self-regulatory strategies and focus on meaningful aspects of the task, such as good quality research. Conversely, when individuals adopt *performance* goals, such as having a certain number of refereed publications, their scholarly behavior tends to be more superficial (Ames, 1992). These relationships are somewhat influenced by whether the individual approaches success or avoids failure.

The Self-worth theory states that in any group that values superior competitive capacity, an individual's self worth is likely to be measured by certain public performance criteria (such as performance indicators). Under the new accountability climate, universities raise the social premium on competence much more dramatically, with relatively vague words such as the "pursuit of effectiveness" becoming a mantra for many a university manager's discourse. Academics have to response with establishing unrealistically high achievement goals or procrastinating their work to avoid potential failure. This could result in a kind of defensive pessimism in which academics manage their anxiety by maintaining an unrealistically low expectation of ever succeeding, or devaluing the importance of the activity. Thus in academia we encounter some faculty who will dismiss the value of performance assessments or deny that they are in a position to be effective given the high level of managerial demands on them.

The theory of Reasoned Action, as proposed by Ajzen and Fishbein (1980), is a well-researched model that has successfully predicted behavior in a variety of contexts. They propose that attitudes and other variables (i.e., an individual's normative beliefs) do not directly

influence actual behavior (e.g., participation), but are fully mediated through behavior intentions, or the strength of one's intention to perform a specific behavior. This would imply that measurement of behavioral intentions (motivation) to participate is a strong and appropriate predictor (rather than only attitudes) of the success of a performance assessment system (Geiger & Cooper, 1996; Chen & Hoshower, 1998; Chen, Gupta & Hoshower, 2004, 2006).

2.2.2 Expectancy theory

All the relevant theories mentioned above propose that a theory that could reasonably explain individuals' pursuing performance goals and adequately measure their behavioral intensions is needed to function as the theoretical framework of this study. Expectancy theory has been recognized as one of the most promising conceptualizations of individual motivation (Ferris, 1977). Many researchers (Ajzen & Fishbein, 1980; Brownell & McInnes, 1986; Hancock, 1995; Warshaw, 1980) have suggested that expectancy theory can provide an appropriate theoretical framework for research that examines an individual's acceptance of and intention to use a system (DeSanctis, 1983). However, empirical research employing expectancy theory within an academe has been limited. Owing to the belief that academics' input is the root and source of academics' acceptance to the performance assessment (Taylor, 2001), it is reasonable to stand that meaningful and active participation of academics is essential and the usefulness of performance assessment data is severely undermined unless academics are willing to exert effort to provide quality input. Thus this study attempts to use expectancy theory to examine factors that motivate academics to participate in the performance assessment.

Expectancy Theory was originally developed by Vroom (1964) and has served as a theoretical foundation for a large body of studies in psychology, organizational behavior and accounting (Harrell et al. 1985; Brownell and Mclnnes 1986; Hancock 1995; Snead and Harrell 1995; Geiger and Cooper 1996). Expectancy models are cognitive explanations of human behavior that cast a person as an active, thinking, predicting creature in his/her environment. He or she continuously evaluates the outcomes of his or her behavior and subjectively assesses

the likelihood that each of his or her possible actions will lead to various outcomes. The choice of the amount of effort that he she exerts is based on a systematic analysis of

(1) the values of the rewards from these outcomes

(2) the likelihood that rewards will result from these outcomes

(3) the perceived level of effort he or she made to reach these outcomes

One of the most important adaptations and explanations of this theory is provided in Porter and Lawler's model (1968) that demonstrated the motivational process in their version of an expectancy model of motivation which has three underlying components, including the following: *Expectancy* is the extent to which individuals feel an objective is achievable. *Instrumentality* is applied to deciding if working towards the objective will achieve what is required. *Valence* is the subjective value placed on the attainment of the objective. Prior to investing effort the individual goes through a process of evaluating the value of rewards, the probability that effort will achieve results and the performance required. In their study of applied research based on motivation theory, Ambrose and Kulik (1999) argue that greater utility can be derived from drawing upon original models, such as Porter and Lawler (1968) rather than attempting to develop all embracing integrated approaches.

Hence the Porter and Lawler approach links perception of value of reward as a function of the perceived effort required. There has to be believed that valued rewards will be achieved for successful outcomes, and perception that the rewards attained are equitable (not equal) is key to satisfaction, and positive or negative experience will influence future performance. By giving a comprehensive and integrative model concerning 10 actors, the Porter and Lawler model has been proved a suitable framework for analysis and development, but not as a predictor of motivational success.

Further testing of Expectancy theories have brought recent track records of application in researching motivation amongst professional staff in the US (Ambrose & Kulik, 1999; Chen, Gupta & Hoshower, 2004, 2006), students' motivation to participate in teaching evaluation (Chen & Hoshower, 1998; Palmer and Collins, 2006) and peer evaluation (Chen & Lou, 2004), students' motivation and cultural differences (Campbell, et. al, 1999), students' motivation and participating in study abroad program (Sanchez, et. al, 2006), etc.

This study is going to apply the original models from Vroom (1964), according to whom, expectancy theory is comprised of two related models: the valence model and the force model. In our application of the theory, the valence model shows that the overall attractiveness of participating in a performance assessment to academics (Vj) is the summation of the products of the attractiveness of those outcomes associated with the assessment (Vk) and the probability that the assessment will produce those outcomes (Ijk). Thus:

$$Vj = \sum_{K=l}^{n} (Vk\ Ijk)$$

where: Vj = the valence, or attractiveness, of a performance assessment (outcome j refers to first-level outcomes);

Vk = the valence, or attractiveness, of outcomes (k refers to second-level outcomes);

Ijk = the perceived probability that the performance assessment will lead to outcome k.

In the case of this study, it is safe to assume that whatever concept of performance effectiveness is used, it must be tested against a model of academics motivation for progress to be made in effectively rewarding effectiveness. It is clear that this also has messages for institution and management of academic staff in how genuinely aligned strategy is, to perceptions of reality. Consequently, the eight potential outcomes that were discussed in the previous section will serve as the k value for second-level outcomes (i.e., k = 8) of participating in the assessment. They could be transformed into the following values:

k1, Improve the quality of teaching-related activities
k2, Improve the quality of research-related activities
k3, Achieve peer recognition
k4, Win students' respect
k5, Get better salary raises
k6, Get promoted to higher professional titles (eg. full professor)
k7, Get promoted to (more) important leadership positions
k8, Get other competitive career development resources or opportunities (eg. Supported traveling to high-level academic conferences or supported studying or training abroad)

The Force model shows that an academic staff member's motivation to exert effort into a performance assessment system. (Fi) is the summation of the products of the attractiveness of the system (Vj) and the probability that a certain level of effort will result in a successful

contribution to the system (Eij). Thus:

$$Fi = \sum_{j=1}^{n} (Eij\ Vj)$$

where:

Fi = the motivational force to participate in a performance assessment at some level i;

Eij = the expectancy that a particular level of participation (or effort) will result in a successful contribution to the assessment;

Vj = the valence, or attractiveness, of the performance assessment; derived in the previous equation of the valence model.

In summary, the perception values of each academic member will be put into the valence model and then the force model. In the valence model, each participant is given the potential outcomes of performance assessment (e.g. the eight k values mentioned above in the valence model) and the subjective probability that outcomes will occur. Next, by placing his or her own intrinsic values (or weights) on the various outcomes, each participant evaluates the overall attractiveness of the performance assessment. Finally, the participants' choices will be applied to the force model to determine the amount of effort he or she is willing to exert in the performance assessment process. This effort level is determined by summation of the product of the attractiveness generated by the valence model (above) and the likelihood that he or she will exert certain amount of effort in pursuing the attractiveness. Based on this systematic analysis, the motivational force of university academics for participating in the performance assessment could be generated.

CHAPTER 3 RESEARCH METHODS

3.1 Case university for research

This study is conducted at a case university that is a comprehensive university in Beijing, capital of China. It is a mid-size reputed public university administered by Chinese Ministry of Education. It consists of nine academic schools (seven schools belong to natural sciences and engineering field, one is business school and one is school of social sciences and humanities) with more than 40 departments or faculties. There are 1582 academic staff members and 25,073 students (with 13,664 undergraduates and 7638 graduates by Oct. 2007) in the whole university. Within this university, semi-formal procedures of performance assessment had already been introduced since 1998 and a systematic assessment scheme was legitimately implemented in all the faculties or schools in 2002 after it had been merged with another professional college. With the impending changes in the goals of emphasizing more the effectiveness and accountability, there is a growing pressure of enhancing institutional performance effectiveness. Among others, more formal and authentic evidences are needed to assess academics' work for fairly distributing resources and rewards, and encouraging academics to improve their performance. Thus, since 2002, academics are required to participate in a yearly campus-wide performance assessment that means to evaluate academics' performance effectiveness based on some major indicators including student evaluation of teaching, publication counts and public service activities (external research outcomes).

During the six years of practicing performance assessments in the case university, it has been noticed that there exist various kinds of reluctance or resistance from academics. Academics often complain that the assessment is just "done" to them without seriously considering the factors that discourage them to participate in the assessments and their personal perceptions to the availability of the assessments. However, there is no statistic evidence so far showing, to what extent, could academics stay motivated in the yearly performance assessment activities since there has never been conducted a campus-wide research in this university before this study.

