AN EXPECTANCY THEORY MODEL FOR HOTEL EMPLOYEE MOTIVATION: THE MODERATING ROLE OF COMMUNICATION SATISFACTION

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ABSTRACT

This study examines expectancy theory in hotel employee motivation and investigates the communication satisfaction as a moderator that strengthens the effects of components of the expectancy theory (expectancy, instrumentality, and valence) on work motivation. An instrument of hotel employee motivation was developed through a literature review, an elicitation study, and a pilot test with hotel employees. The survey was administered to hotel employees from 56 mid-scale and upper-economy scale hotels. Of 301 surveys returned, 289 were used for data analysis. Descriptive analysis, principle component analysis, confirmatory factor analysis (CFA), structural equation modeling (SEM), and moderating effect check by SEM were performed to test the proposed hypotheses.

A modified expectancy theory (expectancy, extrinsic and intrinsic instrumentality, extrinsic and intrinsic valence) better explained the process of hotel employee motivation. Expectancy, intrinsic instrumentality, extrinsic and intrinsic valence had significant positive effects on hotel employee motivation. Although suppressor effect suppressed extrinsic instrumentality, extrinsic instrumentality had a negative effect on work motivation when intrinsic instrumentality is controlled. The findings indicated that intrinsic variables should be emphasized more to motivate hotel employees. Prompt feedback and ongoing motivation to help employees feel accomplished and good about their work and themselves are the best motivators for hotel employees.

Communication satisfaction was not a moderator using the moderating effect check. However, the high communication satisfaction group had more positive attitude toward work motivation than low communication satisfaction group did. High

communication groups are more likely to work harder and willing to enhance their productivity and the quality of their work when they are motivated. This study recognized the positive effect of communication in motivating employees. Hotel managers should improve their communication skills, learn to communicate accurately and promptly, and organize their communication, listen to employees carefully, help employees with problems, and truly care for employees.

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CHAPTER ONE

INTRODUCTION

What makes hotel employees motivated and satisfied with their jobs? The hotel industry has long struggled with the problem of high employee turnover. The nature of the work, low pay, long working hours, and low status of the positions contribute to high turnover. Thus, employee motivation is an on-going issue for managers in hotel operations.

Employee motivation also has been the focus of research in academic circles as scholars seek to understand what motivates employees in a variety of work settings. Effective communication between employer and employee is vital to understanding employee needs. Employee satisfaction with the communication process could be a factor in the complex process of motivation.

Expectancy theory (Vroom, 1964) suggests that motivation can be calculated by expectancy × instrumentality × valence. This study was designed to examine the motivation of hotel workers using expectancy theory while testing the influence of communication satisfaction as a moderator.

Motivation in the hotel industry

Because the work is labor intensive and turnover is high, the hotel industry is characterized by low job security, low pay, and limited opportunities for advancement (Byrne, 1986; Knight, 1971). Understanding hotel worker attitudes and motivation has become an important issue for research in the industry. Studies have identified what factors motivate hotel employees (Johnson, 1986; Charles & Marshall, 1992; Simons &

Enz, 1995; Siu, Tsang, & Wong, 1997; Wong, Siu, & Tsang, 1999). Good wages, good working conditions, job security, and opportunities for advancement and development all help motivate hotel employees. Other motivation factors include interesting work, trust, appreciation, recognition, loyalty to employees, feeling of being in valued, tactful discipline, and sympathetic personal help. Lee-Ross (1995) supported the concept of "internal work motivation," which is to intrinsic motivation in that the more effort is expended on the jobs, the more motivated they would become.

Hotel employees require intelligence, job knowledge and skills, and time management ability but without motivation, an employee will not advance in his/her career. Motivation is complex, often combining personal, money, relationship, and career goals. Motivation factors in the hotel industry have been identified as pay, monetary bonuses, or benefits; opportunity for advancement and promotion; job responsibility; recognition from managers, colleagues, customers, and family; challenge, feelings of accomplishment and development of self-esteem; working conditions, work schedule, and job security; and being regarded as a good employee (Wong, Siu, & Tsang, 1999). Motivating an employee has never been an easy job. Each employee has his or her needs, expectancies, capabilities, desires and accomplishments. Thus, a goal of this study is to gain more knowledge about what motivates hotel employees.

Conceptual background

The expectancy theory of motivation, originally developed by Vroom (1964), is a theory explaining the process individuals use to make decisions on various behavioral alternatives. Expectancy theory is presented as follows:

Motivation Force = Expectancy × Instrumentality × Valence

Motivation force is force directing specific behavioral alternatives, which are suggested when deciding among behavior options. Individuals select the option with the greatest motivation forces. The motivational force for a behavior, action, or task is a function of three distinct perceptions: Expectancy, Instrumentality, and Valence. Expectancy is the perceived probability that effort will lead to good performance; variables affecting the individual's expectancy perception include self-efficacy, goal difficulty, and perceived control. Expectancy that one's effort will lead to a desired performance is based on past experience, self-confidence, and the perceived difficulty of the performance goal. Instrumentality is the perceived probability that good performance will lead to desired outcomes; trust, control, and polices are variables affecting the individual's instrumentality perception. The instrumentality is the belief that if one does meet performance expectation, he or she will receive a greater reward. Valence refers the value the individual personally places on rewards: the function of needs, goals, values and preferences. Expectancy theory generally is supported by empirical evidence (Tien, 2000; Vansteenkiste, Lens, & De Witte, 2005) and is one of most commonly used theories of motivation in the workplace (Pritchard Campbell &, 1976; Heneman & Schwab, 1972; Mitchell & Biglan, 1971).

Expectancy theory provides a general framework for assessing, interpreting, and evaluating employee behavior in learning, decision making, attitude formation, and motivation (Chen & Lou, 2002). However, Mitchell (1974) suggested that the construct validity of the components of expectancy theory remains little understood. The results of the meta-analysis by Van Erde and Thierry (1996) suggest that Vroom's model does not

yield higher effect sizes than the components of the models, implying that the model lacks validity. Van Erde and Thierry (1996) suggested using VIE components rather than the model formulation. One of objectives of this study is to apply expectancy theory to better understand employee motivation and confirm the validity of expectancy theory. Applying expectancy theory to hotel employee motivation should allow academia and industry to better explain how employee perceptions of motivation and individual decision-making change behavior at work.

Communication is probably the most central process in organizations (Frone & Major, 1988). Communication satisfaction is defined as the satisfaction with communication that is linked to an employee's position in the organization (Mount & Back, 1999). In this present study, communication satisfaction is proposed as a moderator to evaluate the relationship between employee work motivation. Satisfaction with the extent to which communication in the organization motivates and stimulates employees to improve performance, which is the moderator between expectancy and work motivation. Satisfaction with the extent to which communication that supervisors and managers are open to ides, listen and pay attention, and offer guidance for solving job-related problems and feedback, such as reflect on pay raise, bonus and opportunity for advancement, so employees clear understand the greater reward they would get if they improve their performance, which is the moderating effect of instrumentality on work motivation. As well as the moderating effect of valence on work motivation that satisfaction with effective and organized communication motivate employees to work hard to get their desired outcomes.

STATEMENT OF PROBLEM

Hotel managers seek to increase employee motivation. Why is employee motivation important to both employees and management? How does management motivate employees? Does management really understand employee needs, and does management motivate employees effectively? Do motivated employees work harder, and are they happier with their jobs? Does employee motivation contribute to job performance and overall effectiveness? Research has not fully explained employee motivation, nor have the theories. A goal of this study is to build a theoretical base for understanding employee motivation in the hotel setting and encouraging continued employee motivation.

The central premise of the expectancy theory is that people make behavioral choices that are calculated to allow them to achieve desired outcomes (Porter & Lawlerm 1969; Vroom, 1964). Employees will be more motivated to adjust their behavior to earn a valuable valence than they will to earn a less valuable valence. There are two points discussed in the expectancy theory. First, the expectancy theory considers the way in which individuals perceive their environment. As a result, the environment and organizational culture are critical to influencing the function of the expectancy theory. Second, according to Vroom (1964), the strength of force for an individual to perform an act is the combined function of expectancy, instrumentality, and valence. If any one perception is zero, the whole equation becomes zero. Therefore, another objective of this study is to modify the expectancy theory to a model with constructs of employee motivation, expectancy, instrumentality, and valence. The model and the constructs will be tested for validity specifically with hotel employees.

Communication has been recognized for its contribution to relationships between management and employees. We propose that communication satisfaction moderates the model of employee motivation. Satisfaction with communication strengthens expectancy, instrumentality, valence in employee motivation. Hence, we further extended the original model by adding communication satisfaction as a moderator. Despite the implications of employee motivation for the hotel industry, relatively little research has focused on hotel employee motivation based on theoretical concepts. Most previous studies have concentrated on identifying the factors motivating employees and suggesting implications for further improving employee motivation. Applying motivation theories and models to the process of employee decision making has not commonly been done. The following research questions will be explored in this study:

- How important of motivation factors to employees working in the hotel industry?
- What are the determinants influencing the motivation of hotel employees?
- Is the expectancy theory the appropriate theory for developing a conceptual model of hotel employee motivation?
- Does adding communication satisfaction as a moderator to the proposed employee motivation model truly advance the understanding of the specific determinants of hotel employee motivation?

PURPOSE AND OBJECTIVES

Employee motivation in hospitality research has focused on simply identifying factors motivating employees. Little research has been devoted to developing a theory

for the process of employee motivation, and the lack of a strong theoretical framework may negatively influence the validity of research in this area.

The main purpose of this study is to gain more understanding of employee motivation and its decision-making process by testing the proposed model with theoretical support. The specific objectives for this study are the following:

1. Examine the extent of importance of each motivation factor to hotel employees.
2. Explain hotel employee motivation by employing the expectancy theory.
3. Test the extent to which each component (expectancy, instrumentality, valence) influences hotel employee motivation.
4. Examining the moderating role of communication satisfaction on the relationship between employee motivation and its determinants (expectancy, instrumentality, valence).

RESEARCH MODEL AND HYPOTHESES

To achieve the research objectives, a model of employee motivation was developed based on the expectancy theory (Figure 1). Further, the model was extended with communication satisfaction. The research hypotheses used in this study are summarized in two parts: model development and moderator effect check. Detailed explanations of each hypothetical relationship among the constructs in the two models are presented in Chapter 2.

Hypothesis 1: Expectancy has a positive effect on hotel employee motivation.

Hypothesis 2: Instrumentality has a positive effect on hotel employee motivation.

Hypothesis 3: Valence has a positive effect on hotel employee motivation.

Hypothesis 4: The higher the level of communication satisfaction, the more positive is the effects of expectancy, instrumentality, and valence on hotel employee motivation.

SIGNIFICANCE OF THE STUDY

This study makes theoretical and practical contributions to the academic and the hotel industry. On the theoretical side, this study examines the credibility of expectancy theory as applied to employee motivation in the hotel industry. It also confirms the validity of measurement scales of constructs of the expectancy theory. Thus, this study extends the model by adding communication satisfaction as a moderator to strength the process of employee motivation. It is important to incorporate existing theoretical frameworks to extend the understanding of employee motivation and its processes. Advanced statistical data analysis will help us examine the moderator effect and will be used to provide validity and reliability as well as to enhance the understanding of theoretical development in research.

Practical implications of this study for the hotel industry are important. Both hotel employees and the management acknowledge the importance of employee motivation and communication, and both will benefit from a better understanding of forms of employee motivation. Hotel employees will be motivated in the way they want to be motivated to do their jobs and to enjoy their jobs. Hotel management will implement employee motivation more effectively, and effective employee motivation will impact employee performance and service quality directly or indirectly. The

proposed employee motivation model can help hotel management understand the needs and wants of employees and develop effective motivation plans for employees. Furthermore, the research model also can be applied to motivate individuals at the managerial level in the hotel industry.

DEFINITION OF TERMS

Expectancy theory: The expectancy theory of motivation, originally developed by Vroom (1964), explains the process individuals was to make decisions on various behavioral alternatives. Expectancy theory is presented as follows:

$$\text{Motivation Force} = \text{Expectancy} \times \text{Instrumentality} \times \text{Valence}.$$

Employee motivation: The act or process of an employee being moved to work.

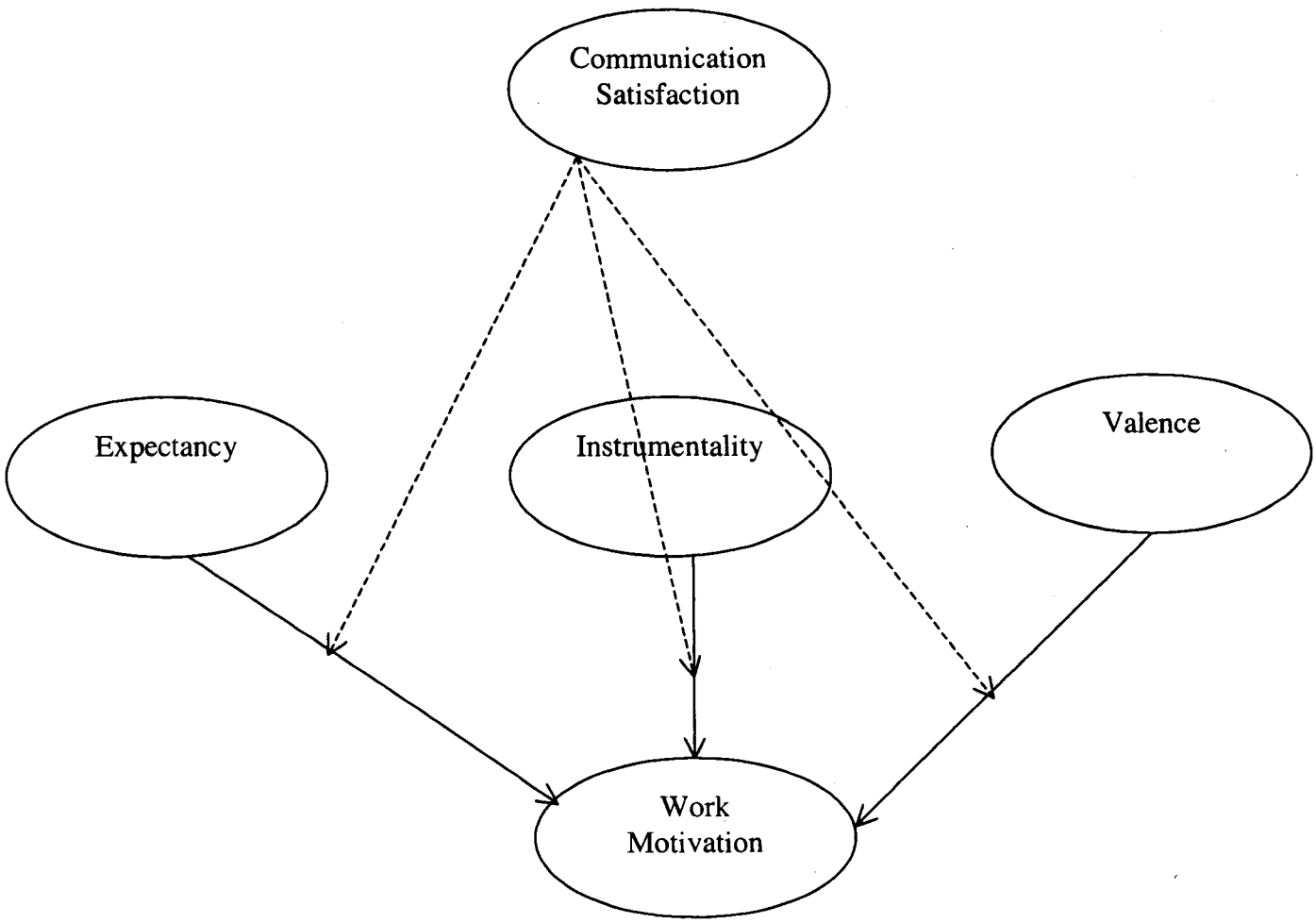
Expectancy: Expectancy is the perceived probability that effort will lead to good performance; variables affecting the individual's expectancy perception include self-efficacy, goal difficulty, and perceived control. It is the expectancy that one's effort will lead to desired performance, which is based on past experience, self-confidence, and the perceived difficulty of the performance goal.

Instrumentality: Instrumentality is the perceived probability that performance will lead to desired outcomes; trust, control, polices are variables affecting the individual's instrumentality perception. Instrumentality is the belief that if one does meet performance expectations, her or she will receive a greater reward.

Valence: Valence refers to the value on individual personally places on rewards and is the function of needs, goals, values, and preferences.

Communication satisfaction: satisfaction with communication that is linked with the employee's position in the organization (Mount & Back, 1999).

Figure1: Model of Hotel Employee Motivation with Expectancy Theory



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CHAPTER TWO

LITERATURE REVIEW

The chapter reviews the literature on the expectancy theory and provides a conceptual model for employee motivation. The review comprises 5 sections: 1) employee motivation in the hotel industry; 2) motivation theories; 3) an introduction to expectancy theory; 4) review of research on the expectancy theory; and 5) communication satisfaction.

EMPLOYEE MOTIVATION IN THE HOTEL INDUSTRY

Because it is labor intensive and has high turnover, the hotel industry is characterized by low job security, low pay, and limited opportunities for advancement (Byrne, 1986; Knight, 1971). Understanding hotel workers' attitudes and motivation has become an important issue for research in the industry. In Charles and Marshall's study (1992), good wages and good working conditions were ranked as the first and second priorities of 255 Caribbean hotel employees. The results were supported by Simons and Enz (1995), who conducted a survey of 278 hotel employees in 12 different hotels throughout the USA and Canada. Good wages, job security, and opportunities for advancement and development were ranked as the three most important factors by these hotel workers, followed by good working conditions, interesting work, appreciation, loyalty to employees, feeling of being in one things, tactful discipline, and sympathetic personal help.

Motivation using money was adopted in the form of a bonus and pension incentive plan by the Four Season hotels (Johnson, 1986). Different categories of employees received different ranges of cash incentives, making the Four Seasons Hotel

chain a company with a reputation for offering relatively high wages, generous benefits, and recognition.

Using recognition as a motivational tool is well accepted in the service industry (Wong, Siu, & Tsang, 1999). Westin Hotels and Resorts used an employee-of-the-month incentive program to motivate their staff (Jaquette, 1992). Whenever an employee's name appeared on a guest comment card, a thank-you letter and $5 were given to that employee by the management. Lee-Ross (1995) supported the concept of "internal work motivation". Similar to intrinsic motivation, internal work motivation means that the more effort expended by workers on their jobs, the more motivated they become. Siu, Tsang, and Wong (1997) examined what motivated Hong Kong's hotel employees. The top three factors for Hong Kong employees were opportunities for advancement and development, respect and trust in the workplace, and good wages.

Certain demographic variables appear to be influential in how individuals perceive motivation factors. A study by Simons and Enz (1995) revealed that employees from different departments responded to different job rewards, suggesting that individual differences should be considered when designing motivational programs. Feiergat (1993) found out that younger hotel employees preferred more recognition, attention, and direction. In the study of Wong et al. (1999), gender, martial status, educational status, and pay level significantly affected motivation among Hong Kong hotel employees. This study was consistent with findings that hotel employees from various departments who perform different functions in the hotel have somewhat different underlying motivational factors. Results showed that interesting work, opportunities for advancement and development, and the feeling of being involved are factors that Hong Kong employees

ranked the highest. Therefore, providing quality training and development programs, employee participation programs, and redesigning existing jobs are recommended when implementing motivational programs for hotel employees. To summarize, the following motivation factors have been identified in the hotel industry: pay; monetary bonuses or benefits; opportunity for advancement and promotion; opportunities for increased job responsibility; recognition from managers, colleagues, customers, and family; challenging work; feelings of accomplishment; development of self-esteem; good working conditions; good work schedules; job security; and, being regarded as a good employee.

MOTIVATION THEORIES

Motivation is the psychological process that causes the arousal, direction, and persistence in voluntary actions that are goal oriented (Mitchell, 1982b). Motivation as defined by Robbins (1993) is the " willingness to exert high levels of effort toward organizational goals, conditioned by the effort's ability to satisfy some individual need." Ramlall (2004) selected need theories, equity theory, expectancy theory, and the job design model as the most relevant theories for motivating employees in an organization, basing his discussion on five methods of explaining behavior, needs, reinforcement, cognition, job characteristics, and feeling/emotions, which underlie the evaluation of modern theories of human motivation (Kretiner & Kinicki, 1998).

Need theories of motivation

Need theories attempt to pinpoint internal factors that energize behavior. Needs as defined previously are physiological or psychological deficiencies that arouse

behavior. These needs can be strong or weak and are influenced by environmental factors. Thus, human needs vary over time and place.

Maslow's need hierarchy theory

Maslow believed that there are at least five sets of goals, which can be referred to as basic needs. These are physical needs, safety needs, the need for love, the need for esteem, and the need for self-actualization. Motivation is linked to this hierarchy of needs because unmet needs act as motivators. Maslow (1943) stated that people are motivated by the desire to achieve or maintain the various conditions upon which these basic needs rest and by certain more intellectual desires.

McClelland's need theory

McClelland (1961) described the theory of needs by focusing on three needs: achievement, power, and affiliation. The need for achievement was defined as the drive to excel, to achieve in relation to a set of standards, to strive to succeed. The need for power was defined as the need to make others behave in a way that they would not have behaved otherwise. The need for affiliation was defined as the desire for friendly and close interpersonal relationships. McClelland (1961) supported an analogous relationship for societies as a whole revealing that a country's level of economic development was positively related to its overall motivation to achieve.

Equity theory

Equity theory recognizes that individuals are concerned not only with the absolute amount of rewards they receive for their efforts, but also with the relationship of that amount to what others receive. Based on one's inputs, such as effort, experience, education, and competencies, one can compare outcomes such as salary levels, salary

increases, recognition, and other rewards. When people perceive an imbalance in their outcome-input ratio relative to others, tension is created. The tension provides the basis for motivation, as people strive for what they perceive to be equitable and fair.

Job design

This theoretical approach is based on the idea that the task itself is key to employee motivation. A boring and monotonous job stifles motivation to perform well, whereas a challenging job enhances motivation. Variety, autonomy, and decision authority are three ways of adding challenge to a job. Job enrichment and job rotation are the two ways of adding variety and challenge.

The Motivator-Hygiene theory

Herzberg (1959) discovered that employees tended to describe satisfaction in terms of the intrinsic content of the job itself. These factors called "motivators" included such variables as achievement, recognition, the work itself, responsibility, advancement, and growth. Conversely, dissatisfying experiences, called "hygiene" factors, largely resulted from extrinsic, non-job related factors, such as company policies, salary, coworker relations, and supervisory styles. Herzberg (1959) argued that eliminating the causes of dissatisfaction (hygiene factors) would not result in a state of satisfaction. Instead, it would result in a neutral state. Satisfaction and motivation would occur only as a result of the use of motivators. Motivation can be increased through basic changes in the nature of an employee's job such as through job enrichment (Steers, 1983). Jobs should be redesigned to allow increased challenge and increasing responsibility, opportunities for advancement, personal growth, and recognition.

Job characteristics model

According to Hackman and Oldham (1980) and Pinder (1984), an employee will experience internal motivation from her/his job when that job generates three critical psychological states. First, the employee must feel personal responsibility for the outcomes of the job. Second, the work must be experienced as meaningful by the employee. The employee feels that her/his contribution significantly affects the overall effectiveness of the organization. Finally, the employee must be aware of how effective she/he is converting her/his effort into performance. Pinder (1984) suggested that jobs should be designed to generate a sense of meaningfulness and responsibility in the employee, and management should acknowledge the results of the employee's effort.

Expectancy theory

The expectancy theory of motivation attempts to explain how individuals make decisions on various behavioral alternatives. This model deals with the direction aspect of motivation; that is, once behavior is energized, what behavioral alternatives are individuals likely to pursue? The following are components of expectancy theory: When deciding among behavioral options, individuals select the option with the greatest motivation forces (MF).

$$MF = \text{Expectancy} \times \text{Instrumentality} \times \text{Valence}$$

The motivational force for a behavior, action, or task is a function of three distinct perceptions:

1. Expectancy - Probability (E→P): The expectancy is the belief that one's effort (E) will result is attainment of desired performance (P) goals. This belief, or perception, is generally based on an individual's past experience, self-confidence

(often termed self efficacy), and the perceived difficulty of the performance standard or goal.

2. Instrumentality - Probability (P→R): The instrumentality is the belief that in meeting performance expectations, one will receive a greater reward. This reward may come in the form of a pay increase, promotion, recognition, or a sense of accomplishment. It is important to note that when it is perceived that valued rewards follow all levels of performance, then instrumentality is low.
3. Valence- V(R): The valence refers the value the individual personally places on the rewards. This is a function of his or her needs, goals, values, and source of motivation.

AN INTRODUCTION TO THE EXPECTANCY THEORY

The expectancy theory of motivation, originally developed by Vroom (1964), has recognized a theory to explain the process by which individuals make decisions on various behavioral alternatives. Expectancy theory is presented as follows:

Motivation Force = Expectancy × Instrumentality × Valence

Motivation force directs specific behavioral alternatives. Thus, when deciding among behavior options, individuals select the option with the greatest motivation forces. The motivational force for a behavior, action, or task is a function of three distinct perceptions: Expectancy, Instrumentality, and Valence.

Expectancy is the perceived probability that effort will lead to good performance; variables affecting the individual's expectancy perception including self-efficacy, goal difficulty, and perceived control. Expectancy suggests that one's effort will lead to

desired performance; expectancy is based on past experience, self-confidence, and the perceived difficulty of the performance goal.

Instrumentality is the perceived probability that good performance will lead to desired outcomes; trust, control, polices are variables affecting an individual's instrumentality perception. Instrumentality is the belief that if one does meet performance expectation, her or she will receive a greater reward.

Valence refers to the value the individual personally places on the rewards. This is the function of needs, goals, values, and preferences. Expectancy theory is generally supported by empirical evidences (Tien, 2000; Vansteenkiste, Lens, & De Witte, 2005) and is a widely used theory of motivation in the workplace (Campbell & Pritchard, 1976; Heneman & Schwab, 1972; Mitchell & Biglan, 1971).

Fudge and Schlacter (1999) commented that expectancy theory was applied in their study because the theory had been validity-tested in academia. Expectancy theory is useful in helping to refocus behaviors and the corporate culture. Moreover, the theory is complex enough to suggest a number of strategies an organization can use to encourage desired behavior from its employees. Expectancy theory models can be complex or simple depending on the number of factors recognized as affecting the three basic components (Fudge & Schlacter, 1999).

The central premise of expectancy theory is that people make behavioral choices that are calculated to allow them to achieve desired outcomes (Porter & Lawler, 1968; Vroom, 1964). Employees will be more motivated to adjust their behavior to earn a more valuable valence than they will to earn a less valuable valence. Two points are important in understanding expectancy theory. First, expectancy theory explains the way in which

individuals perceive their environment. Environmental and organizational cultures are critical influences in expectancy theory. Second, according to Vroom (1964), the strength of force for an individual to perform an act is the combined function of valence, instrumentality, and expectancy. If any one of these three is zero, the whole equation becomes zero. In addition, studies have shown that instrumentality and valence alone could predict motivation and performance (Galbraith & Cummings, 1967; Mitchell, 1974; Schmitt & Son, 1981). Butler and Cantrell (1997) explained the low predictive power of expectancy by noting that social desirability leads to low variance of expectancy and to measurement limitations, thus confounding expectancy with instrumentality.

In a study by Arvey and Neel (1974), the expectancy theory did not predict work motivation for engineers, and the results did not suggest that using better criteria measures would enhance the validity of the expectancy model. They commented on several reasons for the failure of the expectancy model to demonstrate much usefulness in predicting these criteria: 1) the organizational circumstances may not have been within certain boundary conditions necessary for the model to work; 2) operationalism of the expectancy variables was inadequate; 3) job outcomes were used that did not represent of the actual outcomes in the job setting. Porter and Lawler (1968) indicated two major criticisms of the expectancy theory: first, it is vague about the kind of previous learning experiences that produce different expectancies, and the second is that it does not specify how outcomes acquire positive or negative qualities for individuals.

