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## Effects of Service Level with Low Unemployment Rate in Macau

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Effects of Service Level with Low Unemployment Rate in Macau

by

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## **Part One: Introduction**

### **Background**

The former Portuguese colony of Macau, now a Special Administrative Zone of China, has become a highly popular tourist destination for Mainland Chinese, and is also attracting a number of global visitors. The heart of Macau's hospitality industry is the island's casino culture, as gambling is the main attraction for the millions of Mainland Chinese who visit Macau every year. In recent years, hospitality scholars have paid increasing attention to studying the service delivery of Macau's hospitality industry, whether in the context of casinos or general tourism.

The most influential recent study on this topic was probably that of Gu and Siu (2009), who concluded that "Mediocre interpersonal skills are the major weakness of [Macau's] labor force" (p. 561). Chang (2009) and Latour, Sarrazit, Hendler, and Latour (2009) have argued that service, as delivered in the context of hospitality industries dominated by gambling, is a function of how individual employees communicate with individual guests. According to Chang (2009), hospitality employees are able to deliver satisfactory service when they understand, and act according to, the expectations of guests. It is not clear whether this dynamic can be observed in the context of Macau's hospitality industry.

### **Justification and Objectives**

With this background in mind, there is an important question that has not been answered in the context of Macau's hospitality industry: Does the workforce display what Gu and Siu (2009) called "mediocre interpersonal skills" (p. 561) because of innate shortcomings in the workforce, or because of voluntary behavior on the part of the workforce? The proposed paper will use Osterman's (1994) theoretical framework of employment incentives and with reference to the research being conducted by Venetian Macau.

## **Purpose Statement**

The purpose of this study is to quantitatively measure the links between the variables of employee service level, rehiring expectations, and skills/limitations, based on secondary data from The Venetian Macao.

## **Theoretical Background and Brief Literature Review**

One of the corollaries of the Efficiency Wages Theorem as discussed by Osterman (1994) is that, in an environment of economic opportunity, workers will automatically work less well, since they have no incentive to work harder or better. In an environment of job scarcity, service workers are typically observed to raise their service levels (Kim, Prideaux, & Kim, 2002). On the other hand, when jobs are plentiful—as has been the case in the gambling-driven hospitality in Asia over the past decade (Hsu, 2006)—workers have been observed to relax their dedication to work, in the expectation that they can always be rehired if they lose a particular job. It is known that Macau has had low unemployment in the hospitality industry for several years, notwithstanding the global recession of 2008 (Gu & Siu, 2009). What is not known is whether hospitality workers in Macau have voluntarily reduced their commitment to service because of the abundance of employment options, or because there are genuine and innate reasons—such as lack of competence in Mandarin, the language spoken by most Mainland Chinese visitors to Macau (Gu & Siu, 2009)—for their lower levels of service.

## **Methodology of Study**

The study will be quantitative, correlative, and based on secondary data. There are three variables for which data need to be collected in the study: Service levels, rehiring expectations, and innate limitations (which can also be expressed as skills). The paper will be based on the research being conducted by Venetian Macao, the largest hotel in Macao, for purposes of data-

gathering. As part of its internal research, The Venetian Macao distributed a researcher-designed survey (designed to measure worker skills and rehiring expectations) to a random sample of its workers, while also compiling service level ratings for each of the employees who completed the survey. These secondary data will be used to attempt to answer the purpose of this paper.

### **Constraints of the Study**

The main constraint of this paper is that the data will be gathered solely from one hotel in Macau (albeit the largest one). It is possible that workers in The Venetian Macao were not representative of hospitality workers in Macao as a whole. Another constraint is that Venetian Macao's sampling might have relied on self-selection; the workers who decided to fill out the survey might have had different characteristics than the workers who choose not to participate (a situation that, according to Creswell, 2009 can threaten study validity).

### **Importance of Study**

Although Macau is one of the world's most vibrant and popular tourist destinations, and the world's dominant casino hotel destination, it has remained largely ignored by English-speaking researchers who are more familiar with Las Vegas and other destinations in the Global North (Latour, Sarrazit, Hendler, & Latour, 2009). It is all the more important for hospitality and tourism scholars to come to an improved understanding of the dynamics of service levels in Macau, given the close connection between service and long-term appeal of a tourist destination (Hsu, 2006). The importance of this study will lie in its ability to pinpoint whether the observed low service standards of Macau casino hotels are due to innate limitations among staff, or whether the atmosphere of low unemployment has rendered staff members complacent about rendering excellent service that they are in fact capable of providing.

## **Part Two: Literature Review**

### **Macau and the Gambling / Hospitality Economy**

Macau was a Portuguese colony starting from the 16<sup>th</sup> century to December 20, 1999, when Macau was ceded to China. Gambling was legalized in Macau in 1847; for the next 150 years, gambling provided an important source of revenue to Macau's Portuguese government and won the area a reputation as a pleasure center and tourism destination. China allowed Macau's gambling policy to continue after 1999.

For much of its history, Macau had what Brown and Gardner (2002) referred to as a "sleepy colonial image" (p. 197). Two events combined to give Macau its current importance as a casino and tourism destination. First, the entire southeastern coast of China began to industrialize very rapidly in the aftermath of Deng Xiao Ping's decision to embrace capitalism in the early 1980s (Hao, 2011). Second, as Macau reverted to China, it took its place alongside Hong Kong as a convenient island destination for mainland Chinese in search of leisure. The government of China, which did not allow gambling on the mainland, saw the potential of Macau as a popular destination for Chinese gamblers, one that was far enough away to not interfere with the social conservatism of the Chinese mainland (Hao). Macau became a special administrative region (SAR) of China, along with Hong Kong, and its casino businesses grew because of a combination of development, marketing, and infrastructure expansion (including an expansion of Macau's airport).

As of 2007, Macau attracted more gambling revenue than the Las Vegas Strip in Nevada, U.S.A., indicating the maturity of the casino market (Clayton, 2010). Macau currently has over 33 major casinos, including the City of Dreams, The Venetian Macao, and Casino Lisboa (Clayton). The casino business in Macau is regulated by the Gaming Inspection and

Coordination Bureau, which reports directly to the Chief Executive of Macau. The Bureau helps to ensure that Macau's casino activity is regulated and taxed appropriately. Taxation is a particularly important concern, as 70% of the SAR's revenue comes from taxation of gambling revenues (Gaming Inspection and Coordination Bureau of Macau, 2012).

Various statistics relevant to the casino business are available from the Statistics and Census Service of the Macau SAR government. For example, the Statistics and Census Service (2011) collects employment data at three-month intervals and has historical records dating to 1996. Given that most of the working population of Macau is engaged in some aspect of the casino trade, these statistics offer relevant insight into the economic state of the casino industry for the past 16 years. As of December, 2011, unemployment in Macau is at 2.1%, the lowest rate in the 16 years that the Statistics and Census Service has kept records. Even during the height of the Great Recession of 2008, unemployment in Macau never rose above 3.9%. As such, the roughly 560,000 inhabitants of Macau enjoy access to a rare economic opportunity.