3.2 Research design

For the purpose of this study, “Academics” are defined as full-time faculty members that bear professional titles, with or without leadership positions, and assume both teaching and research responsibilities in the case university. By adopting Expectancy Theory as a supporting theoretical background, a campus-wide questionnaire survey research was designed to properly achieve the research objectives of this study. Based on a current review of the literature and the official documents of the case university, the instrument was made and revised to reflect the immediate concerns of those individual academics that are required to participate in the assessment in the previous successive years. The instrument, also known as the set of “eight potential outcomes” of the performance assessment, was provided to measure attractiveness (V) and expectancy (I and E) of participating in the assessment. They are listed as the following, the same as mentioned earlier in this study:

A, Improve the quality of teaching-related activities
B, Improve the quality of research-related activities
C, Achieve peer recognition
D, Win students’ respect
E, Get better salary raises
F, Get promoted to higher professional titles (e.g. full professor)
G, Get promoted to (more) important leadership positions
H, Get other competitive career development resources or opportunities (e.g. Supported traveling to high-level academic conferences or supported studying or training abroad)

To apply this instrument, altogether 51 variables were created based on the collected questionnaire results. Academics were asked to make multiple decisions to these eight potential outcomes under different situations. In each situation, respondents follow three major steps and assign specific values (a five-degree scale number from 1 to 5) to each of the eight cues. By this means, accoring to the expectancy theory, respondents would be guided into a process of calculating expected benefits and rewards in determining how much they were motivated to participate in the assessment. Then this study took ‘the attractiveness of participating in the performance assessment (Vj) as an initiative concept value to proceed with the Valence model suggested by Expectancy Theory. Vj was measured by the summation of products of the

respondents' perceptions of the attractiveness of the potential outcomes (Vk) and the probability (or likelihood) of achieving those outcomes (Ijk).

In the first step, respondents were asked to indicate what was the degree of attractiveness of the eight potential outcomes of the performance assessment to their perception. Where "1" stands for Very Unattractive and "5" stands for Very Attractive.

Scale	1	2	3	4	5
Meaning	Very Unattractive	Unattractive	Neither Unattractive Nor Attractive	Unattractive	Very Attractive

Here for the convience of dealing with the statistical analysis to the model values, this study used "K1 to K8" to replace the previous A to H respectively (the eight potentical outcomes). Thus each "K" item would be assigned a scale number as its value. For example, if K1= 4, K2= 3,…K5= 2.

Then the respondents would go to the second step. They were asked to estimate what is the probability of achieving the eight potential outcomes through the participation of the assessment. Again, respondents were asked to assign a scale number to the likelihood of each occurrence. Where:

Scale	1	2	3	4	5
Probability	10% Very Low	30% Low	50% Neither High Nor Low	70% High	90% Very High

The values assigned in the above two steps corresponded to the Vk values (Vk1…Vk8) and Ijk values (Ijk1…Ijk8) in the Valence model as the following:

$$Vj = \sum_{K=1}^{n} (Vk\ Ijk)$$

In this model, Vj represented the overall attractiveness of participating in the performance assessment. Its value was supposed to be dependent upon the perceived attractiveness of the outcomes (Vk) and the given probability of Ijk, which was from 10%(very low) to 90% (very high). Thus the summation of the products of Vk and Ijk stands for the gross value of Vj. After assigning the Valence value to the performance assessment, the respondents also had finished their first decision-making process.

Consequently, the respondents would be led to the third step that was also to make their second decision in the same instrumental situation. Respondents were asked to indicate the level of effort they would exert to achieve the eight potential outcomes of the performance assessment. The levels of effort were ranged within a five-degree scale, from 1 to 5, as the following:

Scale	1	2	3	4	5
Levels of Effort	Zero Effort	Little Effort	Moderate Effort	Much Effort	Great Deal of Effort

The result of this step corresponded to "Fi" in the Force model and reflected the strength of individual respondent's motivation to participate in the performance assessment. According to the basic concept of Force model in expectancy theory, the Fi value would be determined as shown in the following model:

$$Fi = \sum_{j=1}^{n} (Eij\ Vj)$$

It meant that the individual academics' motivation to participate in the performance assessment (Fi) would be determined by the summation of the attractiveness value of the assessment (Vj), which the respondents assigned in the first two steps and the expectancy value (Eij) that standing for how much effort the respondents would exert if they wanted to realize the potential outcomes from the assessment.

3.3 Data collection

This study collected its data set via an e-mail survey in the case university. By contacting the central administration offices, this study was allowed to use the internal email system of the university to distribute the survey questionnaires to 300 academic staff members. This sample was chosen from the alphabetical list of the university academics mailing addresses and the respondents were assured of confidentiality of results. The sampling technique adopted by this study was to randomly start from an arbitrary number between 0 and 9 that stands for the sequence number of the mailing addresses, and then the mail addresses at every interval of five numbers were chosen as the expected questionnaire respondents. Via this internal system, all

the questionnaires were sent to respondents at the same time and were required to be returned within 10 days.

The questionnaire (attached in the Appendix) was designed specifically to collect responses to the three major questions concerning the determination of respondents' motivation to participate in the performance assessment. In the questionnaire, individual academics were asked to, based on their own perception, assign proper representative numbers to all the given variables to indicate the degree of the attractiveness of the eight potential outcomes to them, their perceived probability of achieving each of those outcomes and the estimated level of effort that they would make to participate in the performance assessment. But demographic information was also collected (including age, working years in case university, faculty, professional title, leadership position) to enable disaggregated comparisons for variables and to justify the generalization of the research results.

After the original mailing and two additional reminder mailings, Of the 300 questionnaires sent, 122 were completed and returned. This represented a response rate of 41%. In spite of a relatively low response rate, the sample was still considered generally representative of the population.

3.4 Limitations and validity of the research

Some limitations of this study need to be discussed. First, the selection of subject (case university) was not random and all respondents came from only one institution. Second, respondents were not given the opportunity for input on the outcomes that motivate them to participate in the performance assessment since, in the instrument, all the eight possible outcomes were directly given to the respondents. Thus it is likely that other possible outcomes of performance assessment may have a stronger impact on respondents' motivation than the eight outcomes used in this study. Third, the use of self-managed and self-report questionnaires could not guarantee fully devoted responses. Although there was successful support for the use of self-managed reports in explaining perceptions of individuals, creating other hypotheses that can be further tested in the field, and delving into new areas of research (Schmitt, 1994; Spector, 1994). Fourth, the comparatively low response rate (41％) of the questionnaire survey

also influenced the persuasion of the research results. Consequently, the results reported in this study must be interpreted with care as they represented areas in need of continued study with other data sources and caution should be used in generalizing the results to other institutions and settings without further research.

With these limitations in mind, methodologically, a "Judgment Exercise" was designed to compensate in the research process in order to enhance the reliability and validity of this research. The within-person or individual focus of expectancy theory suggests that appropriate tests of this theory should involve comparing measurements of the same individual's motivation under different circumstances (Harrell et al., 1985; Murky & Frizzier, 1986). In response to this suggestion, this study incorporated a well -established within-person methodology originally developed by Stahl and Harrell (1981) and later proven to be valid to other studies in various circumstances (e.g., Snead & Harrell 1995; Geiger & Cooper 1996). This methodology uses a judgment modeling decision exercise that provided a set of cues that an individual uses in arriving at a particular judgment or decision. Multiple sets of these cues were presented with each representing a unique combination of strengths or values associated with the cues. A separate judgment was required from the individual for each unique combination of cues presented.

This study used the eight second-level outcomes shown prior to the decision -making questions at 5 levels (very low =10% to very high = 90%), which resulted in 40 different combinations of the second-level outcomes (5 X V8 = 40combinations). Each of the resulting 40 combinations was then presented at 5 levels (10%, 30%, 50%, 70% and 90%) of expectancy to obtain 40 unique cases. In each of the 40 cases, the participants were asked to make two decisions. The first decision corresponded to the Vj in the valence model and represented the overall attractiveness of participating in the assessment. The second decision corresponded to Fi in the force model and reflected the strength of a respondent's motivation to participate in the assessment. This furnished each respondent with multiple cases that, in turn, provided multiple measures of each individual's behavioral intentions under varied circumstances. This was supposed to be a prerequisite for the within-person application of expectancy theory (Snead & Harrell, 1995).

CHAPTER 4 MAIN RESULTS AND FINDINGS

All the data information from the 122 returned (and valid) questionnaires were coded and transcribed to SPSS. Firstly, a preliminary descriptive analysis was done to the 51 classified variables. In order to answer the main research questions concerning what are university academics real expectations and whether these expectations will influence their participation in performance assessments, the whole data analysis process was directed by tackling with the following four sub-questions:

1. To university academics, what are the most and the least attractive outcomes of performance assessments?
2. From the standpoint of university academics, what are the most / least probable outcomes of performance assessments?
3. How do demographic factors (age, working years, faculty, professional title, leadership position) influence academics motivation to participate in performance assessments?
4. What are the possible effective means to help motivate university academics to exert more effort in participating in performance assessments?

At last the results of the data analysis reached its objective to establish reasonable relationships between university academics' expectations and their motivation to participate in performance assessments.

