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DO SATISFIED EMPLOYEES DELIVER BETTER SERVICE  
EXPERIENCES THAT RESULT IN SATISFIED CUSTOMERS, AND,  
WHAT ARE THE FACTORS AFFECTING EMPLOYEE  
SATISFACTION AND CUSTOMER SATISFACTION?

CHEONG CHUEN KONG KEVIN

SINGAPORE MANAGEMENT UNIVERSITY

2018

Do satisfied employees deliver better service experiences that result in satisfied customers, and, what are the factors affecting employee satisfaction and customer satisfaction?

Cheong Chuen Kong Kevin

Submitted to School of Business  
in partial fulfillment of the requirements for the  
Degree of Doctor of Business Administration

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2018

I hereby declare that this DBA dissertation is my original work  
and it has been written by me in its entirety.

I have duly acknowledged all the sources of information  
which have been used in this dissertation.

This DBA dissertation has also not been submitted for any degree  
in any university previously.

A handwritten signature in black ink, consisting of several bold, sweeping strokes. The signature is positioned above a horizontal line.

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Cheong Chuen Kong Kevin  
19 December 2018

## **ABSTRACT**

Do satisfied employees deliver better service experiences that result in satisfied customers, and, what are the factors affecting employee satisfaction and customer satisfaction?

Cheong Chuen Kong Kevin

It is often said that a happy worker is a good worker, but do happy workers in the service industry result in happy or satisfied customers or guests? This research aimed to seek out answers to this anecdotal question by surveying both frontline, customer-facing employees and visitors or guests in several visitor attractions in Singapore and the Philippines. The research found significant correlation between job satisfaction, psychological empowerment and guest satisfaction, particularly in zone-managed visitor attractions. Zone-managed attractions did not deploy the conventional and traditional functional operating structure; employees' job functions were clustered by customer touchpoints associated with how the customers would be most likely to experience the visitor attraction. Functions in these clusters or zones were based on anticipating customer or guest needs and requirements, and employees in these zones were multiskilled to meet these needs and employees performed a range of functions and duties within the same zone. This research found employees in zone-managed attractions to be more likely to be satisfied, more psychologically empowered and more likely to have longer lengths of service; while guests visiting zone-managed attractions to be more likely to be satisfied with their visits.

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## 1 INTRODUCTION

It is often said anecdotally that a happy worker is a good worker, but does a happy worker deliver better service that results in a happy customer? What is the relationship between a happy employee and a happy customer? What is the correlation between job satisfaction and customer satisfaction and what are the contributory factors of a satisfied employee and a satisfied customer?

This research question is of interest in the visitor attraction industry where the product is primarily experiential. Visitor attractions include themed parks, amusement facilities, zoos, aquariums, nature parks, museums, observation towers and edutainment centres where the product can be a thrill ride, a ski slope, animal exhibits, manicured gardens, historical and heritage collection. The key difference in the visitor attraction industry is there is no real physical product to consume or to take home, other than its merchandise and souvenirs. Swarbooke (2001) defined the experience after visiting a visitor or tourist attraction as one that creates an enduring impression and a positive memory, so much so that the visitor feels motivated to share the experience with his or her friends and encourages them to pay the place a visit. It is this lasting and memorable experience that overwhelms the visitor – from how the visitor was treated, how the staff helped the visitor, how clean the restrooms were, how smoothly the queues were managed, through to the exhilarating roller coaster ride and the scariest moments in the haunted house!

Therefore, the interaction between the customer-facing employee and the visitor or customer becomes an integral and critical part of the product experience. Most visitors to a visitor attraction are first-time visitors, and are therefore unlikely to be familiar with the attraction. They do not know where to park their cars, where to purchase their tickets, what the offers are available, where the restrooms and nappy change rooms are located, and, what are the special and popular rides and exhibits. Whilst most attractions will have navigational and way-finding displays, it is not uncommon for visitors to approach the attractions' employees for directions and advice, especially employees in uniform or wearing an identification badge.