One of the changes wrought by China in Macau's gambling policy is that of liberalization of casino ownership. The Portuguese colonial government had treated Macanese gambling as a monopoly, whose rights were owned by a consortium of businessmen known as the Sociedad de Turismo e Diversoes de Macau. As a SAR of China, Macau terminated the monopoly system in 2002, preparing the way for many other casino operators to enter Macao. One of the results of this policy was that American casinos, including the Wynn Resorts, MGM Mirage, and Las Vegas Sands, opened locations in Macao. By 2007, partly due to the liberalization of casino ownership requirements, gambling revenues in Macau had surpassed those of Las Vegas, establishing Macau as the premier casino destination in the world.

## **The Efficiency Wages Theorem**

The efficiency wages theorem is, in its most fundamental form, a construct derived from Bandura's (1997) theory of self-efficacy. According to Bandura, humans seldom express any ability to the fullest: "People often fail to perform optimally even though they know full well what to do and possess the requisite skills to do it" (p. 37). In Bandura's theory, there are many cognitive, behavioral, and emotional reasons that people fail to perform optimally. Osterman (1994) focused on the importance of compensation as a predictor of optimum performance. According to the efficiency wages theorem, employees either exercise or withhold competence in proportion to the motivation provided by compensation (or merely the fact of employment). When an employee feels that a particular compensation level or employment opportunity is inadequate, he or she will reduce voluntary work behaviors and perform enough work to remain employed. On the other hand, when an employee feels fortunate to be at a particular compensation level or to have a particular job, he or she will orchestrate existing skills in order to become a better and more efficient worker (Bandura, 1997; Osterman, 1994)).

Although the efficiency wages theorem is explanatorily rich, it is bounded by the employee's innate abilities. For example, no amount of wage-based motivation can result in a worker learning a new language in a week. Therefore the efficiency wages theorem ought to be taken to refer to the narrow band of behaviors that an employee already possesses and can control (Osterman, 1994).

There are other theoretical explanations of how service levels are determined. For example, social cognition is a theory that began to acquire force in the 1960s, largely because of the experiments of the psychologist Albert Bandura. In 1961, Bandura and his colleagues (Bandura, Ross, & Ross, 1961) made an interesting discovery. Children who observed adults



treating a doll became more likely to treat a doll in the same fashion, with the likelihood increasing if the adult were of the same gender as the child. This experiment was the first laboratory confirmation that behavior can be learned through direct imitation of others, even if the immediate stimulus only occurred once (thus, ruling out operant conditioning as a mechanism of the imitation observed by Bandura et al.). In the intervening five decades, social cognition has become a full-fledged theory of learning, one with vast explanatory scope. In the context of customer service theory, researchers have observed that service cultures can emerge not as the result of an employee's voluntary decisions, but because employees absorb—whether consciously or unconsciously—existing service cultures in their workplaces.

The efficiency wages theorem (Osterman, 1994) and the theory of social cognition (Bandura et al., 1961) take opposite theoretical approaches to the question of service levels. The Efficiency Wages Theorem suggests that employees are, by and large, free agents who make voluntary decisions about the quantity and quality of the service they provide, in response to the stimulus of compensation. Social cognition suggests that, although there might be voluntary aspects of an employee's provision of service, service is also provided in the context of an existing culture that an individual employee cannot easily defy or alter. In addition, there is an important role played by theories of business process management, which ensure that service is provided in involuntary ways. Allan (2005) argued that, in workplaces in which service or aspects of service are automated, “principles of efficiency, calculability, predictability, and control” predominate so that “*quantity and standardization replace quality and variety as the indicators of value...*” (p. 138).

Because of the limited scholarly work that has been carried out on the casino industry of Macau, it is not clear which of the theories discussed here is the most apt description of casino

operations in the SAR. It is for this purpose that the second research question of this study was created. By speaking to casino executives, it should be possible to discover the extent to which service provision in Macau casinos can be voluntarily improved by individual employees, and to which extent the state service is determined by a pre-existing service culture or automated service provisioning system.

### **Other Theoretical Bases of Employee Motivation to Raise Service Levels**

According to Adams (1976), Herzberg (1959; 1987), and other theorists, motivation is the concept that helps to explain why workers work in the first place. The efficiency wages theorem (Osterman, 1994) is one possible explanation of motivation; however, motivation to work can also arise for reasons that have little or nothing to do with money. Workplace democracy is another possible root of employee motivation to raise service levels.

Motivation is closely related to workplace democracy for two key reasons. The first reason is known as the halo effect. If workers feel motivated, then research suggests that they will feel as if their organizations are more democratic than they actually are (Adams, 1976). Thus, the highly motivated worker who feels fortunate to be working might ignore or minimize signs of hierarchy and coercion and genuinely come to believe that the workplace is open and democratic, which in turn will motivate the worker to raise his or her level of efficiency and service.

While the halo effect is illusory, there are also ways in which motivation and workplace democracy are more genuinely connected. For example, Herzberg's (1987) work suggested that, when workers are motivated through meaningful kinds of job enrichment, they will recognize that the distance between themselves and managers has lessened. This finding was also supported by Adams (1976) and Osterman (1994), both of whom concluded that the main font of

motivation is increased wages, which send a clear and quantifiable signal about how much an organization values its workers, and about what the real power distance between workers and managers is. However, Herzberg's work suggested that factors other than wages, such as improved communication and training and development, can also motivate workers by demonstrating that the organization thinks of them, if not as equals to managers, then still as employees with dignity and the right to increased attention and resource commitment from the organization.

As far as Herzberg (1959; 1987) is concerned, so-called hygiene factors—such as status, job security, salary, inter-personal relationships, and physical environment, etc.—are important for a functional and healthy workplace, but they will not motivate people to strain for higher work performance; enjoyment, fulfillment, and a sense of equity and development are better predictors of employee motivation (Vitalis, 1977; Herzberg, 1959). However, there is some tension in the literature here, as both Adams (1976) and Osterman (1994) demonstrated that workers voluntarily raise the quality and quantity of their work when presented with more money. Organizations often focus on superficial changes to hygiene in order to keep workers from leaving, but do not indicate their interest in what Osterman called genuine workplace democracy by paying workers equitably. Early organizational psychologists, such as Maslow (1945)—an influence on Herzberg—dissociated wages from the category of genuinely motivating factors and argued that emotional fulfillment was the key component of both motivation and workplace democracy. The clash between those theorists who emphasize money as the prime indicator of how much organizations really value employees, and those theorists who believe that both motivation and democracy can be inculcated through means other than money, has not been resolved.