4.1 Descriptive analysis of the data

The 24 key variables, out of the 51 altogether, used in the descriptive analysis, were assigned to the eight potential outcomes in three different situations occurring in the three major questions (refer to the Appendix). It meant that each outcome was coded into three corresponding variables for analyzing the responses for the three major questions in the questionnaire. The allocated variables were as follows:

(K1A, K2A, K3A) Improve the quality of teaching-related activities
(K1B, K2B, K3B) Improve the quality of research-related activities
(K1C, K2C, K3C) Achieve peer recognition

(K1D, K2D, K3D) Win students' respect
(K1E, K2E, K3E) Get better salary raises
(K1F, K2F, K3F) Get promoted to higher professional titles (eg. full professor)
(K1G, K2G, K3G) Get promoted to (more) important leadership positions
(K1H, K2H, K3H) Get other competitive career development resources or opportunities (eg. Supported traveling to high-level academic conferences or supported studying or training abroad)

Based on the descriptive analysis, we could have a general understanding of the obtained data. The following three Tables representing three descending orders concerning the attractiveness of the potential outcomes, the probability of achieving the outcomes and the expected level of effort to exert were clearly presented respectively.

Table 1 Descending order of Attractiveness of the potential outcomes

	N	Mean	Std. Deviation
Peer recognition	122	3,74	,969
Other resources	122	3,61	1,229
Students' respect	122	3,60	1,183
Improve research	122	3,51	1,137
Title promotion	122	3,39	1,376
Improve teaching	122	3,19	1,086
Salary raises	122	3,11	1,271
Leadership promotion	122	2,32	1,248
Valid N (listwise)	122		

In Table 1, it showed the descending order of the attractiveness of the eight potential outcomes (variables K1A to K8A). Among the eight variables, seven were assigned positive values (higher than 3.0 in the 1.0 to 5.0 scale) by respondents. The mean value of 'Peer recognition' (K1C) was 3.74 and that was also the highest value in Table. It indicated that 'Peer recognition' was considered the most attractive outcome of the performance assessment. 'Other resources' (K1H) and 'student respect' got almost the same attractiveness values and ranked the second and third respectively (with the mean of 3.61and 3.60). Following the three top ones, the less attractive outcomes were 'improve research' (K1B) (3.51), 'obtaining higher academic titles' (K1F) (3.39), 'improve teaching' (K1A) (3.19) and 'salary raises' (K1E) (3.11). The least attractive outcome of performance assessment, according to the respondents of this study, was

‘leadership promotion’ (K1G) (2.32).

Table 2 Descending order of the Probability of achieving the outcomes

	N	Mean	Std. Deviation
students' respect	122	3,11	1,019
peer recognition	122	3,06	,947
improve research	122	2,76	,992
title promotion	122	2,67	1,032
salary raises	122	2,61	,932
other resources	122	2,50	1,159
improve teaching	122	2,48	1,100
leadership promotion	122	1,78	,818
Valid N (listwise)	122		

While in Table 2, the descending order refers to respondents’ perception of the probability (or likelihood) of achieving each outcome, this time, only two outcomes, ‘students’ respect’ (K2D) and ‘peer recognition’ (K2C), were assigned positive values (with mean of higher than 3.0) by the respondents. All the other six variables got quite low mean values (with mean of lower than 3.0). Especially ‘leadership promotion’ (K2G) was ranked the least probable outcome (with the mean value of only 1.78). Compared with Table 1, ‘leadership position’ (K2G) remained the bottom position in the orders, most other outcomes got similar ranking position in the descending orders, except ‘other resources’ (K1H and K2H) with very high attractiveness value (3.61) but quite low probability of achievement value (2.50).

Table 3 Descending order of the expected level of effort to exert

	N	Mean	Std. Deviation
improve research	122	3,82	,833
students' respect	122	3,80	,909
peer recognition	122	3,76	,919
title promotion	122	3,66	,868
improve teaching	122	3,52	1,287
other resources	121	3,36	1,203
salary raises	122	3,01	1,056
leadership promotion	122	2,25	1,031
Valid N (listwise)	121		

In Table 3, again, seven of the eight outcomes were assigned high expectancy values (with mean of higher than 3.00). Respondents wanted to exert most effort on 'improve research (K3B)' (with mean of 3.82), followed by 'students' respect (K3D)' (3.80), 'peer recognition (K3C)' (3.76), 'improve teaching (K3A)' (3.52) and so on. The least expectancy value was, for the third time, assigned to 'leadership promotion (K3G)' (with mean value of only 2.25) that was also the only outcome that respondents would not want to exert much effort to achieve.

All three Tables above described that the respondents of this study believed that most of the potential outcomes were attractive to them and they all expected themselves to exert certain amount of effort to achieve some of the outcomes although comparatively, the probability of achieving them was quite low. Then, based on the Valence Model and Force Model of the Expectancy theory, it was a must to have a descriptive comparison of Valence and Force values to know how much valence value the respondents had assigned to performance assessments and how much university academics stay motivated in the participation process. For convenience, this study created another two new and classified variables (V cl. and F cl.).

Table 4 Count of Valence and Force values assigners

Degree of values		Count of Valence assigners	Count of Force assigners
1.0 – 2.0	low	9	4
2.1 – 3.0	neither high nor low	58	48
3.1 – 4.0	high	51	64
4.1 – 5.0	very high	4	6
Total		122	122

In Table 4, it clearly identified the distributions of the degree of values and the count of assigners. For the Valence value assignment of the performance assessment, there were 9 respondents who assigned low values, 58 of respondents assigned moderate values (neither high nor low), 51 respondents assigned high values and only 4 respondents assigned very high values. It meant that almost 89% of the respondents assigned average to high values to the Valence of the assessment. Similarly we could compare the corresponding numbers of Force value assigners and we found out that about 92% of the respondents assigned average to high

values to the Force (motivation) to participate in the assessment.

By establishing another two re-classified variables, Vcl and Fcl, we could compare the minimum and maximum values being assigned to them and get the range and mean of these two classified variables. In the following Table 5, we could have a general view to the average level of Valence value of the performance assessment and the estimated Force (Motivation) value from its respondents (university academics):

Table 5 Compare Valence and Force (Motivation) values

	N	Minimum	Maximum	Mean	Std. Deviation
Valence	122	1.63	4.25	2.9631	.61771
Force (Motivation)	122	1.83	4.25	3.1079	.58706
Valid N (listwise)	122				

From the Table 5, we could see that the respondents assigned valence values (degree of attractiveness) to the performance assessment within the range of 1.63 and 4.25, thus the mean Valence value was about 2.96, a little bit lower than the average value (3.00). It indicated that the respondents' perceptions of this Valence value diverse dramatically from each other, therefore, it was needed to explore further what were the crucial factors or reasons leading to this big range. But due to the comparatively high expectancy value shown in Table 3, the mean of the Force value (motivation of the respondents) assigned by all the respondents was about 3.10, turned to be a little bit higher than 3.00 although a similar big value range between 1.83 and 4.25 was also observed. This indicated that, in average, the respondents in this study had a moderate level of motivation in participating in performance assessments.

4.2 Results and findings of the analysis

Based on the above description of the data, a preliminary correlation analysis was done to check whether demographic factors were significant or not to influence the respondents' value assignment to the performance assessment. The ANOVA Table below (Table 6) showed that all the demographic factors but 'faculty' was statistically significant (lower than 0.05) in the study.

Thus, this study would take no consideration to the 'faculty' factor in the Valence value and Force value analysis since its significance value was 0.772 (No statistical significance was observed).

Table 6 ANOVA Table for significance

Valence *			Sum of Squares	df	Mean Square	F	Sig.
Working years	Between Groups	(Com.)	2,805	3	,935	2,544	,051
	Within Groups		43,365	118	,368		
Age	Between Groups	(Com.)	4,002	3	1,334	3,733	,013
	Within Groups		42,168	118	,357		
Faculty	Between Groups	(Com.)	,032	1	,032	,085	,772
	Within Groups		46,137	120	,384		
Title	Between Groups	(Com.)	3,039	3	1,013	2,771	,045
	Within Groups		43,131	118	,336		
Leadership-position	Between Groups	(Com.)	3,072	3	1,024	2,804	,043
	Within Groups		43,098	118	,365		
	Total		46,170	121			

Thus, in the following detailed statistical analysis, this study would be conducted via the perspective of the other four demographic factors including working years, age, professional titles (or academic rankings) and leadership positions. This analysis would include two steps concerning the two models (Valence model and Force model) of the Expectancy theory respectively.

4.2.1 Step one: Valence value analysis

The data source for analyzing the Valence value of the performance assessment was from the responses of the first two major questions provided by each respondent. The answers would indicate each respondent's perception of the attractiveness of all the potential outcomes of participating in the performance assessment. This level of attractiveness served as the dependent variable (Vk). Then the answers from the second question would show the probability of achievement (Ijk) associated with each of the eight outcomes of the performance assessment. This level of probability served as the eight independent variables. The resulting

Valence value was the product of Vk and Ijk and it would represent individual respondent' perception of the attractiveness (or importance) of participating in the assessment.

Valence value analysis was conducted against the four controlling factors (working years, age, professional title and leadership position) suggested above in Table 6. The determination of Valence value would function as a premise for estimating the Force value (Motivation) of the respondents' participation in the assessment in the second step analysis.