Expectancy theory (Vroom, 1964) has been discussed widely in the study of work motivation. Vroom's (1964) expectancy-instrumentality and valence model has been

used to explain organizational behavior (Naylor, Prithcard, & Ilgen, 1980), leadership (House, 1971), and compensation (Lawler, 1971). Literature reviews on the expectancy theory (Mitchell, 1974, 1982a; Prithcard & Campbell, 1976; Schwab, Olian-Gottlieb, & Heneman, 1979; Wanous, Keon, & Latack, 1983) have addressed several conceptual and empirical problems and provided suggestions for future research. Recent publications show interest in the expectancy theory and its implication on training motivation (Mathieu, Tannenbaum, & Salas, 1992), turnover (Summers & Hendrix, 1991), self-set goals (Tubbs, Boehne, & Dahl, 1993), and goal commitment (Klein & Wright, 1994; Tubbs, 1993). Researchers also suggest that the expectancy theory should be combined with other motivation theories (Kanfer, 1987; Kernan & Lord, 1990; Klein, 1989; Landy & Becker, 1990). In recent years, applications of expectancy theory have been used in the educational context (Brophy, 1988; Feather, 1992; Hancock, 1995). In an educational setting, expectancy suggests that a student's motivation toward learning depends on the student's expectation that the student can learn and that learning will result in a valued outcome (Hancock, 1995). Teachers, therefore, are encouraged to implement actions based on the expectancy theory by electing one or more components of the theory - expectancy, instrumentality, and valence, to create an environment that will maximize student motivation to learn. Modified theories based on expectancy theory have been further developed, such as Lawler's expectancy model (1970). In his model, Lawler (1970) added observed and actual experiences, and problem solving and divided rewards into extrinsic and intrinsic rewards.

Many different interpretations, organizational plans, applications, and methods of statistical analysis have been used with the expectancy theory, but the major concern

remains: that the validity of expectancy theory is unclear (Van Eerde & Thierry, 1996). Landy and Becker (1990) suggested that the key to improving the predictions of expectancy model might lie in variables such as the number of outcomes, valence of outcomes, and the particular dependent variable chosen for study. Schwab et al. (1979) examined the relationship between the VIE model and two criterion variables: effort and performance. They included several moderators of this relationship in 32 between-subject studies in a statistical analysis. Van Eerde and Thierry (1996) used meta-analysis to further examine the expectancy model and its relationship to 5 types of criterion variables: performance, effort, intention, preference, and choice. Results showed slightly lower average correlations between Vroom's (1964) model and work-related criterion variables than reported previously in narrative reviews (Mitchell, 1974; Wanous et al., 1983). Van Erde and Thierry (1996) indicted that Vroom's model does not yield higher effect sizes than the components of the models, which indicates that the model lacks validity. They suggested using VIE components rather than models, because many studies were incorrectly performed and analyzed from the original theoretical point of view. In particular, the use of a simple correlation between the sum-of-product variables of the models and the criterion variable may be problematic (Evans, 1991; Mellenbergh, Moldendijk, DeHann, & Ter Horst, 1990). Other important issues addressed by Van Eerde and Thierry (1996) indicated criterion variables that are more strongly related to the models and that components appear to be attitudinal (intention and preference) rather than behavioral (performance, effort and choice) because of response biases in the self-report measures of attitudinal criterion variables. VIE variables should be related to cognition and not directly to actions (Gollwitzer, 1993; Kanfer, 1990; Vroom, 1964).

Therefore, a unique aspect of this study is modifying expectancy theory and examining its validity with three components using structural equation modeling rather using probability as in previous studies. In addition, we will attempt to assess employees' attitudinal cognition by asking their perceptions.

Although the research on expectancy theory has been promising, two primary criticisms of the theory center on 1) the theory's fundamental assumption that all motivation is conscious, and 2) a lack of completeness in the model (Gibson, Ivancovich, & Donnelly, 1988). Villere and Hartman (1990) commented that first, the model assumes that individuals are consciously aware of what choices are to be made and that they are consciously aware of the link between these choices and certain rewards or outcomes. Expectancy theory ignores subconscious motivation. Secondly, employee behavior cannot be completely explained by expectancy theory. Other factors are also important. Organizational factors such as policies, job descriptions, and technology may limit an individual's ability to act in a given situation regardless of the strength of the connection between performance and rewards. Therefore, a potential limitation of expectancy theory in predicting behavior concerns is the theory's assumption that people are rational utility maximizers (Wahba & House, 1974).

The expectancy theory generated substantial interest following its introduction on the 1960s. Researches during the past decade reveal few advances in the expectancy theory. In addition, the expectancy theory provides a general framework for assessing, interpreting, and evaluating employee behavior (Chen & Lou, 2002).

THE REVIEW OF RESEARCH ON THE EXPECTANCY THEORY

Expectancy theory is a theory of the process of motivation. Rather than simply explaining what will motivate an employee, process theories define how motivation comes about. Process theories are, in effect, working models of the decision processes that individuals go through in order to determine whether they will be motivated to pursue a certain activity and sustain a certain level of productivity. Process theories help describe and explain how behavior is directed, energized, sustained, or stopped. While there are several process theories of motivation, one of the most respected theories of motivation among organizational and industrial psychologists is the process theory of expectancy.

Vroom (1964) defined expectancy as a subjective probability of an action or effort leading to an outcome or performance. Instrumentality was defined as an outcome-outcome association and interpreted it not only as a relationship between an outcome and another outcome but also as a probability to obtain an outcome. Valence is all possible affective orientations toward outcomes, and considers the importance, attractiveness, desirability, or anticipated satisfaction with outcomes. Expectancy has also been measured as the perceived relation or correlation between an action and an outcome. In addition, expectancy has been interpreted as the subjective probability that effort leads to the outcome of performance or second-level outcome.

Research based upon expectancy theory (Heneman & Schwab, 1972; House & Wahba, 1972; Mitchell & Biglan, 1971) has concluded that this theory lacks theoretical examined and that findings are inconsistent from one study to another (Reinharth & Wahba, 1975). Wahba and House (1974) raised several logical and methodological

issues where the lack of resolution appears to account for the inconsistent level of support and for several measurement weaknesses. Reinharth and Wahba (1975) addressed several issues in expectancy theory: 1) the distinction between the concepts of expectancy and that of instrumentality; 2) a reevaluation of the concepts of valence, acts and outcomes to incorporate negative as well as positive valences; 3) the limitation of most studies to positively validate outcomes; and, 4) an examination of additional behavior alternatives in the work situation to include both avoidance as well as approach behaviors. Certainly, among the work alternatives to be considered is the choice to not work hard as opposed to the choice to work hard. Poor performance may be a possible outcome as well as good performance. The distinction was among three dependent variables: work motivation, effort expenditure, and job performance. Expectancy theory (Vroom, 1964) assumes a subjective measure of expectancy and valence; independence between expectancies and valences; a multiplicative interaction between expectancies and valences; and instrumentality as a determinant of valence. The Vroom model postulates performance to be job effort multiplied by ability. Arvey and Dunnett (1970) argued that an additive relationship between ability and expectancy is perhaps a better predictor of performance than a multiplicative relationship. Findings on this point are inconsistent, and because adding the ability variable would prevent more methodological problems without resolving any conceptual ones, we decided for this study to predict performance from the motivational component of expectancy theory without using an ability measure. This is consistent with most expectancy theory studies (Graen, 1969; Hackman & Porter, 1968; Lawler, 1968). The effect of omission of the ability dimension should be borne in mind as findings on job performance are reviewed.

Lawler (1966) measured ability by having a supervisor rank subordinates on overall qualifications. This ranking correlated significantly with the supervisor's ranking of subordinates on overall job performance. Criterion contamination in some degree was likely, however, because both rankings were obtained from the same supervisor at the same time. Galbraith and Cummings (1967) defined ability as length of time on the job. The extent to which length of time on the job serves as a proxy for ability as defined, however, is unclear. Garvin (1970) used a psychometric ability measure. This measure did not correlate significantly with performance, nor did its interactions with force and role perceptions generally contribute significantly to the multiple correlations. In part, this was probably due to the restriction of range because the measure was used as a selection instrument by the organization. Gavin (1970) also argued that the measure may not tap the relevant intellectual capacities. Using of numerous psychometric ability measures should rely on validity evidence of various aptitude and achievement tests used for predicting employee performance in a selection context (Ghiselli, 1966; Guion, 1965). In addition, given the broad definition of ability presented by Vroom (1964) and Porter and Lawler (1968), measures of interest, temperament, and personality also might be considered. Their use requires caution, however, for they generally have not correlated significantly with performance (Dunnette, 1966; Guion & Gottier, 1965; Nash, 1965), and they may tap motivational characteristics of individuals (Guion, 1965).

The original Vroom model has been modified by subsequent researchers in three ways: 1) first-level and second-level outcomes have been distinguished. The first-level outcome refers to the level of performance resulting from a given amount of effort, whereas the second-level outcome is defined as the reward or penalty obtained as the

result of the level of performance or as results of the effort expended. 2) The intrinsic sources of valence have been identified. These include the degree of satisfaction or pleasure the individual receives from the activity or work behavior itself regardless of outcome, as well as the degree of satisfaction or pleasure the individual derives from accomplishing of the work goal regardless of extrinsic rewards. 3) Expectancy I and expectancy II have been introduced as separate variables. Expectancy I is defined as the perceived belief that effort will lead to performance or to second-level outcomes. Expectancy II is the perceived belief that performance will lead to second-level outcomes. The problem with the valence of outcomes remains: the preferences that individuals have toward outcomes, rewards, and events are referred to as the attraction, valence, or value of rewards and outcomes. Mobley (1971) indicated several problems related to these outcome measures. One is the assumption that all outcomes are relevant to the subject. Moreover, previous studies usually failed to consider negative outcomes. Finally, the use of importance as the dimension of valence measures the intensity of the preference but not its content, such as what the person values. The measure should reflect both content and intensity. Further, the results of Reinharth and Wahba (1975) did not support the Vroom expectancy model and its components. They commented that the strength of the theory and its variables depends in large measure upon differences among the sample group. Therefore, other factors should be considered, such as individual and environmental moderators. The widely accepted aggregate model is no better than, and in certain circumstances, is considerably inferior to the individual components within the model. Reinharth and Wahba (1975) further stated that the lack of predictive power of the multiplicative model indicates a rather low status for both the additive and the

multiplicative relationships. In other words, a multiplicative relationship becomes additive with a logarithmic transformation of the variables. Reinharth and Wahba (1975) showed a model that retained the distinction between first- and second-level outcomes and measured both positive and negative relationships in terms of subjective probability without establishing an artificial distinction between expectancy and instrumentality. This resolves both the logical and the methodological inconsistencies in the theory insofar as expectancy and instrumentality are concerned.

Vroom's formulation postulates that the motivational force for an individual is a function of (1) the expectancy that certain outcomes will result from behavior and (2) the valence or desirability of these outcomes. Lawler (1971) and Campbell, Dunnette, and Lawler (1970) have expanded on this model with two basic kinds of expectancies that individuals have in a given work situation. In Campbell's words:

> "The decision by an individual to work on a particular task and expend a certain amount of effort in that direction is a function of (1) his personal probability estimate he can accomplish the task (Expectancy I), and (2) his personal probability estimate the accomplishing the task goal will be followed by certain first level outcomes (Expectancy II), and (3) the valence of the first level outcomes." (p.348).

While making the same distinction between the two expectancies, Lawler (1971) includes other variables in his model (satisfaction, ability, etc.). In summarizing this model, one considers motivation as a function of the two expectancies (effort → performance; performance → outcomes) and the value of the outcomes. Assuming that an employee is motivated to perform well, he or she will exert effort that may result in effective performance depending on other factors (such as ability and role perceptions). If the individual performs well, he/she may or may not receive the reward outcomes perceived as likely to result from good performance. Receiving these outcomes should

strengthen performance → outcome expectancy. Similarly, success in performance should influence the effort → performance expectancy.

Campbell et al. (1970) and Lawler (1971) also distinguish between intrinsic and extrinsic rewards that accrue to an individual as a result of job effort and/or job performance. Extrinsic outcomes are those rewards that are distributed by some external agent (e.g., organization, boss) while intrinsic outcomes are mediated by the individual and are internal, personal rewards (e.g., self-fulfillment, self-esteem). Research on expectancy theory formulation has generally been positive (Hackman & Porter, 1968; Lawler & Porter, 1967; Arvey, 1972; Galbraith & Cummings, 1967). However, in their review of expectancy literature, Heneman and Schwab (1972) indicate some limitations in the existing research. They observe that the performance → outcomes (Expectancy II) and effort → performance (Expectancy I) variables have not been clearly delineated. That is, many researchers have used an effort → rewards variable, thus confounding the two variables. Heneman and Schwab (1972) also indicated that many studies combine separate performance → outcome relationships into a single index rather than relating each performance → outcome (Expectancy II) variable separately to measure success. An individual may have three quite different expectations of whether performance will result in outcomes. One may have a high Expectancy II on the performance → pay relationship, a low Expectancy II on the performance → recognition relationship, and an intermediate Expectancy II on the performance → challenge relationship. It is probably appropriate to relate each of these expectancies separately to effort and performance in addition to some composite index of the expectancies. Schwab and Commings (1970) have raised another issue with testing motivation theories: the measurement of

performance. Most, if not all, of previous expectancy research has used global measures of performance. Dunnette (1963) and others have questioned the use of overall measures of job effectiveness and suggested a multidimensional approach. Using global performance measures serve to cover up rather than reveal relationships. Perhaps some of the low correlations obtained when testing expectancy theory predictions may be due to simplistic measures of job performance.

Arvey and Mussio (1973) examined the linear relationship between expectancies and measures of job performance, and further tested the relationship between outcome satisfaction and expectancy II variables for these outcomes. They hypothesized that a relationship should exist between an individual's satisfaction with a particular outcome and the perception of the performance → outcome contingency. They predicted that satisfaction with a job outcome should vary according to the degree to which that outcome is perceived to be controlled by the individual. For individuals with a high expectancy II for a particular outcome, we predict high satisfaction for that same outcome. The results showed that the pattern of correlations between Expectancy II measures and measures of satisfaction give credibility to the concept of job satisfaction being differently related to perceptions of Expectancy II. If the correlations were due to a halo or other response error tendency, this differential pattern of correlations would all be relatively high. Thus, possible outcome satisfaction influences individual Expectancy II perceptions. Mitchell and Albright (1972) and Pritchard and Sanders (1973) also have suggested rather moderate relationships between these expectancy variables and performance. Mitchell and Albright (1972) also suggested predicting effort rather than performance using the model. Using behaviorally based performance criteria did not

increase the relationships hypothesized, nor did the singular treatment of the various expectancy variables help enhance the relationships.

A number of studies conducted in organizational settings have tested portions of both expectancy I and expectancy II models (Galbraith & Cummings, 1967; Graen, 1969; Hackman & Lawler, 1971; Lawler & Porter, 1967; Mitchell & Albright, 1972). Although these studies generally conclude that expectancy behaviors significantly correlate with specific measures of job performance, a number of problems remain. One notable problem, which has existed for years, is finding reliable and valid measures of job performance. As pointed out by Schwab and Cummings (1970) and in the House, Shapiro, and Wahba (1974) review of the literature, most expectancy theory field research has used global or subjective measures of performance. Perhaps in addition to using multidimensional job performance measures (Lawler & Suttle, 1973), researchers should attempt to more scientifically assess job effort (Arvey & Neel, 1974). The Expectancy I (EI) and Expectancy II (EII) notions of Campbell et al. (1970) and Lawler (1971) suggest moderators of the EI linkage. Thus, continually focusing on the clarification, description, and measurement of performance and not investigating motivational effort may result in incomplete conclusions about behavior and effectiveness. In addition, it seems that the relationship of expectancy variables and criterion judgments of superiors must be examined to more adequately test the predictive power of the expectancy models.

The instrumentality component suggests two ways in which behavior may be changed (Mitchell & Biglan, 1971). First, the subject's perception of the instrumental relationship between behavior and outcome may be changed. Employees may value the

rewards provided by the organization but not know which behaviors lead to them. Second, behavior may be influenced by changing the value of outcomes or of organizational rewards. Changes in the behavior of the subject result from the expectation of others. Therefore, one might also bring about changes in the subject by changing the expectations of those around him. A number of problems are associated with this instrumentality approach and with the statistical techniques used to test it. The theories demand specific rules of combination that exclude the possibility of examining certain interaction effects. Two outcomes, when they are both perceived as possible consequences of an act, may contribute more to the intentions of an individual than outcomes that appear separately from other behaviors. That is, outcome combinations may be important. Much of the literature used multiple regressions to test results. In their most common use, multiple regression equations limit the investigator to the same weighted linear function as the rule of combination of components for all subjects. This constraint is not required by the theory; in fact, it was suggested that the relative weight of each factor may differ over individuals and situations. One necessary element is a weighting system that is psychologically meaningful in that it reflects the way in which individuals actually combine these factors. Even though the theories can predict behavioral intentions or behavior accurately, some situations can occur in which behavioral intentions or instrumentality is not highly related to actual behavior. Fishbein (1967) pointed out that degree of control over behavior is important. Behavior may be controlled by other people, such as supervisors or colleagues. These theories must either include variables that mediate the behavioral intention-behavior relationship or limit themselves to behaviors the individual does control. Moreover, constructs in the

instrumentality component change over time. That is, perceived instrumentalities and the value of outcomes often change; so do the perceived expectations of others. When this change cannot be predicted or controlled, behavioral intentions and the components of the theory may not be related to actual behavior. The preceding three criticisms point to the need for a theory of the situation. Such a theory should describe those aspects of the situation that affect the relative weights of the factors in the instrumentality equation and that mediate the relationship between behavioral intention and behavior. Many studies use a standard set of outcomes for all subjects. However, different outcomes are relevant for different subjects. Subjects should be asked to generate their own outcomes. In other words, the instrumentality component of the instrumentality theory may be culturally specific. Individuals who think solely in terms of the outcomes accruing as the result of their behavior may not be found in cultures other than their own.

It is possible that instrumentality and expectancy are conceptually equivalent because both refer to a perceived degree of relationship between two variables. Expectancy is the relationship between effort and performance, while instrumentality is the relationship between performance and job outcomes. This conceptual similarity presumably has led some researchers (Porter & Lawler, 1968) to combine expectancy and instrumentality into one variable and discuss the relationship between effort and job outcomes. By combining these, one can consider job outcomes that are a direct function of effort.

While there is a conceptual advantage in combining expectancy and instrumentality into one measure, there are advantages to keeping them separate as well. Using both variables allows one to assess the value of high performance (valence ×

instrumentality) separately from the perceived relationship between effort and performance. In an incentive pay system, the value of high performance may be quite high, but ability, role perceptions, or external constraints, may cause an individual to feel that increased effort will not result in increased performance. Measuring both expectancy and instrumentality would show that the incentive system was powerful, making valued rewards contingent on performance. However, such a program would not increase effort because expectancy was low. In contrast, if one were to measure the perceived relationship between effort and job outcome, one could not tell whether performance was unrelated to job outcomes or whether effort was unrelated to performance.

Expectancy – valence models also postulate that the three components combine in a specific manner to influence effort. Valence and instrumentality combine multiplicatively to determine what might be called "valence of performance". Specifically, valence × instrumentality equals the sum of the products obtained by multiplying the valence of each job outcome by its corresponding performance-outcome instrumentality and summing these products across all outcomes. A second relationship considers how expectancy and valence × instrumentality combine to determine level of effort. That is, effort = E (valence × instrumentality). While there is some support for the prediction made by the overall model (Hackman & Porter, 1968; Lawler & Porter, 1967), less attention has been given to the separate usefulness of the various components of the model. The influence of expectancy, for instance, has received little attention. Tests of the model by Gavin (1970), Hackman and Porter (1968), Lawler (1968), and Porter and Lawler (1968) have combined expectancy and instrumentality into one measure. The only study that explicitly examines the expectancy component is that of

Graen (1969). He reported mixed findings for the relationship of this component with measurement of performance. Pritchard and Sanders research (1973) supported the basic expectancy-valence model.

Expectancy - valence models postulate that these three variables combine multiplicatively. The valence for each job outcome is multiplied by the instrumentality of performance for attaining that outcome, and then these products are summed to obtain the valence attached to performance. Valence of performance is, in turn, multiplied by effort-performance expectancy, the result being a prediction of force, or as it is usually called, "operationalized effort". These multiplicative relationships are critical to the expectancy - valence approach. They imply that if a person sees no relationship between his level of performance and the amount of money he earns, a potential pay raise will not affect his level of effort. While the valence of pay raises may be very high, when this valence is multiplied by a performance-pay instrumentality of zero, the resulting product is zero. Thus, the outcome of receiving a pay raise serves to increase neither the overall value of high performance nor the force toward high effort.

If this relationship is additive instead of multiplicative, a completely different prediction is made. With an additive relationship, the valued pay raise will increase effort no matter what the level of instrumentality or expectancy happens to be. Pritchard and De Leo (1973) tested the multiplicative relationship between valence of job outcomes and performance - outcome instrumentality. However, the results did not support for the expectancy - valence model. Pritchard and De Leo (1973) addressed several possible explanations: the manipulation of valence was inadequate; feelings of inequity existed, and the valence component of expectancy-valence model was not a critical component.

Pritchard and De Leo (1973) argued that the level of need a person has for an outcome must also be considered as a determinant of the perceived valence for that outcome. This differs from other studies (Porter & Lawler, 1968; Pritchard & Sanders, 1973) in that subjects were asked to indicate the importance of outcomes. Pritchard and De Leo (1973) asserted that in addition to importance, the valence of a particular job outcome is also determined by the level for that outcome. Lawler and O'Gara (1967) found that subjects' performance on a piece-rate pay system was positively related to their need for money. Andrews (1967) reported that previous wage history was positively correlated with piece-rate performance, which is consistent with the findings of Pritchard and De Leo (1973) that previous wages are related to the need for or attractiveness of money. As subjects earned more and more money in the high-piece-rate condition, their need for money could have decreased. Thus, to measure the valence of the outcomes component in expectancy-valence models, one should measure the need a subject has for the outcome, as well as the need for a specific level of that outcome. In addition to asking how important a salary raise is to the individual, one should ask how badly does he or she wants a salary increase at that time. Furthermore, if one could group subjects on the basis of their level of need for earning money or level of need for earning specific amounts of money, one would have a better operationalization of valence. Therefore, Pritchard and De Leo (1973) suggested that a more appropriate measure should include the idea of need for the outcome, in addition to the idea of importance of the outcome.

To summarize this clarification of expectancy theory (Mitchell, 1974):

1. Investigators determining outcomes instead of subjects determining their own outcomes is probably not the most accurate representation of what the theory would suggest. The impact of this is unknown.
2. Outcomes can be viewed as having different levels of specificity, yet increased specificity does not seem to account for markedly increased criterion variance.
3. Distinctions between positive and negative outcomes and intrinsic and extrinsic outcomes should probably be included and analyzed separately.
4. Long lists of outcomes, as opposed to short lists, are probably detrimental.
5. Most researchers view instrumentality as a probability rather than a correlation.
6. Important-unimportant is used most frequently as a measure of valence, yet valence is supposed to reflect anticipated satisfaction.
7. Few investigations include measures of instrumentality and valence that assume both positive and negative values.
8. Criterion measures in many cases have been theoretically incorrect or poorly conceptualized.

Mitchell (1974) noted the following points in his study:

1. Few theorists have tested accurate representations of Vroom's model using a within-subjects choice analysis.
2. Conceptualizing the expectancy model as a subjective expected utility model has a number of constraints and drawbacks.
3. The ΣEV is meant to predict the force to behave. Limitations on the individual's ability to carry out intentions will reduce the $\Sigma EV \rightarrow$behavior relationship.

4. Current formulations of the theory predict effort from only one expectancy: the relationship between effort and performance. Vroom's model made no such restriction.
5. The theory suggests that valence and force are dependent on anticipated outcomes as opposed to received outcomes.
6. The evidence for causal relationships between expectancy formulations and behavior is only moderate.
7. Competitive tests of the theory provide mixed support.

Arvey and Neel (1974) also suggested a number of reasons to account for the general failure of the expectancy model to demonstrate much usefulness in predicting criteria: 1) the organizational circumstances may not have been within certain boundary conditions necessary for the model to work (Graen, 1969); 2) expectancy variables are inadequately operationalized; 3) job outcomes were not representative of the actual outcomes in the job setting; 4) there were criteria problems. Graen (1969) has indicated that there are certain boundary conditions under which the expectancy model will work. One condition he specified was that there must be a contingency between effective job performance and the attainment of reward outcomes that actually exist in the organization before the model will operate. Graen (1969) further indicated that the subjects' perceptions of these relationships were responsive to the actual contingencies of job situations. The organization reinforces individuals for effective performance. It is quite possible that Expectancy I and Expectancy II variables were not measured properly. Mitchell and Albright (1972) noted that different results occurred depending on how

Expectancy I was measured. The probabilities held by subjects concerning the effort → performance relationship were simply not tapped by asking them to indicate their degree of agreement or disagreement with a statement about effort leading to effective performance in their job. Arvey and Neel (1974) suggested using each of these effort dimensions as a variable that leads to effective job performance. Subjects' perceptions of the various relationships between such things as team attitude and job curiosity, and effective performance may have more appropriately operationalize Expectancy I perceptions. The response format of Expectancy II questions may not have been conductive to eliciting accurate perceptions of these contingencies. Criterion measures may have been inadequate. More "halo" effect is present in the criterion judgments than in the data presented by Landy and Guion (1970). Mitchell and Albright (1972) reported several relatively low correlations between various expectancy variables and superior ratings of employee effort. They suggested that supervisors are often not in a position to observe effort and generally see only the output or products of employee behavior. They further suggest that employee self-rated effort may be a more accurate measure. Arvey and Neel (1974) suggested that combining all of the various Expectancy II variables (some of which exhibited positive and some negative relationships to the criterion on question) might have had the effect of diluting any relationships that may exist. Future research should examine these relationships separately before combining the expectancy variables into a composite reflecting a particular model. The proper method of combining the variables (either multiplicatively or additively) remains a research question. Some of the expectancy variables are bound to be less reliable than others and may operate to contribute unwanted error variance.