One of the difficulties faced by any study on worker motivation is how to discuss the concept that has been variously described and expressed as empowerment, enfranchisement, delegation, etc. The difficulty arises because of human psychology. In any individual employee's feelings about worker motivation, there will be a combination of judicious evaluation of conditions together with what marketers called the halo effect (Vitalis, 1977). Corporations themselves understand and play to this human tendency. For example, theorists have discussed the concept of job enrichment, which has gone to sometimes absurd ends to make obviously maltreated and exploited employees feel as if they are actually stakeholders in the organization (Adams, 1976). Thus, job enrichment activities could include the issuing of valueless certificates, pats on the back by a supervisory, and special mention in company newsletters. To be sure, many theorists have belittled these kinds of job enrichment as skirting the real issues of workplace democracy, such as democracy in compensation (Adams; Herzberg, 1959; Osterman, 1994). However, it is also beyond doubt that some employees respond well to these overtures and come to raise their quantity and quality of work as a result, which in turn raises their levels of service to customers.

Work engagement refers to the intensity of an employee's physical, emotional, and cognitive connection to work (Bakker, Schaufeli, Leiter, & Taris 2008). An engaged employee has been described as a motivated, happy, and competent employee (Hakanen, Schaufeli, & Ahola, 2008). There is a great deal of empirical evidence that engagement predicts high job performance and, conversely, that a lack of engagement predicts increased work stress and lowers service levels (Halbesleben & Wheeler, 2008). Engagement is an interesting stress variable given that it is itself subject to being affected by other factors, such as bullying and personality characteristics. Thus, the lack of employee engagement not only indicates the likely

presence of stress but also points to the existence of other negative factors in the work life of an employee or manager (Schaufeli, Bakker, & Van Rhenen, 2009). The research suggests that work engagement can result not only from an employee's idiosyncratic reasons for enjoying a job but also because the organizational structure is supportive (Van den Broeck, Vansteenkiste, De Witte, & Lens, 2008). Thus, work engagement is both an intrinsic and extrinsic phenomenon, one equally determined by motivation and workplace conditions (Schaufeli & Bakker, 2003).

Attitude at work is a sub-theme within the literature on work engagement. The relevant findings in this regard are that employees who have a positive attitude are likely to feel less stress as compared to employees with a neutral or negative attitude, regardless of the actual operational situation (Tucker et al., 2008). In other words, someone with a positive attitude will feel less stress in the very same operational situation as someone with a negative attitude. Attitude to work is oftentimes a carryover from general personality orientations (Lowe & Bennett, 2003). Some people have been observed to have more cheerful and optimistic dispositions, whether because of genetics, environment, or a complex tableau of influences. The literature suggests that, to some extent, a positive attitude can be learned through psychotherapy (Buhr & Dugas, 2002). However, the token gestures often taken by human resources departments—for example, awarding plaques to employees and engaging in various forms of workplace recognition and support—are not likely to change a negative attitude into a positive one (Avey et al., 2009). More extensive intervention is needed before a major attitude shift can be brought about in a manner that convinces employees to take the necessary actions to raise their service levels.

In organizational settings, there are some people who handle stress better than others because of personality variables; for example, people who have higher levels of self-control may

feel less stress at work because they do not feel as keenly victimized by outside circumstances (Christie & Barling, 2009; Naswall, Sverke, & Hellgren, 2005), and might therefore be better workers. However, there is a feedback relationship between the nature of a job and the levels of control that an individual feels (Dalgard, Sorenson, Sandanger, Nygard, Svensson, & Reas 2009). If a job begins to impose demands on an employee that are particularly trying and unsustainable for that employee, the employee will incrementally lose his or her sense of control (Burisch 2002; Chung-Yan 2010; Johnson, 2001), which in turn will result in a decrease in service levels.

There are cases in which there is not a good fit between the individual employee and the organization; for example, a job's requirements might be too difficult for an employee to fulfill (Meier, Semmer, Elfering, & Jacobshagen, 2008; Posner, 2010) or there might be a bad sociocultural fit between an employee and an organization (Soylu, 2007). When organizational fit is not present, the employee tends to work less hard and less well (Bocchino, Hartman, & Foley 2003). Research has demonstrated that one of the best predictors of organizational fit is an employee's happiness with the job (Taris & Schreurs 2009). Emotional satisfaction tends to make the fit between employee and organization better and thereby raise service levels.

Another source of variability in service levels arises from the relationship between work life and home life (Buhr & Dugas, 2002). Employees' home lives can be radically different from each other in their potential to contribute to uncertainty-based work variability. Boyar, Maertz, Pearson, and Keough (2003) have called attention to the phenomenon of work-family conflict, a situation in which an employee's uncertain home life and uncertain work life make mutually exclusive demands on the employee. Not surprisingly, the existence of such conflict has been

shown to translate into more stress and lowered performance in the workplace as well (Haines III, Marchand, Rousseau, & Demers 2008).

Burnout is a phenomenon that has a general meaning: That of an employee being used up—mentally, physically, and/or emotionally—by work (Kalimo, Pahkin, Mutanen, & Toppinen-Tanner, 2003), in a manner that steadily lowers the employee’s ability to provide high levels of service. Burnout is subjective; it is a phenomenon whose character is different for each employee (Darr & Johns, 2008). For some employees, burnout is more of a function of their own lack of coping skills (Boersma & Lindblom, 2009), cognitive skills (Schmidt, Neubach, & Heuer 2007) and/or their emotional styles (Malach Pines, 2004). For other employees, burnout may occur not because employees lack ability, resilience, and skill, but because they have simply worked too long and too hard (Joulain & Mullet, 2001). For other workers, burnout may actually occur very suddenly, as a result of feeling out of step with work (Leiter, Gascon, & Martinex-Jarreta ,2010). There are many documented instances of what Bekker, Croon, and Bressers (2005) call “emotional exhaustion” (p. 221) leading to sudden burnout syndrome, which in turn lowers service levels.

### **Conclusion**

There are many possible mechanisms through which employee service levels might be increased or decreased. While the purpose of this study was primarily to examine the role of two such mechanisms—re hiring expectations and increased wages—it is also necessary to be mindful that personality variables, burnout, uncertainty, workplace democracy, and other factors can also determine an employee’s motivation to raise his or her service levels.

## **Part Three: Methodology**

### **Introduction**

The purpose of this study is to quantitatively measure the links between the variables of employee service level, rehiring expectations, and skills/limitations, based on secondary data from The Venetian Macao. The purpose of this chapter is how to explain how data pertaining to these variables will be gathered and analyzed in order to address the study's research questions. It should be noted that all data used in the study are secondary data that have already been gathered by an internal survey conducted by The Venetian Macao, for the company's own internal purposes; these secondary data will be made available to the researcher for analysis.