How the employee responds to the customer's enquiries will result in whether the customer's needs are met satisfactorily. It may not be just the information and advice given, it will also depend on the employee's tone, manner and style. The employee's empathetic and proactive approach to the customer's needs will also affect the customer's perception of service delivered. Besides safety, transportation, well-maintained facilities and cleanliness, knowledgeable staff who can assist and attend to visitor needs is one of the top ten factors to visitors' perception of service in a visitor attraction (Fotiadis and Vassiliadis, 2016).

The research question poses a fundamental proposition: do satisfied employees deliver better service experiences that result in satisfied customers, and, what are the factors affecting employee satisfaction and customer satisfaction?



## **2 JOB SATISFACTION**

The wide body of literature on job satisfaction focuses largely on job dissatisfaction or the factors contributing to a negative job satisfaction. These factors were described by Ngo, Foley and Loi (2005) as role stressors – role ambiguity, role conflict, role overload, and, work-family conflict. These lead to employee burnout, job dissatisfaction and intentions to quit the employing organisation.

Yang's (2010) empirical study of employees working in hotels in Taiwan showed that job satisfaction leads to employees' affective and continuance commitment to the organisation, and that while role ambiguity, role conflict and burnout negatively affected job satisfaction, the level of socialization within the organisation and work autonomy had positive effects on job satisfaction.

A widely-used measurement of job satisfaction is the Warr, Cook and Wall's Job Satisfaction Scale (JSS) (1979), which looked at intrinsic and extrinsic factors of employee satisfaction. Intrinsic factors included method of working, recognition, responsibility, abilities, promotion, suggestions and variety, while extrinsic factors were physical working conditions, fellow workers, immediate boss, pay, industrial relations, management, hours and job security.

Macdonald and MacIntyre (1997) examined and collated the constructs of job satisfaction by other researchers (Cross, 1973; Hackman & Oldham, 1975; Khaleque and Rahman, 1987; Scarpello and Campbell, 1983; Smith, Kendall and Hulin, 1969 and Yuzuk, 1961) to form an initial pool of 44 items. Then, they used factor analysis

to develop a shorter 10-item scale. This 10-factor Job Satisfaction Scale covered recognition, co-worker relations, affective commitment, job security, management, personal well-being, pay, use of talent and skills.

While job satisfaction and employee morale are closely related and some researchers even use them synonymously, they are fundamentally different. Job satisfaction focuses on the individual employee's feelings to his/her respective job circumstances in the past and present time-frame, while employee morale delves on the employee's view of the future and a more collective and common sense of purpose and belonging (Macdonald and MacIntyre, 1997).

Macdonald and MacIntyre's generic job satisfaction scale focuses on the structure of job satisfaction and what keeps the employee on the job, rather than levels of satisfaction and what drives him/her out of the job. Job satisfaction is deemed to drive positive job outcomes such as being involved with the job and organisation, reduced stress levels, reduced turnover and improved attendance. Therefore, satisfied employees are more likely to foster positive relations with their superiors and co-workers, have lower intention to leave the organisation, develop an affective bond and alignment with the organisation and ultimately perform better. As a result, overall staff and related costs such as hiring and recruiting costs and costs of absenteeism will likely be lower with increased employee job satisfaction.

The Generic Job Satisfaction Scale is specific to the employee's relationship with co-workers and superiors; how the employee feels towards the organisation on dimensions such as job security; how the organisation's leadership and management

treats the employee in terms of a good wage and job recognition; and, the employee's perception towards work. These components cover both the employees' intrinsic values and attitude towards work, and, work-specific environmental factors such as the organisation, superiors and co-workers. In essence, the Macdonald & MacIntyre scale is based on what keeps an employee in the organisation satisfied rather than what will drive the employee to leave.