Graen (1969) and Mitchell and Albright (1972) have suggested that intrinsic outcomes yield predictions of job performance and job satisfaction that are superior to those yielded by extrinsic outcomes. Other authors (Wahba & House, 1974) have suggested that intrinsic outcomes may have more power to motivate than extrinsic outcomes, primarily because the instrumentality perceptions associated with outcomes that are self-administered should approach certainty. Parker and Dyer (1976) noted that the roles of intrinsic and extrinsic outcomes in expectancy theory research are very complex and remain very much unsettled. Parker and Dyer (1976) stated that excluding of negatively valent outcomes from the expectancy theory model actually increased its validity. Given the many conceptual and methodological shortcomings of expectancy theory (Locke, 1975; Mitchell, 1974; Schmidt, 1973; Parker & Dyer, 1976), one might conclude that expectancy theory model does not offer a promising avenue of research to predict or explain decisions on work-related choices or behaviors. However, the expectancy theory should not be abandoned until additional conceptual and methodological refinements are attempted. Moreover, adding nonexpectancy variables to the expectancy theory model enhanced its validity in the behavioral criterion. Consistent with Mitchell (1974), model predictions that constitute preferences, internally oriented motivation, or intentions that are translated into actual behavior seem to depend on three additional classes of variables. The usefulness of nonexpectancy components in expectancy theory models led to the following findings (Parker & Dyer, 1976). First, expectancy theory models may have limited potential as a practical means of predicting work-related behavior. By including additional situational and psychological components in the model, however, particularly useful behavioral predictions may be

obtained. Before these additional variables can be used, however, researchers will need to identify which variables are appropriate in a particular setting to avoid the almost inevitable tendency to include an excessive number and thereby obscure the results. Second, if added variables of this kind become integral components of a motivational model, research designs will need to be changed. Although expectancy theory research to date has consisted of post hoc analysis, predictive models have been the eventual goal. If additional nonexpectancy variables will help us achieve satisfactory levels of accuracy, however, a return to a regression-based test validation paradigm will be necessary to determine how expectancy and nonexpectancy components should be combined. This will require a much more complex system of weighting and cross-validation than the aggregate statistical models traditionally used. Before a predictive model can use additional nonexpectancy variables, it will be necessary to select the nonexpectancy predictors, determine beta weights for expectancy and nonexpectancy predictors, select prediction cutting scores, test the results, and cross-validate the results. This demands more of the researcher than the testing of between-person or even within-person expectancy models, even if these models are cross-validated. The final and most difficult question on the usefulness of nonexpectancy components is why these variables actually enhance predictions. Mitchell and Knudsen (1973) presented an appearing explanation, suggesting that expectancy models predict only preferences and that situational moderators explain actual behavior. Although this may account for the effects of the expectations of others, it is more difficult to explain why individual differences such as hesitancy, risk-taking propensity, or irrationality would not affect valence, instrumentality, or expectancy perceptions rather than mediating between preferences and

behavior. The major research tasks relating to nonexpectancy variables are to identify the kinds of variables that are appropriate and to determine how these variables can best be incorporated into models, and to understand why these variables are not accounted for in the basic expectancy formula. In this study, we propose that communication satisfaction is a moderator strengthens the relationships among expectancy, instrumentality, valence and employee motivation. Literature review pertaining communication satisfaction will be discussed in the following section.

COMMUNICATION SATISFACTION

Expectancy theory predictions of job effort and performance tend to receive weak to moderate support in recent literature. Vroom's (1964) original model and its various extensions have been frequently tested using several moderating variables in a search to increase model predictions (Seybolt & Pavett, 1979). In this study, communication satisfaction is proposed as a moderator to improve predicting hotel employee motivation.

Communication is probably the most central process in organizations (Frone & Major, 1988). Several studies posit that the perceived communication environment should be related to organizational outcomes such as work motivation, job satisfaction and organization productivity or effectiveness. (Downs, 1977; Greenbaum, 1974; Hall & Goodale, 1986; Likert, 1973; Pinchus, 1986a, 1986b; Orpen, 1997; Mutch, 1986; Porter & Roberts, 1993; Shuler, 1995). Other empirical research supports the hypothesized communication-job satisfaction relationship (Roberts & O'Reilly, 1974; Muchinsky, 1989; Sussman, 1974), and these studies suggest that high-quality communication is associated with relatively high levels of job satisfaction, whereas low-quality

communication is associated with relatively low levels of job satisfaction. However, some studies have failed to prove a significant relationship between these two constructs (Muchinsky, 1989). These inconsistent and often weak findings support the contention of several writers that a contingency (moderator) approach to the study of organizational communication is warranted (Goldhaber, Yates, Porter, & Lesniak, 1978; Larson, Lee, Brown, & Shorr, 1984; Porter & Roberts, 1976; Schuler, 1995). Frone and Major (1988) examined the moderating effect of job involvement on the relationship between perceived communication quality and job satisfaction in a sample of managerial issues. The quality of communication was assessed separately for immediate supervisor, subordinates, co-workers, and hospitality administrators. Each source of information was rated by dimension of communication quality using timelines, accuracy, and usefulness. Results showed that perceived communication quality is positively related to the level of reported job satisfaction among nurses. The strength of communication quality-job satisfaction relationship would be modified by the respondents' level of job involvement. Further, in Orpen's (1997) study, the involvement-communication interaction was significant in explaining variance in both satisfaction and motivation.

It is through communication of one kind or another that employees learn what is expected to learn, find out how to do their jobs, and become aware of what others think of their work (Likert, 1993; Schuler, 1995). Because the transmission and reception of information pay such an important role in the organization, effective communication should be related to employee work attitude (Schuler, 1995). However, some studies do not support the prediction Muchinsky, 1989; Pinchus, 1993). According to Porter and Roberts (1993), the reason for the inconsistent findings is that the relationship between

communication and employee work attitude is likely to be moderated by several variables. In this present study, communication satisfaction is proposed as a moderator to evaluate the relationship between employee work motivation. Satisfaction with the extent to which communication in the organization motivates and stimulates employees to improve performance, which is the moderator between expectancy and work motivation. Satisfaction with the extent to which communication that supervisors and managers are open to ides, listen and pay attention, and offer guidance for solving job-related problems and feedback, such as reflect on pay raise, bonus and opportunity for advancement, so employees clear understand the greater reward they would get if they improve their performance, which is the moderating effect of instrumentality on work motivation. As well as the moderating effect of valence on work motivation that satisfaction with effective and organized communication motivate employees to work hard to get their desired outcomes.

Communication satisfaction refers to satisfaction with communication that is linked with the employee's position in the organization (Mount & Back, 1999). The Communication Satisfaction Questionnaire (CSQ) was developed by Downs and Hazen (1977) to investigate the relationship between communication and job satisfaction. Eight factors were identified to explain communication satisfaction: communication climate, supervisory communication, organizational integration, media quality, coworker communication, corporate information, personal feedback and subordinate communication. Mount and Back (1999) further examined communication satisfaction in the lodging setting by using Communication Satisfaction Questionanire (CSQ). This study then has 13 items of communication quality measurements which mostly draw

from the study of Mount and Back's (1999). Examples: " The management knows and understands the problems faced by employees." " The management listens and pays attentions to me." "Conflicts are handled appropriately through proper communication channels." "The amount of communication in the company is about right."

RESEARCH HYPOTHESES

Based on the literature review, the model of employee motivation was developed using the expectancy theory. Further, the model included communication satisfaction. Research hypotheses used in this study are summarized in two parts: model development and model comparison.

Hypothesis 1: Expectancy has a positive effect on hotel employee motivation.

Hypothesis 2: Instrumentality has a positive effect on hotel employee motivation.

Hypothesis 3: Valence has a positive effect on hotel employee motivation.

Hypothesis 4: The higher the level of communication satisfaction, the more positive is the effects of expectancy, instrumentality, and valence on hotel employee motivation.

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CHAPTER THREE

RESEARCH METHODOLOGY

Introduction

The main objective of this study was to enhance understanding of hotel employee motivation and the associated process of decision-making. The proposed model was tested with the expectancy theory; in addition the model extended by adding communication satisfaction as a moderator effect to reinforce the employee motivation model. The purposes were achieved following these sections: instrument development, sample and data collection, and data analysis.

DEVELOPMENT OF RESEARCH INSTRUMENT

A primary purpose of this study was to develop a research instrument that measures each construct in the proposed employee motivation model. The research instrument for this study was developed through several steps (Figure 1). An initial survey questionnaire was developed after reviewing the relevant literature. The following section describes the development of the research instrument.

Insert Figure 1

Sources of Research Instrument

The expectancy theory of motivation, originally developed by Vroom (1964), explains the process of individual decisions making for various behavioral alternatives.

The original expectancy theory was calculated using the formulate: Motivation Force = Expectancy × Instrumentality × Valence. Even though the expectancy theory is widely accepted, one concern with the expectancy theory pertaining to the expectancy theory is validity. (Mitchell, 1974; Prithcard & Campbell, 1976; Schwab, Olian-Gottlieb, & Heneman, 1979; Wanous, Keon, & Latack, 1983; Van Erde & Thierry, 1996). Second, the strength of force for an individual to perform an act is the combined function of valence, instrumentality, and expectancy. If any one perception is zero, the whole equation becomes zero. Van Erde and Thierry (1996) suggested using VIE components rather than the model formulate. Therefore, to confirm the validity of the expectancy theory as well as to measure the construct validity of its components, we modified the scale of the original expectancy theory from –1 to 1. Moreover, this study asked respondents to judge each construct on a seven-point scale.

The constructs of this study were identified as expectancy, instrumentality, valence, work motivation and communication satisfaction. Measurement items were developed from a review of the literature (Arvey & Nell, 1974; Arvey & Mussio, 1973; Campbell, Dunnette, Lawler& Weick, 1970; Galbraith & Cummings, 1967; Gavin, 1969; Ivancevich, 1976; Kopelman, 1979; Landy & Guion, 1970; Matsui & Ohtsuka, 1978; Mitchell, 1974; Mobley, 1971; Porter & Lawler, 1968; Reinharth & Wahba, 1975; Mount & Back, 1999). Expectancy is based on the perceived effort-performance relationship. One's effort should lead to the desired performance and is based on past experience, self-confidence, and the perceived difficulty of the performance goal. Five items of expectancy were drawn from the literature (Campbell et al., 1970; Gavin, 1969; Porter & Lawler, 1968) to measure each respondent's expectation of work outcomes on a 7-point

scale ranging from strongly disagree to strongly agree. Measurement items of expectancy include such items: " If I work very hard, my job performance will be improved;" "If I work very hard, the quality of my job performance will be enhanced;" "If I put more effort on my job, I will be regarded as an effective employee."

Instrumentality is based on the perceived performance-reward relationship. Instrumentality is the belief that if one does meet performance expectations, he or she will receive a greater reward. Work outcomes can be categorized as pay, monetary bonus, advancement opportunities, recognition from upper level management, colleagues, customers, and family, as well as the need for fulfillment. Thirteen items of instrumentality were drawn from the literature (Gavin, 1969; Matsui & Ohtsuka, 1978; Reinharth & Wahba, 1975), and respondents evaluated the effort of performance on work outcomes using a 7-point scale ranging from strongly disagree to strongly agree with the statement. Measurement items of expectancy include such items as: "If I perform well, I will get good pay;" " If I perform well, I will have more opportunities for advancement and promotion;" "If I perform well, I will develop feelings of accomplishment."

Valence refers to the value the individual personally places on the rewards. This is a function of his or her needs, goals, and values. Sixteen items of valence were drawn from the literature (Galbraith & Cummings, 1967; Gavin, 1969; Mobley, 1971; Mitchell, 1974), and respondents evaluated the desirability of work outcomes using a 7-point scale ranging from very undesirable to very desirable. Examples include " Good Salary/wage," " Good working conditions," "Job security, " "Personal growing and development."

Work motivation is defined as the act or process of an employee being motivated to work. Eleven items of work motivation were adopted from the literature (Arvey &

Mussio, 1973; Ivancevich, 1976; Kopelman, 1979; Landy & Guion, 1970). Respondents evaluated work motivation using a 7-point scale ranging from strongly disagree to strongly agree. Examples include: " Amount of effort I expend on the job;" " Enhance quality of my job performance;" "Increase productivity on the job;" "Willing to cooperate and shoulder extra load."

Communication satisfaction refers to satisfaction with communication that is linked with the employee's position in the organization (Mount & Back, 1999). Mount and Back (1999) examined communication satisfaction in the lodging setting by using the Communication Satisfaction Questionnaire (CSQ). Organizational integration, personal feedback, corporate information, communication climates, supervisor communication, media quality, cowork communication, and subordinate communication were used to measure communication. Thus, this study has 16 items measuring communication satisfaction mostly drawn from Mount and Back (1999). Examples include: " The management knows and understands the problems faced by employees;" " The management listens and pays attentions to me;" "Conflicts are handled appropriately through proper communication channels."

Elicitation Study

Measurement items were developed from a literature review and an elicitation study (see Appendix A). For measurements of hypothetical constructs (expectancy, instrumentality, valence, work motivation, and communication satisfaction), this study adopted items that have been validated in many studies. Pay; monetary bonuses; advancement opportunities; job responsibility; recognition from managers, colleagues,

family, and customers; challenging work; a sense of accomplishment, self-esteem, and being regarded as a good employee; work conditions; work schedule; and job security were selected as items that measure expectancy, expectancy, and valence in the elicitation study. Amount of effort, quality, productivity, job involvement were items used to measure work motivation. The items for communication satisfaction were modified from Mount and Back's (1999). An elicitation study was used in constructing the final set of measurement items for the instrument questionnaire. In the elicitation study, respondents were required to rank the list of measurement items to elicit best measurement items for five constructs. The elicitation study was developed and administered to 33 hotel managers, supervisors, and employees from 6 hotels near a Midwestern university. These 6 hotels included 3 mid-scale and 3 economy hotels. Table 1 summarizes the results of the elicitation study. The results of the elicitation study were similar found in the literature pertaining employee motivation (Knight, 1971; Byrne, 1986; Charles & Marshall, 1992; Simons & Enz, 1995; Siu, Tsang, & Wong, 1997; Wong, Siu, & Tsang, 1999). Pay, advancement opportunities, monetary bonus, and recognition from managers and colleagues are primary motivators for hotel employees. Showing concern and respect to customers, paying attention to detail and planning and willingness to cooperate and shoulder extra load are three differences determine motivated employees and in motivated employees. Managers offer guidance for solving job-related problems; managers know and understand the problems faced by employees; and conflicts are handled appropriately through proper communication channels are ranked highly in measuring communication satisfaction.

Insert Table 1

Pilot Study

A pilot study (see Appendix B) was conducted before data collection. The purpose of the pilot study was to test the reliability of the study instrument and to test the survey distribution procedures. One hotel in Manhattan and both Hotel and Restaurant Management major graduate and undergraduate students who has worked in hotels, were asked to participate in the pilot test. A total of 100 questionnaires were distributed, and 29 questionnaires were returned, resulting in a response rate of 29%. Revisions to the study instrument and to the distribution procedures were made based on the results of the pilot test.

Insert Table 2

Cronbach's alpha (α) was used to measure internal consistency of the measurements. The reliability scores, ranging from .842 for expectancy and instrumentality to .962 for communication satisfaction, indicated the measurement items are satisfactory for measuring the constructs of interest.

Based on the results of the pilot study, changes in wording and question statements were made. Most measurement items were kept for the final version of the questionnaire, however, some items were deleted for increasing Cronbach's alpha and

shortening the survey. "If I work very hard, the quality of my job performance will be greatly enhanced" was deleted from the construct of Expectancy. "Receiving recognition/praise from others at work;" and "Being regarded as a good employee;" were deleted from the construct of Instrumentality. "Good working conditions;" Stable work schedules;" Job security;" Recognition/Praise from others at work;" were deleted from the construct of Valence. "Work harder than others" was deleted from the construct of Valence." Written directives and reports are clear and concise;" "Communication with employees is accurate and free-flowing;" "The amount of supervision given me is about right;" "Informal communication is active and accurate;" "Attitudes toward communication in the hotel are basically healthy;" "The amount of communication in the company is about right;" "My manager and supervisor trust me;" were deleted from the construct of Communication Satisfaction. The final version of the questionnaire comprises a total of 34 questions to measure 5 constructs and respondent demographic characteristics (see Appendix C).

SAMPLING AND DATA COLLECTION PROCEDURE

The sample population was targeted employees working in hotels. The participating hotels were several cities in a Midwestern state. Collection of data from 50 hotels (upper economy hotels to mid-scale hotels), with 20 questionnaires distributed to each hotel, and a predicted response rate of 25%, was predicted to yield 250 completed questionnaires. Generally, 200 samples are necessary to analyze data using structural equation modeling (Hair, Anderson, Tatham, & Black, 1998). The researcher called each hotel human resources manager to introduce the study and ask them to participate in the study. A letter explaining the purpose and survey questionnaire was faxed or emailed

to the General Managers or Human Resources managers for permission approval (see Appendix D).

When permission was granted for participation, 20 questionnaires were sent to human resource managers within each participating hotel and randomly selected employees were asked to complete the research survey. Hotel employees received a survey packet, including a cover letter describing the research project the survey and a stamped, pre-addressed envelope in which to return the survey. This study and survey was reviewed and approved by Kansas State University Institutional Review Board, which is mandated by federal laws and regulations, and is responsible for oversight of all activities involving research with human subjects.

DATA ANALYSIS

Collected data were analyzed using SPSS for Windows 13.0 and LISREL 8.54. The procedures of data analysis used in this study included descriptive analysis, principle component factor analysis, confirmatory factor analysis (CFA), structural equation modeling (SEM) and moderating effect check by SEM (Figure2).

Insert Figure 2

Descriptive analysis included mean and standard deviation of sample characteristics as well as linearity and normality of data assumption check. Principle components analysis was performed to check if every proposed construct extracts one factor. Confirmatory factor analysis was used to test the reliability and validity of measurements for latent constructs in the model. Composite reliability assessed the

reliability of indicators representing each construct in the measurement model. Composite reliability of .70 for all constructs was used as criteria as suggested by Anderson and Gerbing (1988). A validity check was conducted to check convergent validity and discriminant validity. Factor loading of .5 is the criterion for convergent validity. Average variance extracted (AVE) presents the overall amount of variance in the indicators accounting for the latent construct (Hair et al., 1998), and an AVE of .50 is the criterion for convergent validity. Discriminant validity was assessed by comparing AVE with the squared correlation between two constructs (Anderson & Gerbing, 1988).

Structural equation modeling (SEM) determines the causal relationships among constructs proposed in the employee motivation model. Standardized path coefficients were used to test hypothesized paths (Hypotheses 1 to 3) among constructs proposed in the structural model. Furthermore, the hypothesized moderator of communication satisfaction was assessed by a series of modeling tests for metric invariance (Hypotheses 4). The sample were divided into high and low communication satisfaction groups. Grouping was split based on their summated scores for communication satisfaction. To analyze the measurement model with two different groups, a confirmatory factor analysis was performed on the nonrestricted model first. The equality of factor loading between two groups (Full metric invariance) was used to test if these two group are comparable. The non-significance of the chi-square difference between the nonrestricted model and the full metric invariance model was assessed. The next step was to check the equity of path coefficients. The significance of the chi-square difference between the full metric invariance and the coefficients invariance model was tested. If the chi-square difference

test is significant, it is implied that there is moderating effect of communication satisfaction between high and low communication satisfaction groups.

Figure 1. Research Procedures of the Study

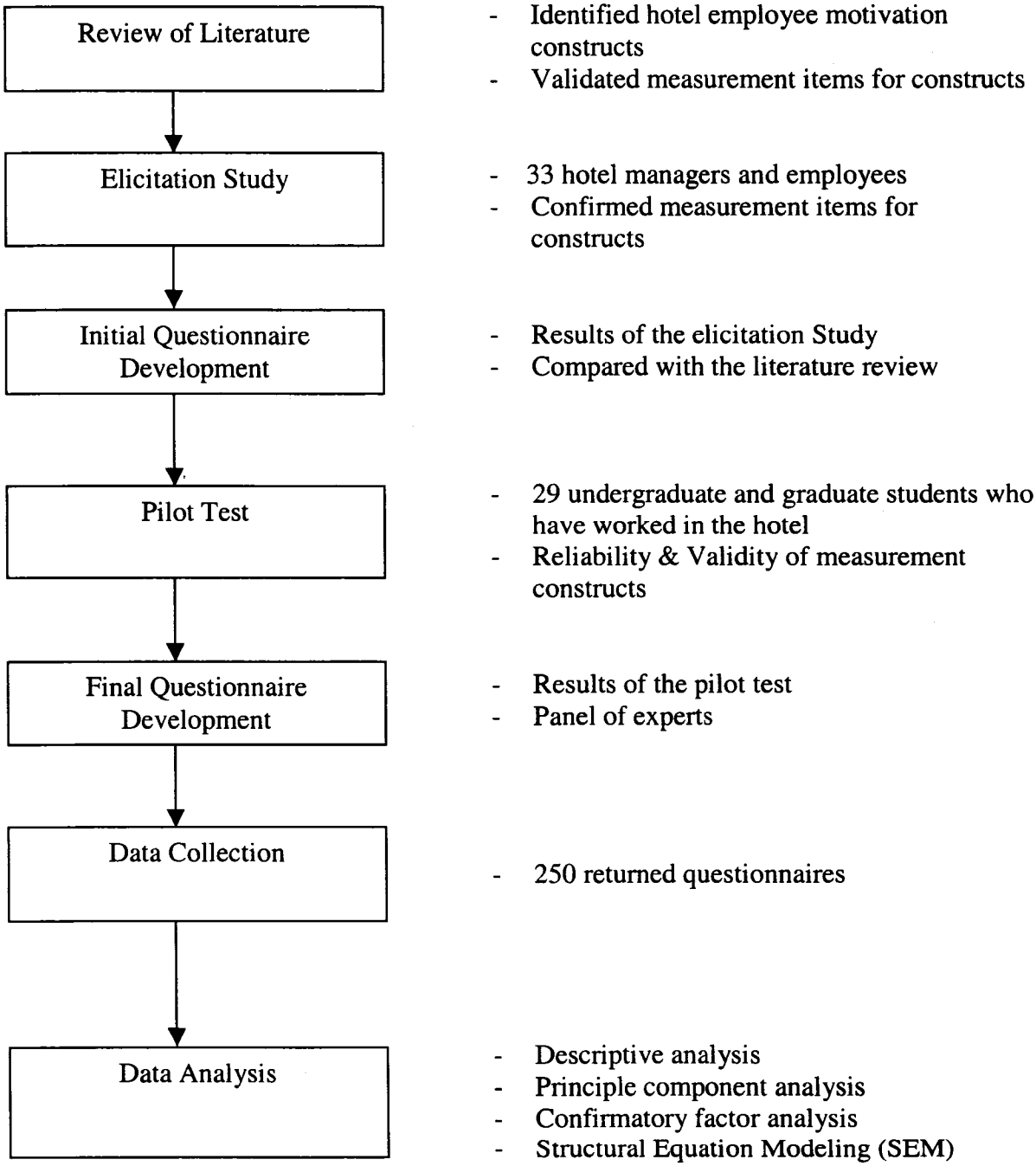

Figure 2. Data Analysis Procedures of the Study

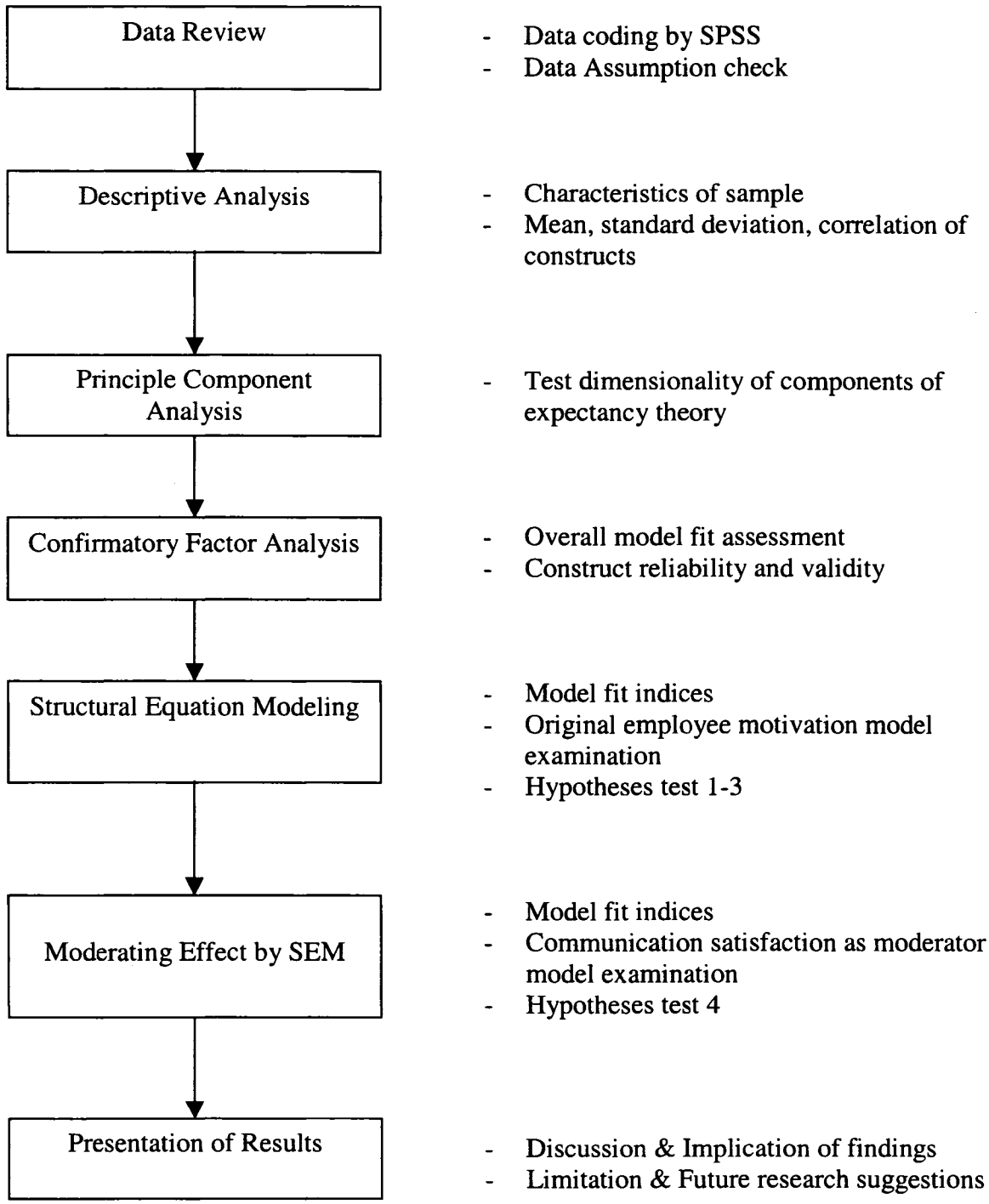

Table 1. Results of the Elicitation Study

Constructs	Measurement Items	Ranking
If I work very hard, which job outcome I except to get mostly	Better Pay	1
	Opportunities for advances/promotion	2
	Monetary bonus or benefits	3
	Obtain praise and recognition from my supervisors and managers	4
	Take more job responsibility/control over job	5
	Gain respect from my colleagues	6
	Develop feelings of accomplishment	7
	Be regarded as a good employee	8
	Gain appreciation from my customers	9
	More challenging work tasks	10
	Develop self-esteem	11
	Gain recognition from my family	12
	Learn a lot from working	13
I am willing to work very hard to get the following job outcomes	Better Pay	1
	Monetary bonus or benefits	2
	Opportunities for advances/promotion	3
	Obtain praise and recognition from my supervisors and managers	4
	Gain respect from my colleagues	5
	Develop feelings of accomplishment	6
	Be regarded as a good employee	7
	Gain appreciation from my customers	8
	Learn a lot from working	9
	Take more job responsibility/control over job	10
	Develop self-esteem	11
	More challenging work tasks	12
	Gain recognition from my family	13
Which motivate me most working in the hotel	Good salary/wage	1
	Good Working conditions	2
	Interesting work	3
	Opportunities for advancement/promotion	4
	Take more job responsibility/control over job	5
	Monetary bonus or benefits	6
	Job security	7
	Supervisors and managers	8
	Have stable work schedule	9
	Make full use of my ability	10
	Develop feelings of accomplishment	11
	More challenging work tasks	12
	Gain appreciation from my customers	13

(Table to be continued)

(Table continued)

	Gain recognition from my family	14
	Colleagues and coworkers	15
	Personal growing and development	16
If I am being highly motivated	Show concern and respect to customers	1
	Pay attention to detail and planning	2
	Willing to cooperate and shoulder extra load	3
	Willing to help colleagues	4
	Willing to take more challenging work tasks.	5
	Show responsibility and imitative	6
	Enhance quality of my job performance	7
	Willing to get involved in job	8
	Amount of effort I expand on the job	9
	Increase productivity on the job	10
	Expand autonomy in workplace decision-making	11
Communication Satisfaction	My supervisor offers guidance for solving job-related problems	1
	The management knows and understands the problems faced by employees	2
	Management's communication makes me identify with it or feel a vital part of it	3
	Conflicts are handled appropriately through proper communication channels	4
	I receive on-time information needed to do my job	5
	The management listens and pays attentions to me	6
	My supervisors and managers trust me	7
	Hotel's communication is interesting and helpful	8
	Our meetings are well-organized	9
	Written directives and reports are clear and concise	10
	Communication with employees is accurate and free-flowing	11
	The management is open to ideas	12
	The amount of supervision given me is about right	13
	Informal communication is active and accurate	14
	Attitudes toward communication in the hotel are basically healthy	15
	The amount of communication in the company is about right	16

Table 2. Reliability of Measurements

Constructs	Number of Items	Cronbach's alpha (α)
Expectancy	5	.842
Instrumentality	11	.842
Valence	14	.886
Work Motivation	5	.941
Communication Satisfaction	9	.962

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CHAPTER FOUR

HOTEL EMPLOYEE MOTIVATION: AN APPLICATION OF EXPECTANCY THEORY

Abstract

Understanding what motivates employees and how to do is always an on-going issue for managers in hotel operations. Expectancy theory is one of most commonly used theories in work motivation, explaining the process individuals use to make decisions on various behavioral alternatives. However, its framework lacks validity. The purpose of this study is to apply expectancy theory to better understanding employee motivation in the hotel setting and confirm the validity of expectancy theory. The proposed expectancy theory model with hotel employee motivation was addressed with a survey collected from 289 hotel employees. The results suggest a modified expectancy theory with five components (expectancy, extrinsic instrumentality, intrinsic instrumentality, extrinsic valence and intrinsic valence) best explains the process of motivating hotel employees. Findings also suggest that intrinsic motivation factors are more valuable than extrinsic factors for hotel employees, which indicates that hotel managers can focus on intrinsic motivation factors to motivate employees. Motivating employees continuously in a variety of ways is strongly recommended.