### **Research Questions of Venetian**

The research question of the study is a means of exploring whether the service levels provided by employees in The Venetian Macao depend more on (a) workers' rehiring expectations (on the assumption that workers who assume that they are much in demand will make reduced voluntary efforts to increase service) or (b) workers' innate skills (in which case the precursor to low service levels will be employee limitations).

### **Variables in the Study**

The dependent variable (DV) of the study is workers' service levels. The Venetian Macao assigns each employee a sliding score from 0 to 20 to reflect supervisors' evaluations of workers' service excellence. The independent variables (IVs) of the study are: (a) workers' rehiring expectations and (b) workers' skills, which are further broken down into professional skills and language skills, all of which are also measured on a 7-point Likert scale. Professional skills vary from worker to worker; for example, the skills that a croupier is expected to have differed significantly from the skills that a waiter is expected to have. However, regardless of the



role of the worker, The Venetian Macao uses a 7-point Likert scale to assign a skill rating to the worker. Language skills are also variable, in the sense that some employees are employed to have a better grasp of languages than others. However, as with professional skills, language skills are also graded on a 7-point Likert scale. Demographic variables in the study include: worker age, worker ethnicity, and worker experience with the casino (in years).

### **Data Gathering**

The secondary data in this study were obtained by the researcher from The Venetian Macao. The Venetian Macao has already gathered numerical data pertaining to each of the variables listed above, as part of an internal analysis of human resources, and made this data available to the researcher.

### **Data Analysis**

Data analysis took place with the assistance of SPSS™ software, which was used to analyze the data. The following variables were used:

Table 1

*Coding of Study Variables in SPSS™*

<b>Variable</b>	<b>SPSS™ Name</b>	<b>Coding</b>
Workers' service level	Service_Level	Continuous: 0 to 20
Workers' rehiring expectations	Rehiring	Continuous: 1 to 7
Workers' professional skills	Prof_Skill	Continuous: 1 to 7
Workers' language skill	Lang_Skill	Continuous: 1 to 7
Worker age	Worker_Age	Continuous: age in years
Worker ethnicity	Worker_Eth	Categorical: 1 = Macanese; 2 = Han Chinese; 3 = Other
Worker experience	Worker_Exp	Continuous: experience in years

Once these data were input into SPSS <sup>TM</sup>, the correlation function of the program was used to discover the Pearson moment correlation value (abbreviated as R) for the following pairs of variables: (a) Service\_Level and Rehiring, (b) Service\_Level and Prof\_Skill, and (c) Service Level and Lang\_Skill. Correlations were considered significant at values of  $p < .05$ . Partial correlation analysis was used to control for the influence of age, ethnicity, and experience on the connection between service levels and rehiring expectations / skill.

One of the attributes of data analysis in this study is that, although service level is a single construct (measured through the Service\_Level variable), skill is a construct measured through two variables (Prof\_Skill and Lang\_Skill). R values were obtained separately for the correlations between Service\_Level and Prof\_Skill / Lang\_Skill in order to pinpoint which kind of skill might correlate more highly with service level.

### **Study Data**

The purpose of this section of the methodology is to disclose the secondary data that were received from The Venetian Macao. These data were analyzed with a view to answering the research question in chapter four. In this section, only the raw data and the associated descriptive statistics will be tabulated.

### **Descriptive Statistics of Study Data**

The following descriptive statistics were collected for each variable in the study: Mean, standard error of the mean, media, mode, standard deviation, variance, range, minimum, and maximum. The only variable in the descriptive statistics that had not already been discussed earlier in the study was that of category. This variable was created by The Venetian Macao in order to categorize employees by the kind of work that they did in the casino, on the following

basis: 1 = floor worker, 2 = dealer or equivalent, 3 = floor manager or equivalent, 4 = back-office worker, 5 = restaurant worker (see Tables 2 and 3).

Table 2

*Descriptive Statistics of Data*

		<b>Statistics</b>				
		Category	Service_Level	Rehiring	Prof_Skill	Lang_Skill
N	Valid	100	100	100	100	100
	Missing	0	0	0	0	0
Mean		3.26	11.32	4.84	3.70	3.73
Std. Error of Mean		.140	.309	.114	.130	.139
Median		3.00	11.00	5.00	4.00	4.00
Mode		4	15	5	4	2
Std. Deviation		1.397	3.088	1.143	1.299	1.392
Variance		1.952	9.533	1.307	1.687	1.936
Range		4	11	4	4	4
Minimum		1	6	3	2	2
Maximum		5	17	7	6	6

		<b>Statistics</b>		
		Worker_Age	Worker_Eth	Worker_Exp
N	Valid	100	100	100
	Missing	0	0	0
Mean		37.44	1.68	6.23
Std. Error of Mean		.941	.060	.272
Median		37.00	2.00	6.00
Mode		51	2	5
Std. Deviation		9.414	.601	2.719
Variance		88.633	.361	7.391
Range		32	2	16
Minimum		21	1	3
Maximum		53	3	19

Table 3

*Descriptive Statistics for Category*

	Frequency	Percent	Cumulative Percent
Valid 1	16	16.0	16.0
2	15	15.0	31.0
3	20	20.0	51.0
4	25	25.0	76.0
5	24	24.0	100.0
Total	100	100.0	

The employees were spread more or less evenly across the five categories.

Service-level was assigned on a continuous scale of 0 to 20, with 20 representing the highest possible service score and 0 representing the lowest possible score. The mean service level of the sample was 11.32 (see Table 4).

Table 4

*Descriptive Statistics for Service Level*

<b>Service Level</b>				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 6	7	7.0	7.0	7.0
7	6	6.0	6.0	13.0
8	8	8.0	8.0	21.0
9	9	9.0	9.0	30.0
10	12	12.0	12.0	42.0
11	14	14.0	14.0	56.0
12	6	6.0	6.0	62.0
13	7	7.0	7.0	69.0
14	8	8.0	8.0	77.0
15	18	18.0	18.0	95.0
16	1	1.0	1.0	96.0
17	4	4.0	4.0	100.0
Total	100	100.0	100.0	

Rehiring expectations were assigned on a continuous scale of 1 to 7, with 1 representing an employee's feeling that he or she was not rehirable and 7 representing an employee's feeling that he or she was instantly rehirable. The mean rehiring expectation of the sample was 4.84 (see Table 5).

Table 5

*Descriptive Statistics for Rehiring Expectations*

	Frequency	Percent	Cumulative Percent
Valid 3	12	12.0	12.0
4	29	29.0	41.0
5	31	31.0	72.0
6	19	19.0	91.0
7	9	9.0	100.0
Total	100	100.0	

Professional skill was assigned on a continuous scale of 1 to 7, with 1 representing the minimum possible skill and 7 representing the maximum possible skill. The mean professional skill score of the sample was 4.84 (see Table 6).