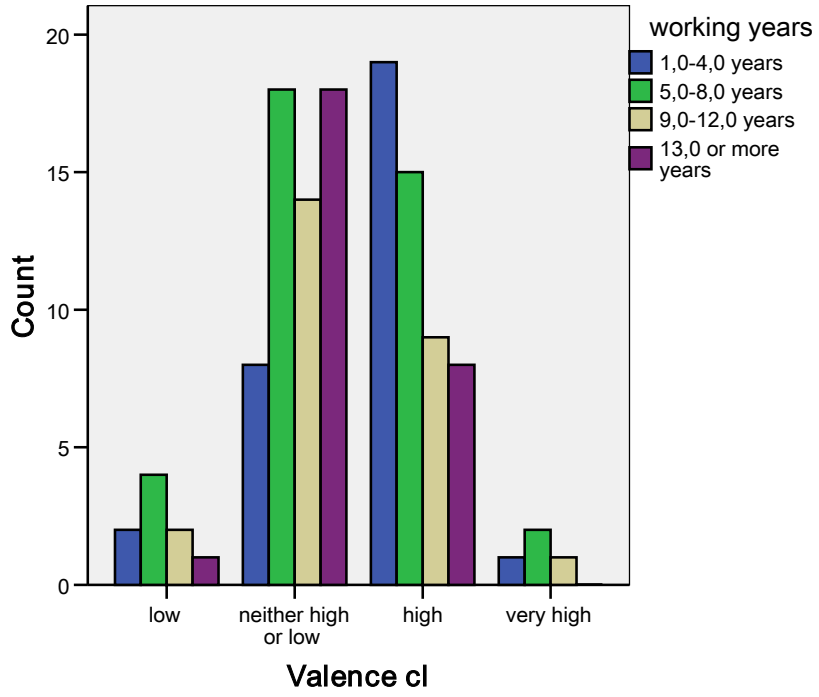
First, working years factor was a significant factor that influenced the respondents' assignment of the Valence value. By Cross-tabulation (refer to the appendix) we knew that among all 122 respondents, 30 of them had been working in the case university for 1 to 4 years, 39 of them working for 5 to 8 years, 26 for 9 to 12 years and 27 for 13 years or more. From the Table7 below, it was observed that the group with least working years (less than 4 years) assigned the highest Valence to the performance assessment. While the group with most working years (13 years or more), on the other end of the contrast, assigned the lowest value to the Valence. Based on the comparison of all the Valence means in the Table 7, we could safely assert that the length of the working years was at an inverse ratio to the weight of the Valence value being assigned and only the respondents who had been working for one to four years assigned a Valence value (3.1958) of higher than average (2.9631) to the performance assessment.

Table 7 Valence value and Working years

		working years				Total
		1,0-4,0	5,0-8,0	9,0-12,0	13,0 or more	count
Valence (cl)	low	2	4	2	1	9
	neither high nor low	8	18	14	18	58
	high	19	15	9	8	51
	very high	1	2	1	0	4
Total number		30	39	26	27	122
Valence Mean		3,1958	2,9455	2,9351	2,7569	2,9631
Std. Deviation		,58024	,62322	,64311	,57186	,57186

The whole picture of the relationship between working years and the perceived Valence (the attractiveness) of performance assessment could be illustrated in the following Graph 1.

Graph1 Valence value (attractiveness) and Working years



Second, age factor analysis offered another significant perspective to understand the respondents' decision-making of Valence value assignment to the performance assessment. According to the cross-tabulation of Valence and age, among the 122 respondents, 30 of them were at the age of 26 to 34 years old, 38 of them were at the age of 35 to 38 years old, 27 of them were at the age of 39 to 43 years old and another 27 were 44 years or older. From the Table 8, we could see that the youngest group (age from 26 to 34) assigned the highest Valence value to the assessment (with the mean of 3.1625) while more than two thirds of the respondents from this group assigned high or very high Valence value to the assessment. While the oldest group (age of 44 or older) assigned the lowest Valence value to the assessment, with the mean of only 2.6505 that is also the only group who assigned a valence value of lower than the average (2.9631). For the age group of 35 to 38, more than half of the respondents chose to assign a Valence of 'neither high nor low, so the Valence mean of this group (2.9720) was very close to the average mean value of the total responses (2.9631). In age group of 39 to 43, no respondents assigned 'low' or 'very high' Valence value to the assessment. It showed that most respondents in this group held a moderate view to the attractiveness of the assessment. From

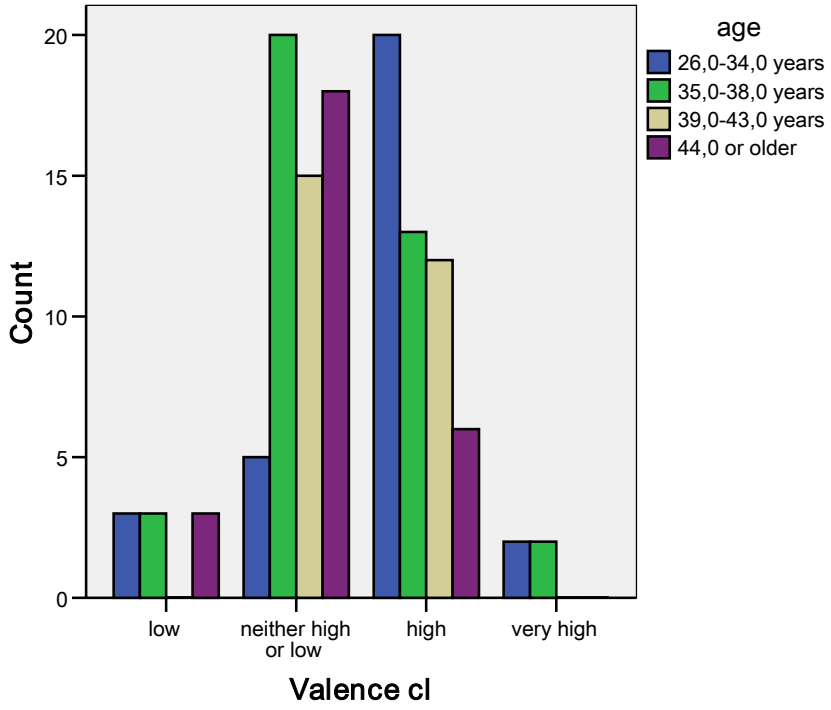
the comparison of all the groups, we could see that it was not true that the respondents' age increase would definitely lead to a decrease of Valence value being assigned. There should be some specific conditions in which respondents tended to perceive that the assessment turned to be more attractive than any other times.

Table 8 Valence value and Age factor

		age				Total
		26,0-34,0	35,0-38,0	39,0-43,0	44,0 or older	Count
Valence (cl)	low	3	3	0	3	9
	neither high nor low	5	20	15	18	58
	high	20	13	12	6	51
	very high	2	2	0	0	4
Total number		30	38	27	27	122
Valence mean		3,1625	2,9720	3,0417	2,6505	2,9631
Std. Deviation		,65768	,61815	,52720	,56364	,61771

The whole picture of the relationship between age factor and the perceived Valence (the attractiveness) of performance assessment could be illustrated in the following Graph 2.

Graph 2 Valence value (attractiveness) and Age



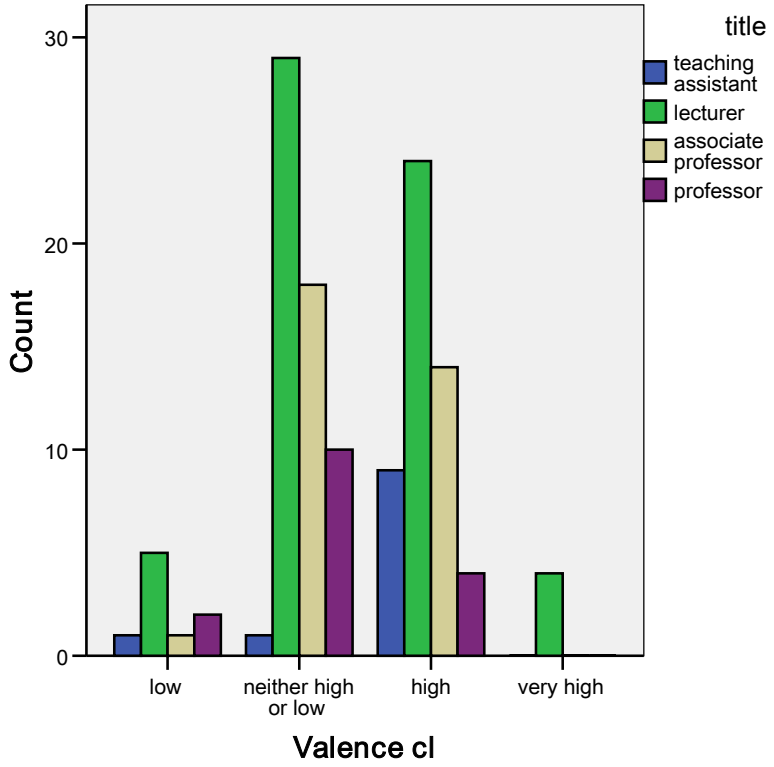
Third, the perspective of professional titles (or academic rankings) also helped to shape the general pattern of Valence value assignment among the respondents. According to the cross-tabulation analysis, among all the 122 respondents, there were 11 teaching assistants, 62 lecturers, 33 associate professors and 16 professors. Obviously the number of lecturers almost took half of the total number of respondents and it included both the only four respondents who assigned 'very high' Valence value and the largest number of respondents who assigned 'low' Valence value to the performance assessment. Consequently, the lecturers' general perception would heavily influence the Valence value of the assessment. When it comes to the comparison of Valence mean among respondents with different professional titles, Table 9 below showed that teaching assistants, although as the smallest group, assigned the highest Valence value (3.2443) to the assessment, followed by lecturers (2.9940) and associate professors (2.9867). Professors were observed to assign the lowest Valence value (2.6016) to the performance assessment. Thus from the perspective of professional titles, this study found that performance assessments turned to be the most attractive to teaching assistants, less attractive to lecturers, even less attractive to associate professors and the least attractive to professors.