Key words: Expectancy theory, Hotel employee motivation, Expectancy, Instrumentality, Valence.

INTRODUCTION

Because the work is labor intensive and turnover is high, the hotel industry is characterized by low job security, low pay, and limited opportunities for advancement (Byrne, 1986; Knight, 1971). Understanding hotel worker attitudes and motivation has become an important focus for research in the industry. Employee motivation also has been the focus of research in academic circles as scholars seek to understand what motivates employees in a variety of work settings.

Hotel employees require intelligence, job knowledge and skills, and time management ability, but without motivation, employees will not advance in their careers. Motivation is complex, often combining personal, monetary, relationship, and career goals. Motivation factors in the hotel industry have been identified as pay, monetary bonuses, or benefits; opportunity for advancement and promotion; job responsibility; recognition from managers, colleagues, customers, and family; challenge, feelings of accomplishment, and development of self-esteem; working conditions, work schedule, and job security; and being regarded as a good employee (Wong, Siu, & Tsang, 1999). Motivating an employee has never been an easy job. Each employee has his or her needs, expectancies, capabilities, desires, and accomplishments. Thus, one goal of this study is to gain more knowledge about what motivates hotel employees.

The expectancy theory of motivation, originally developed by Vroom (1964), is a theory explaining the process individuals use to make decisions on various behavioral alternatives. Expectancy theory is presented as follows:

Motivation Force = Expectancy × Instrumentality × Valence

Motivational force is the force directing specific behavioral alternatives, which are suggested when deciding among behavior options. Individuals select the option with the greatest motivational forces. The motivational force for a behavior, action, or task is a function of three distinct perceptions: Expectancy, Instrumentality, and Valence. Expectancy is the perceived probability that effort will lead to good performance; variables affecting the individual's expectancy perception include self-efficacy, goal difficulty, and perceived control. Expectancy that one's effort will lead to a desired performance is based on past experience, self-confidence, and the perceived difficulty of the performance goal. Instrumentality is the perceived probability that good performance will lead to desired outcomes; trust, control, and policies are variables affecting the individual's instrumentality perception. The instrumentality is the belief that if one does meet performance expectations, he or she will receive a greater reward. Valence refers the value the individual personally places on rewards: the function of needs, goals, values, and preferences. Expectancy theory generally is supported by empirical evidence (Tien, 2000; Vansteenkiste, Lens, & De Witte, 2005) and is one of most commonly used theories of motivation in the workplace (Campbell & Pritchard, 1976; Heneman & Schwab, 1972; Mitchell & Biglan, 1971).

Expectancy theory provides a general framework for assessing, interpreting, and evaluating employee behavior in learning, decision making, attitude formation, and motivation (Chen & Lou, 2002). However, Mitchell (1974) suggested that the construct validity of the components of expectancy theory remains little understood. The results of the meta-analysis by Van Erde and Thierry (1996) suggest that Vroom's model does not yield higher effect sizes than the components of the models, implying that the model

lacks validity. Van Erde and Thierry (1996) suggested using VIE components rather than the model formulation. One of objectives of this study is to apply the expectancy theory to better understand employee motivation and confirm the validity of the expectancy theory. Applying the expectancy theory to hotel employee motivation should allow academia and industry to better explain how employee perceptions of motivation and individual decision-making change behavior at work.

Despite the implications of employee motivation for the hotel industry, relatively little research has focused on hotel employee motivation based on theoretical concepts. Most previous studies have concentrated on identifying the factors motivating employees and made suggestions for further improving employee motivation. Applying motivation theories and models to the process of employee decision making has not commonly been done. The following research questions were explored in this study:

- How important are motivation factors to employees working in the hotel industry?
- What are the determinants influencing hotel employee motivation?
- Is the expectancy theory the appropriate theory for developing a conceptual model of hotel employee motivation?

Employee motivation in hospitality research has focused on simply identifying factors motivating employees. Little research has been devoted to developing a theory for the process of employee motivation, and the lack of a strong theoretical framework may negatively affect the validity of research in this area.

The main purpose of this study was to gain more understanding of employee motivation and its decision-making process by testing the proposed model with theoretical support. The specific objectives for this study were the following:

- Examine the importance of each motivational factor on hotel employees.
- Explain hotel employee motivation using the expectancy theory.
- Test the extent to which each component (expectancy, instrumentality, valence) influences hotel employee motivation.

Both hotel employees and the management acknowledge the importance of employee motivation, and both will benefit from a better understanding of forms of employee motivation. Hotel employees will be motivated in the way they want to be motivated to do their jobs and to enjoy their jobs. Hotel management will implement employee motivation more effectively, and effective employee motivation will impact employee performance and service quality directly or indirectly. The proposed employee motivation model can help hotel management understand the needs and wants of employees and develop effective motivation plans for employees. Furthermore, the research model also can be applied to motivate individuals at the managerial level in the hotel industry.

CONCEPTUAL BACKGROUND

Studies have identified motivation factors of hotel employees (Johnson, 1986; Charles & Marshall, 1992; Simons & Enz, 1995; Siu, Tsang, & Wong, 1997; Wong, Siu, & Tsang, 1999). Good wages, good working conditions, job security, and opportunities for advancement and development all help motivate hotel employees. Other motivation factors include interesting work, trust, appreciation, recognition, loyalty to employees,

feeling of being in valued, tactful discipline, and sympathetic personal help. Lee-Ross (1995) supported the concept of "internal work motivation," which is to intrinsic motivation in that the more effort is expended on the jobs, the more motivated they would become.

The expectancy theory of motivation, originally developed by Vroom (1964), is a recognized theory that explains the process by which individuals make decisions on various behavioral alternatives. This model deals with the direction aspect of motivation; that is, once behavior is energized, what behavioral alternatives are individuals likely to pursue? The following are components of expectancy theory:

When deciding among behavioral options, individuals select the option with the greatest motivation forces (MF).

$$MF = \text{Expectancy} \times \text{Instrumentality} \times \text{Valence}$$

The motivational force for a behavior, action, or task is a function of three distinct perceptions:

Expectancy - Probability (E→P): The expectancy is the belief that one's effort (E) will result is attainment of desired performance (P) goals. This belief, or perception, is generally based on an individual's past experience, self-confidence (often termed self efficacy), and the perceived difficulty of the performance standard or goal.

Instrumentality - Probability (P→R): The instrumentality is the belief that in meeting performance expectations, one will receive a greater reward. This reward may come in the form of a pay increase, promotion, recognition, or a sense of accomplishment. Note that when it is perceived that valued rewards follow all levels of performance, then instrumentality is low.

Valence- V(R): The valence refers the value the individual personally places on the rewards. This is a function of his or her needs, goals, values, and source of motivation.

Fudge and Schlacter (1999) commented that the expectancy theory was used in their study because the theory had been validity-tested in academia. Expectancy theory is useful in helping to refocus behaviors and the corporate culture. Moreover, the theory is complex enough to suggest a number of strategies an organization can use to encourage desired behavior from its employees. Expectancy theory models can be complex or simple depending on the number of factors recognized as affecting the three basic components (Fudge & Schlacter, 1999).

The central premise of the expectancy theory is that people make behavioral choices that are calculated to allow them to achieve desired outcomes (Porter & Lawler, 1968; Vroom, 1964). Employees will be more motivated to adjust their behavior to earn a more valuable valence than a less valuable valence. Two points are important in understanding the expectancy theory. First, the expectancy theory explains the way in which individuals perceive their environment. Environmental and organizational cultures are critical influences in expectancy theory. Second, according to Vroom (1964), the strength of force for an individual to perform an act is the combined function of valence, instrumentality, and expectancy. If any one of these three is zero, the whole equation becomes zero. In addition, studies have shown that instrumentality and valence alone could predict motivation and performance (Galbraith & Cummings, 1967; Mitchell, 1974; Schmitt & Son, 1981). Butler and Cantrell (1997) explained the low predictive power of expectancy by noting that social desirability leads to low variance of

expectancy and to measurement limitations, thus confounding expectancy with instrumentality.

In a study by Arvey and Neel (1974), the expectancy theory did not predict work motivation for engineers, and the results did not suggest that using better criteria measures would enhance the validity of the expectancy model. They commented on several reasons for the failure of the expectancy model to demonstrate much usefulness in predicting these criteria: 1) the organizational circumstances may not have been within certain boundary conditions necessary for the model to work; 2) operationalism of the expectancy variables was inadequate; 3) job outcomes were used that did not represent of the actual outcomes in the job setting. Porter and Lawler (1968) indicated two major criticisms of the expectancy theory: first, it is vague about the kind of previous learning experiences that produce different expectancies, and the second is that it does not specify how outcomes acquire positive or negative qualities for individuals.

The expectancy theory (Vroom, 1964) has been discussed widely in the study of work motivation. Vroom's (1964) expectancy-instrumentality and valence model has been used to explain organizational behavior (Naylor, Prithcard, & Ilgen, 1980), leadership (House, 1971), and compensation (Lawler, 1971). Literature reviews on the expectancy theory (Mitchell, 1974, 1982a; Campbell & Prithcard, 1976; Schwab, Olian-Gottlieb, & Heneman, 1979; Wanous, Keon, & Latack, 1983) have addressed several conceptual and empirical problems and provided suggestions for future research. Recent publications show interest in the expectancy theory and its implications for training motivation (Mathieu, Tannenbaum, & Salas, 1992), turnover (Summers & Hendrix, 1991), self-set goals (Tubbs, Boehne, & Dahl, 1993), and goal commitment (Klein &

Wright, 1994; Tubbs, 1993). Researchers also suggest that the expectancy theory should be combined with other motivation theories (Kanfer, 1987; Kernan & Lord, 1990; Klein, 1989; Landy & Becker, 1990). In recent years, the expectancy theory has been applied in education (Brophy, 1988; Feather, 1992; Hancock, 1995). In an educational setting, expectancy suggests that a student's motivation to learn depends on the student's expectation that the student can learn and that learning will result in a valued outcome (Hancock, 1995). Teachers, therefore, are encouraged to implement actions based on the expectancy theory by electing one or more components of the theory (expectancy, instrumentality, and valence) to create an environment that will maximize student motivation to learn. Modified theories based on expectancy theory, such as Lawler's expectancy model (1970), have been further developed. In his model, Lawler (1970) added observed and actual experiences and problem solving; he also divided rewards into extrinsic and intrinsic rewards.

Many different interpretations, organizational plans, applications, and methods of statistical analysis have been used with the expectancy theory, but the major concern remains: that the validity of the expectancy theory remains unclear (Van Eerde & Thierry, 1996). Landy and Becker (1990) suggested that the key to improving the predictions of expectancy model might lie in variables such as the number of outcomes, valence of outcomes, and the particular dependent variable chosen for study. Schwab et al. (1979) examined the relationship between the VIE model and two criterion variables: effort and performance. They included several moderators of this relationship in 32 between-subject studies in a statistical analysis. Van Eerde and Thierry (1996) used meta-analysis to further examine the expectancy model and its relationship to 5 types of

criterion variables: performance, effort, intention, preference, and choice. Results showed slightly lower average correlations between Vroom's (1964) model and work-related criterion variables than reported previously in narrative reviews (Mitchell, 1974; Wanous et al., 1983). Van Erde and Thierry (1996) indicted that Vroom's model does not yield higher effect sizes than the components of the models, which indicates that the model lacks validity. They suggested using VIE components rather than models, because many studies were incorrectly performed and analyzed from the original theoretical point of view. In particular, the use of a simple correlation between the sum-of-product variables of the models and the criterion variable may be problematic (Evans, 1991; Mellenbergh, Moldendijk, DeHann, & Ter Horst, 1990). Other important issues addressed by Van Eerde and Thierry (1996) indicated criterion variables that are more strongly related to the models and that components appear to be attitudinal (intention and preference) rather than behavioral (performance, effort, and choice) because of response biases in the self-report measures of attitudinal criterion variables. VIE variables should be related to cognition and not directly to actions (Gollwitzer, 1993; Kanfer, 1990; Vroom, 1964). Therefore, a unique aspect of this study is modifying that expectancy theory and examining its validity with three components using structural equation modeling rather using probability as in previous studies. In addition, we will attempt to assess employees' attitudinal cognition by asking their perceptions.

Campbell et al. (1970) and Lawler (1971) distinguish between intrinsic and extrinsic rewards that accrue to an individual as a result of job effort and/or job performance. Extrinsic outcomes are those rewards that are distributed by some external agent (e.g., organization, boss) while intrinsic outcomes are mediated by the individual

and are internal, personal rewards (e.g., self-fulfillment, self-esteem). Research on expectancy theory formulation has generally been positive (Hackman & Porter, 1968; Lawler & Porter, 1967; Arvey, 1972; Galbraith & Cummings, 1967). However, in their review of expectancy literature, Heneman and Schwab (1972) indicate some limitations in the existing research. They observe that the performance to outcomes (Expectancy II) and effort to performance (Expectancy I) variables have not been clearly delineated. That is, many researchers have used an effort to rewards variable, thus confounding the two variables. Heneman and Schwab (1972) also indicated that many studies combine separate performance to outcome relationships into a single index rather than relating each performance to outcome (Expectancy II) variable separately to measure success. An individual may have three quite different expectations of whether performance will result in outcomes. One may have a high Expectancy II on the performance to pay relationship, a low Expectancy II on the performance to recognition relationship, and an intermediate Expectancy II on the performance to challenge relationship. It is probably appropriate to relate each of these expectancies separately to effort and performance in addition to some composite index of the expectancies. Schwab and Commings (1970) have raised another issue with testing motivation theories: the measurement of performance. Most, if not all, of previous expectancy research has used global measures of performance. Dunnette (1963) and others have questioned the use of overall measures of job effectiveness and suggested a multidimensional approach. Using global performance measures serves to cover up rather than reveal relationships. Perhaps some of the low correlations obtained when testing expectancy theory predictions may be due to simplistic measures of job performance.

Graen (1969) and Mitchell and Albright (1972) have suggested that intrinsic outcomes yield predictions of job performance and job satisfaction that are superior to those yielded by extrinsic outcomes. Other authors (Wahba & House, 1974) have suggested that intrinsic outcomes may have more power to motivate than extrinsic outcomes, primarily because the instrumentality perceptions associated with outcomes that are self-administered should approach certainty. Parker and Dyer (1976) noted that the roles of intrinsic and extrinsic outcomes in expectancy theory research are very complex and remain very much unsettled. Parker and Dyer (1976) stated that excluding negatively valent outcomes from the expectancy theory model actually increased its validity. Given the many conceptual and methodological shortcomings of expectancy theory (Locke, 1975; Mitchell, 1974; Schmidt, 1973; Parker & Dyer, 1976), one might conclude that the expectancy theory model does not offer a promising avenue of research to predict or explain decisions on work-related choices or behaviors. However, the expectancy theory should not be abandoned until additional conceptual and methodological refinements are attempted.

Based on the literature review, the model of employee motivation was developed using the expectancy theory.

Hypothesis 1: Expectancy has a positive effect on hotel employee motivation.

Hypothesis 2: Instrumentality has a positive effect on hotel employee motivation.

Hypothesis 3: Valence has a positive effect on hotel employee motivation.

METHODOLOGY

A primary purpose of this study was to develop a research instrument that measures each construct in the proposed employee motivation model. An initial survey questionnaire was developed after reviewing the relevant literature and after an elicitation study.

Elicitation Study

Measurement items were developed from both a literature review and an elicitation study (see Appendix A). For measurements of hypothetical constructs (expectancy, instrumentality, valence, work motivation), this study adopted items that have been validated in many studies. Pay; monetary bonuses; advancement opportunities; job responsibility; recognition from managers, colleagues, family, and customers; challenging work; a sense of accomplishment, self-esteem and being regarded as a good employee; work conditions; work schedule; and job security were selected as items that measure expectancy, instrumentality, and valence in the elicitation study. Amount of effort, quality, productivity, job involvement were items used to measure work motivation. An elicitation study was used in constructing the final set of measurement items for the instrument questionnaire. In the elicitation study, respondents were required to rank the list of measurement items to elicit the best measurement items for the five constructs. The elicitation study was developed and administered to 33 hotel managers, supervisors, and employees from 6 hotels near a Midwestern university. These 6 hotels included 3 mid-scale and 3 economy hotels. The results of the elicitation study were similar to results in the literature pertaining employee motivation (Knight, 1971; Byrne, 1986; Charles & Marshall, 1992; Simons & Enz, 1995; Siu, Tsang, &

Wong, 1997; Wong, Siu, & Tsang, 1999). Pay, advancement opportunities, monetary bonus, and recognition from managers and colleagues are primary motivators for hotel employees.

Instrument Development

Further, an instrument survey was conducted. Expectancy is based on the perceived effort-performance relationship. One's effort should lead to the desired performance and is based on past experience, self-confidence, and the perceived difficulty of the performance goal. Five items of expectancy were drawn from the literature (Campbell et al., 1970; Gavin, 1970; Porter & Lawler, 1968) to measure each respondent's expectation of work outcomes on a 7-point scale ranging from strongly disagree to strongly agree. Instrumentality is based on the perceived performance-reward relationship. Instrumentality is the belief that if one does meet performance expectations, one will receive a greater reward. Work outcomes can be categorized as pay, monetary bonus, advancement opportunities, and recognition from upper level management, colleagues, customers, and family, as well as the need for fulfillment. Thirteen items of instrumentality were drawn from the literature (Gavin, 1970; Matsui & Ohtsuka, 1978; Reinharth & Wahba, 1975), and respondents evaluated the effort of performance on work outcomes using a 7-point scale ranging from strongly disagree to strongly agree with the statement. Valence refers to the value the individual personally places on the rewards. This is a function of his or her needs, goals, and values. Sixteen items of valence were drawn from the literature (Galbraith & Cummings, 1967; Gavin, 1970; Mobley, 1971; Mitchell, 1974), and respondents evaluated the desirability of work outcomes using a 7-point scale ranging from very undesirable to very desirable. Work motivation is defined

as the act or process of an employee being motivated to work. Eleven items of work motivation were adopted from the literature(Arvey & Mussio, 1973; Ivancevich, 1976; Kopelman, 1979; Landy & Guion, 1970). Respondents evaluated work motivation using a 7-point scale ranging from strongly disagree to strongly agree.

Pilot Study

A pilot study (see Appendix B) was conducted before data collection. The purpose of the pilot study was to test the reliability of the study instrument and to test the survey distribution procedures. One hotel in a city of a Midwestern state and both Hotel and Restaurant Management graduate and undergraduate students in that city who had worked in hotels were asked to participate in the pilot test. One hundred surveys were distributed, and 29 surveys were returned for pilot test data analysis. Revisions to the study instrument and to the distribution procedures were made based on the results of the pilot test.

Cronbach's alpha (α) was used to measure internal consistency of the measurements. The reliability scores, ranging from .842 for expectancy and instrumentality to .941 for work motivation, indicated the measurement items are satisfactory for measuring the constructs of interest.

Insert Table 1

Based on the results of the pilot study, changes in wording and question statements were made. Most measurement items were kept for the final version of the questionnaire; however, some items were deleted to increase Cronbach's alpha and

shorten the survey. "If I work very hard, the quality of my job performance will be greatly enhanced" was deleted from the construct of Expectancy. "Receiving recognition/praise from others at work" and "Being regarded as a good employee" were deleted from the construct of Instrumentality. "Good working conditions" "Stable work schedules"" Job security" "Recognition/Praise from others at work" were deleted from the construct of Valence. "Work harder than others" was deleted from the construct of Work Motivation. The final version of the questionnaire comprises a total of 34 questions to measure 5 constructs and respondent demographic characteristics (see Appendix C).

The sample population was employees working in hotels. The researcher called each hotel human resources manager to introduce the study and ask for participation in the study. A letter explaining the purpose and survey questionnaire was faxed or emailed to the General Managers or Human Resources managers for permission (see Appendix D). When permission was granted for participation, questionnaires were taken to human resource managers within each participating hotel and randomly selected employees completed the research survey. Hotel employees receives a survey packet, including a cover letter describing the research project, the survey, and a stamped, pre-addressed envelope in which to return the survey. This study and survey were reviewed and approved by Kansas State University Institutional Review Board, which is mandated by federal laws and regulations, and is responsible for oversight of all activities involving research with human subjects.

Collected data was analyzed using SPSS for Windows 13.0 and LISREL 8.54. The procedures of data analysis used in this study included descriptive analysis, principle

component factor analysis, confirmatory factor analysis (CFA), and structural equation modeling (SEM). Descriptive analysis included mean and standard deviation of sample characteristics as well as linearity and normality of data assumption check. Principle components analysis was performed to check that every proposed construct extracts one factor. Confirmatory factor analysis was used to test the reliability and validity of measurements for latent constructs in the model. Composite reliability assessed the reliability of indicators representing each construct in the measurement model. Composite reliability of .70 for all constructs was used as a criterion as suggested by Anderson and Gerbing (1988). A validity check was conducted to check convergent validity and discriminant validity. Factor loading of .5 is the criterion for convergent validity. Average variance extracted (AVE) presents the overall amount of variance in the indicators accounting for the latent construct (Hair et al., 1998), and an AVE of .50 is the criterion for convergent validity. Discriminant validity was assessed by comparing AVE with the squared correlation between two constructs (Anderson & Gerbing, 1988). Structural equation modeling (SEM) was used to determine the causal relationships among constructs proposed in the employee motivation model. Standardized path coefficients were used to test hypothesized paths (Hypotheses 1 to 3) among constructs proposed in the structural model.

DATA ANALYSIS

Data Collection and Data Analyses

Employees working in hotels in several cities in a Midwestern state were selected as samples for the study. Fifty-six hotels agreed to participate in the study. Surveys with

cover letters were delivered to Human Resources managers or General Managers in these hotels. The managers distributed the surveys to their full-time employees by a convenience sampling method. Employees then returned the completed surveys to the managers, and the researcher collected them. The period for data collection was February 24, 2006 to March 22, 2006. A total of 1450 surveys were distributed to employees in these participating hotels, and 301 were returned, yielding a response rate of 20.76%. Of the 301 returned responses, 12 were not usable. Thus, 289 (19.93%) responses were used for analysis.

Sample Characteristics

A total of 289 employees, consisting of 84 (29.1%) males and 203 (70.2%) females, participated in the study (Table 2). The age range was 17 to 70. More than one-third of the respondents (37.72%) were 21 to 30 years old. The largest groups comprised respondents (16.95%) between 31 and 40 years old and respondents (14.19%) between 41 and 50 years old. One-third of the respondents (33.91%) had completed some college, and another one-third of the respondents (33.56%) had high school degrees. One hundred twenty-eight respondents (44.29%) were employees in the Front Office department, 23.18% worked in housekeeping, and 12.46% were employed in Administration department. In terms of their jobs, most respondents were front office receptionists, housekeepers, and office assistants. Average lengths of employment at the current hotel and in the hotel industry are 2.88 and 5.19 years, respectively.

Insert Table 2

Measurement Items

The mean scores for each measurement item, which indicated the extent to which each measurement item was perceived by employees, are presented in Table 3. The mean scores for the four measures of expectancy ranged from 5.56 to 5.75, based on the seven-point Likert scale. The mean scores for the eight measures of instrumentality ranged from 4.29 to 6.01. The mean scores for the ten measures of valence ranged from 5.67 to 6.20. The mean scores for the four measures of attitude toward work motivation ranged from 6.14 to 6.21. When respondents evaluated three components of expectancy theory, valence had the highest scores. Respondents responded that they would improve their performance if they were highly motivated. The descriptive analyses are presented and discussed because the results provide more practical implications.

Insert Table 3

The 34 measurement items were adopted and modified using previous studies and an elicitation study. Therefore, the principle component analysis with a varimax rotation procedure was to check each proposed construct, extracting one component to measure each construct. One component was extracted for the construct of Expectancy (4 items), and Work Motivation (4 items). However, two components were extracted for both constructs of Instrumentality (8 items) and Valence (10 items). The construct of Instrumentality extracted 2 factors: extrinsic instrumentality and intrinsic instrumentality;

Valence extracted 2 factors: extrinsic valence and intrinsic valence. Extrinsic instrumentality included four items: good pay, monetary bonuses, pay increases, and opportunities for promotion; intrinsic instrumentality included four items: responsibility and control over the job, challenging work, feeling of accomplishment, and feeling good about self. Extrinsic valence included four items: good pay, monetary bonuses, pay increases, and opportunities for promotion; intrinsic valence included six items: interesting work, responsibility and control over the job, challenging work, full use skills and abilities, feeling of accomplishment, and personal growth and development. Noted that four items (INSRESPO, INSCHALL, VALINTER, VALPROMO) were excluded because of two cross factor loadings; thus, to achieve a high reliability alpha, these items were deleted from further analysis. As a result, intrinsic instrumentality included two items: feeling of accomplishment and feeling good about self; intrinsic valence included five items: responsibility and control over the job, challenging work, full use skills and abilities, feeling of accomplishment, and personal growth and development.

Table 4 presents results of principle component analysis with each set separately analyzed, including factor loadings of measurement items and eigenvalue and percent of variance explained by each construct.

Insert Table 4

Confirmatory Factor Analysis

Before confirmatory factor analysis was performed, reliability alphas (see Table 4) were checked for internal consistency. The alpha values for the constructs of this study were expectancy (.89), extrinsic instrumentality (.94), intrinsic instrumentality (.87), extrinsic valence (.86), intrinsic valence (.91), and work motivation (.95). The alpha values of all the constructs used in this study exceeded the minimum requirement for reliability of 0.7. The results indicated that multiple measurement items are highly reliable for measuring each construct. To validate the developed constructs, a measurement model was estimated with a confirmatory factor analysis (CFA) in which each measurement item was loaded on its prior constructs, and the constructs were correlated in the analysis (Gerbing & Anderson, 1988). All measurement items were loaded on their expected constructs; however, the model did not fit the goodness of fit indices. (χ^2=1045.48, df=284, χ^2/ df = 3.68, RMSEA= .096, CFI= .95, NNFI= .94). After deleting two measurement items (VALCHALL and VALGROWNI with two high measurement errors), the revised confirmatory factor analysis was found to be a good-fit model (χ^2=181.35, df=97, χ^2/ df = 1.87, RMSEA= .055, CFI=.98, NNFI= .98).