Table 6

*Descriptive Statistics for Professional Skill*

	Frequency	Percent	Cumulative Percent
Valid 2	24	24.0	24.0
3	20	20.0	44.0
4	29	29.0	73.0
5	16	16.0	89.0
6	11	11.0	100.0
Total	100	100.0	

Language skill was assigned on a continuous scale of 1 to 7, with 1 representing the minimum possible skill and 7 representing the maximum possible skill. The language measured was Mandarin Chinese. The mean language skill score of the sample was 3.73 (see Table 7).

Table 7

*Descriptive Statistics for Language Skill*

		Lang_Skill			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	28	28.0	28.0	28.0
	3	17	17.0	17.0	45.0
	4	21	21.0	21.0	66.0
	5	22	22.0	22.0	88.0
	6	12	12.0	12.0	100.0
	Total	100	100.0	100.0	

Most workers were either Chinese or Macanese in background (see Table 8).

Table 8

*Mean Worker Ethnicity*

		Frequency	Percent	Cumulative Percent
Valid	Chinese	39	39.0	39.0
	Macanes e	54	54.0	93.0
	Other	7	7.0	100.0
	Total	100	100.0	

Worker age was measured in years. Mean worker age was 37.4 (see Table 9).

Table 9

*Mean Worker Age*

		<b>Worker_Age</b>			Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	21	1	1.0	1.0	1.0
	22	1	1.0	1.0	2.0
	23	2	2.0	2.0	4.0
	24	4	4.0	4.0	8.0
	25	3	3.0	3.0	11.0
	26	6	6.0	6.0	17.0
	27	2	2.0	2.0	19.0
	28	2	2.0	2.0	21.0
	29	4	4.0	4.0	25.0
	30	6	6.0	6.0	31.0
	31	4	4.0	4.0	35.0
	32	1	1.0	1.0	36.0
	33	2	2.0	2.0	38.0
	34	2	2.0	2.0	40.0
	35	6	6.0	6.0	46.0
	36	3	3.0	3.0	49.0
	37	4	4.0	4.0	53.0
	38	4	4.0	4.0	57.0
	39	1	1.0	1.0	58.0
	40	2	2.0	2.0	60.0
	41	2	2.0	2.0	62.0
	42	4	4.0	4.0	66.0
	43	2	2.0	2.0	68.0
	44	6	6.0	6.0	74.0
	45	2	2.0	2.0	76.0
	46	1	1.0	1.0	77.0
	47	2	2.0	2.0	79.0
	48	2	2.0	2.0	81.0
	49	3	3.0	3.0	84.0
	50	3	3.0	3.0	87.0
	51	7	7.0	7.0	94.0
	52	3	3.0	3.0	97.0
	53	3	3.0	3.0	100.0
Total		100	100.0	100.0	

The mean experience of workers in the sample was 6.23 (see Table 10).

Table 10

*Mean Worker Experience*

		Frequency	Percent	Cumulative Percent
Valid	3	11	11.0	11.0
	4	14	14.0	25.0
	5	24	24.0	49.0
	6	9	9.0	58.0
	7	17	17.0	75.0
	8	11	11.0	86.0
	9	10	10.0	96.0
	12	1	1.0	97.0
	15	1	1.0	98.0
	17	1	1.0	99.0
	19	1	1.0	100.0
	Total	100	100.0	

**Conclusion**

This study was quantitative, correlative, and based on secondary data. The dependent variable of the study was workers' service levels. The independent variables of the study were workers' rehiring expectations and workers' skills. SPSS™ was used to analyze the data in order to answer the research question of whether the service levels of hospitality industry workers in a Macau hotel correlated more highly with workers' expectations that they can be easily rehired, or with workers' actual incompetence in one or more important service variables (such as the ability to speak Mandarin). Having explained and defended the study methodology, the next chapter will contain a presentation and discussion of study results.



## Discussion of Results

The research question of the study asked whether the service levels provided by employees in The Venetian Macao depend more on (a) workers' rehiring expectations (on the assumption that workers who assume that they are much in demand will make reduced voluntary efforts to increase service) or (b) workers' innate skills (in which case the precursor to low service levels will be employee limitations). This question was explored through correlation and regression analysis.

Table 11

### *Correlations of Variables*

		<b>Correlations</b>			
		Service_Level	Rehiring	Prof_Skill	Lang_Skill
Service_Level	Pearson Correlation	1	-.014	-.195	.016
	Sig. (2-tailed)		.890	.052	.877
	N	100	100	100	100
Rehiring	Pearson Correlation	-.014	1	.137	-.205*
	Sig. (2-tailed)	.890		.173	.041
	N	100	100	100	100
Prof_Skill	Pearson Correlation	-.195	.137	1	.027
	Sig. (2-tailed)	.052	.173		.787
	N	100	100	100	100
Lang_Skill	Pearson Correlation	.016	-.205*	.027	1
	Sig. (2-tailed)	.877	.041	.787	
	N	100	100	100	100

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

At  $p < .010$ , the significant correlations were between service level and professional skill ( $R = -.195, p = .052$ ) and between rehiring expectations and language skill ( $R = -.205, p = .041$ ).

Linear regression was conducted on each of these variable pairs to cast further light on the relationships between the variables.

Table 12

*Linear Regression, Professional Skill (IV) and Service Level (DV)*

Variables Entered/Removed <sup>b</sup>			
Model	Variables Entered	Variables Removed	Method
1	Prof_Skill <sup>a</sup>		.Enter

a. All requested variables entered.

b. Dependent Variable: Service\_Level

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.195 <sup>a</sup>	.038	.028	3.044

a. Predictors: (Constant), Prof\_Skill

ANOVA <sup>b</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	35.873	1	35.873	3.872	.052 <sup>a</sup>
	Residual	907.887	98	9.264		
	Total	943.760	99			

a. Predictors: (Constant), Prof\_Skill

b. Dependent Variable: Service\_Level

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	13.035	.923		14.121	.000
	Prof_Skill	-.463	.236	-.195	-1.968	.052

a. Dependent Variable: Service\_Level

The linear regression demonstrated that the connection between professional skill and service level was as follows:  $\text{Service Level} = (\text{Professional Skill})(-.463) + 13.035$ . This finding was somewhat counterintuitive, as higher professional skill was correlated with lower service level. One possible expectation of this finding is that casino workers with better professional skills might be more cavalier about providing good customer service, since they have higher rehiring expectations and feel insulated from professional repercussions on that count. However,

since there was not a significant correlation between professional skill and rehiring expectations, some other explanation of this finding must be sought by the Venetian Macao.