### **3 CUSTOMER SATISFACTION**

“Delivering superior service quality appears to be a prerequisite for success, if not survival” (Parasuraman, Zeithaml, Berry, 1988). Customer satisfaction is the outcome of customers' perception of quality service delivered. Satisfied customers are more inclined to tell others about their positive experiences, retain a positive memory and recollection of their experience, and they are more likely to visit repeatedly, and more willing to pay a higher price.

However, the concept of service quality needs to be distinguished between what is deemed to be mechanistic and what is humanistic (Holbrook, Corfman, 1985), where mechanistic quality focuses on an objective product feature and attribute, and, humanistic quality focuses on a person's subjective and relative response to objects. Herein lies the difference between product-based objective quality and user-based perceived quality.

In the case of employee-customer interactions in a visitor attraction, service quality is perceived quality based on the customer's judgement of the attraction's overall excellence or superiority (Zeithaml, 1987), and customer satisfaction is related to a specific transaction, interaction or encounter (Parasuraman, Zeithaml, Berry, 1988).

This distinction is important because in a visitor attraction, customers form an attitude towards the attraction's service quality based on their observations of how the attraction is managed and run, and establish service satisfaction levels based on their interactions and encounters with the attraction's employees.

Parasuraman, Zeithaml and Berry (1988), developed the 22-item SERVQUAL instrument that includes and embodies the original 10 dimensions of tangibles, reliability, responsiveness, understanding/knowing customers, access, communication, credibility, security, competence and courtesy. These 22 items are classified into 5 dimensions of how consumers assess service quality: Tangibles, Reliability, Responsiveness, Assurance and Empathy:

Tangibles are the business's physical attributes such as facilities, equipment, premises, including how the employees are presented and their physical appearance.

Reliability focuses on how the business carries out and delivers the services promised, including timeliness and consistency.

Responsiveness deals with how willing the business and its employees are to assist customers, proactivity in dealing with customers in need and promptness in addressing customer needs.

Assurance in service quality is the employees' ability to instill credibility and trust within the customers and this comes from the employees' understanding of the product and service, their ability to provide information and the level of courtesy and respect showed by employees to customers.

Empathy focuses on the level of personal attention and compassion showed by the business and its employees to the customer and this also includes care, concern and consideration for the customers' needs and anxieties.

#### **4 RELATIONSHIP BETWEEN JOB SATISFACTION AND CUSTOMER SATISFACTION**

The link between job satisfaction and customer satisfaction is not new.

The practice of marketing is very product-oriented and service marketers find the replicability and applicability of product-based marketing to services to be challenging. The role of the marketing department in an organisation is usually confused with its components such as market research and promotions and constrained to very narrowly defined focus and influence within the organisation.

The key issue with services is there is no physical possession or ownership of a

'product', even with tangible embellishments, such as the decor, food & beverage served, flight seats and cabin crew's uniform of an airline (Shostack, 1977).

Shostack (1977) proposed a 'molecular model' as a framework to diagrammatically represent products and services, using a set of solid and dotted lines to detail tangible and intangible elements respectively. She also asserted that tangible products need to be projected and promoted using intangible abstraction or image of possession; and, intangible services have tangible evidence of use and experience. This supports the Job Satisfaction and Customer Satisfaction relationship where the tangible evidence of visitor attractions is through its people - the manifestation of happy staff providing good service to bring about happy customers. Therefore, people are an organisation's tangible evidence. Similarly using Shostack's molecular model, the concept of touch-points from the customers' perspective in developing zone management practices can also be supported. Tangible evidence of intangible service aligns with the SERVQUAL components of Parasuraman, Zeithaml and Berry (1988).

Empowering employees to address and assist guests and attend to guest service issues is a result of an organisation's practices and policies that centre around encouraging employees to be proactive in attending to guest needs and delivering service above expectations. This policy will reap longer term benefits from employees who are both motivated to deliver great service and who have a greater sense of belonging and loyalty to the organization. Organisations will also benefit from greater customer satisfaction, customer loyalty and advocacy (Mayer, 2002).