Construct reliability and validity were then assessed after the overall fit of the measurement model was performed. Table 5 presents the factor loadings of the observed variables on the latent constructs and the composite reliability and construct validity. Composite reliability was computed to assess the reliability of indicators representing each construct in the measurement model. Composite reliability was calculated as follows:

$(\Sigma \text{ standardized loadings})^2 / (\Sigma \text{ standardized loadings})^2 + (\Sigma \text{ indicator measurement error})$

Composite reliability is similar to Cronbach's alpha; composite reliability accounts for the actual factor loadings in the composite load determination rather than Cronbach's alpha assuming each item is equally weighted. Composite reliability of each constructs were well over .70, which indicated good reliability.

Construct validity was evaluated by examining convergent and discriminant validity of constructs. Average variance extracted (AVE) was calculated to check the convergence of constructs. AVE was calculated as follows:
(Σ squared standardized loadings)/ (Σ square standardized loadings) + (Σ indicator measurement error)

Insert Table 5

Hair, Anderson, Tatham, & Black (1998) suggested the AVE should be higher than .5, indicating satisfactory convergent validity. Discriminant validity of constructs was assessed by comparing the AVE with the squared correlation between latent constructs (Fornell & Larcker, 1981). AVE in each construct should exceed the square of correlation between constructs. As shown in Table 5, AVE of each construct was over .5, and AVE of each construct was higher than the squared correlations between pairs of constructs, which indicates construct validity (Table 6).

Insert Table 6

Structural Equation Modeling

Structural equation modeling with LISREL 8.54 was used to examine the hypothesized relationships in the expectancy theory of hotel employee motivation. Goodness-of-fit indices were used to evaluate the overall model fit of the structural equation model. The model was used (χ^2=275.76, df=155, χ^2/ df = 1.78, RMSEA=.052, NFI=.96, NNFI=.98, CFI=.98); all goodness-of-fit exceeded their acceptance level, suggesting this model was able to explain hotel employee attitudes toward motivation. Factor loadings of the expectancy theory model are presented in Table 7. Based on the results of exploratory and confirmatory factor analysis, both instrumentality and valence extracted to extrinsic instrumentality and intrinsic instrumentality as well as extrinsic valence and intrinsic valence. Hypotheses 2 and 3 (H 2: Instrumentality has a positive effect on hotel employee motivation; H 3: Valence has a positive effect on hotel employee motivation) were changed to H 2a: Extrinsic Instrumentality has a positive effect on hotel employee motivation; H 2b: Intrinsic Instrumentality has a positive effect on hotel employee motivation; H 3a: Extrinsic Valence has a positive effect on hotel employee motivation; and H3b: Intrinsic Valence has a positive effect on hotel employee motivation.

Insert Table 7

Standardized path coefficients were used to test the hypotheses. In Table 8, t-values were significant at .01 level, demonstrating that H1, H2b, H3a, H3b were

supported. Standardized path coefficients and t-values for each hypothesized path were as follows: expectancy → work motivation (.17 with t-value = 2.66**); intrinsic instrumentality → work motivation (.36 with t-value = 4.33**); extrinsic valence → work motivation (.16 with t-value = 2.04**); intrinsic valence → work motivation (.22 with t-value = 2.63**). Therefore, the following hypotheses were supported: H1: Expectancy has a positive effect on hotel employee motivation; H2b: Intrinsic Instrumentality has a positive effect on hotel employee motivation; H3a: Extrinsic Valence has a positive effect on hotel employee motivation, and H3b: Intrinsic Valence has a positive effect on hotel employee motivation.

Insert Table 8

The standardized path coefficient and t-value for hypothesis H2a showed extrinsic instrumentality → work motivation (-.14 with t-value = -2.12**). This negative-significant relationship between extrinsic instrumentality and work motivation may be explained by a suppressor effect (Cohen & Cohen, 1983). According to the correlation matrix (Table 6), extrinsic instrumentality and work motivation were significantly correlated (.193**); however, other correlations were even more significant (Expectancy: .367**; Intrinsic Instrumentality: .422**; Extrinsic Valence: .258**; Intrinsic Valence: .408**). A series of regressions were performed to further examine the suppressor effect (Table 9). Darlington (1968) defined a negative suppressed variable as a variable that has a positive correlation with the dependent variable but negative beta weights in a

regression equation. Extrinsic Instrumentality was positively correlated with work motivation (.193**), but it showed negative beta (β = -.064) in the regression equation 1. When extrinsic instrumentality is only the variable regressed to work motivation, regression equation 2 showed positive beta (β = .108). Regression equations 3 to 6 were then run with each independent variable with extrinsic instrumentality to identify which is suppressor (Cohen & Cohen, 1983). In regression equation 3, extrinsic instrumentality showed negative beta (β = -.001) with intrinsic instrumentality, which imdicated that intrinsic instrumentality was a suppressor. Intrinsic instrumentality acted as suppressor, suppressing the effect of extrinsic instrumentality on work motivation. With intrinsic instrumentality the only independent variable, intrinsic instrumentality should show stronger prediction power for work motivation in the regression equation6 (R^2= 178, β = .298). Because extrinsic instrumentality is not significant (β = -.001, significance .969), the beta of intrinsic instrumentality showed similar β (β = .299). In this study, so H2a showed negative significance, H2a was not supported. Extrinsic instrumentality does not have a positive effect on hotel employee motivation. However, its negative significance should not be ignored. Under the suppressor effect, if the intrinsic instrumentality is controlled, the more extrinsic instrumentality, the less an employee will be motivated. Further detail will be provided in the discussion section.

Insert Table 9

Overall, the expectancy theory can explain employee motivation in the hotel setting. The findings suggest the modified expectancy theory (expectancy, extrinsic and

intrinsic instrumentality, extrinsic and intrinsic valence) would enhance more understanding of hotel employee motivation (Figure 1). Expectancy led hotel employees to believe their effort will lead to desired performance. Instrumentality is the belief that if a hotel employee meets performance expectations, he or she will receive a greater reward, particularly for intrinsic instrumentality. Hotel employees think if they perform well in their job, they will definitely have a sense of accomplishment and feel good about themselves. But hotel employees do not think they will get better pay, monetary bonus, pay increases, or promotion even they meet performance expectations. Hotel employees thought valence was an important attribute in motivation. Hotel employees prefer responsibility over job, using their abilities, and feeling of accomplishment, which are intrinsic valences to extrinsic valences of good pay, monetary bonuses, pay raises, and promotions. Modified Expectancy theory (expectancy, extrinsic and intrinsic instrumentality, extrinsic and intrinsic) was valid in the hotel employee setting and can be used to explain the perceptions and attitudes of hotel employees.

Insert Figure 1

DISCUSSION

The findings of the study supported the validity of the expectancy theory explaining expectancy, instrumentality, and valence of employee motivation in the hotel industry setting. Good pay, monetary bonuses, pay increases, promotions, responsibility and control over the job, full use of skills and abilities, feelings of accomplishment, and

feeling good about themselves all motivate hotel employees. For the three components of the expectancy theory, expectancy shows that employees believe if they work very hard, their job performance will improve. Instrumentality is the reward hotel employees think they will get from doing a good job. Valence is the reward or outcome that motivates them to work. Intrinsic instrumentality contributes to motivation in that hotel employee have a sense of accomplishment and feel good about themselves when they perform well. Next intrinsic valence motivates employees to take more responsibility, making full use of their abilities and accomplishments. Then expectancy and extrinsic valence (pay, bonus, pay increase and promotion) are employee motivators. Only extrinsic instrumentality showed no positive effect on work motivation. However, extrinsic instrumentality showed a negative effect on work motivation when intrinsic instrumentality was controlled. If hotel employees perform well, the intrinsic outcomes are controlled, expecting good pay, monetary bonuses, pay increases or promotions, their motivation decreases if they do not receive those extrinsic rewards. Results showed that intrinsic variables (both instrumentality and valence) contribute more than extrinsic variables do. In fact, intrinsic variables are more important for employees in hotels than extrinsic variables. However, pay always ranked first in motivating hotel employees in most studies and in the elicitation study of this study. Stereotypically hotel employees receive lower pay than employees in other industries, so hotel employees should prefer pay increases or bonuses to motivate them. This finding is consistent with the studies of Graen (1969) and Mitchell and Albright (1972), that intrinsic outcomes yield predictions of job performance and job satisfaction that are superior to those affected by extrinsic outcomes. Wahba & House (1974) suggested that intrinsic outcomes may have more

power to motivate than extrinsic outcomes, primarily because the instrumentality perceptions associated with outcomes that are self-administered should approach certainty. Lee-Ross (1995) also supported the concept of "internal work motivation," which is intrinsic motivation in that the more effort is expended on the jobs, the more motivated employees become. This study confirms that hotel employees weight intrinsic factor higher; employees feel a sense of accomplishment about their jobs, which most motivates them to work harder.

Cohen and Cohen (1983) commented that suppressor variables are viewed as unfavorable attributes of regression model because of multicollinearity or highly correlated independent variables that do not provide exclusive information to explain the model. Multicollinearity could cause high standard errors and imprecise parameter estimates, which threaten the stability of the model and weaken its predictive power (Kidwell & Brown, 1982). However, suppressor variables are important within regression models because they increase effect size and explain the relationships as well as account for the total variance of the dependent variable (Kirk, 1996; Thompson, 1998). As a result, the effect of suppressor variables should be explored because suppressor variables measure some of the variance in the predictor measures not found in the criterion measure (Horst, 1966). In this study, intrinsic instrumentality was found to be a suppressor, and extrinsic instrumentality was suppressed. If intrinsic instrumentality is controlled, employees put more weight on extrinsic instrumentality, and thus they would be less motivated. If hotel employees expect good performance to result in intrinsic outcomes is controlled, when they expect to get good pay, monetary bonuses, pay increases or promotions when performing well, their motivation would be decreased,

because the possibility to get those extrinsic outcomes is low. Expectation is high but desired outcome is low, resulting in decreasing motivation.

The original Vroom expectancy theory has been modified (Campbell, Dunnette, Lawler, & Weick, 1970); Lawler (1971): 1) first-level and second-level outcomes have been distinguished; 2) the intrinsic and extrinsic of valence have been identified; 3) expectancy I and expectancy II have been introduced as separate variables. The first-level outcome refers to the level of performance resulting from a given amount of effort, whereas the second-level outcome is defined as the reward or penalty obtained as the result of the level of performance or as results of the effort expended. Campbell et al. (1970) and Lawler (1971) also distinguished between intrinsic and extrinsic rewards that accrue to an individual as a result of job effort and/or job performance. Extrinsic outcomes are those rewards that are distributed by some external agent (e.g., the organization or boss) while intrinsic outcomes are mediated by the individual and are internal, personal rewards (e.g., self-fulfillment, self-esteem). The intrinsic sources of valence have been identified. These include the degree of satisfaction or pleasure the individual receives from the activity or work behavior itself, regardless of outcome, as well as the degree of satisfaction or pleasure the individual derives from accomplishing the work goal regardless of extrinsic rewards. Expectancy I is defined as the perceived belief that effort will lead to performance or to second-level outcomes. Expectancy II is the perceived belief that performance will lead to second-level outcomes. Arvey and Neel (1974) suggested that combining all of the various Expectancy II variables (some of which exhibited positive and some negative relationships to the criterion in question) might have had the effect of diluting any relationships that may exist. In this study, the

total of 34 measurement items were adopted and modified using previous studies and an elicitation study. Therefore, exploratory factor analysis using a varimax rotation procedure was performed first to identify each construct and then to confirmatory factor analysis. Both instrumentality and valence extracted two factors. Thus, extrinsic instrumentality and intrinsic instrumentality as well as extrinsic valence and intrinsic valence was introduced to run for further analysis. In this study, because the results of confirmatory factor analysis and structural equation modeling showed good model fit and proved model reliability and validity, extrinsic and intrinsic instrumentality and valence are adopted in this study. Mitchell (1974) suggests distinctions between positive and negative outcomes and intrinsic and extrinsic outcomes should probably be included and analyzed separately. In addition, separate extrinsic and intrinsic of both instrumentality and valence provide deeper insight into the model of expectancy theory with hotel employees, as well as to suggest practical implications for the hotel management.

IMPLICATIONS

Theoretical Implications

The findings of the study suggest some theoretical implications. The modified expectancy theory is valid, and it can be applied to employee motivation in the hotel industry. The central premise of the expectancy theory is that people make behavioral choices that are calculated to allow them to achieve desired outcomes (Porter & Lawler, 1969; Vroom, 1964). In the academic field, employee motivation has focused mostly on what motivate employees, not how to motivate them. In this study, hotel employee motivation can be explained as the process individuals use to make decisions on various

behavioral alternatives (expectancy, instrumentality, valence). Employees know their efforts will lead to good performance. Employees believe that if they meet performance expectations, it leads to desired outcomes: having a feeling of accomplishment and feeling good about themselves. They place motivation intrinsic valence than extrinsic valence.

The expectancy theory is generally supported by empirical evidence (Tien, 2000; Vansteenkiste, Lens, & De Witte, 2005) and is one of most commonly used theories of motivation in the workplace (Campbell &Pritchard, 1976; Heneman & Schwab, 1972; Mitchell & Biglan, 1971). However, Mitchell (1974) suggested that the construct validity of the components of the expectancy theory remains little understood. The results of the meta-analysis by Van Erde and Thierry (1996) suggest that Vroom's model does not yield higher effect sizes than the components of the models, which suggests that the model lacks validity. Van Erde and Thierry (1996) suggested using VIE components rather than the model formulation. One objective of this study was to apply the expectancy theory to gain a better understanding of employee motivation and to confirm the validity of the expectancy theory. This study has confirmed its validity as well as construct validity. Applying the expectancy theory to hotel employee motivation allows academia and industry to better explain employee perceptions of motivation and the individual decision-making process.

Specifically, the proposed expectancy theory extends the constructs of instrumentality and valence into extrinsic instrumentality, intrinsic instrumentality, extrinsic valence, and intrinsic valence. Although second-factor of instrumentality and valence could provide another approach, separate constructs of instrumentality and

valence showed better model fit. Parker and Dyer (1976) noted that the roles of intrinsic and extrinsic outcomes in expectancy theory research are very complex and remain very much unsettled. This study attempts to separate intrinsic and extrinsic variables to see their effects on work motivation. Extending existing theory into a sound framework, including extrinsic and intrinsic factors, enhances the understanding of the extent to which each specific construct influences the process of decision-making.

Lastly, one finding of this study is that intrinsic variables were stronger than extrinsic variables in hotel employee motivation. Research has asserted that intrinsic variables play a more important role than extrinsic variables in motivation (Wahba & House ,1974; Lee-Ross, 1995). Pay and other extrinsic variables have always been the most highly ranked motivation factors. It was assumed that pay, bonuses, or promotions should most surely motivate hotel employees. It is possible that employees realize how slim their chances of getting better pay, pay increases, or promotions, so they in turn seek extrinsic factors to motivate them. However, all the results showed intrinsic factors have stronger power to predict employee motivation than extrinsic factors do; thus, the more effort placed on intrinsic motivation, the more motivated employees should become.

Practical Implications

Hotel employees understand that if they work hard, their performance will significantly improve, and when they are highly motivated, they will put more effort into the job, enhancing productivity and the quality of their job performance. Thus, managers should motivate employees continuously, providing feedback on job performance. Employees know they can reach intrinsic rewards easily when they perform well, even if

they do not receive good pay, bonuses, pay increases, or promotions. Managers could compliment employees when they see employees doing well, provide job training so employees can fully use their skills and knowledge in the work place, listen to employees, care about employees, encourage employees to be involved in their job or to make job-related decisions, take care of employee advancements, and reward employees with pay increases or bonuses. The most important thing is manager support for employees and recognition of employees.

If employees make behavioral choices that are calculated to allow them to achieve desired outcomes (Porter & Lawler, 1969; Vroom, 1964), they will be more motivated to adjust their behavior to earn a valuable valence than to earn a less valuable valence. Each employee might place different weight on each construct, and managers can use this to motivate each employee. Results of this study show that the most important predictor of hotel employee motivation is intrinsic instrumentality. This implies that employees know they will feel a sense of accomplishment and feel good about themselves if they perform well; this intrinsic valence is the best reward. Thus, hotel managers should compliment employees when employees perform well. Hotel managers also should provide opportunities to employees, allowing them more challenging work and taking responsibility for the job. Hotel managers should show their appreciation for employees and truly care for them. Employees will feel they are recognized and thus feel more motivated to work.

LIMITATIONS AND FUTURE RESEARCH

There are some limitations in this study. First, data were collected from hotels in major cities in a Midwestern state, and most of the hotels are upper-economy and mid-scale hotels. Very few of them are upper-scale hotels. The findings of this study might only be valid for upper-economy to mid-scale hotels and cannot be generalized to all hotels in the whole industry. It would interesting to duplicate the study in other segments of the hotel industry or in other areas to see if results differ. This approach would help reconfirm the validity of the expectancy theory with hotel employee motivation model.

More and more Hispanics work in the hotel industry. A Spanish version of survey was not part of this study. The researcher asked the hotel managers to have someone who speaks Spanish help Hispanic employees fill out the surveys, but we do not know how much input came from Hispanic employees. Data collection is always difficult; providing an incentive can help, but it is not very efficient. Letting hotel companies know the importance of the study and how the study benefits them, as well as cooperating with hotel managers in distributing surveys or collecting responses, requires researchers to put in more effort to get higher response rate.

Mitchell (1974) commented that measures of instrumentality and valence should include both positive and negative values. Parker and Dyer (1976) stated that excluding negatively valent outcomes from the expectancy theory model actually increased its validity. Previous research has generally identified positive values of motivation factors. Moreover, the researchers also attempted to shorten the measurement items in the surveys, so negative variables were not included in this study. However, including negative values in the instrumentality and valence would provide more information about

employee motivation although it would decrease the model's validity. Future research could include positive values of instrumentality and valence for further analysis.

The expectancy theory should not be abandoned until additional conceptual and methodological refinements are attempted. Moreover, adding other variables to the expectancy theory model enhanced its validity in the behavioral criteria. Parker and Dyer (1976) stated that by including additional situational and psychological components in the model, however, particularly useful behavioral predictions may be obtained. Before these additional variables can be used, however, researchers will need to identify which variables are appropriate in a particular setting to avoid the almost inevitable tendency to include an excessive number of variables and thereby obscure the results. If additional variables will help achieve satisfactory levels of accuracy, however, a return to a regression-based test validation paradigm will be necessary to determine how expectancy and other components should be combined. This will require a much more complex system of weighting and cross-validation than the aggregate statistical models traditionally used. The final and most difficult question on the usefulness of other components is why these variables actually enhance predictions. Mitchell and Knudsen (1973) presented one explanation, suggesting that expectancy models predict only preferences and that situational moderators explain actual behavior. Although this may account for the effects of the expectations of others, it is more difficult to explain why individual differences such as personality, background, or organizational climate would not affect valence, instrumentality, or expectancy perceptions rather than mediating between preferences and behavior. The major research tasks relating to other variables are to identify the kinds of variables that are appropriate and to determine how these

variables can best be incorporated into models, and to explain human's decision-making and behavior.

CONCLUSION

This study applied the expectancy theory to employee motivation in the hotel industry to confirm the validity of the expectancy theory. The expectancy theory was modified so that expectancy, intrinsic instrumentality, extrinsic valence, and intrinsic valence were components determining the process individuals use to make decisions being motivated, and this modified expectancy theory was valid to explain hotel employee motivation.

Hotel employees understand their effort will lead to better performance. Employees believe that if they meet performance expectations. They will lead desired intrinsic outcomes: a feeling of accomplishment and feeling good about themselves. They find intrinsic valence more valuable than extrinsic valence in work motivation. Managers should compliment employees when employees perform well, encourage employees to fully use their skills and knowledge in the work place, support employees, and truly care for them. Expectancy theory model with hotel employee motivation should help hotel managers better understand how employees are motivated and help them further motivate employees, both individually and continuously.

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Figure1. Model of Modified Expectancy Theory for Hotel Employee Motivation

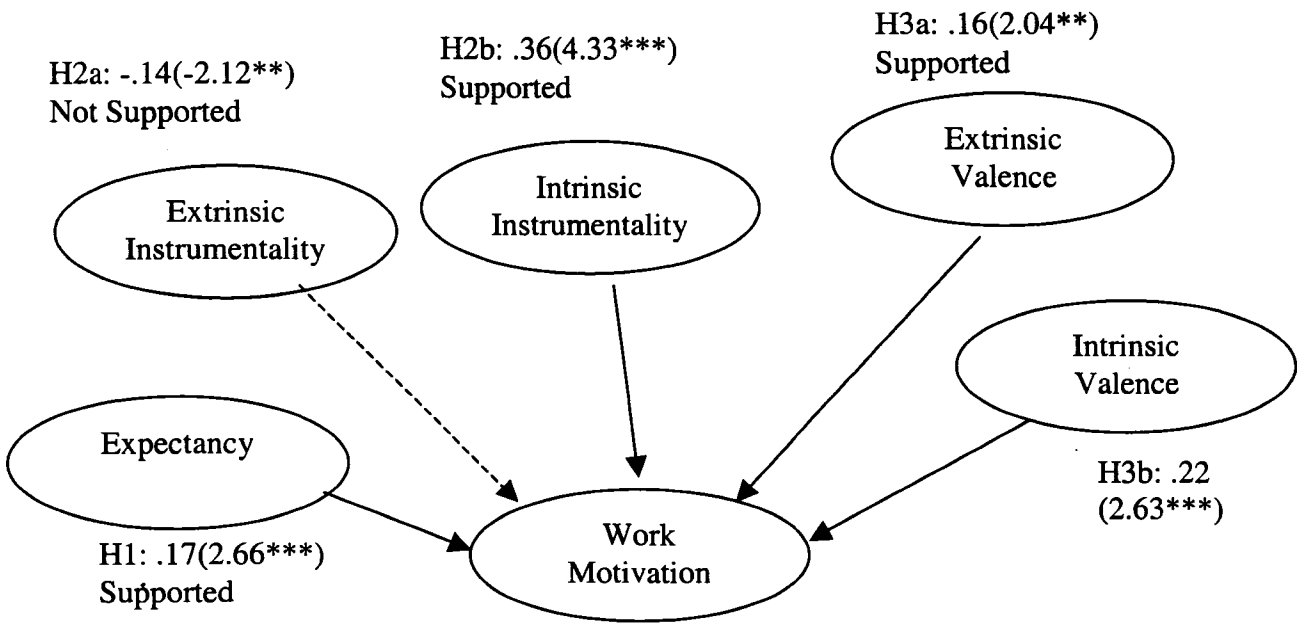

Table 1. Reliability of Measurements

Constructs	Number of Items	Cronbach's alpha (α)
Expectancy	5	.842
Instrumentality	11	.842
Valence	14	.886
Work Motivation	5	.941

Table 2. Profile of Respondents

	Frequency (N=289)	
	N	%
Gender		
Males	84	29.1
Females	203	70.2
No response	2	.7
Age		
20 years old and below	30	10.38
21-30 years old	109	37.72
31-40 years old	49	16.95
41-50 years old	41	14.19
51 years old and above	33	11.42
No response	27	9.34
Education		
Secondary but no degree	14	4.84
High school degree	97	33.56
Completed some college	98	33.91
College or university	54	18.69
Graduate degree	16	5.54
No response	10	3.46
Department		
Administration	36	12.46
Front Office	128	44.29
Housekeeping	67	23.18
Food & Beverage	15	5.19
Others	37	12.80
No response	6	2.08
	Mean	S.D.
Time working in the current hotel	2.88 years	4.16 years
Time working in the hotel industry	5.19 years	6.04 years

Table 3. Descriptive Statistics of Measurement Items

Measurement Items	Mean	S. D.
Expectancy	**5.67**	**1.30**
If I work very hard, my job performance will significantly improve.	5.56	1.50
If I work very hard, I will get a lot more accomplished.	5.70	1.49
If I put more effort into my job, my productivity will improve significantly.	5.75	1.45
If I put more effort into my job, I will definitely be regarded as an effective employee.	5.66	1.52
Instrumentality	**5.08**	**1.41**
Performing well in my job will definitely result in my		
getting good pay.	4.58	1.87
getting monetary bonuses	4.29	1.97
getting pay increases.	4.56	1.92
having more opportunities for promotion.	4.85	1.95
having more responsibility and control over my job.	5.28	1.71
taking on more challenging work tasks.	5.24	1.62
having feelings of accomplishment.	5.82	1.52
feeling very good about myself.	6.01	1.44
Valence	**5.95**	**1.08**
Good salary/wage.	5.84	1.59
More monetary bonuses.	5.75	1.49
More pay increases.	6.00	1.39
Interesting work.	5.98	1.37
Opportunities for advancement/promotion.	5.88	1.48
More responsibility/control over my job.	5.98	1.25
More challenging work tasks.	5.67	1.38
Full use my skills and abilities.	5.97	1.33
Feelings of accomplishment.	6.20	1.23
Personal growth and development.	6.18	1.31
Work Motivation	**6.16**	**.99**
When I am highly motivated, I will definitely...		
expend more effort on the job.	6.16	1.01
enhance quality of my job performance.	6.14	1.05
increase productivity on the job.	6.14	1.07
be willing to get involved in my job.	6.21	1.08

Note: A 7-point scale from 1 (strongly disagree) to 7 (strongly agree).

Table 4. Principle Component Analysis of Expectancy Theory of Hotel Employee Motivation

Factors	Factor Loadings	Eigenvalue	Percent of Variance Explained %	Cronbach's Alpha (C.A.)
1. Expectancy		3.060	76.50	.89
EXPPERFO	.93			
EXPACCOM	.92			
EXPPRODU	.89			
EXPEFFEC	.76			
2. Extrinsic Instrumentality		3.357	83.92	.94
INSPAY	.92			
INSBONUS	.92			
INSINCRE	.94			
INSPROMO	.89			
3. Intrinsic Instrumentality		1.779	88.93	.87
INSACCOM	.94			
INSGOODE	.94			
4. Extrinsic Valence		2.365	78.82	.86
VALPAY	.83			
VALBONUS	.92			
VALINCRE	.92			
5. Intrinsic Valence		3.716	74.32	.91
VALRESPO	.85			
VALCHALL	.83			
VALABILI	.89			
VALACCOM	.89			
VALGROWNI	.85			
6. Work Motivation		3.493	87.33	.95
WORKEFFO	.91			
WORKQUAL	.95			
WORKPROD	.95			
WORKINVO	.93			

Note: Four items (INSRESPO, INSCHALL, VALINTER, VALPROMO) were excluded due to high across- loadings preliminary and each set separately analysis. In order to achieve a high reliability alpha, these items were deleted from further analysis.