Table 13

*Linear Regression, Language Skill (IV) and Rehiring Expectations (DV)*

Variables Entered/Removed <sup>b</sup>			
Model	Variables Entered	Variables Removed	Method
1	Lang_Skill <sup>a</sup>		.Enter

a. All requested variables entered.

b. Dependent Variable: Rehiring

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.205 <sup>a</sup>	.042	.032	1.125

a. Predictors: (Constant), Lang\_Skill

ANOVA <sup>b</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.449	1	5.449	4.307	.041 <sup>a</sup>
	Residual	123.991	98	1.265		
	Total	129.440	99			

a. Predictors: (Constant), Lang\_Skill

b. Dependent Variable: Rehiring

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	5.469	.323		16.920	.000
	Lang_Skill	-.169	.081	-.205	-2.075	.041

a. Dependent Variable: Rehiring

The linear regression demonstrated that the connection between language skill and rehiring expectations was as follows: Rehiring Expectations = (Language Skill)(-.169) + 5.469. Employees with her language skills actually had lower expectations that they could be rehired. This finding can be interpreted in a number of ways. It is possible, for example, that employees

with superior language skill were more intelligent, and that intelligence correlated with insecurity in a way that led these employees to feel that they could not easily be rehired. The data are insufficient to determine exactly why language skill correlated negatively with rehiring expectations, highlighting this area for potential follow-up research by the Venetian Macao.

The next step in the analysis was to determine whether the correlations between skill, service level, and rehiring expectations gained significance if the variables of worker age, ethnicity, and experience were controlled for in partial correlation analysis.

Table 14

*Partial Correlation Analysis Impact of Worker Age*

		Correlations					
Control Variables			Service_Level	Rehiring	Prof_Skill	Lang_Skill	Worker Age
-none <sup>a</sup>	Service_Level	R	1.000	-.014	-.195	.016	.049
		<i>p</i>	.	.890	.052	.877	.629
		df	0	98	98	98	98
	Rehiring	R	-.014	1.000	.137	-.205	.144
		<i>p</i>	.890	.	.173	.041	.154
		df	98	0	98	98	98
	Prof_Skill	R	-.195	.137	1.000	.027	.059
		<i>p</i>	.052	.173	.	.787	.561
		df	98	98	0	98	98
	Lang_Skill	R	.016	-.205	.027	1.000	-.058
		<i>p</i>	.877	.041	.787	.	.567
		df	98	98	98	0	98
Worker_Age	R	.049	.144	.059	-.058	1.000	
	<i>p</i>	.629	.154	.561	.567	.	
	df	98	98	98	98	0	
Worker_Age	Service_Level	R	1.000	-.021	-.198	.018	
		<i>p</i>	.	.835	.049	.856	
		df	0	97	97	97	
	Rehiring	R	-.021	1.000	.131	-.199	
		<i>p</i>	.835	.	.198	.048	
		df	97	0	97	97	
	Prof_Skill	R	-.198	.131	1.000	.031	
		<i>p</i>	.049	.198	.	.761	
		df	97	97	0	97	
	Lang_Skill	R	.018	-.199	.031	1.000	
		<i>p</i>	.856	.048	.761	.	
		df	97	97	97	0	

a. Cells contain zero-order (Pearson) correlations.

Partial correlation analysis revealed that controlling for worker age did not alter the significance levels of the correlations. The same procedures were repeated to test for the impact of worker ethnicity and worker experience on the findings.

Table 15

*Partial Correlation Analysis Impact of Worker Ethnicity*

Control Variables		Correlations					
		Service_Level	Rehiring	Prof_Skill	Lang_Skill	Worker_Eth	
-none <sup>a</sup>	Service_Level	R	1.000	-.014	-.195	.016	-.015
		<i>p</i>	.	.890	.052	.877	.882
		df	0	98	98	98	98
	Rehiring	R	-.014	1.000	.137	-.205	.072
		<i>p</i>	.890	.	.173	.041	.478
		df	98	0	98	98	98
	Prof_Skill	R	-.195	.137	1.000	.027	-.072
		<i>p</i>	.052	.173	.	.787	.474
		df	98	98	0	98	98
	Lang_Skill	R	.016	-.205	.027	1.000	.125
		<i>p</i>	.877	.041	.787	.	.215
		df	98	98	98	0	98
	Worker_Eth	R	-.015	.072	-.072	.125	1.000
		<i>p</i>	.882	.478	.474	.215	.
		df	98	98	98	98	0
Worker_Eth	Service_Level	R	1.000	-.013	-.197	.018	
		<i>p</i>	.	.899	.051	.862	
		df	0	97	97	97	
	Rehiring	R	-.013	1.000	.143	-.216	
		<i>p</i>	.899	.	.157	.031	
		df	97	0	97	97	
	Prof_Skill	R	-.197	.143	1.000	.037	
		<i>p</i>	.051	.157	.	.717	
		df	97	97	0	97	
	Lang_Skill	R	.018	-.216	.037	1.000	
		<i>p</i>	.862	.031	.717	.	
		df	97	97	97	0	

a. Cells contain zero-order (Pearson) correlations.

Partial correlation analysis revealed that controlling for worker ethnicity did not alter the significance levels of the correlations. Finally, as revealed in Table 15, partial correlation analysis revealed that controlling for worker experience also did not alter the significance levels of the correlations.

Table 16

*Partial Correlation Analysis Impact of Worker Experience*

Control Variables		Correlations					
			Service_Level	Rehiring	Prof_Skill	Lang_Skill	Worker_Exp
-none <sup>a</sup>	Service_Level	R	1.000	-.014	-.195	.016	-.067
		<i>p</i>	.	.890	.052	.877	.510
		df	0	98	98	98	98
	Rehiring	R	-.014	1.000	.137	-.205	.031
		<i>p</i>	.890	.	.173	.041	.756
		df	98	0	98	98	98
	Prof_Skill	R	-.195	.137	1.000	.027	.043
		<i>p</i>	.052	.173	.	.787	.674
		df	98	98	0	98	98
	Lang_Skill	R	.016	-.205	.027	1.000	.070
		<i>p</i>	.877	.041	.787	.	.489
		df	98	98	98	0	98
	Worker_Exp	R	-.067	.031	.043	.070	1.000
		<i>p</i>	.510	.756	.674	.489	.
		df	98	98	98	98	0
Worker_Exp	Service_Level	R	1.000	-.012	-.193	.020	
		<i>p</i>	.	.907	.056	.841	
		df	0	97	97	97	
	Rehiring	R	-.012	1.000	.136	-.208	
		<i>p</i>	.907	.	.179	.039	
		df	97	0	97	97	
	Prof_Skill	R	-.193	.136	1.000	.024	
		<i>p</i>	.056	.179	.	.810	
		df	97	97	0	97	
	Lang_Skill	R	.020	-.208	.024	1.000	
		<i>p</i>	.841	.039	.810	.	
		df	97	97	97	0	

a. Cells contain zero-order (Pearson) correlations.