An empirical study conducted by Ugboro and Obeng (2000) revealed the positive correlation between top management leadership, employee empowerment, job satisfaction and customer satisfaction. The study found a strong relationship between employee empowerment and job satisfaction, and between job satisfaction and customer satisfaction (Ugboro, Obeng, 2000).

However, these studies were conducted in companies that have introduced and adopted Total Quality Management (TQM) principles in their respective organisations. In addition, these studies are based on the employee's perception of customer satisfaction and not the customers' perspective.

## **5 PSYCHOLOGICAL EMPOWERMENT**

Spreitzer (1995) studied and validated the following four constructs of psychological empowerment: meaning, competence, self-determination and impact. Meaning results in increased employee commitment and concentration of energy (Kanter, 1983). Competence leads to greater positive effort and persistence in challenging situations (Gecas, 1989), greater goal expectations (Ozer and Bandura, 1990), and increased performance (Locke, Frederick, Lee and Bobko, 1984). Self-determination leads to learning, interest and resilience (Deci and Ryan, 1989); and, impact results in greater individual performance (Ashforth, 1990).

Psychological empowerment derives from the employee's ability to influence and control the employee's tasks, the performance outcome of the department and

organization, the employee's level of self-esteem and self-image on the employee's role in the organization, the employee's access to information, and how the employee is recognized in the form of financial and non-financial rewards. As asserted by Thomas & Velthouse, these are the outcomes of how the management structures, organizes and manages the organisation – management style and organizational culture (Thomas and Velthouse, 1990).

Therefore, an employee with a greater sense of psychological empowerment is empowered to exercise judgement and initiative, and will likely have an increased sense of job satisfaction. At the same time, employees who exercise this empowerment will likely deliver higher level of service quality and satisfy customer needs more spontaneously.

At the same time, Spreitzer highlighted that psychological empowerment in the workplace can also vary with organizational and work contextual factors such as hierarchy, management structures, job roles, culture and appraisal systems.

Workplace environment is critical to cultivate and encourage empowerment, insofar as an employee may feel empowered, the environment needs to allow empowerment and empowered behaviour (Spreitzer, 1995).

In the context of visitor attractions, another aspect of the workplace environment will also be critical – how teams are organized and managed in an environment of high involvement, and the need to exercise judgment in an instant due to emergencies.

Clearly, psychological empowerment is dependent on environmental, organizational



and contextual factors and has a direct correlation with employee satisfaction. However, employee satisfaction alone may not be the only reason for organisations to adopt practices to encourage empowerment. As businesses become more competitive and consumers are presented with more options, empowerment and empowered employees must lead to greater customer satisfaction to increase customer loyalty, they must encourage positive advocacy and justify an organisation's product and service premium pricing.

## **6 MULTISKILLING**

While psychological empowerment is clearly a major factor affecting both job satisfaction and customer satisfaction, it is also the outcome of management culture and human resource practices.

In the United Kingdom, Swarbrooke asserted that particularly in visitor attractions, new staff were rarely provided orientation to their workplace and environment on their first days at work and did not undergo some form of structured training, and, many employees were elevated to team leadership positions such as shift leaders and supervisors based on their performance in previous functions and were not trained or prepared for these supervisory position (Swarbrooke, 2001). He also found that job rotation, cross-competency and cross-functional training will result in higher levels of job satisfaction.

However, in the hospitality industry, hotel staff are being trained cross-functionally so that they can be deployed based on the needs and demands of the hotel and this has been particularly beneficial to smaller establishments where staff strength is low and the need for elastic deployment is higher (Johnston and Jones, 2004).

It could be argued that it is in the organisation's interest to train and multiskill their employees and to organize them in an appropriate manner, so that the staff can be empowered to multitask depending on work situations. With respect to the attractions industry, these could be managing queues and expediting ticketing or ride admission, deploying more staff to direct traffic and assist visitors' wayfinding during peak times.