Table 9 Valence value and Professional title

		Professional title				Total
		teaching assistant	lecturer	associate professor	professor	count
Valence cl	low	1	5	1	2	9
	neither high nor low	1	29	18	10	58
	high	9	24	14	4	51
	very high	0	4	0	0	4
Total numbers		11	62	33	16	122
Valence Mean		3,2443	2,9940	2,9867	2,6016	2,9631
Std. Deviation		,59912	,63058	,55524	,60116	,60116

The whole picture of the relationship between professional titles and the perceived Valence (the attractiveness) of performance assessment could be illustrated in the following Graph 3.

Graph 3 Valence value (attractiveness) and Professional title



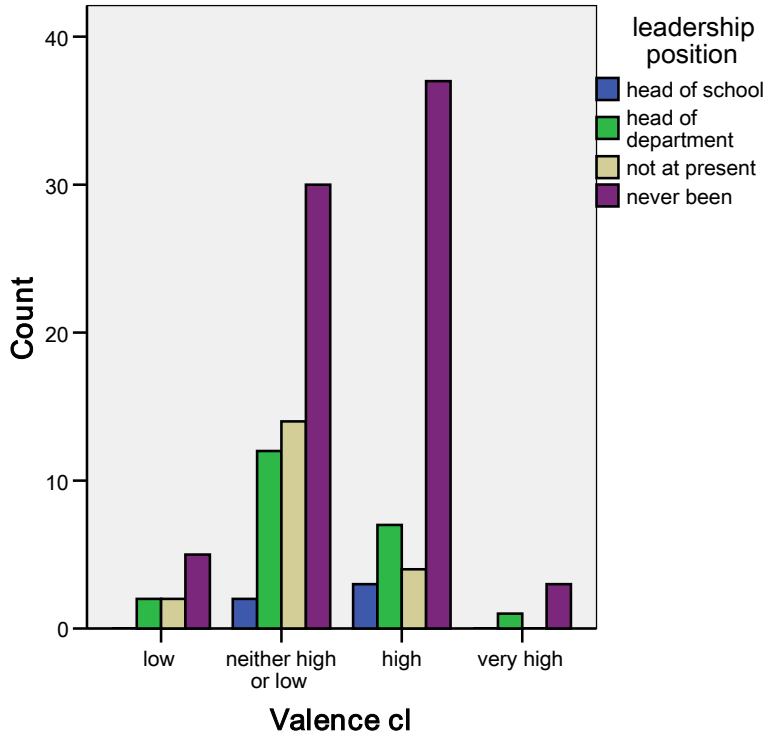
Fourth, and also the last significant factor was 'leadership position' which influenced the respondents' perception of the weight of Valence value being assigned. Based on the cross-tabulation analysis in Table10, it showed that the smallest group, with only 5 respondents (about 4%) who were holding some high level leadership positions (head of school) assigned the highest Valence value (3.2125) to the assessment. At the same time, the largest group with 75 respondents (about 61%) who had never been in any leadership positions also assigned a comparatively high Valence value (3.0467) to the assessment. The 22 respondents, holding some mid-level leadership positions (head of department or program) assigned almost an average Valence value (2.9233). Surprisingly, the lowest Valence value (2.6313) was assigned by those 20 respondents who were not at present but ever been in some leadership positions. Some follow-up interviews should be helpful to explore the deep reasons why performance assessment had mostly disinterested and discouraged this specific group of respondents. But in this study it would not be feasible to do it due to the time and resource limitation. Hence, based on the existing statistics, we could only observe that the

performance assessment was more attractive to those respondents who held some leadership positions at 'school' level and those who had never been in any leadership positions than to those who held some mid-level leadership positions or those who were not at present in any leadership positions.

Table 10 Valence value and Leadership position

		leadership position				Total
		head of school	head of department	not at present	never been	count
Valence (cl)	low	0	2	2	5	9
	neither high nor low	2	12	14	30	58
	high	3	7	4	37	51
	very high	0	1	0	4	4
Total numbers		5	22	20	75	122
Valence Mean		3,2125	2,9233	2,6313	3,0467	2,9631
Std. Deviation		,59883	,65378	,51415	,61143	,61771

Graph 4 Valence value (attractiveness) and Leadership position



The whole picture of the relationship between leadership position and the perceived Valence

(the attractiveness) of performance assessment could be illustrated in the above Graph 4.

4.2.2 Step Two: Force value analysis

According to the Expectancy theory, the weight of Force value should be determined by the combinational effect of both Valence value and the Expectancy value (e.g. the effort expected to exert). Hence, Force value analysis was also conducted among the four significant demographic factors (working years, age, professional title and leadership position) applied in Valence value analysis. The dependent variable was the individual respondent's motivation to participate in the evaluation (Fj). The two independent variables were (1) the respondents' perception about the attractiveness of the system (Vj) from Step One, and (2) the expectancy information (Ejj = level of expected effort to exert) which was provided by the answers of the third major question in the questionnaire survey (refer to the Appendix). From the statistical analysis of Force value, this study would demonstrate how much those respondents stay motivated in participating in performance assessments. The Force model results were summarized in the following descriptions.

Table 11 Force value (Motivation) and Working years

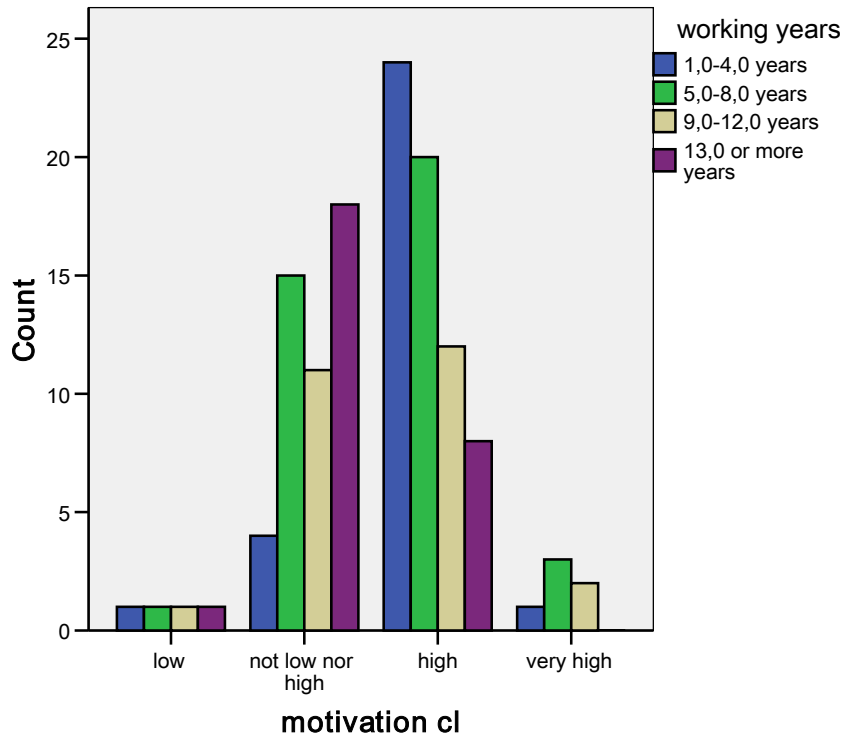
		Working years				Total
		1,0-4,0 years	5,0-8,0 years	9,0-12,0 years	13,0 or more years	count
Force (Motivation)	low	1	1	1	1	4
	Neither low nor high	4	15	11	18	48
	high	24	20	12	8	64
	very high	1	3	2	0	6
Total numbers		30	39	26	27	122
Force Mean		3,3708	3,1052	3,0865	2,8403	3,1079
Std. Deviation		,52754	,55345	,61913	,56799	,58706

First, the difference of working years was a significant factor that influenced the weight of Force value obtained by individual respondent. In Table 11, it showed that the mean of all the respondents' Force value was 3.1079, a little bit higher than 3.00 that was defined as the level of moderate motivation. In each working years group, only very few respondents (less than 9％)

assigned either ‘low’ or ‘very high’ Force value to the assessment. The group with least working years (1 to 4 years) assigned the highest Force value (3.3708) to participate in the performance assessment since 80% of the respondents in this group got a ‘high’ value for their motivation. The Force values for other working years groups, in a descending order, were the group with 5 to 8 working years (3.1052), the group with 9 to 12 working years (3.0865) and the group with 13 or more working years (2.8403). It was observed that, with the increase of working years, respondents turned to be less motivated in participation. That was to say the length of the employment was at an inverse ratio to the weight of the Force value being assigned. At the same time, this result also proved a consistence with that of the previous Valence analysis. Thus it justified the basic assumption of this study that the respondents who believed that the outcomes of the performance assessment were attractive tended to exert more effort and thus stay more motivated in participation.

The whole picture of the relationship between working years and the estimated Force (motivation) of participating in the performance assessment could be illustrated in the above Graph 5.