The research question posed by this study was whether the service levels provided by employees in The Venetian Macao depend more on (a) workers' rehiring expectations or (b) workers' innate skills. At  $p < .010$ , the significant correlations were between service level and professional skill ( $R = -.195, p = .052$ ) and between rehiring expectations and language skill ( $R = -.205, p = .041$ ). The implications of these findings, situated in the context of both the literature and recommendations for the Venetian Macao, will be offered at greater length in part five of the study.

## Conclusions

The second part of this study, the literature review, discussed several factors that can determine an employee's service levels. These factors include rehiring expectations, increased wages, personality variables, burnout, uncertainty, and workplace democracy. Thus the first recommendation to emerge from an analysis of the data is that the Venetian Macao ought to conduct a follow-up study to determine more precisely why its workers' service levels are low. An analysis of service level data from the Venetian Macao reveals that a relatively small group of employees is responsible for most of the organization's exceptional service:

Table 17

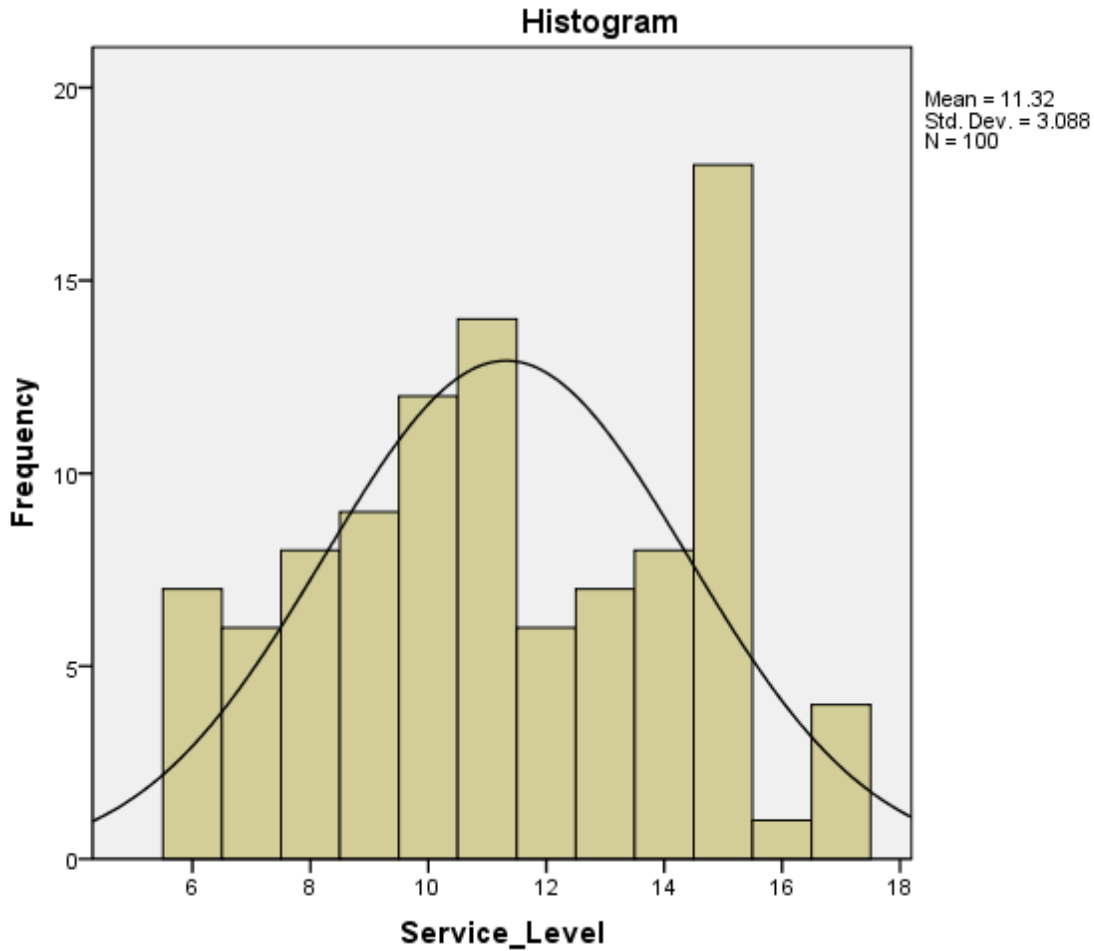
### *Frequencies of Service Levels*

		<b>Service_Level</b>			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	6	7	7.0	7.0	7.0
	7	6	6.0	6.0	13.0
	8	8	8.0	8.0	21.0
	9	9	9.0	9.0	30.0
	10	12	12.0	12.0	42.0
	11	14	14.0	14.0	56.0
	12	6	6.0	6.0	62.0
	13	7	7.0	7.0	69.0
	14	8	8.0	8.0	77.0
	15	18	18.0	18.0	95.0
	16	1	1.0	1.0	96.0
	17	4	4.0	4.0	100.0
	Total	100	100.0	100.0	

It is of special note that the casino reported that none of its surveyed employees had truly exceptional (> 17) ratings on service. The service levels of the organization can best be described as mediocre:

Figure 1

*Histogram of Service Levels, Venetian Macao*



There is a spike of excellence at service level 15. However, there is still a less frequent distribution of excellence to the right of the mean that expected in a Gaussian distribution. Given a scale of 1-20, the null hypothesis is that the mean of the distribution should have been at 10.5, with 2.2% of the sample (in other words, 2.2 people) falling more than 2 standard distributions to the right of the mean. In the actual distribution, there were no employees more than 2 standard distributions to the right of the mean. Clearly, then, the distribution of service levels at the Venetian Macao was not normal, and extraordinary service levels were under-represented. This



under-representation cannot be explained by the hypothesis testing in this study, which was unable to correlate service level with either rehiring expectations or skill (with the exception of language skill, which actually had a negative rather than positive correlation with service level). Consequently, it is necessary for the Venetian Macao to turn to a new instrument—perhaps one that touches on measurements of personality, burnout, uncertainty, and workplace democracy—to learn more about why its employee service levels are substandard.