Table 5. Confirmatory Factor Analysis of Expectancy Theory of Hotel Employee Motivation

Construct	Standardized Factor Loadings	Composite Reliabilities*	Average Variance Extracted (AVE)**
Expectancy		.95	.82
EXPPERFO	.83		
EXPACCOM	.91		
EXPPRODU	.94		
EXPEFFEC	.64		
Extrinsic Instrumentality		.94	.79
INSPAY	.89		
INSBONUS	.88		
INSINCRE	.93		
INSPROMO	.84		
Intrinsic Instrumentality		.88	.79
INSACCOM	.95		
INSGOODE	.82		
Extrinsic Valence		.94	.85
VALPAY	.69		
VALBONUS	89		
VALINCRE	.90		
Intrinsic Valence		.79	.55
VALRESPO	.77		
VALABILI	.85		
VALACCOM	.88		
Work Motivation		.95	.83
WORKEFFO	.86		
WORKQUAL	.94		
WORKPROD	.94		
WORKINVO	.91		

Note: Composite reliability and variance extracted for constructs were computed based on the following formulas (Fornell & Larcker, 1981; Hair, Anderson, Tatham & Black, 1998):

*Composite reliability = $(\Sigma \text{ standardized loadings})^2 / (\Sigma \text{ standardized loadings})^2 + (\Sigma \text{ indicator measurement error})$

**AVE = $(\Sigma \text{ squared standardized loadings}) / (\Sigma \text{ square standardized loadings}) + (\Sigma \text{ indicator measurement error})$

Table 6. Correlation Matrix, Means and Standard Deviations of the Measurement Model

	1	2	3	4	5	6	Mean	S.D.
1. Expectancy	1						5.67	1.30
2. Extrinsic Instrumentality	.253**	1					4.57	1.76
3. Intrinsic Instrumentality	.447**	.461**	1				5.92	1.40
4. Extrinsic Valence	.151**	.263**	.014	1			5.87	1.32
5. Intrinsic Valence	.270**	.348**	.317**	.536**	1		6.05	1.13
6. Work Motivation	.367**	.193**	.422**	.258**	.408**	1	6.16	.99

Note. * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 7. Factor Loadings in the Structural Model of Expectancy Theory

Construct Measurement items	Standardized Factor Loading	t-value
Expectancy		
Experfo	.83	-
Expaccom	.91	19.58
Expprodu	.94	20.22
Expeffec	.64	11.83
Extrinsic Instrumentality		
Inspay	.89	-
Insbonus	.88	22.04
Insincre	.93	24.97
Inspromo	.84	19.61
Intrinsic Instrumentality		
Insaccom	.95	-
Insgoode	.92	15.48
Extrinsic Valence		
Valpay	.69	-
Valbonus	.89	13.38
Valincre	.90	13.43
Intrinsic Valence		
Valrespo	.77	-
Valabili	.85	14.84
Valaccom	.88	15.25
Worm Motivation		
Workeffo	.86	-
Workqual	.94	23.33
Workprod	.94	23.33
Workinvo	.91	22.21

Note. Model indices: χ^2 =275.76, df=155, χ^2/ df = 1.78, RMSEA=.052, CFI=.98, NNFI=.98

Table 8. Results of the Modified Expectancy Theory Model

Hypothesized Path From To	Standardized Path Coefficients	t-value	Hypothesis Test
H1: Expectancy Work Motivation	.17	2.66***	Supported
H2a: Extrinsic Instrumentality Work Motivation	-.14	-2.12**	Not supported
H2b: Intrinsic Instrumentality Work Motivation	.36	4.33***	Supported
H3a: Extrinsic Valence Work Motivation	.16	2.04**	Supported
H3b: IntrinsicValence Work Motivation	.22	2.63***	Supported

Note. * $p < .05$, ** $p < .01$, *** $p < .001$.
H2a showed negative significance, H2a was not supported.

Table 9. Summary Results of Regression of Suppressor Effect

Regression Dependend Variable Independent Variable	R^2	Unstandardized β	Standardized β	Significance
Regression 1				
Work Motivation	.305			
Expectancy		.128	.168	.003
Extrinsic Instrumentality		-.064	-.115	.051
Intrinsic Instrumentality		.231	.327	.000
Extrinsic Valence		.102	.137	.026
Intrinsic Valence		.196	.226	.000
Regression 2				
Work Motivation	.037			
Extrinsic Instrumentality		.108	.193	.001
Regression 3				
Work Motivation	.145			
Extrinsic Instrumentality		.060	.107	.060
Expectancy		.258	.340	.000
Regression 4				
Work Motivation	.178			
Extrinsic Instrumentality		-.001	-.002	.969
Intrinsic Instrumentality		.299	.423	.000
Regression 5				
Work Motivation	.083			
Extrinsic Instrumentality		.075	.134	.023
Extrinsic Valence		.166	.222	.000
Regression 6				
Work Motivation	.169			
Extrinsic Instrumentality		.032	.058	.315
Intrinsic Valence		.337	.388	.000
Regression 7				
Work Motivation	.178			
Intrinsic Instrumentality		.298	.422	.000

CHAPTER FIVE

EXPECTANCY THEORYOF HOTEL EMPLOYEE MOTIVATION: EXAMINING THE MODERATOR ROLE OF COMMUNICATION SATISFACTION

Abstract

The study investigated the role of communication satisfaction as a moderator strengthening the effect of three components of the expectancy theory (expectancy, instrumentality, valence) on work motivation in the hotel setting. High and low communication satisfaction groups respond differently about expectancy, instrumentality, valence, and work motivation. Employees who are highly satisfied with communication respond more positively toward motivation components, and they are more likely to perform well in their job when they are motivated. However, a series of confirmatory factor analyses of metric invariance indicated that there is no significant difference the moderating effect between high and low communication satisfaction groups. Communication should be managed collectively to motivate employees. Implications and suggestions for future research are provided to better explain the process of decision-making when hotel employees are motivated.

Key words: Expectancy theory, Hotel employee motivation, Communication satisfaction, Moderator, metric invariance.

INTRODUCTION

Employee motivation has been the focus of research in academic circles as scholars seek to understand what motivates employees in a variety of work settings. Particularly in the hotel industry, the work is labor intensive, and turnover is high; understanding hotel worker attitudes and motivation has become an important issue for research in the hotel industry. Effective communication between employer and employee is vital to understanding employee needs. Employee satisfaction with the communication process could be a factor in the complex process of motivation.

The expectancy theory of motivation, originally developed by Vroom (1964), is a theory explaining the process individuals use to make decisions on various behavioral alternatives. Motivation is force directing specific behavioral alternatives, which are suggested when deciding among behavior options. Individuals select the option with the greatest motivational forces. The motivational force for a behavior, action, or task is a function of three distinct perceptions: Expectancy, Instrumentality, and Valence. Expectancy is the perceived probability that effort will lead to good performance; instrumentality is the perceived probability that good performance will lead to desired outcomes; valence refers the value the individual personally places on rewards. This study was designed to examine the motivation of hotel workers using expectancy theory while testing the influence of communication satisfaction as a moderator.

Communication is probably the most central process in organizations (Frone & Major, 1988). Communication satisfaction is defined as the satisfaction with communication that is linked to an employee's position in the organization (Mount & Back, 1999). In this present study, communication satisfaction is proposed as a

moderator in evaluating the relationships of employee work motivation. Satisfaction with the extent to which communication in the organization motivates and stimulates employees to improve performance is the moderator between expectancy and work motivation. Supervisors and managers who are open to ideas, who listen and pay attention, and who offer guidance for solving job-related problems and feedback show the moderating effect of instrumentality on work motivation, which is reflected in employees receive pay raises, bonuses, opportunity for advancement and feel of accomplishment. Communication allows employees to clearly understand the greater reward they would get if they improve their performance. The moderating effect of valence on work motivation shows satisfaction with effective and organized communication that motivates employees to work hard to get their desired outcomes.

Despite the importance of employee motivation in the hotel industry, relatively little research has focused on hotel employee motivation based on theoretical concepts. Most previous studies have concentrated on identifying the factors motivating employees and suggesting implications for further improving employee motivation. Applying motivation theories and models to the process of employee decision making has not commonly been done. In this study, we apply the expectancy theory as a theoretical foundation to explain hotel employee motivation. The expectancy theory is a very commonly used theory. However, adding one or two variables should provide better understanding of the process of being motivated (Parker & Dyer, 1976). Communication has been recognized for its contribution to good relationships between management and employees. We propose that communication satisfaction moderates the model of employee motivation. Satisfaction with communication strengthens the influences of

expectancy, instrumentality, valence on employee motivation. A major research question will be explored in this study: Does adding communication satisfaction as a moderator to the proposed expectancy theory model of hotel employee motivation truly advance the understanding of the specific determinants of hotel employee motivation?

The main purpose of this study is to examine the moderating role of communication satisfaction on the relationship between employee motivation and its determinants (expectancy, instrumentality, valence). Thus, this study extends the model by adding communication satisfaction as a moderator to strength the process of employee motivation. It is important to incorporate existing theoretical frameworks to extend the understanding of employee motivation and its processes. Advanced statistical data analysis will also help examine the moderator effect and will be used to provide validity and reliability as well as to enhance the understanding of theoretical development in research.

CONCEPTUAL BACKGROUND

Both the hotel industry and academia recognize the importance of motivating employees. Most previous studies have concentrated on identifying the factors that motivate employees and on suggesting implications for further improving employee motivation (Simons & Enz, 1995; Siu, Tsang, & Wong, 1997; Wong, Siu, & Tsang, 1999). Motivation factors have been identified in the hotel industry: pay; monetary bonuses or benefits; opportunities for advancement and promotion; opportunities for increased job responsibility; recognition from managers, colleagues, customers, and family; challenging work; feelings of accomplishment; development of self-esteem; good

working conditions; good work schedules; job security; and, being regarded as a good employee.

The expectancy theory of motivation, proposed by Vroom (1964), attempts to explain how individuals make decisions about various behavioral alternatives. This model deals with the direction aspect of motivation; that is, once behavior is energized, what behavioral alternatives are individuals likely to pursue. The following are components of expectancy theory: When deciding among behavioral options, individuals select the option with the greatest motivation forces (MF).

$$MF = \text{Expectancy} \times \text{Instrumentality} \times \text{Valence}$$

The motivational force for a behavior, action, or task is a function of three distinct perceptions: Expectancy, Instrumentality, Valence. Expectancy is the perceived probability that effort will lead to good performance; variables affecting the individual's expectancy perception including self-efficacy, goal difficulty, and perceived control. Expectancy suggests that one's efforts will lead to desired performance; expectancy is based on past experience, self-confidence, and the perceived difficulty of the performance goal. Instrumentality is the perceived probability that good performance will lead to desired outcomes; trust, control, policies are variables affecting an individual's instrumentality perception. Instrumentality is the belief that if one does meet performance expectations, one will receive a greater reward. Valence refers to the value the individual personally places on the rewards. This is the function of needs, goals, values, and preferences. Expectancy theory is generally supported by empirical evidence (Tien, 2000; Vansteenkiste, Lens, & De Witte, 2005) and is a widely used theory of

motivation in the workplace (Campbell & Pritchard, 1976; Heneman & Schwab, 1972; Mitchell & Biglan, 1971).

Expectancy theory is a theory of the process of motivation. Rather than simply explaining what will motivate an employee, process theories define how motivation comes about. Process theories are, in effect, working models of the decision processes that individuals go through in order to determine whether they will be motivated to pursue a certain activity and sustain a certain level of productivity. Process theories help describe and explain how behavior is directed, energized, sustained, or stopped. While there are several process theories of motivation, one of the most respected theories of motivation among organizational and industrial psychologists is the process theory of expectancy.

Research based upon expectancy theory (Heneman & Schwab, 1972; House & Wahba, 1972; Mitchell & Biglan, 1971) has concluded that support for the theory is rather low and that support is inconsistent from one study to another (Reinharth & Wahba, 1975). Wahba and House (1974) raised several logical and methodological issues where the lack of resolution appears to account for the inconsistent level of support and for several measurement weaknesses. Reinharth and Wahba (1975) addressed several issues in expectancy theory: 1) the distinction between the concepts of expectancy and that of instrumentality; 2) a reevaluation of the concepts of valence, acts and outcomes to incorporate negative as well as positive valences; 3) the limitation of most studies to positively validate outcomes; and, 4) an examination of additional behavior alternatives in the work situation to include both avoidance as well as approach behaviors. Certainly, among the work alternatives to be considered is the choice to not

work hard as opposed to the choice to work hard. Poor performance may be a possible outcome as well as good performance. The distinction was among three dependent variables: work motivation, effort expenditure, and job performance. Expectancy theory (Vroom, 1964) assumes a subjective measure of expectancy and valence; independence between expectancies and valences; a multiplicative interaction between expectancies and valences; and instrumentality as a determinant of valence. The Vroom model postulates performance to be job effort multiplied by ability. Arvey and Dunnett (1970) argued that an additive relationship between ability and expectancy is perhaps a better predictor of performance than a multiplicative relationship. Findings on this point are inconsistent, and because adding the ability variable would prevent more methodological problems without resolving any conceptual ones, we decided for this study to predict performance from the motivational component of expectancy theory without using an ability measure. This is consistent with most expectancy theory studies (Graen, 1969; Hackman & Porter, 1968; Lawler, 1968). The effect of omitting of the ability dimension should be borne in mind as findings on job performance are reviewed.

Lawler (1966) measured ability by having a supervisor rank subordinates on overall qualifications. This ranking correlated significantly with the supervisor's ranking of subordinates on overall job performance. Criterion contamination in some degree was likely, however, because both rankings were obtained from the same supervisor at the same time. Galbraith and Cummings (1967) defined ability as length of time on the job. The extent to which length of time on the job serves as a proxy for ability as defined, however, is unclear. Garvin (1970) used a psychometric ability measure. This measure did not correlate significantly with performance, nor did its interactions with force and

role perceptions generally contribute significantly to the multiple correlations. In part, this was probably due to the restriction of range because the measure was used as a selection instrument by the organization. Gavin (1970) also argued that the measure may not tap the relevant intellectual capacities. Using numerous psychometric ability measures should rely on validity evidence of various aptitude and achievement tests used for predicting employee performance in a selection context (Ghiselli, 1966; Guion & Gottier, 1965). In addition, given the broad definition of ability presented by Vroom (1964) and Porter and Lawler (1968), measures of interest, temperament, and personality also might be considered. Their use requires caution, however, for they generally have not correlated significantly with performance (Dunnette, 1966; Guion & Gottier, 1965; Nash, 1965), and they may tap motivational characteristics of individuals (Guion & Gottier, 1965).

Lawler (1971) includes other variables in his model (satisfaction, ability, etc.). In summarizing this model, one considers motivation as a function of the two expectancies (effort → performance; performance → outcomes) and the value of the outcomes. Assuming that an employee is motivated to perform well, he or she will exert effort that may result in effective performance depending on other factors (such as ability and role perceptions). If the individual performs well, he/she may or may not receive the reward outcomes perceived as likely to result from good performance. Receiving these outcomes should strengthen performance → outcome expectancy. Similarly, success in performance should influence the effort → performance expectancy.

Adding nonexpectancy variables to the expectancy theory model enhanced its validity in the behavioral criterion. Consistent with Mitchell (1974), model predictions

that constitute preferences, internally oriented motivation, or intentions that are translated into actual behavior seem to depend on three additional classes of variables. The usefulness of nonexpectancy components in expectancy theory models led to the following findings (Parker & Dyer, 1976). First, expectancy theory models may have limited potential as a practical means of predicting work-related behavior. By including additional situational and psychological components in the model, however, particularly useful behavioral predictions may be obtained. Before these additional variables can be used, researchers will need to identify which variables are appropriate in a particular setting to avoid the almost inevitable tendency to include an excessive number and thereby obscure the results. Second, if added variables of this kind become integral components of a motivational model, research designs will need to be changed. Although expectancy theory research to date has consisted of post hoc analysis, predictive models have been the eventual goal. If additional nonexpectancy variables will help us achieve satisfactory levels of accuracy, however, a return to a regression-based test validation paradigm will be necessary to determine how expectancy and nonexpectancy components should be combined. This will require a much more complex system of weighting and cross-validation than the aggregate statistical models traditionally used. Before a predictive model can use additional nonexpectancy variables, it will be necessary to select the nonexpectancy predictors, determine beta weights for expectancy and nonexpectancy predictors, select prediction cutting scores, test the results, and cross-validate the results. This demands more of the researcher than the testing of between-person or even within-person expectancy models, even if these models are cross-validated. The final and most difficult question on the usefulness of

nonexpectancy components is why these variables actually enhance predictions. Mitchell and Knudsen (1972) presented an appearing explanation, suggesting that expectancy models predict only preferences and that situational moderators explain actual behavior. Although this may account for the effects of the expectations of others, it is more difficult to explain why individual differences such as hesitancy, risk-taking propensity, or irrationality would not affect valence, instrumentality, or expectancy perceptions rather than mediating between preferences and behavior. The major research tasks relating to nonexpectancy variables are to identify the kinds of variables that are appropriate and to determine how these variables can best be incorporated into models, and to understand why these variables are not accounted for in the basic expectancy formula. In this study, we propose that communication satisfaction as a moderator strengthens the relationships among expectancy, instrumentality, valence, and employee motivation. Literature review of communication satisfaction will be provided in the following section.

Expectancy theory predictions of job effort and performance tend to receive weak to moderate support in recent literature. Vroom's (1964) original model and its various extensions have been frequently tested using several moderating variables in a search to increase model predictions (Seybolt & Pavett, 1979). In this study, communication satisfaction is proposed as a moderator to improve predicting hotel employee motivation.

Communication is probably the most central process in organizations (Frone & Major, 1988). Several studies posit that the perceived communication environment should be related to organizational outcomes such as work motivation, job satisfaction and organization productivity or effectiveness. (Downs, 1977; Greenbaum, 1974; Hall & Goodale, 1986; Likert, 1973; Pinchus, 1986a, 1986b; Orpen, 1997; Porter & Roberts,

1993; Shuler, 1995). Other empirical research supports the hypothesized communication-job satisfaction relationship (Roberts & O'Reilly, 1974; Muchinsky, 1989; Sussman, 1974), and these studies suggest that high-quality communication is associated with relatively high levels of job satisfaction, whereas low-quality communication is associated with relatively low levels of job satisfaction. However, some studies have failed to prove a significant relationship between these two constructs (Muchinsky, 1989). These inconsistent and often weak findings support the contention of several writers that a contingency (moderator) approach to the study of organizational communication is warranted (Goldhaber, Yates, Porter, & Lesniak, 1978; Larson, Lee, Brown, & Shorr, 1984; Porter & Roberts, 1976; Schuler, 1995). Frone and Major (1988) examined the moderating effect of job involvement on the relationship between perceived communication quality and job satisfaction in a sample of managerial issues. The quality of communication was assessed separately for immediate supervisor, subordinates, co-workers, and hospitality administrators. Each source of information was rated by dimension of communication quality using timelines, accuracy, and usefulness. Results showed that perceived communication quality is positively related to the level of reported job satisfaction among nurses. The strength of communication quality-job satisfaction relationship would be modified by the respondents' level of job involvement. Further, in Orpen's (1997) study, the involvement-communication interaction was significant in explaining variance in both satisfaction and motivation.

It is through communication of one kind or another that employees learn what they are expected to learn, find out how to do their jobs, and become aware of what others think of their work (Likert, 1993; Schuler, 1995). Because the transmission and

reception of information pay such an important role in the organization, effective communication should be related to employee work attitude (Schuler, 1995). However, some studies do not support the prediction (Muchinsky, 1989; Pinchus, 1993). According to Porter and Roberts (1993), the reason for the inconsistent findings is that the relationship between communication and employee work attitude is likely to be moderated by several variables. In this present study, communication satisfaction is proposed as a moderator to evaluate the relationship between employee work motivation. Satisfaction with the extent to which communication in the organization motivates and stimulates employees to improve performance, which is the moderator between expectancy and work motivation. Satisfaction with the extent to which supervisors and managers are open to ideas, listen and pay attention, offer guidance for solving job-related problems, and provide feedback, reflected in pay raises, bonuses and opportunities for advancement, so employees clearly understand the greater reward they will get if they improve their performance. This is the moderating effect of instrumentality on work motivation. In addition, the moderating effect of valence on work motivation shows in satisfaction with effective and organized communication that motivates employees to work hard to get their desired outcomes.

Communication satisfaction refers to satisfaction with communication that is linked to the employee's position in the organization (Mount & Back, 1999). The Communication Satisfaction Questionnaire (CSQ) was developed by Downs and Hazen (1977) to investigate the relationship between communication and job satisfaction. Eight factors were identified to explain communication satisfaction: communication climate, supervisory communication, organizational integration, media quality, coworker

communication, corporate information, personal feedback, and subordinate communication. Mount and Back (1999) further examined communication satisfaction in the lodging setting by using Communication Satisfaction Questionnaire (CSQ).

The main objective of this study was to examine the moderating role of communication satisfaction strength on the relationship between employee motivation and its determinants (expectancy, instrumentality, valence). Based on the literature review, a hypothesis was conducted (Figure 1):

Hypothesis 1: The higher the level of communication satisfaction, the more positive is the effects of expectancy, instrumentality, and valence on hotel employee motivation.

Insert Figure 1

METHODOLOGY

A primary purpose of this study was to test the expanded model, adding communication satisfaction to reinforce employee motivation. A survey instrument was developed after reviewing the relevant literature and an elicitation study conducted by hotel employees.

Elicitation Study

Measurement items were developed from a literature review and an elicitation study (see Appendix A). An elicitation study was used in constructing the final set of

measurement items for the instrument questionnaire. To develop a realistic elicitation study, we used 33 hotel managers, supervisors, and employees from 6 hotels in a small city in Midwest. These 6 hotels included 3 mid-scale and 3 economy hotels. Respondents were asked to rank the list of measurement items to elicit best measurement items for five hypothetical constructs (expectancy, instrumentality, valence, work motivation, and communication). This study adopted items for measurements of constructs from previous studies (Arvey & Nell, 1974; Arvey & Mussio, 1973; Campbell, Dunnette, Lawler& Weick, 1970; Galbraith & Cummings, 1967; Gavin, 1969; Ivancevich, 1976; Kopelman, 1979; Landy & Guion, 1970; Matsui & Ohtsuka, 1978; Mitchell, 1974; Mobley, 1971; Porter & Lawler, 1968; Reinharth & Wahba, 1975; Mount & Back, 1999). Pay; monetary bonuses; advancement opportunities; job responsibility; recognition from managers, colleagues, family, and customers; challenging work; a sense of accomplishment, self-esteem, and being regarded as a good employee; work conditions; work schedule; and job security were selected as items that measured expectancy, instrumentality, and valence in the elicitation study. Amount of effort, quality, productivity, job involvement were items used to measure work motivation. The items for communication satisfaction were modified from Mount and Back's (1999) study. The results of the elicitation study were similar to the typology of employee motivation in previous studies(Knight, 1971; Byrne, 1986; Charles & Marshall, 1992; Simons & Enz, 1995; Siu, Tsang, & Wong, 1997; Wong, Siu, & Tsang, 1999).

Instrument Development

The constructs of this study are identified as expectancy, instrumentality, valence, work motivation, and communication satisfaction. Measurement items were developed from a review of the literature (Arvey & Nell, 1974; Arvey & Mussio, 1973; Campbell, Dunnette, Lawler& Weick, 1970; Galbraith & Cummings, 1967; Gavin, 1969; Ivancevich, 1976; Kopelman, 1979; Landy & Guion, 1970; Matsui & Ohtsuka, 1978; Mitchell, 1974; Mobley, 1971; Porter & Lawler, 1968; Reinharth & Wahba, 1975; Mount & Back, 1999) and the results of the elicitation study. Five items of expectancy were drawn from the literature (Campbell et al., 1970; Gavin, 1969; Porter & Lawler, 1968) to measure each respondent's expectation of work outcomes on a 7-point scale ranging from strongly disagree to strongly agree. Measurement items of expectancy included such items: "If I work very hard, my job performance will be improved"; "If I work very hard, the quality of my job performance will be enhanced"; "If I put more effort on my job, I will be regarded as an effective employee."

Instrumentality is the belief that if one does meet performance expectations, one will receive a greater reward. Rewards were identified in the elicitation study as pay, monetary bonus, advancement and promotion, as well as taking on more challenging work, having a feeling of accomplishment, and feeling very good about self. Thirteen items of instrumentality were drawn from the literature (Gavin, 1969; Matsui & Ohtsuka, 1978; Reinharth & Wahba, 1975), and respondents used a 7-point scale to reveal what they thought about whether performing well would result in such rewards. The 7-point scale ranged from strongly disagree to strongly agree with the statement. Measurement items of expectancy included such items as "If I perform well, I will get good pay"; " If I

perform well, I will have more opportunities for advancement and promotion"; "If I perform well, I will develop feelings of accomplishment."

Valence refers to the value the individual personally places on rewards. Sixteen items of valence were drawn from the literature (Galbraith & Cummings, 1967; Gavin, 1969; Mobley, 1971; Mitchell, 1974), and respondents evaluated the desirability of work outcomes using a 7-point scale ranging from very undesirable to very desirable. Examples include "Good Salary/wage"; " Good working conditions"; "Job security "and "Personal growing and development."

Work motivation is defined as the act or process of an employee being moved to work. Eleven items of work motivation were adopted from the literature (Arvey & Mussio, 1973; Ivancevich, 1976; Kopelman, 1979; Landy & Guion, 1970). Respondents evaluated work motivation using a 7-point scale ranging from strongly disagree to strongly agree. Examples include " Amount of effort I expend on the job"; " Enhance quality of my job performance"; "Increase productivity on the job"; "Willing to cooperate and shoulder extra load."

Communication satisfaction refers to satisfaction with how well managers communicate to employees. Mount and Back (1999) examined communication satisfaction in the lodging setting by using the Communication Satisfaction Questionnaire (CSQ). This study used 16 items measuring communication satisfaction mostly drawn from Mount and Back (1999). Examples include "The management knows and understands the problems faced by employees"; " The management listens and pays attentions to me"; "Conflicts are handled appropriately through proper communication channels."

Pilot Study

A pilot test was conducted to finalize the survey instrument (see Appendix B). The pilot study evaluated the reliability of the study instrument and tested the survey distribution procedures. Hotel employees in a hotel in a small city in a Midwest state and undergraduate and graduate students majoring in Hotel and Restaurant Management who had worked in hotels were asked to participate in the pilot test. A total of 100 questionnaires were distributed; and 29 questionnaires were returned, giving a response rate of 29%. The study instrument was modified, wording changed, and unnecessary questions deleted.

Reliability was assessed by measuring Cronbach's alpha (α) to exceed a cut off of.70. All the reliability scores, ranging from .842 for expectancy and instrumentality to .962 for communication satisfaction, exceeded .70, which indicated the measurement items had satisfactory reliability.

Insert Table 1

Most measurement items were kept for the final version of the survey; however, some items were deleted to increase Cronbach's alpha and to shorten the survey. The final version of the questionnaire comprises a total of 34 questions to measure 5 constructs and respondent demographic characteristics (see Appendix C).

This study used convenience samples of hotel employees. The researcher called every hotel human resources manager or general manager to explain the research and ask

for participation in the study. A letter explaining the purpose of the study and the survey questionnaire was faxed or emailed to the General Managers or Human Resources managers (see Appendix D). The surveys with a stamped, pre-addressed envelope were delivered to hotels which had granted approval permission, and hotel employees were selected in a convenience sample to complete the research survey. Employees then returned the completed surveys to the managers, and the researcher collected the surveys. This study and the survey were reviewed and approved by Kansas State University Institutional Review Board.

The procedures of data analysis used in this study included descriptive analysis, principle component factor analysis, confirmatory factor analysis (CFA), and moderating effect check by structural equation modeling (SEM). Descriptive analysis included mean and standard deviation of sample characteristics. Principle components analysis was performed to see if every proposed construct extracts one factor. Confirmatory factor analysis was used to test the reliability and validity of measurements for latent constructs in the model. Composite reliability assessed the reliability of indicators representing each construct in the measurement model. Composite reliability of .70 for all constructs was used as a criterion as suggested by Anderson and Gerbing (1988). A validity check was conducted to check convergent validity and discriminant validity. Factor loading of .5 is the criterion for convergent validity. Average variance extracted (AVE) presents the overall amount of variance in the indicators accounting for the latent construct (Hair et al., 1998), and an AVE of .50 is the criterion for convergent validity. Discriminant validity was assessed by comparing AVE with the squared correlation between two constructs (Anderson & Gerbing, 1988). Lastly, the hypothesized moderator of

communication satisfaction was assessed by a series of modeling tests for metric invariance (Hypotheses 1). The sample was divided into high and low communication satisfaction groups. Grouping was split based on summed scores for communication satisfaction. To analyze the measurement model with two different groups, a confirmatory factor analysis was performed on the nonrestricted model first. The equality of factor loading between two groups (full metric invariance) was used to test if these two groups were comparable. The non-significance of the chi-square difference between the nonrestricted model and the full metric invariance model was assessed. The equity of path coefficients was then checked. The significance of the chi-square difference between the full metric invariance and the coefficients invariance model was tested. A significant chi-square difference test indicated a moderating effect of communication satisfaction between high and low communication satisfaction groups. Statistical packages were performed using SPSS for Windows 13.0 and LISREL 8.54.