Graph 5 Force value (motivation) and Working years



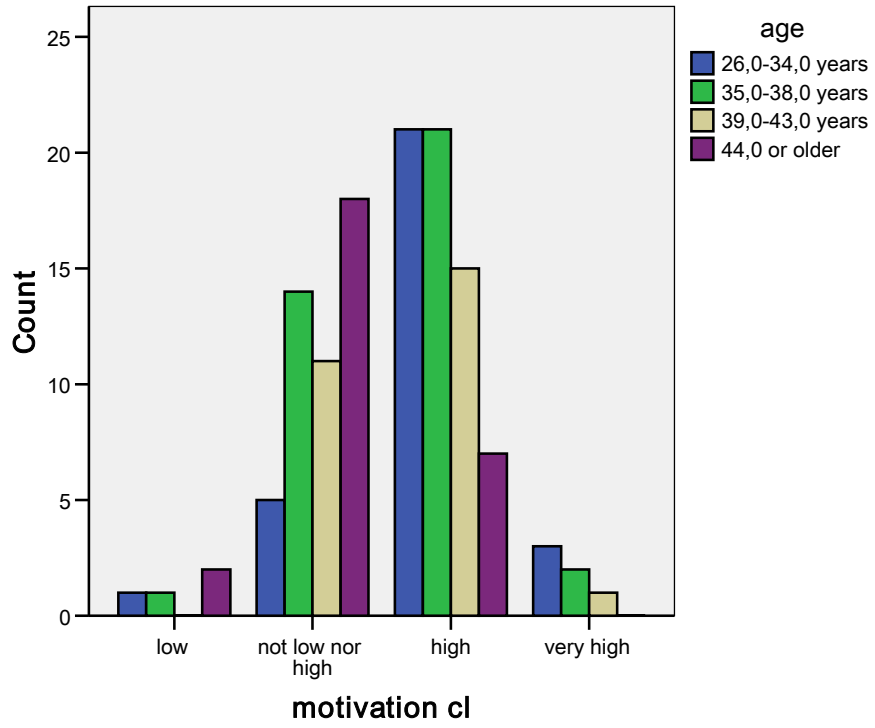
Second, as in the Valence analysis, age was another significant factor that influenced the assignment of individual's Force value to participate in the performance assessment. The Table 12 below showed that the result from the age perspective also positively correlated with previous Valence value analysis. Again, the youngest group (26 to 34 years) got the highest Force value (3.3542) while the oldest group (44 years or older) got the lowest Force value (2.7191). The age group of 39 to 43 years again, like in the Valence analysis, got a higher Force value (3.1975) than that (3.1261) of the age group of 35 to 38 years. Although these results again disproved the hypothesis that age increase absolutely led to Force decline, there was still an observable trend that with the age increasing, less and less respondents assigned 'high' Force value. Instead, more and more respondents shifted themselves to assign 'neither high nor low' Force value to the participation in the performance assessment. Combined with the result from Valence analysis this study asserted that one plausible reason that age could explain for this decline in Force value was the decline of extrinsic attractiveness as a result of attainment of higher professional titles or promotion and the proximity of retirement to the older respondents.

Table 12 Force value (Motivation) and Age

		age				Total
		26,0-34,0	35,0-38,0	39,0-43,0	44,0 or older	count
Motivation cl	low	1	1	0	2	4
	neither low nor high	5	14	11	18	48
	high	21	21	15	7	64
	very high	3	2	1	0	6
Total number		30	38	27	27	122
Force Mean		3,3542	3,1261	3,1975	2,7191	3,1079
Std. Deviation		,58310	,54718	,52522	,53570	,58706

The whole picture of the relationship between age factor and the estimated Force value (motivation) of participating in performance assessments could be illustrated in the following Graph 6.

Graph 6 Force value (motivation) and Age



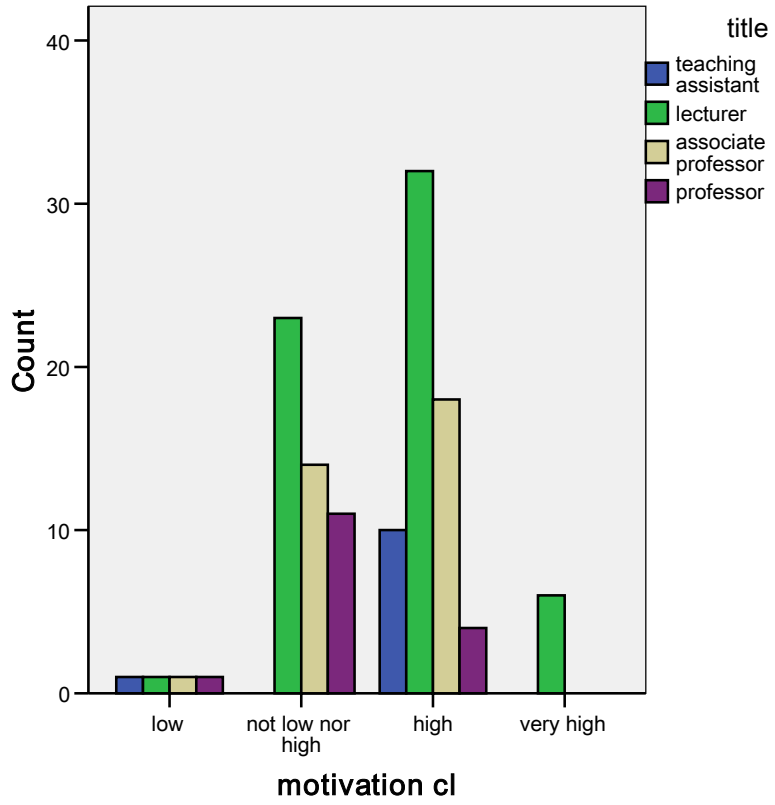
Third, professional title as a controlling factor also showed that the motivation of participating in performance assessments maintained high when the respondents kept pursuing the promotion of their professional titles, while it experienced a sharp decline when the respondents had secured the title of 'professor'. Overall, there was only very few (less than 10 %) respondents who assigned either 'low' or 'very high' Force value to the performance assessments in each title group. Most respondents assembled at the 'moderate' (neither high nor low) to 'high' level of motivation to participate. In the teaching assistant group, among the 11 respondents, only 1 respondent assigned a 'low' value to the assessment. All the other 10 respondents assigned 'high' value to their motivation. The 'lecturer' group consisted of only 6 respondents who assigned 'very high' value and half of the respondents who assigned 'high' value to the assessments. In the associate professor group, there were still more than half (18) of the respondents who maintained a high level of Force value. However, in the professor group, the majority of respondents assigned a moderate weight to their motivation in participation and the mean of the overall Force value fell down to 2.6302, much lower than the

average. It suggested that the respondents with lower professional titles tended to be more motivated in participation On the contrary, the title of ‘professor’ was no longer attractive to the respondents who had already been ‘professors’ and would inevitably exert a negative influence to their perception of overall Force value to the performance assessments.

Table 13 Force value (motivation) and Professional title

		Professional title				Total
		teaching assistant	lecturer	associate professor	professor	count
Force value (motivation)	low	1	1	1	1	4
	neither low nor high	0	23	14	11	48
	high	10	32	18	4	64
	very high	0	6	0	0	6
Total number		11	62	33	16	122
Force Mean		3,3977	3,1660	3,1338	2,6302	3,1079
Std. Deviation		,52782	,58923	,51694	,54030	,58706

Graph 7 Force value (motivation) and Professional title



The whole picture of the relationship between professional title and the estimated Force value (motivation) of participating in the performance assessment could be illustrated in the above Graph 7.

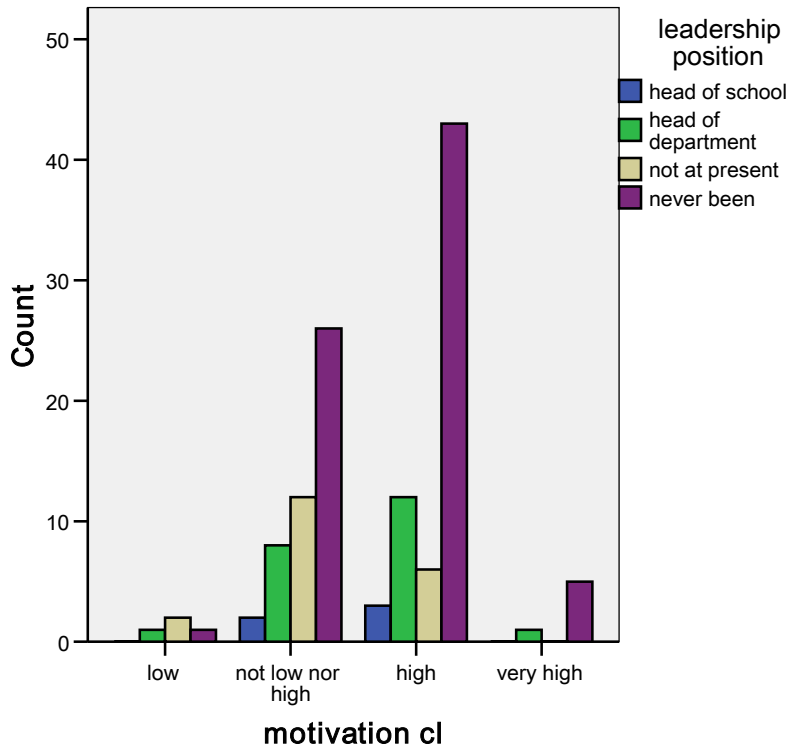
Fourth, leadership position analysis, as expected as well, offered correlated result with previous Valence analysis. The same as that in Valence analysis, the group of 'head of school' assigned the highest value (3.2500) to the Force and the group of 'not at present (in any leadership positions)' assigned the lowest value (2.7365) to the Force in participating in the assessment. The group of 'never been in any leadership positions', with the largest number of respondents (75), assigned a comparatively high Force value (3.2203) to the assessment. The group of lower level leadership position (like the head of department) expressed their moderate motivation by assigning a Force value of 3.0303 (a little bit higher than 3.00 which stands for neither high nor low motivation) to the assessment. The overall result in Table 14 indicated that assuming different level of leadership positions and whether assuming a leadership position or not were significantly influencing the assignment of Force value in participation of the performance assessment among university academics.