## References

- Adams, S. (1976). *Equity theory*. New York, NY: Psychology Press.
- Allan, S. (2005). *Journalism: critical issues*. New York, NY: McGraw-Hill International.
- Avey, J. B., Luthans, F., & Jensen, S. M. (2009). Psychological capital: A positive resource for combating employee stress and turnover. *Human Resource Management, 48*(5), 677-693.
- Bakker, A. B., Schaufeli, W. B., Leiter, M. P., & Taris, T. W. (2008). Work engagement: An emerging concept in occupational health psychology. *Work & Stress, 22*(3), 187-200.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: Macmillan.
- Bandura, A., Ross, D., & Ross, S.A. (1961). Transmission of aggression through imitation of aggressive models. *The Journal of Abnormal Social Psychology, 63*(3), 575-582.
- Bekker, M. J., Croon, M. A., & Bressers, B. (2005). Childcare involvement, job characteristics, gender and work attitudes as predictors of emotional exhaustion and sickness absence. *Work & Stress, 19*(3), 221-237.
- Bocchino, C. C., Hartman, B. W., & Foley, P. F. (2003). The Relationship Between Person--Organization Congruence, Perceived Violations of the Psychological Contract, and Occupational Stress Symptoms. *Consulting Psychology Journal: Practice & Research, 55*(4), 203-214.
- Boyar, S. L., Maertz Jr., C. P., Pearson, A. W., & Keough, S. (2003). Work-Family Conflict: A Model Of Linkages Between Work And Family Domain Variables And Turnover Intentions. *Journal of Managerial Issues, 15*(2), 175.
- Brown, J. & Gardner, D. (2002). *Hong Kong and Macau*. San Francisco, CA: Rough Guides.
- Buhr, K. & Dugas, M.J. (2002). The intolerance of uncertainty scale. *Behavior Research and Therapy, 40*(8), 931-945.

- Burisch, M. (2002). A longitudinal study of burnout: the relative importance of dispositions and experiences. *Work & Stress*, 16(1), 1-17
- Chang, Y-F. (2009). How to say no: An analysis of cross-cultural difference and pragmatic transfer. *Language Sciences*, 31(4), 477-493.
- Christie, A. M., & Barling, J. (2009). Disentangling the Indirect Links Between Socioeconomic Status and Health: The Dynamic Roles of Work Stressors and Personal Control. *Journal of Applied Psychology*, 94(6), 1466-1478.
- Chung-Yan, G. A. (2010). The Nonlinear Effects of Job Complexity and Autonomy on Job Satisfaction, Turnover, and Psychological Well-Being. *Journal of Occupational Health Psychology*, 15(3), 237-251.
- Clayton, C.H. (2010). *Sovereignty at the edge: Macau and the question of Chineseness*. Cambridge, MA: Harvard University Press.
- Creswell, J.W. (2009). *Research design*. Thousand Oaks, CA: Sage.
- Dalgard, O., Sørensen, T., Sandanger, I., Nygård, J. F., Svensson, E., & Reas, D. L. (2009). Job demands, job control, and mental health in an 11-year follow-up study: Normal and reversed relationships. *Work & Stress*, 23(3), 284-296.
- Gu, Z. & Siu, R.C. (2009). Drivers of job satisfaction as related to work performance in Macao casino hotels: An investigation based on employee survey. *International Journal of Contemporary Hospitality Management*, 21(5), 561-578.
- Hakanen, J. J., Schaufeli, W. B., & Ahola, K. (2008). The Job Demands-Resources model: A three-year cross-lagged study of burnout, depression, commitment, and work engagement. *Work & Stress*, 22(3), 224-241.

- Halbesleben, J. B., & Wheeler, A. R. (2008). The relative roles of engagement and embeddedness in predicting job performance and intention to leave. *Work & Stress*, 22(3), 242-256.
- Hao, Z. (2011). *Macau history and society*. Hong Kong, China: Hong Kong University Press.
- Hsu, C.H. (2006). *Casino industry in Asia Pacific*. New York, NY: Psychology Press.
- Johnson, J. W. (2001). The Relative Importance of Task and Contextual Performance Dimensions to Supervisor Judgements of Overall Performance. *Journal of Applied Psychology*, 86(5), 984-996.
- Joulain, M., & Mullet, E. (2001). Estimating the 'appropriate' age for retirement as a function of perceived occupational characteristics. *Work & Stress*, 15(4), 357-365.
- Kim, S-S., Prideaux, B., & Kim, S-H. (2002). A cross-cultural study on casino guests as perceived by casino employees. *Tourism Management*, 23(5), 511-520.
- Latour, K.A., Sarrazit, F., Hendler, R., & Latour, M.S. (2009). Cracking the cultural code of gambling. *Cornell Hospitality Quarterly*, 50(4), 475-497.
- Leiter, M. P., Gascón, S., & Martínez-Jarreta, B. (2010). Making Sense of Work Life: A Structural Model of Burnout. *Journal of Applied Social Psychology*, 40(1), 57-75.
- Lowe, R., & Bennett, P. (2003). Exploring coping reactions to work-stress: Application of an appraisal theory. *Journal of Occupational & Organizational Psychology*, 76(3), 393-400.
- Malach Pines, A. (2004). Adult attachment styles and their relationship to burnout: A preliminary, cross-cultural investigation. *Work & Stress*, 18(1), 66-80.
- Meier, L. L., Semmer, N. K., Elfering, A., & Jacobshagen, N. (2008). The Double Meaning of Control: Three-Way Interactions Between Internal Resources, Job Control, and Stressors at Work. *Journal of Occupational Health Psychology*, 13(3), 244-258.

- Näswall, K., Sverke, M., & Hellgren, J. (2005). The moderating role of personality characteristics on the relationship between job insecurity and strain. *Work & Stress*, 19(1), 37-49.
- Osterman, P. (1994). Supervision, discretion, and work organization. *The American Economic Review*, 84(2), 380-384.
- Posner, B. (2010). Another Look at the Impact of Personal and Organizational Values Congruency. *Journal of Business Ethics*, 97(4), 535-541.
- Schaufeli, W. B., Bakker, A. B., & Van Rhenen, W. (2009). How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism. *Journal of Organizational Behavior*, 30(7), 893-917.
- Schaufeli, W.B. & Bakker, A.B. (2003). *Utrecht work engagement scale*. Retrieved from [http://www.schaufeli.com/downloads/tests/Test manual UWES.pdf](http://www.schaufeli.com/downloads/tests/Test%20manual%20UWES.pdf)
- Schmidt, K., Neubach, B., & Heuer, H. (2007). Self-control demands, cognitive control deficits, and burnout. *Work & Stress*, 21(2), 142-154.
- Soylu, A. (2007). Foreigners and Workplace Stress. *Journal of Individual Employment Rights*, 12(4), 313-327.
- Taris, T. W., & Schreurs, P. G. (2009). Well-being and organizational performance: An organizational-level test of the happy-productive worker hypothesis. *Work & Stress*, 23(2), 120-136.
- Tucker, J. S., Sinclair, R. R., Mohr, C. D., Adler, A. B., Thomas, J. L., & Salvi, A. D. (2008). A temporal investigation of the direct, interactive, and reverse relations between demand and control and affective strain. *Work & Stress*, 22(2), 81-95.