ANALYSIS AND RESULTS

Data Collection and Data Analyses

Hotel employees from fifty-six hotels in several cities in a Midwest state filled out the surveys. Data was collected February 24, 2006 to March 22, 2006. A total of 1450 surveys were distributed to employees in these participating hotels, and 301 were returned, yielding a response rate of 20.76%. Of the 301 returned responses, 12 were not usable due to missing data. Thus, 289 (19.93%) responses were used for analysis.

Sample Characteristics

Of the 289 respondents, the most were female employees (70.2%, n = 203) (Table 2). Respondents age 21 to 30 years old (37.72%) accounted for most respondents. One-third of the respondents (33.91%) had completed some college, and another one-third of the respondents (33.91%) had high school degrees. One hundred twenty-eight respondents (44.29%) were employees in the Front Office department, and 23.18% worked in housekeeping. In terms of their jobs, most respondents were front office receptionists and housekeepers. Average lengths of employment at the current hotel and in the hotel industry are 2.88 and 5.19 years, respectively.

Insert Table 2

Measurement Items

The mean scores and standard deviation of each measurement item are presented in Table 3. The mean scores for four measure items of expectancy ranged from 5.56 to 5.75, based on the seven-point Likert scale. The mean scores for eight measures of instrumentality ranged from 4.29 to 6.01. The mean scores for ten measures of valence ranged from 5.67 to 6.20. The mean scores for the four measures of attitude toward work motivation ranged from 6.14 to 6.21. The mean scores for the eight measures of attitudes toward communication satisfaction range from 4.88 to 5.33. When respondents evaluated the three components of the expectancy theory, valence had higher scores than expectancy and instrumentality. Respondents responded that they would improve their

performance when they were highly motivated. Respondents said they were somewhat satisfied with the quality of communication.

Insert Table 3

Because measurement items of the survey instrument were adopted and modified by previous studies and an elicitation study, principle component analysis using a varimax rotation procedure was performed to examine if each proposed construct extracted one component to present each construct. One component was extracted for the construct of Expectancy, Work Motivation, and Communication Quality. However, the construct of Instrumentality extracted 2 factors (extrinsic instrumentality and intrinsic instrumentality), and Valence extracted 2 factors (extrinsic valence and intrinsic valence). Four items (INSRESPO, INSCHALL, VALINTER, VALPROMO) were excluded due to cross two factor loadings; to achieve a high reliability alpha, these items were deleted. As a result, intrinsic instrumentality included two items: feeling of accomplishment and feeling good about myself; intrinsic valence included six items: responsibility and control over the job, challenging work, full use of skills and abilities, feeling of accomplishment, and personal growth and development.

Table 4 presents results of principle component analysis with each set separately analyzed, including factor loadings of measurement items and eigenvalue and percent of variance explained by each construct.

Insert Table 4

Confirmatory Factor Analysis

Confirmatory factor analysis was used to test the measurement model and evaluate the validity of the constructs. Reliability alphas (see Table 4) were checked for internal consistency first. The alpha values for the constructs of this study were expectancy (.89), extrinsic instrumentality (.94), intrinsic instrumentality (.87), extrinsic valence (.86), intrinsic valence (.91), work motivation (.95), and communication satisfaction (.95); all exceeded the minimum requirement of 0.7 for reliability. The results indicate these multiple measurement items are highly reliable for measuring each construct. To validate the developed constructs, a measurement model was estimated with a confirmatory factor analysis (CFA) in which each measurement item was loaded on its proposed constructs, and the constructs were allowed to correlate in the analysis (Gerbing & Anderson, 1988). All measurement items were loaded on their expected constructs. The model indices were as follows: χ^2=1045.48, df=284, χ^2/ df = 3.68, RMSEA= .096, CFI= .95, NNFI= .94. The model did not fit the goodness of fit indices. After deleting two measurement items (VALCHALL and VALGROWNI) because of high measurement errors, the revised confirmatory factor analysis was found to be a good-fit model. The model indices showed good improvement and an acceptable level: χ^2=181.35, df=97, χ^2/ df = 1.87, RMSEA= .055, CFI=.98, NNFI= .98.

Composite reliabilities and construct validity were then assessed. Composite reliability of indicators should exceed the cut off value of .70 (Hair, Anderson, Tatham, & Black, 1995). Table 5 presents the factor loadings of the observed variables on the latent constructs and the composite reliability and construct validity.

Insert Table 5

Construct validity was evaluated by examining convergent and discriminant validity of constructs. Average variance extracted (AVE) was calculated to check the convergent of constructs; and the AVE should be higher than of .5 (Hair, et al., 1995). Discriminant validity of constructs was assessed by comparing the AVE with the squared correlation between latent constructs (Fornell & Larcker, 1981). The squares correlations between constructs were less than the AVE, suggesting discriminant validity (Fornell & Larcker, 1981). As shown in Table 5, the AVE of each construct was more than .5, and the AVE of each construct was higher than the squared correlations between pairs of constructs, which indicated construct validity (Table 5).

Grouping Checks

Moderator Effect by Structural Equation Modeling

The respondents were divided into a high communication satisfaction group and a low communication satisfaction group, based on their communication satisfaction scores. One hundred forty-six respondents was categorized into the high communication satisfaction group, and 143 respondents was categorized into to the low communication

satisfaction group. Further, mean scores between high and low communication satisfaction groups were calculated (see Table 6).

Insert Table 6

For validation of grouping, group means were compared by variables of expectancy, extrinsic instrumentality, intrinsic instrumentality, extrinsic valence, intrinsic valence, and work motivation. The mean difference of expectancy was checked to see if the high communication satisfaction group believed their effort would lead to better performance than the low communication satisfaction group. If the high communication satisfaction group has relatively higher expectancy than the low communication group, we can infer that the high communication satisfaction group is willing to work harder to perform better than low communication satisfaction group. The purpose of comparing extrinsic instrumentality and intrinsic instrumentality was to see if the high communication satisfaction group thought that meeting performance expectation would guide a greater reward than the low communication satisfaction group. Comparing extrinsic valence and intrinsic valence tested whether the high communication satisfaction group reached the desired job-outcome while the low communication satisfaction group did not. Lastly, comparing work motivation showed whether the high communication satisfaction group thought that high motivation would enhance the productivity and the quality of their work while the low communication satisfaction group do.

Table 6 shows that there were significant differences in mean scores among variables (Except Extrinsic Valence) between high and low communication satisfaction groups, suggesting face validity. The differences also showed that the high communication satisfaction group believed that their effort would lead to good performance; if they meet expectations, they reach desired outcomes; job outcomes are more desirable to them; and their motivation improve their performance. The low communication group showed opposite. Except extrinsic valence did not showed significant difference that both high and low communication satisfaction group had similar attitude toward extrinsic valence.

Cronbach's alpha was performed to check reliability. Cronbach's alpha for the high communication satisfaction group was as follows: expectancy (.90), extrinsic instrumentality (.91), intrinsic instrumentality (.91), extrinsic valence (.82), intrinsic valence (.82), and work motivation (.93). Cronbach's alpha for the low communication satisfaction group was as follows: expectancy (.88), extrinsic instrumentality (.93), intrinsic instrumentality (.83), extrinsic valence (.88), intrinsic valence (.89), and work motivation (.95). All the measures showed a satisfactory reliability.

Test for Metric Invariance

For further analyzing the measurement model by confirming the underlying structure of constructs and by testing the validity of these two groups, a confirmatory factor analysis was performed to assess the equity of factor loading (Table 7). A two-group model was estimated in which all parameters in each group were allowed to be freely estimated, then a model in which the path coefficients were constrained to be invariant across the groups was estimated. If there was a significant different in the chi-

square in this constrained versus the base model that suggests a moderating effect exist between the two groups. A non-restricted model showed a marginal fit for the model (χ^2=471.63, df=310, χ^2/ df = 1.52, RMSEA=.060, CFI=.97, CAIC=1204.94). The full metric invariance model was as follows: χ^2=493.77, df=324, χ^2/ df = 1.52, RMSEA=.060, CFI=.97, CAIC=1133.75. The chi-squared difference between the nonrestricted model was not significant ($\Delta\chi^2(14) = 22.46$, $p > .05$): the full metric invariance was supported. Next, equality in the path coefficients between the two groups (Factorial invariance: χ^2=477.57, df=315, χ^2/ df = 1.52, RMSEA=.060, CFI=.97, CAIC=1177.55) was assessed; the chi-squared difference was not significant ($\Delta\chi^2(5) = 6.26$, $p > .05$). Based on this series of modeling tests, the two groups showed similar path coefficients among the variables; there was a non-significant moderating effect of communication satisfaction between these two groups. Thus, Hypothesis 1 was not supported: The higher the level of communication satisfaction does not have a positive effect on expectancy, instrumentality, or valence in hotel employee motivation.

Insert Table 7

DISCUSSION

The major purpose of this present study was to apply the expectancy theory to hotel employee motivation; an attempt was made to capture the effect of communication satisfaction between high and low communication satisfaction groups. Statistically,

communication satisfaction did not play a moderator role in the model of expectancy theory of hotel employee motivation.

Specifically testing the difference of mean scores of each variable, the results indicated that the effect of communication satisfaction is different between the two groups. For expectancy, the high communication satisfaction group is willing to work harder to perform better than low communication satisfaction groups. For both extrinsic and intrinsic instrumentality, the high communication group believed that if they met performance expectations, they would receive a greater reward than the low communication satisfaction group do. For both extrinsic valence and intrinsic valence, the high communication satisfaction group wanted job-outcomes more than the low communication satisfaction group. Lastly, for work motivation, the high communication satisfaction group thought that being highly motivated would enhance their productivity and the quality of their work, unlike the low communication satisfaction group. These distinct differences between the high communication satisfaction group and the low communication group may account for the impact of communication satisfaction.

Several studies posit that the perceived communication environment should be related to organizational outcomes such as work motivation, job satisfaction, and organization productivity or effectiveness. (Downs, 1977; Greenbaum, 1974; Hall & Goodale, 1986; Likert, 1973; Pinchus, 1986a, 1986b; Orpen, 1997; Porter & Roberts, 1993; Shuler, 1995). Other empirical research supports the hypothesized communication-job satisfaction relationship (Roberts & O'Reilly, 1974; Muchinsky, 1989; Sussman, 1974), and these studies suggest that high-quality communication is associated with relatively high levels of job satisfaction, whereas low-quality

communication is associated with relatively low levels of job satisfaction. Frone and Major (1988) examined the moderating effect of job involvement on the relationship between perceived communication quality and job satisfaction in a sample of managerial issues. All these studies have indicated that communication is a direct predictor of job satisfaction or job outcomes. No study tested communication as a moderator. This present study verifies that communication satisfaction is not a moderator explaining expectancy theory of employee motivation. However, communication might be a predictor in the expectancy theory, an idea can be examined in future research.

IMPLICATIONS

Given that communication satisfaction plays an influential role in motivating employees, it would be important for hotel managers to pay attention to communicating with employees. In this regard, it would be beneficial for hotel managers to understand how well satisfied employees are with communication. In this study, the mean of measurement items of communication satisfaction ranked from high to low as follows: managers are open to new ideas; managers listen and pay attention to me; my manager's communications with me make me feel an important part of this hotel; my manager offers guidance for solving job-related problems; I receive on-time information needed to do my job; conflicts are handled appropriately through proper communication channels; management's communications with employees are accurate and organized; managers know and understand the problems faced by employees. Overall, managers are willing to listen to employees and accept ideas from employees, so employees feel they are part of the organization. However, the quality of communication may not be quite satisfactory:

information is not prompt enough, or not organized, and managers do not exactly know what problems employees are dealing with. Therefore, managers should check these deficiencies to improve communication skills with employees.

Another issue is that more and more people whose first language is not English work in the hotel industry. Here, communication might play a more important role in motivating employees. Managers should respect employees and understand cultural differences. In particular, managers should give clear and precise instruction to let employees know their job description, performance evaluation, service quality, and hotel values. Always providing prompt feedback and encouraging job involvement and truly caring for employees make communication successful.

LIMITATIONS AND FUTURE RESEARCH

There are some limitations to the current study and suggestions for future research. First, data were collected from hotels in several cities in Midwest, and most hotels were upper-economy and mid-scale hotels. Very few of them are upper-scale hotels. The findings of this study might only be valid for upper-economy to mid-scale hotels and cannot be generalized to all hotels in the whole industry. It would interesting to duplicate the study in other segments of the industry or other areas to see if results different. This approach would help reconfirm the validity of expectancy theory with hotel employee motivation model.

More and more Hispanics work in the hotel industry, and they may be representative of some hotel employees. A Spanish version of survey was not provided in this study. Communication satisfaction, particularly language barriers, should be

assessed in future research. Hotel managers should be aware of cultural differences. A Spanish version of the survey should be used to increase the response rate as well as assess communication satisfaction among other groups.

Mitchell (1974) commented that measures of instrumentality and valence should include both positive and negative values. Parker and Dyer (1976) stated that excluding negatively valent outcomes from the expectancy theory model actually increased its validity. Previous research has mostly identified positive values of motivation factors, and the researchers also attempted to shorten the measurement items in the surveys, so negative variables were not included in this study. However, including negative values in instrumentality and valence would provide more understanding of employee motivation even though doing so would decrease the model's validity. Future research could include positive values of instrumentality and valence for further analysis.

Other studies have founded that communication leads to job satisfaction and other desirable job outcomes (Roberts & O'Reilly, 1974; Muchinsky, 1989; Sussman, 1974), so we should also see if adding communication satisfaction as a component of expectancy and doing the model comparison better explains hotel employee motivation. The samples in this study have identical characteristics and backgrounds and should have internal validity, but it would be challenging to identify which source is more responsible for the failure of factorial invariance. Lastly, Yoo (2002) commented that establishing metric invariance is not a sufficient condition to compare composite means across groups (Yoo, 2002). Yoo (2002) suggested establishing partial or scalar invariance to conduct comparative studies.

CONCLUSION

The objective of this study was to investigate the moderator effect of communication satisfaction on high and low communication satisfaction groups. The findings indicated that there is no significant moderator effect of communication satisfaction on the expectancy theory model of hotel employee motivation. The higher levels of communication satisfaction do not have a positive effect on expectancy, instrumentality, or valence in hotel employee motivation.

However, from a practitioner's perspective, communication satisfaction does have an effect in motivating employees. The high communication satisfaction group was willing to work harder to get better performance; they strongly believed that if they met performance expectations, they would receive a greater reward; they wanted better job-outcomes than the low communication satisfaction group; thus, the high communication satisfaction group is more likely to enhance the productivity and the quality of their work if they are highly motivated. This indicating that communication is still an important tool in motivating employees.

Employees noted that they are only somewhat satisfied with the communication, which suggests that hotel managers still need to improve their communication with employees. The communication should be accurate and prompt and organized, and managers should listen to employees carefully, help employees with the problems, and care for employees.

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Figure1: Proposed Moderating Effect of Communication Satisfaction on Expectancy Theory

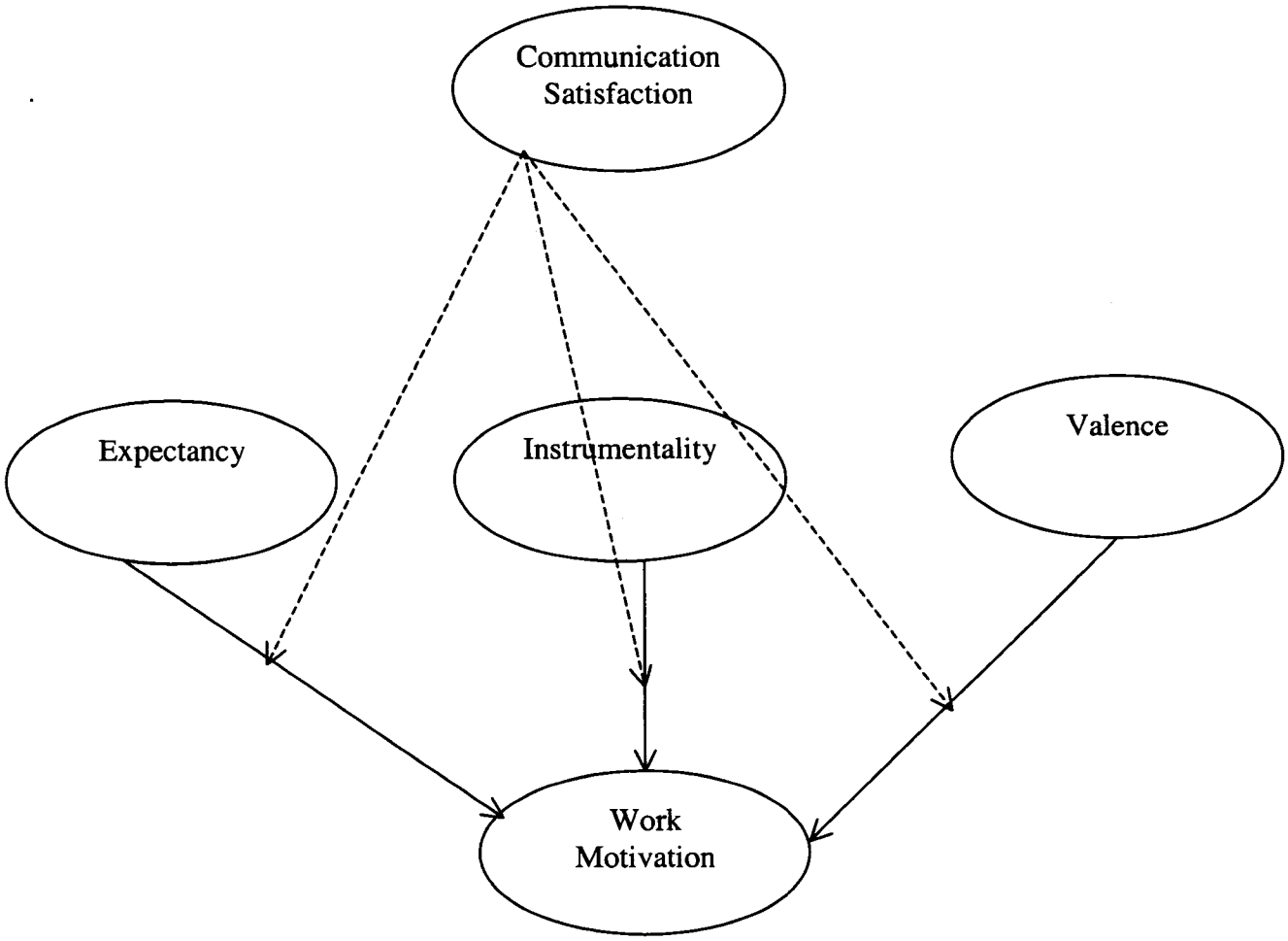

Table 1. Reliability of Measurements

Constructs	Number of Items	Cronbach's alpha (α)
Expectancy	5	.842
Instrumentality	11	.842
Valence	14	.886
Work Motivation	5	.941
Communication Satisfaction	9	.962

Table 2. Descriptive Characteristics of Respondents

	Frequency (N=289)	
	N	%
Gender		
Males	84	29.1
Females	203	70.2
No response	2	.7
Age (years old)		
20 and below	30	10.38
21-30	109	37.72
31-40	49	16.95
41-50	41	14.19
51 and above	33	11.42
No response	27	9.34
Education Level		
Secondary but no degree	14	4.84
High school degree	97	33.56
Completed some college	98	33.91
College or university	54	18.69
Graduate degree	16	5.54
No response	10	3.46
Department		
Administration	36	12.46
Front Office	128	44.29
Housekeeping	67	23.18
Food & Beverage	15	5.19
Others	37	12.80
No response	6	2.08
	Mean	S.D.
Time working in the current hotel	2.88 years	4.16 years
Time working in the hotel industry	5.19 years	6.04 years

Table 3. Descriptive Statistics of Measurement Items

	Measurement Items	Mean	S. D.
Expectancy		**5.67**	**1.30**
EXPPERFO	If I work very hard, my job performance will significantly improve.	5.56	1.50
EXPACCOM	If I work very hard, I will get a lot more accomplished.	5.70	1.49
EXPPRODU	If I put more effort into my job, my productivity will improve significantly.	5.75	1.45
EXPEFFEC	If I put more effort into my job, I will definitely be regarded as an effective employee.	5.66	1.52
Instrumentality		**5.08**	**1.41**
Performing well in my job will definitely result in my			
INSPAY	getting good pay.	4.58	1.87
INSBONUS	getting monetary bonuses.	4.29	1.97
INSINCRE	getting pay increases.	4.56	1.92
INSPROMO	having more opportunities for promotion.	4.85	1.95
INSRESPO	having more responsibility and control over my job.	5.28	1.71
INSCHALL	taking on more challenging work tasks.	5.24	1.62
INSACCOM	having feelings of accomplishment.	5.82	1.52
INSGOODE	feeling very good about myself.	6.01	1.44
Valence		**5.95**	**1.08**
VALPAY	Good salary/wage.	5.84	1.59
VALBONUS	More monetary bonuses.	5.75	1.49
VALINCRE	More pay increases.	6.00	1.39
VALINTER	Interesting work.	5.98	1.37
VALPROMMO	Opportunities for advancement/promotion.	5.88	1.48
VALRESPOV	More responsibility/control over my job.	5.98	1.25
VALCHALL	More challenging work tasks.	5.67	1.38
VALABILI	Full use my skills and abilities.	5.97	1.33
VALACCOM	Feelings of accomplishment.	6.20	1.23
VALGROWI	Personal growth and development.	6.18	1.31
Work Motivation		**6.16**	**.99**
When I am highly motivated, I will definitely...			
WORKEFFO	expend more effort on the job.	6.16	1.01
WORKQUAL	enhance quality of my job performance.	6.14	1.05
WORKPROD	increase productivity on the job.	6.14	1.07
WORKINVO	be willing to get involved in my job.	6.21	1.08
Communication Satisfaction		**5.11**	**1.55**
COMMKNOW	Managers know and understand the problems faced by employees.	4.88	1.70
COMMLIST	Managers listen and pay attention to me.	5.22	1.78

(Table continues)

Table continued

	Measurement Items	Mean	S. D.
Communication Satisfaction			
COMMGUID	My manager offers guidance for solving job-related problems.	5.19	1.84
COMMPART	My manager's communications with me make me feel an important part of this hotel.	5.22	1.87
COMMINFO	I receive on-time information needed to do my job.	5.06	1.79
COMMCONF	Conflicts are handled appropriately through proper communication channels.	5.04	1.84
COMMOPEN	Managers are open to new ideas.	5.33	1.72
COMMORGA	Management's communications with employees are accurate and organized.	4.92	1.84

Note: A 7-point scale from 1 (strongly disagree) to 7 (strongly agree).

Table 4. Principle Component Analysis of Expectancy Theory of Hotel Employee Motivation

Factors	Factor Loadings	Eigenvalue	Percent of Variance Explained %	Cronbach's Alpha (C.A.)
1. Expectancy		3.060	76.50	.89
EXPPERFO	.93			
EXPACCOM	.92			
EXPPRODU	.89			
EXPEFFEC	.76			
2. Extrinsic Instrumentality		3.357	83.92	.94
INSPAY	.92			
INSBONUS	.92			
INSINCRE	.94			
INSPROMO	.89			
3. Intrinsic Instrumentality		1.779	88.93	.87
INSACCOM	.94			
INSGOODE	.94			
4. Extrinsic Valence		2.365	78.82	.86
VALPAY	.83			
VALBONUS	.92			
VALINCRE	.92			
5. Intrinsic Valence		3.716	74.32	.91
VALRESPO	.85			
VALCHALL	.83			
VALABILI	.89			
VALACCOM	.89			
VALGROWNI	.85			
6. Work Motivation		3.493	87.33	.95
WORKEFFO	.91			
WORKQUAL	.95			
WORKPROD	.95			
WORKINVO	.93			
7.Communication Satisfaction		5.942	74.27	.95
COMMKNOW	.78			
COMMLIST	.86			
COMMGUID	.89			
COMMPART	.90			
COMMINFO	.85			
COMMCONF	.84			
COMMOPEN	.86			
COMMORGA	.91			

Note: Four items (INSRESPO, INSCHALL, VALINTER, VALPROMO) were excluded due to high across- loadings preliminary and each set separately analysis. In order to achieve a high reliability alpha, these items were deleted from further analysis.

Table 5. Results of Confirmatory Factor Analysis, Correlation of Constructs

Construct	Standardized Factor Loadings	Composite Reliabilities*	Average Variance Extracted (AVE)**	1	2	3	4	5	6	Mean	S.D.
1. Expectancy		.95	.82	1						5.67	1.30
EXPPERFO	.83										
EXPACCOM	.91										
EXPPRODU	.94										
EXPEFFEC	.64										
2. Extrinsic		.94	.79	.253**	1					4.57	1.76
Instrumentality	.89										
INSPAY	.88										
INSBONUS	.93										
INSINCRE	.84										
INSPROMO											
3. Intrinsic		.88	.79	.447**	.461**	1				5.92	1.40
Instrumentality	.95										
INSACCOM	.82										
INSGOODE											
4. Extrinsic Valence		.94	.85	.151**	.263**	.014	1			5.87	1.32
VALPAY	.69										
VALBONUS	.89										
VALINCRE	.90										
5. Intrinsic Valence		.79	.55	.270**	.348**	.317**	.536**	1		6.05	1.13
VALRESPO	.77										
VALABILI	.85										
VALACCOM	.88										

(Table continues)

(Table continued)

Construct	Standardized Factor Loadings	Composite Reliabilities*	Average Variance Extracted (AVE)**	1	2	3	4	5	6	Mean	S.D.
6. Work Motivation		.95	.83	.367**	.193**	.422**	.258**	.408**	1	6.16	.99
WORKEFFO	.86										
WORKQUAL	.94										
WORKPROD	.94										
WORKINVO	.91										

Note. * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 6. Compariosn of Group Means

Variables	High Communication Satisfaction Group (N=146) Mean	Low Communication Satisfaction Group (N=143) Mean	t value
Expectancy	5.96	5.36	3.97***
Extrinsic Instrumentality	5.26	3.88	7.11***
Intrinsic Instrumentality	6.40	5.44	5.66***
Extrinsic Valence	5.97	5.76	1.41
Intrinsic Valence	6.23	5.86	2.89***
Work Motivation	6.41	5.91	4.34***

Note. * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 7. Tests for Metric Invariance

Model	χ^2	*df*	RMSEA	CFI	CAIC
Nonrestricted Model	471.31	310	.060	.97	1204.94
Full metric invariance	493.77	324	.060	.97	1133.75
Factorial invariance	477.57	315	.060	.97	1177.55

Note. Full metric invariance is supported ($\Delta\chi^2(14)= 22.46$, $p>.05$).

The χ^2 difference of Full metric invariance and Factorial invariance is not significant ($\Delta\chi^2(5)= 6.26$, $p>.05$). Based on these series of modeling tests, the two groups have similar path coefficients among the variables, resulting in a non-significant moderating effect.