Table 14 Force value (motivation) and Leadership position

		Leadership position				Total
		head of school	head of department	not at present	never been	count
Force value (motivation)	low	0	1	2	1	4
	neither low nor high	2	8	12	26	48
	high	3	12	6	43	64
	very high	0	1	0	5	6
Total number		5	22	20	75	122
Force Mean		3,2500	3,0303	2,7365	3,2203	3,1079
Std. Deviation		,59875	,61091	,51149	,56376	,58706

The whole picture of the relationship between leadership position and the estimated Force (motivation) of participating in the performance assessment could be illustrated in the following Graph 8.

Graph 8 Force value (motivation) and Leadership position



Thus far, the data analysis shows that performance assessments to academics in the case university, generally speaking, has the potential to contribute to motivating academics to participate. However, the potential is not fully realized in the current application. As it is clearly indicated that academics tend to accept that most of the potential outcomes of the performance assessment are attractive to them. Even though they perceive that the probabilities of achieving those outcomes are comparatively low, academics are still willing to exert considerable effort to achieve them. It means that the academics have generally agreed the importance of performance assessments and expressed certain degree of motivation to participate. But it is far from convincing to claim that academics in this university have *strong* motivation to participate in performance assessments since both the Valence and Force value assigned by the respondents did not show strong positive inclination (higher than moderate level value of 3.00). So it is safer to say that there is still a lot of work to do for the university mangers or assessors to further effectively motivate the academics to participate in performance assessments in the future.

CHAPTER 5 CONCLUSIONS AND SUGGESTIONS

5.1 Discussions and Conclusions

The following discussions contain the major conclusions that this study has drawn from the previous analysis. So far, all the empirical evidences and theoretical inferences have successfully led this study to the answering of the two-fold research questions raised in the introductory Chapter. One is what are university academics real expectations from participating in performance assessments? The other is that do university academics' expectations influence their motivation to participate in performance assessments? In the following sections, the concluding statements at the beginning of each sub-section will serve to answer the first fold of the research questions. The examples and illustrations derived directly from the statistical analysis will serve to answer the second fold of the research questions.

5.1.1 Recognition and respect versus material rewards

First, academics expect more academic or professional recognition and respect from performance assessments than any other external rewards. The eight potential outcomes functioning as motivational factors presented in this study are actually the possible rewards of the performance assessment, including four internal rewards (peer recognition, students respect, improved teaching and improved research) and four external rewards (salary raises, higher professional title, leadership position and other developmental resources or opportunities). On the one hand, of the eight motivations examined in this study, academics ranked first 'peer recognition' and 'students respect' was third most valued reward. Correspondingly, they also assigned the highest probabilities of achievement to the same two rewards (outcomes) in the response to the second question (refer to the appendix). Thus, these two outcomes get the highest Force value among other motivational factors. It proves that academics tend to believe gaining recognition and respect is the factor that most likely leads to the satisfaction to the performance assessment.

On the other hand, academics ranked as the least attractive outcomes of the performance

assessment to the promotion to ‘leadership position’ and the improvement of teaching. It is consistent with the long-established academic value in universities that academic work is the most valued responsibility for being academics. Recognitions from fields other than academic or professional would not be considered as significant as academic work.

In addition, academics view their various activities in relation to their preparation, the effort involved, and the material rewards and prestige that ensue. For the improvement of teaching, it has been generally perceived that doing research and contributing to public service bring greater recognition and opportunity for advancement than teaching does. Those who establish reputations in these areas are less vulnerable to administrative intervention. Ironically but true, students also allocate more of their respect to the teachers by judging whether their teachers enjoy high academic reputation within the discipline, how much they publish or how many research projects they are hosting rather than how well they could teach in the classrooms. Thus performing good in teaching promises neither great reward nor prestige and may operate against rather than for one’s career. Even designation as an outstanding teacher has limited and passing prestige so that improvement may not be worth the effort. So to academics, the performance assessment and the accompanying demands for teaching improvement require an extra effort or a reallocation of effort that they do not see as especially beneficial or even possibly productive.

5.1.2 Support versus control

Second, academics expect managerial support rather than bureaucratic coerce for their personal career development from the participation in performance assessments. The data analysis suggests that performance assessment can be linked to the reward structure of academics, only with the emphasis that improvement and development are the first concerns. After all, there is not and will never be a perfect performance assessment system, the best way to motivate academics to cooperate is that the assessment activities be broadly conceived as a basis for improvement, not the managerial decision-making. From the perspective of academics, the availability of the performance assessment is primarily determined by whether it could promote a variety of incentives that positively recognize academics’ progress and

development, independent of their previous opportunities, training, or status.

What's more, this study also echoes with numerous previous researches that academics tend to show reactance or resistance if they believe their academic value had been offended by managerial intervention. Hence, it is recommended by this study that the Valence value of performance assessments could be highly increased if the assessors are to modify them to reduce to a minimum the sense of a management-oriented procedure, while emphasizing the focus on the individual development. By making a favorable link between personal needs and managerial activities in the minds of academics, the assessors will use the assessment more effectively to motivate academics' participation.

Especially the evidence that academics assigned high Valence value to 'other resources and research improvement' can better support this argument. For example, 'other resources', typically including financially supported trips to advanced academic conferences or priority to studying abroad, are considered advantageous resources for personal development in the case university and also in most other Chinese universities under the current circumstance. Obtaining this extra opportunity could help prove and enhance the individual academics' competitive capacity in achieving their career goals. Another example is that 'improving research' has also widely received emphasis among university academics. In the survey data, research improvement ranked first in the level of effort that academics are willing to exert. It is not only because research productivity has almost been agreed upon as the most important performance indicator to evaluate university academics' effectiveness in the new managerial era, but more importantly, because academics believe that doing research is primarily for satisfying their academic interest and meeting their personal development demands rather than managerial requirements.

5.1.3 Practical goals versus flyaway

Third, academics expect practical goals (or rewards) that are perceived to be achievable from participating in the performance assessment. Apart from the value of the internal rewards to the individual, another aspect to the motivational strength of the reward should acquire equal importance. That is the probability that the reward will occur if academics are successful in

achieving the goal to which the reward is attached. After all, the data analysis results do not show that the internal rewards were the only important factors in explaining the variations in motivation to participate among academics. We suppose that this is because all the academics are highly motivated by intrinsic recognition and the standard deviation of the Valence of the assessments happens to be relatively low. Thus, the difference in the total Force value in the second step of analysis should be explained by the expectancy factors. That is university academics tend to perceive that the probability of achieving the potential outcomes of performance assessment is low. It could negatively influence their motivation to participate. So managerial strategies should be developed and implemented to guarantee that the attractive outcomes are achievable.

For instance, academics ranked 'other resources' as their second most valued reward. However, their subjective probability of receiving them from participating in the assessment ranked 6th out of 8. It showed that the university management has not established a strong link in the minds of academics between performance assessment participation and the assurance of achieving the expected goals. Thus, the motivational effect of the goal-achievement aspect of the performance assessment is limited. The university could, therefore, increase the motivational impact of developmental opportunities by making a clearer link between the reward of developmental opportunities and performance effectiveness. One possibility is to assure academics that they will receive a kind of personal developmental opportunity once they prove their effectiveness in the performance assessment.

Taking the 'salary raise' as another illustration, academics ranked 'salary raises' among the least attractive outcomes of the performance assessment, with least probability of achievement and the least effort expected to exert. It is unreasonable to conclude that academics in Chinese universities are really well paid and do not consider salary raise as attractive at all. It is mainly because the current salary distribution scheme in the case university is comparatively rigid and subject to complicated regulations and principles. Although achievement-based grants and awards have been introduced by the assessment committee, they are relatively small in terms of monetary gains, and limited to a very few "lucky potatoes". It makes the promise of salary raises turn to be very unattractive

unfortunately. Thus, the academics showed low motivation to increase their salary via participating in the performance assessment.

Viewed in other way, the major challenge facing the assessors is to avoid setting up an elaborate system of goals and rewards with low probability of achievement. These considerations suggest that providing attractive rewards is nothing problematic for motivating the academics, whereas setting realistic goals, maximizing perceptions that achieving the goals will lead to positive outcomes, minimizing stress reactions, and providing enabling conditions, that is where effort and attention need to be focused. After all, motivational impact is not guaranteed simply by promising academics a reward without developing any systemic and coherent approaches to support goal attainment.

5.1.4 Adjustable schemes versus rigid mode

Fourth, academics expect flexible and adjustable performance assessment schemes to meet their diverse needs under various practical circumstances. According to the data analysis results, working years, age, professional titles and leadership positions are all very important indicators to tell the variance of motivation levels from different respondents to participate in performance assessments. There is a general pattern of motivation decline with the increase of age, working years and the attainment of the highest professional title (Professor). It shows that academics tend to exert different effort to try to achieve different potential outcomes under different circumstances. Thus, it is assumed by this study that one set of uniformed assessment scheme will not work well for a comprehensive and candid evaluation to different individual academics' performance effectiveness. Regardless of rank, it is very likely that academics are at various levels of competence in different facets of their work, whether this is teaching or research. Consequently, the challenge for the development of performance assessment schemes is to avoid a focus on specific areas (such as quantity over quality, or research over teaching), or to some absolute standards.

For example, teaching assistants or novice academics are always under strong pressure in changing their low status in the university in order to achieve their career goals. Hence, they are more likely to feel motivated to participate if the performance assessment could help them

get peer recognition, student respect, training opportunities, enhance research productivity, promote their professional titles, etc. For professors or the academics who are approaching to their retirement, however, some outcomes like professional title promotion will naturally lose their attractiveness. In short, academics feel more motivated to participate in the assessment activities as long as they could offer the outcomes consistent with their preference or expectations. Therefore, in order to achieve the purposes of performance assessment as the assessors claimed, this study suggests that the criteria and scheme used to assess professors should not be the same for the assessments of teaching assistants and others.

5.1.5 Practical recommendations to university management

From the above discussion, this study convinces that university academics' expectation is a crucial factor to determine their motivation to participate in performance assessments. University academics would feel more motivated to participate in performance assessment if the potential outcomes are consistent with their expectations. Consequently, toward the goal of better motivating university academics to participate in the future performance assessments, this study makes a number of practical recommendations to the university managers or assessors.

First, consider listing prominently the attractiveness of the potential outcomes of the performance assessment on the instrument. This will inform the academics of the positive purposes of the assessment. Second, make sure the claimed purposes of the performance assessment are consistent with academics' expectations (and they believe that the assessment will truly be used for these purposes), so that the academics will assign a high valence to the assessment. Third, remember to motivate academics to participate in a healthy competition for improving and innovating their academic work and try to avoid chasing for some superficial criteria or just busy themselves with maximizing their performance on some specific indicators. Fourth, try every means to avoid academics' passive acceptance of the assessments. Academics should be given appropriate and sufficient opportunities to be involved in setting up assessment scheme, procedure, techniques, and feedbacks. Fifth, analyze conceptually what could emerge as unintended negative outcomes and design strategies to monitor such outcomes, rather than

assuming that only the intended positive result will eventuate.

5.2 Summary and suggestions for further research

5.2.1 Summary

In this study, we employed expectancy theory (Vroom, 1964) to examine the impact of various motivational factors on academics' participation in performance assessments in a Chinese university context. The survey data collected by email questionnaires provided a good overall explanation of university academics' motivation to participate in the performance assessment. The Valence model significantly explained the perception of the attractiveness of the performance assessment. Further, the Force model provided a good explanation of university academics' motivation to participate in the performance assessment. By the successful application of expectancy theory, this study achieved a better understanding of the behavioral intention (motivation) of academics' participation in the performance assessment activities.

Our empirical results show that academics have strong preferences for the uses of performance assessment and these preferences are remarkably consistent across individuals. It also shows that academics with higher expectations for achieving the outcomes of performance assessment that are attractive to them tend to obtain higher Force value (or motivation) to participate than do those with lower expectations from the performance assessment. Since active academic staff participation is an essential antecedent of the success of assessing university academics' performance effectiveness, this knowledge of academics' motivation must be considered thoughtfully when the system is implemented. If, however, academics are kept ignorant of the use of performance assessment or if the performance assessment is used for purposes that academics do not value or if they see no visible results from their participatory efforts, they will cease to exert effort in participation.

5.2.2 Suggestions for further research

Six suggestions are advanced for future research in this area. First, given that perceptions and situations of "attractive outcomes and motivational force" are subject to change over time,

a longitudinal approach may be a better method of monitoring academic' perception of the availability of the performance assessment in a certain university context. Second, this study did not investigate differences in the perception of previous and current assessment schemes on the effectiveness of systematic improvement. It is conceivable that the views of those who presently join the new generation of assessment may vary from those who have had the privilege of successful participation in previous rounds of evaluation. It is suggested that a future study should specifically examine and differentiate the opinion and attitude of former success models and current success hunters. Third, this study could be replicated to further examine the extent to which satisfaction with the assessment to academics performance effectiveness varies by academic discipline, salary, rank, and level of education. Fourth, a field research design should be explored to conduct a thorough investigation of the attitude of academics towards university managers or assessors and the impact of faculty dissatisfaction with the performance assessment activities. Rather than focusing on only one case university, the field study approach may require the investigator to select more universities in the country in order to ensure adequate sample representation, thus increasing the generalizability of the findings. Fifth, the extent to which academics' expectations, perception of academic freedom, and attitude towards new managerial assessment vary by the current dominant political system is worthy of investigation. Finally, fairness and justice of the performance assessment, failure or punishment avoiding attitude and other relative topics are still worthy of consideration in further related researches.

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APPENDIX

The Attached Questionnaire:

Research topic:

Expectancy and University Academics' Motivation to Participate in Performance Assessments

I am currently conducting a research study towards my Master of Philosophy in Higher Education. The aim of this study is to investigate the relationship between university academics' intrinsic motivation and their participation of currently used performance assessment at the institutional level, particularly to testify the Hypothesis that the more intrinsically motivated academics tend to be more cooperate in the process of performance assessment.

Eight potential outcomes from performance assessment to university academics are listed for testing. We want to know how attractive for you to participate in the assessment in each given situation. You are asked to follow three major steps. You must first decide how *attractive* are the eight potential outcomes of the assessment for you and then estimate the *probability* of achieving those outcomes. Finally, please indicate how much *effort* will you make in completing the assessment. There are no "right" or "wrong" responses, so express your opinions freely so that a true picture of the perceptions of university academics may be gained.

I would appreciate it if you would be so kind as to complete the questionnaire, to indicate your views. It should not take more than ten minutes to complete. This data will enable me to make recommendations with regard to possible strategies for minimizing resistance to performance assessment from academics and maximizing the anticipated positive results of the performance assessment in university context. You are welcome to add any comments you may have, in the allocated areas.

Please note:

1. All individual responses and comments will be kept confidential. However, the final results will be made available for academic reference and managerial improvement.
2. Please be kind and be sure to return your answered questionnaire to misszhangjie@gmail.com within 7 days!

Thank you ------ your effort is much appreciated!

Jie Zhang (Apr.7, 2008)

SECTION A: BIOGRAPHICAL INFORMATION

Please indicate your response by filling the blanks or choosing a representative Number assigned below: (**You are assured of complete confidentiality)**.

1. How many years have you been working in this university? _____ years.

2. Please indicate your age: _____

3. Which Faculty/Department are you in _____

4. What is the representative Number of your Title level: _____

Number	1	2	3	4	5
Title	Teaching assistant	Lecturer	Associate professor	Professor	Others

5. What is the representative number of your management / leadership position:_____

Head of School	1
Head of Department	2
Not at present: been in such a position before	3
Never been in a leadership position.	4

SECTION B : The Three Major Steps

Step One: Based on your own perception, **please assign a scale number standing for degree of attractiveness (from 1 to 5) to each of the eight potential outcomes** to you of participating in the performance assessment. Where:

Scale	1	2	3	4	5
Meaning	Very Unattractive	Unattractive	Neither Unattractive Nor Attractive	Attractive	Very Attractive

____ A, Improve the quality of teaching-related activities
____ B, Improve the quality of research-related activities
____ C, Achieve peer recognition
____ D, Win students' respect
____ E, Get better salary raises
____ F, Get promoted to higher professional titles (eg. full professor)
____ G, Get promoted to (more) important leadership positions
____ H, Get other competitive career development resources or opportunities (eg. Supported traveling to high-level academic conferences or supported studying or training abroad)

Step Two: Please **indicate the probability (or likelihood) of achieving the eight potential outcomes** by participating the performance assessment. Where:

Scale	1	2	3	4	5
Probability	10％ Very Low	30％ Low	50％ Neither High Nor Low	70％ High	90％ Very High

____ A, Improve the quality of teaching-related activities
____ B, Improve the quality of research-related activities
____ C, Achieve peer recognition
____ D, Win students' respect
____ E, Get better salary raises
____ F, Get promoted to higher professional titles (eg. full professor)
____ G, Get promoted to (more) important leadership positions
____ H, Get other competitive career development resources or opportunities (eg. Supported traveling to high-level academic conferences or supported studying or training abroad)

Step Three: Indicate the **level of effort you would exert** to participate in the performance assessment.

Scale	1	2	3	4	5
Level of Effort	Zero Effort	Little Effort	Moderate Effort	Much Effort	Great Deal of Effort

____ A, Improve the quality of teaching-related activities
____ B, Improve the quality of research-related activities
____ C, Achieve peer recognition
____ D, Win students' respect
____ E, Get better salary raises
____ F, Get promoted to higher professional titles (eg. full professor)
____ G, Get promoted to (more) important leadership positions
____ H, Get other competitive career development resources or opportunities (eg. Supported traveling to high-level academic conferences or supported studying or training abroad)

SECTION C: Comments or Additional Suggestions

Please leave anything that you would like to present here in the blanks.

_____

_____

_____

THANK YOU FOR YOUR PARTICIPATION!