CHAPTER SIX

SUMMARY AND CONCLUSION

In this final chapter, the major findings of Chapters 4 and 5 are summarized in context. Theoretical and practical implications are discussed, as well as limitations and future research suggestions. The purposes of this study were to apply expectancy theory to explain hotel employee motivation and to propose if adding communication satisfaction as a moderator could better predict the process of being motivated. The instrument survey was conducted after a relevant literature review and an elicitation study. Results were based on responses from 289 hotel employees who participated in the study. Results suggested that the modified expectancy theory with 5 components (expectancy, extrinsic instrumentality, intrinsic instrumentality, extrinsic valence, and intrinsic valence) best describes employee motivation. Hotel employees are more motivated by intrinsic variables than extrinsic variables. Communication satisfaction was not a moderator strengthening the effects of expectancy, instrumentality, and valence in work motivation. However, communication with employees should be valued by managers. Communication will help to reveal what employees need and want, provide prompt feedback, provide reorganization, help encourage employees, and support employees.

SUMMARY OF FINDINGS

Model Development

The expectancy theory of motivation, originally developed by Vroom (1964), explains the process individuals use to make decisions on various behavioral alternatives. Expectancy theory is presented as follows:

Motivation Force = Expectancy × Instrumentality × Valence

Van Erde and Thierry (1996) suggested using VIE components rather than the model formula. Therefore, to confirm the validity of the expectancy theory as well as to measure the construct validity of its components, we modified the expectancy theory to become a model with 3 components. Principle component analysis using a varimax rotation procedure was performed first to check each proposed construct by extracting one component to measure each construct. Results of principle component analysis suggested 5 components to predict work motivation: expectancy, intrinsic instrumentality, extrinsic instrumentality, extrinsic valence, and intrinsic valence. Further, construct reliability and validity were assessed after the overall fit of measurement model was performed by confirmatory factor analysis. Lastly, structural equation modeling was used to examine the hypothesized relationships in the expectancy theory of hotel employee motivation.

Standardized path coefficients were used to test the hypotheses. The following hypotheses were supported: H1: Expectancy has a positive effect on hotel employee motivation; H2b: Intrinsic Instrumentality has a positive effect on hotel employee motivation; H3a: Extrinsic Valence has a positive effect on hotel employee motivation, and H3b: Intrinsic Valence has a positive effect on hotel employee motivation. Standardized path coefficient and t-value for hypothesis H2a showed negative significance; intrinsic instrumentality acted as a suppressor, suppressing the effect of extrinsic instrumentality on work motivation (Cohen & Cohen, 1983). Thus, H2a was not supported. Extrinsic instrumentality did not have a positive effect on hotel employee motivation. However, its negative significance should not be neglected. Under the

suppressor effect, if the intrinsic instrumentality is controlled, the more extrinsic instrumentality, the less employees will be motivated.

The modified expectancy theory (expectancy, extrinsic and intrinsic instrumentality, extrinsic and intrinsic valence) can enhance more understanding of hotel employee motivation. Hotel employees believe their effort will lead to desired performance; they think that if they meet performance expectations, they will receive a greater reward, particularly for intrinsic instrumentality; and valences are important attributes to motivate them. Hotel managers should put more weight on intrinsic variables to motivate employees.

Moderator Effect

The second objective of this study was to determine if communication satisfaction is a moderator in the modified expectancy theory model to account for more variance in hotel employee motivation. Findings did not support that communication satisfaction plays a moderator role, which implied that the higher the level of communication satisfaction did not have positive effect of expectancy, instrumentality, and valence on hotel employee motivation.

The respondents were divided into a high communication satisfaction group and a low communication satisfaction group. For validation of grouping, group means were compared by variables of expectancy, extrinsic instrumentality, intrinsic instrumentality, extrinsic valence, intrinsic valence, and work motivation. Cronbach's alpha was performed and showed the satisfactory reliability. A series of confirmatory factor analyses was performed to assess the equity of path coefficients between these high and

low communication groups. The two groups had similar path coefficients among the variables, indicating that there was a non-significant moderating effect of communication satisfaction.

The significant differences of mean scores showed that high communication satisfaction group believed their effort will move to good performance; if they met the expectations, they receive desired outcomes; job outcomes were more desirable to them; and they improves their performance if they were motivated. The low communication satisfaction group showed the opposite. Communication satisfaction should have its impact on hotel employee motivation. In addition, more and more people who do not speak English as a first language are working in the hotel industry, so communication should play a more important role in motivating employees.

IMPLICATIONS

The modified expectancy theory was found valid and it can better explain employee motivation in the hotel industry. In past research, employee motivation has mostly focused on what motivates employees, instead of exploring the process of motivation, particularly with theoretical support. The central premise of the expectancy theory is that people make behavioral choices that are calculated to allow them to achieve desired outcomes (Porter & Lawler, 1969; Vroom, 1964). In this study, hotel employee motivation can be explained as the process individuals use to make decisions on various behavioral alternatives (expectancy, extrinsic and intrinsic instrumentality, extrinsic and intrinsic valence). Employees know their effort will lead to good performance. Employees believe that if they meet performance expectation, they will reach desired

outcomes; specifically, they can reach intrinsic instrumentality easily. Hotel employees also find intrinsic valence more than extrinsic valence in motivation.

One objective of this study was to apply expectancy theory to better understand employee motivation in the hotel setting and confirm the validity of expectancy theory. In addition, this study adopted the suggestion from Van Erde and Thierry (1996) to use VIE components rather than the model formulation. The results of this study suggest that the modified expectancy theory is valid, confirming its construct validity by structural equation modeling. Incorporating modified expectancy theory in hotel employee motivation allows academia and industry to better explain how employees perceive motivation and the individual decision-making process.

Further, the proposed expectancy theory extends the constructs of instrumentality and valence into extrinsic instrumentality, intrinsic instrumentality, extrinsic valence, and intrinsic valence. Parker and Dyer (1976) noted that the roles of intrinsic and extrinsic outcomes in expectancy theory research are very complex and remain very much unsettled. This study attempts to separate intrinsic and extrinsic variables to see each specific effect on work motivation. Expanding existing theory into a sound framework, including extrinsic and intrinsic factors, enhances more understanding of the extent to which each specific construct influences the decision-making process of employee motivation.

Intrinsic variables had more influence on work motivation than extrinsic variables. It was interesting to see this finding because pay and other extrinsic variables have always been identified as the best motivation factors. However, this finding is consistent with previous studies that indicated that intrinsic variables are more important

than extrinsic variables in motivation (Wahba & House ,1974; Lee-Ross, 1995). One possible explanation is that employees realize they receive better pay, pay increases, or promotions only rarely, so they seek intrinsic factors to motivate them. However, several employees commented that recognition and appreciation from customers and managers motivate them to work harder. Therefore, the study suggests that intrinsic variables should be more emphasized than extrinsic variables when motivating hotel employees.

This study illustrated the importance of motivation, because hotel employees understand if they work hard, their performance will significantly improve, and when they are highly motivated, they will put more effort on the job and enhance their productivity and the quality of their performance. Managers need to motivate employees continuously and provide on-going feedback for employees. Since feeling good about themselves, having a sense of accomplishment, taking responsibility, and having challenging work are good motivators, managers should compliment employees and recognize employees who do well, recognize employees. Managers should also provide job training, so employees can fully use their skills and knowledge in the work place. Managers should listen to employees, care about employees, encourage employees involved in job or make job-related decisions, take care of employee advancement or career growing, and reward employees with pay increases or bonuses. The most important thing is for managers to support employees and recognize employees.

Communication should play a more important role in motivating employees. Particularly, more and more people whose first language is not English are working in the hotel industry. Managers should be aware of the cultural difference and value as well as respect those differencies. Managers should give clear and precise instructions to let

employees know their job description, performance evaluation, service quality, and hotel values. In this study, managers do best when they are willing to listen to employees and accept ideas from employees, so employees feel that they are part of the organization. However, the quality of communication could be improved. Information is not prompt enough, not well organized, and managers do not exactly know what problems employees face. Therefore, managers should improve their communication skills and demonstrate leadership to employees. Listening to employees, and encouraging job involvement, and truly caring for employees make communication successful.

LIMITATIONS AND FUTURE RESEARCH

Interpreting the results of this study should be approached with caution. First, these findings may not generalize to all hotel properties. Data were collected from fifty-six hotels in several cities in a midwestern state, but most of these hotels are categorized as upper-economy and mid-scale hotels; very few of them are up-scale hotels. In addition, a Spanish version of survey was not provided in this present research. Hispanic employees may be limited enough in their English ability that they could not complete the survey. It would be ideal to extend the study to other segments of hotels or other geographic areas to make the results more generalizable. This approach should also help reconfirm the validity of the expectancy theory with the hotel employee motivation model.

Mitchell (1974) suggested the construct of instrumentality and valence should include both positive and negative values. Parker and Dyer (1976) stated that the exclusion of negatively valent outcomes from the expectancy theory model actually increased its validity. Previous research has mostly identified positive values of

motivation factors, and the researchers also attempted to shorten the measurement items in the surveys, so negative variables were not included in this study. However, including negative values in instrumentality and valence would reveal different aspects of employee motivation and reflect real responses from employees. Future research could include positive values of instrumentality and valence for further analysis.

Future study can also determine other variables, such as personal characteristics, abilities, and needs for goal achievement in examining employee motivation. Adding other variables to the expectancy theory model enhanced its validity in the behavioral criterion. Additional studies might investigate more demographically diverse employees to determine whether different motivation strategies should be used. Parker and Dyer (1976) stated that by including additional situational and psychological components in the model, particularly useful behavioral predictions may be obtained. Mitchell and Knudsen (1972) presented an apparent explanation, suggesting that expectancy models predict only preferences and that situational moderators explain actual behavior. Although this may account for the effects of the expectations of others, it is more difficult to explain why individual differences such as personality, background, or organizational climate would not affect valence, instrumentality, or expectancy perceptions rather than mediating between preferences and behavior. The last approach is to combine other motivation theories with the expectancy theory to investigate motivation and its process. Motivation is complex, and continuous in-depth study of motivation will help managers in the hotel industry effectively motivate employees.

CONCLUSION

The purposes of this study were to apply the expectancy theory to better understand employee motivation in the hotel setting and propose communication satisfaction as a moderator that strengthens the effect of the three components of expectancy theory (expectancy, instrumentality, valence) on work motivation. The results suggest modifying the expectancy theory to five components (expectancy, extrinsic instrumentality, intrinsic instrumentality, extrinsic valence, and intrinsic valence) would best explain the process of motivating hotel employees. Findings also suggest that intrinsic motivation factors are more valuable than extrinsic factors for hotel employees, which implies that hotel managers can focus on intrinsic motivation factors to motivate employees.

A series of confirmatory factor analysis of metric invariance indicated that there is no significant moderating effort for communication satisfaction. However, high and low communication satisfaction groups responded differently to expectancy, instrumentality, valence, and work motivation. Employees in a high communication satisfaction group responded more positively to motivation components, and they were more likely to perform well in their jobs when they were motivated. Communication should be managed collectively to motivate employees. Motivating employees continuously in a variety of ways is strongly recommended.

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Appendix A.
Elicitation Study Survey

Elicitation Study Questionnaire

My name is Chun-Fang Chiang, a doctoral student in the department of Hotel, Restaurant, Institution Management and Dietetics (HRIMD) at Kansas State University. Currently, I am working on my dissertation, tentatively titled" The influence of communication quality attributes on expectancy theory predictions of employee motivation." To develop measurement items for the instrument questionnaire, I would like to conduct an elicitation study with you. Please think about the motivations which motivate you working in the hotel industry, and answer the following questions.

Thank you so much for your cooperation!!

Should you have any other questions, please contact Chun-Fang Chiang at (785) 532-2211 (email: chiang@humec.ksu.edu)

Sincerely,

Chun-Fang Chiang
Ph.D. student
HRIMD of KSU

1. **If you work very hard, you expect you would get the following desired outcomes. Please rank from 1 to 14 you expect to get most.**

1. Better pay _____
2. Monetary bonus or benefits _____
3. Opportunities for advancement/promotion _____
4. Take more job responsibility/control over job _____
5. Obtain praise and recognition from my supervisors and managers _____
6. Gain respect from my colleagues _____
7. Gain recognition from my family _____
8. Gain appreciation from my customers _____
9. Learn a lot from working _____
10. More challenging work tasks _____
11. Develop feelings of accomplishment _____
12. Develop self-esteem _____
13. Be regarded as a good employee _____
14. Other (Please specify) _____ _____

2. **Please rank from 1 to 14 you are willing to work very hard to get the following desired outcomes.**

1. Better pay _____
2. Monetary bonus or benefits _____
3. Opportunities for advancement/promotion _____

4. Take more job responsibility/control over job _____
5. Obtain praise and recognition from my supervisors and managers _____
6. Gain respect from my colleagues _____
7. Gain recognition from my family _____
8. Gain appreciation from my customers _____
9. Learn a lot from working _____
10. More challenging work tasks _____
11. Develop feelings of accomplishment _____
12. Develop self-esteem _____
13. Be regarded as a good employee _____
14. Other (Please specify) _____ _____

3. Please rank work motivation from 1 to 17 which motivate you most working in the hotel.

1. Good salary/wage _____
2. Good Working conditions _____
3. Monetary bonus or benefits _____
4. Interesting work _____
5. Opportunities for advancement/promotion _____
6. Take more job responsibility/control over job _____
7. Supervisors and managers _____
8. Colleagues and coworkers _____
9. Gain recognition from my family _____
10. Gain appreciation from my customers _____
11. Make full use of my ability _____
12. Have stable work schedule _____
13. Job security _____
14. More challenging work tasks _____
15. Develop feelings of accomplishment _____
16. Personal growing and development _____
17. Other (Please specify)_____ _____

4. Please rank the following statement (1to 11) if you feel like being motivated to work.

1. Amount of effort I expend on the job _____
2. Enhance quality of my job performance _____
3. Increase productivity on the job _____
4. Show concern and respect to customers _____
5. Expand autonomy in workplace decision-making _____
6. Willing to get involved in job _____
7. Willing to cooperate and shoulder extra load _____

8. Pay attention to detail and planning _____
9. Show responsibility and imitative _____
10. Willing to take more challenging work tasks. _____
11. Willing to help colleagues. _____
11. Other (Please specify)_____ _____

5. Please rank the following statement (1 to 16) you think which is important to evaluate communication satisfaction.

1. The management knows and understands the problems faced by employees. _____
2. The management listens and pays attentions to me. _____
3. My supervisor offers guidance for solving job-related problems. _____
4. Management's communication makes me identify with it or feel a vital part of it. _____
5. Hotel's communication is interesting and helpful. _____
6. My supervisors and managers trust me. _____
7. I receive on-time information needed to do my job. _____
8. Conflicts are handled appropriately through proper communication channels. _____
9. The management is open to ideas. _____
10. Communication with employees is accurate and free-flowing. _____
11. Our meetings are well-organized. _____
12. The amount of supervision given me is about right. _____
13. Written directives and reports are clear and concise. _____
14. Attitudes toward communication in the hotel are basically healthy. _____
15. Informal communication is active and accurate. _____
16. The amount of communication in the company is about right. _____

Thank you so much!!!

Appendix B.
Pilot Test Survey

Date

Dear Hotel Associate:

My name is Chun-Fang Chiang. I am a Ph.D. student in the Department of Hotel, Restaurant, Institution Management and Dietetics at Kansas State University. I am pleased that your hotel has agreed to help with a study I am conducting on motivation and communication. Results of this study will provide important information for managers to use to motivate and enhance the quality of communication with employees.

Please take a few minutes to complete the attached questionnaire. All responses will be kept confidential and anonymous, and your participation is strictly voluntary. Results will be summarized so that no individual results will be shared. Your identity will be totally protected. After completing the questionnaire, please seal it in the envelope provided and return it to your human resources department. Your Human Resources manager will return all of the sealed envelopes to me.

If you have any questions regarding your rights as a participant in this study, please contact the Kansas State University Institutional Review Board at (785) 532-3224. If you have any other questions, please contact me at (785) 532-2211 (email: chiang@humec.ksu.edu). Dr. SooCheong (Shawn) Jang at (765) 496-3910 (email: jang12@purdue.edu), or Dr. Deborah Canter at (785) 532-5507 (email: canter@ksu.edu).

Your contribution to the success of this study is appreciated.

Sincerely,

Chun-Fang Chiang	SooCheong (Shawn) Jang	Deborah D. Canter, Ph.D.
Ph.D. Candidate	Assistant Professor	Professor
HRIMD at KSU	HTM at Purdue University	HRIMD at KSU

Part I: Please circle the number that reflects the degree of agreement you feel about each statement.

	Strongly Disagree						Strongly Agree
1. If I work very hard, my job performance will significantly improve.	1	2	3	4	5	6	7
2. If I work very hard, the quality of my job performance will be greatly enhanced.	1	2	3	4	5	6	7
3. If I work very hard, I will get a lot more accomplished.	1	2	3	4	5	6	7
4. If I put more effort into my job, my productivity will improve significantly.	1	2	3	4	5	6	7
5. If I put more effort into my job, I will definitely be regarded as an effective employee.	1	2	3	4	5	6	7

Part II: Please circle the number that reflects the degree of agreement you feel about each statement.

	Strongly Disagree						Strongly Agree
Performing well in my job will definitely result in my							
1. getting good pay.	1	2	3	4	5	6	7
2. getting monetary bonuses.	1	2	3	4	5	6	7
3. getting pay increases.	1	2	3	4	5	6	7
4. having more opportunities for advancement and promotion.	1	2	3	4	5	6	7
5. receiving recognition/praise from others at work.	1	2	3	4	5	6	7
6. having more learning opportunities.	1	2	3	4	5	6	7
7. having more responsibility and control over my job.	1	2	3	4	5	6	7
8. taking on more challenging work tasks.	1	2	3	4	5	6	7
9. having feelings of accomplishment.	1	2	3	4	5	6	7
10. feeling very good about myself.	1	2	3	4	5	6	7

11. being regarded as a good employee. 1 2 3 4 5 6 7

Part III: Please circle the number that reflects how you feel about each of the following:

	Very Undesirable						Very Desirable
1. Good salary/wage.	1	2	3	4	5	6	7
2. More monetary bonuses.	1	2	3	4	5	6	7
3. More pay increases.	1	2	3	4	5	6	7
4. Interesting work.	1	2	3	4	5	6	7
5. Opportunities for advancement/promotion.	1	2	3	4	5	6	7
6. More responsibility/control over my job.	1	2	3	4	5	6	7
7. More challenging work tasks.	1	2	3	4	5	6	7
8. Full use my skills and abilities.	1	2	3	4	5	6	7
9. Good working conditions.	1	2	3	4	5	6	7
10 Stable work schedules.	1	2	3	4	5	6	7
12. Job security.	1	2	3	4	5	6	7
13. Recognition/praise from others at work.	1	2	3	4	5	6	7
14. Feelings of accomplishment.	1	2	3	4	5	6	7
15. Personal growth and development.	1	2	3	4	5	6	7

Part IV: Please circle the number which indicates how likely or unlikely you are to act in the way described below:

When I am highly motivated, I will definitely...	**Unlikely**						**Likely**
1. expend more effort on the job.	1	2	3	4	5	6	7
2. enhance quality of my job performance.	1	2	3	4	5	6	7

3. increase productivity on the job.	1	2	3	4	5	6	7
4. be willing to get involved in my job.	1	2	3	4	5	6	7
5. work harder than others.	1	2	3	4	5	6	7

Part V: Please circle the number that reflects your level of agreement with each statement.

	Strongly Disagree						**Strongly Agree**
1. Managers know and understand the problems faced by employees.	1	2	3	4	5	6	7
2. Managers listen and pay attention to me.	1	2	3	4	5	6	7
3. My manager offers guidance for solving job-related problems.	1	2	3	4	5	6	7
4. My manager's communications with me make me feel an important part of this hotel.	1	2	3	4	5	6	7
5. My manager and supervisor trust me.	1	2	3	4	5	6	7
6. I receive on-time information needed to do my job.	1	2	3	4	5	6	7
7. Conflicts are handled appropriately through proper communication channels.	1	2	3	4	5	6	7
8. Managers are open to new ideas.	1	2	3	4	5	6	7
9. Management's communications with employees are accurate and organized.	1	2	3	4	5	6	7

Part VI. Please answer the following demographic questions. We will use this information to help understand more about the group of people who have answered this questionnaire. Answers will be summarized and your identity will not be revealed in any way.

1. What is your gender? _____Male _____Female

2. What is your age? _____

3. What is the highest level of education you have completed?

_____Some high school courses but did not graduate

_____High school graduate or have a GED

_____Less than 2 years of college coursework

_____More than 2 years of college coursework

_____College degree

_____Graduate degree

4. In what department of this hotel do you work?

_____Administration

_____Front office

_____Housekeeping

_____Food & Beverage

_____Other (Please specify)_____

5. What is your job title? _____

6. How long have you worked in this hotel? _____Years _____Months

7. How long have you worked in the hotel industry? _____Years _____Months

If you have any further comments, please write them below.

Thanks for your time and participation!

Appendix C.
Hotel Employee Motivation Survey

Dear Hotel Associate:

My name is Chun-Fang Chiang. I am a Ph.D. student in the Department of Hotel, Restaurant, Institution Management and Dietetics at Kansas State University. I am pleased that your hotel has agreed to help with a study I am conducting on motivation and communication. Results of this study will provide important information for managers to use to motivate and enhance the quality of communication with employees.

Please take a few minutes to complete the attached questionnaire. All responses will be kept confidential and anonymous, and your participation is strictly voluntary. Results will be summarized so that no individual results will be shared. Your identity will be totally protected. After completing the questionnaire, please seal it in the envelope provided and return it to your human resources department. Your Human Resources manager will return all of the sealed envelopes to me.

If you have any questions regarding your rights as a participant in this study, please contact the Kansas State University Institutional Review Board at (785) 532-3224. If you have any other questions, please contact me at (785) 532-2211 (email: chiang@humec.ksu.edu). Dr. SooCheong (Shawn) Jang at (765) 496-3910 (email: jang12@purdue.edu), or Dr. Deborah Canter at (785) 532-5507 (email: canter@ksu.edu).

Your contribution to the success of this study is appreciated.

Sincerely,

Chun-Fang Chiang	SooCheong (Shawn) Jang	Deborah D. Canter
Ph.D. Candidate	Assistant Professor	Professor
HRIMD at KSU	HTM at Purdue University	HRIMD at KSU

Part I: Please circle the number that reflects the degree of agreement you feel about each statement.

	Strongly Disagree						Strongly Agree
1. If I work very hard, my job performance will significantly improve.	1	2	3	4	5	6	7
2. If I work very hard, I will get a lot more accomplished.	1	2	3	4	5	6	7
3. If I put more effort into my job, my productivity will improve significantly.	1	2	3	4	5	6	7
4. If I put more effort into my job, I will definitely be regarded as an effective employee.	1	2	3	4	5	6	7

Part II: Please circle the number that reflects the degree of agreement you feel about each statement.

	Strongly Disagree						Strongly Agree
Performing well in my job will definitely result in my							
1. getting good pay.	1	2	3	4	5	6	7
2. getting monetary bonuses.	1	2	3	4	5	6	7
3. getting pay increases.	1	2	3	4	5	6	7
4. having more opportunities for promotion.	1	2	3	4	5	6	7
5. having more responsibility and control over my job.	1	2	3	4	5	6	7
6. taking on more challenging work tasks.	1	2	3	4	5	6	7
7. having feelings of accomplishment.	1	2	3	4	5	6	7
8. feeling very good about myself.	1	2	3	4	5	6	7

Part III: Please circle the number that reflects how desirable you find each of the following:

	Very Undesirable						Very Desirable

1. Good salary/wage.	1 2 3 4 5 6 7
2. More monetary bonuses.	1 2 3 4 5 6 7
3. More pay increases.	1 2 3 4 5 6 7
4. Interesting work.	1 2 3 4 5 6 7
5. Opportunities for advancement/promotion.	1 2 3 4 5 6 7
6. More responsibility/control over my job.	1 2 3 4 5 6 7
7. More challenging work tasks.	1 2 3 4 5 6 7
8. Full use my skills and abilities.	1 2 3 4 5 6 7
9. Feelings of accomplishment.	1 2 3 4 5 6 7
10. Personal growth and development.	1 2 3 4 5 6 7

Part IV: Please circle the number which indicates how likely or unlikely you are to act in the way described below:

When I am highly motivated, I will definitely...	**Unlikely**						**Likely**
1. expend more effort on the job.	1	2	3	4	5	6	7
2. enhance quality of my job performance.	1	2	3	4	5	6	7
3. increase productivity on the job.	1	2	3	4	5	6	7
4. be willing to get involved in my job.	1	2	3	4	5	6	7

Part V: Please circle the number that reflects your level of agreement with each statement.

	Strongly Disagree						**Strongly Agree**
1. Managers know and understand the problems faced by employees.	1	2	3	4	5	6	7

2. Managers listen and pay attention to me.	1	2	3	4	5	6	7
3. My manager offers guidance for solving job-related problems.	1	2	3	4	5	6	7
4. My manager's communications with me make me feel an important part of this hotel.	1	2	3	4	5	6	7
5. I receive on-time information needed to do my job.	1	2	3	4	5	6	7
6. Conflicts are handled appropriately through proper communication channels.	1	2	3	4	5	6	7
7. Managers are open to new ideas.	1	2	3	4	5	6	7
8. Management's communications with employees are accurate and organized.	1	2	3	4	5	6	7

Part VI. Please answer the following background questions. We will use this information to help understand more about the group of people who have answered this survey. Answers will be summarized and your identity will not be revealed in any way.

1. What is your gender? _____Male _____Female
2. What is your age? _____
3. What is the highest level of education you have completed?
   - _____Secondary but no degree
   - _____High school degree
   - _____Completed some college
   - _____College or university
   - _____Graduate degree
4. In what department of this hotel do you work?
   - _____Administration
   - _____Front office
   - _____Housekeeping
   - _____Food & Beverage
   - _____Other (Please specify)_____

5. What is your job title? (Optional)_____

6. How long have you worked in this hotel? _____Years _____Months

7. How long have you worked in the hotel industry? _____Years _____Months

If you have any further comments, please write them below.

Thanks for your time and participation!

Appendix D.
Cover Letter for Human Resources Managers

Dear Director of Human Resources:

The aim of employee motivation is to improve performance and productivity in the workplace. Motivating your employees and communicating effectively with them may enhance their job satisfaction. At Kansas State University, we are conducting a research study to investigate what motivates hotel employees to improve their on-the-job performance. The results of this study can help the hotel industry motivate employees to do a better job. **Your cooperation is very valuable and important to us!**

We would like to distribute a survey to employees working at your property. The survey will ask the employees their views about motivation, job performance, and communication satisfaction. The questionnaire can usually be completed in about 10 minutes. All responses will be kept confidential and participation of the employees should be strictly voluntary. Results will be reported in summary form only to protect the identity of those completing the survey. We also would be happy to share a summary of the results of this study with you upon its completion.

In a few days, I will phone you about this opportunity. If you agree to participate, we will send you the correct number of survey instruments and return envelopes needed for all of your employees. We would ask that you distribute these surveys in the best way you see fit, either along with employee time cards, paychecks, at an employee meeting, etc. We ask that employees fill out the survey, seal it in the envelope, and return the envelope to you. We will then retrieve the completed surveys from you, either by mail or in person.

If you have any questions regarding the rights of human study participants, please contact the Kansas State University Institutional Review Board at (785) 532-3224. If you have any other questions about the study, please contact Chun-Fang Chiang at (785) 532-2211 (email: chiang@humec.ksu.edu) or Dr. Deborah Canter at (785) 532-5507 (email: canter@ksu.edu).

We appreciate you taking time from your busy schedule to participate in this research. Enclosed please find a copy of the employee cover letter and the questionnaire for your perusal. If you have any questions about this survey, please don't hesitate to call or e-mail. Your assistance and cooperation is appreciated.

Sincerely,

Chun-Fang Chiang	SooCheong (Shawn) Jang	Deborah D. Canter
Ph.D. Candidate	Assistant Professor	Professor
HRIMD at KSU	HTM at Purdue University	HRIMD at KSU