Therefore, multiskilling through structured training programmes with the combination of flexible, demand-based deployment are other factors that affect job satisfaction and customer satisfaction.

At the same time, multiskilling should be viewed from 2 perspectives: (1) skills training of more varied functions, roles and responsibilities within a particular department or division; and, (2) skills training of different functions, roles and responsibilities across different departments (Frazer and Lawley, 2000). The aim of multiskilling should be dynamic: for the staff to be able and competent to perform varied tasks within a department, and for the same staff to be able to be deployed in different departments. The 2 dimensional aspects of multiskilling allow staff to be deployed at a shorter notice period and more dynamically based on the needs of the organisation and demands of situations.

## **7 ZONE MANAGEMENT**

### **7.1 Theoretical Basis**

Shostack (1977) discussed critical differences between product and service marketing: where product marketing primarily focused on physical possession and ownership and service marketing on experiential use and patronage. In this respect, Shostack asserted that “management of the physical environment should be one of a service marketer’s highest priorities” (Shostack, 1977). This involved how the organisation’s brand positioning was projected and manifested consistently through the experience from décor, staff uniforms, graphics and even promotions. Services would need to focus on projecting and delivering tangible evidences of the brand and service promise. Shostack’s assertions underpinned SERVQUAL components of Tangibility, Reliability and Assurance where these were clearly tangible evidences of the organisation’s or product positioning and promise to its customers (Parasuraman, Zeithaml, Berry, 1988).

However, creating and delivering a service’s physical environment would be much more than engineering a bunch of tangible evidences. Shostack (1987) coined the term “service blueprinting” where services were to be perceived and organized in the form of a system where service processes and customer interactions were documented and mapped out into steps and points of a dynamic flowchart. These processes were then categorized into levels of complexity where increased task variability would require increased skill variability. At the same time, there would

also be varying levels of executional decision-making or latitude and that would be the result of situational variability – greater situational variability would lead to increased judgement variability, executional latitude or empowerment. This echoed Spreitzer’s psychological empowerment required to allow employees to make proactive and affirmative decisions in responding to customer needs which would in turn affect how the customer perceived the Responsiveness and Empathy of the service organisation’s staff (Spreitzer, 1995; Parasuraman, Zeithaml, Berry, 1988). From an organisation’s standpoint, these would first require management to make strategic choices on process complexity and divergence. For example, how these processes would be grouped, what tasks should be performed by the staff, what skills should staff have, what situations staff would be likely face and how should staff react and respond to these situations. The people element in these strategic choices would be just as important as how the service processes and service environment were developed and executed.

While services could be mapped into detailed and structured processes, the customer’s perception of service or more specifically evaluation of service quality would be formed from the moment the customer interacted with the organisation or a “service encounter” (Bitner, 1990). These service encounters were primarily formed by the service’s physical surroundings which included design, décor and layout of the place; displays and signage; and, other non-verbal embellishments; and, the service’s employees’ appearance, demeanour, interaction and response to the customer. From the on-set of the service encounter, customers would start to form their expectations and through interaction evaluate their service experience. These

forge the backdrop of a “servicescape” (Bitner, 1992) combining the environment with employee and customer or guest interactions within a designed and engineered physical or virtual facility to bring deliver positive customer experience.

From service encounters, designed and deliberate responses to anticipated customer needs to develop an exchange relationship between the employee and customer or guest (Czepiel, 1990), service organisations would be challenged to explore better, more effective ways to operate their respective servicescapes and service environment. Each encounter would be an opportunity for the service organisation to impress the customer, build trust and loyalty and eventually build a relationship with the customer (Bitner, 1995). It was also acknowledged that particularly in a service environment, the customer would not be a mere observer but an active participant and contributor to the service delivered.

These perspectives of service delivery could also be mapped out from the customer’s standpoint in the form of a customer experience journey – how the customer interacted the service organisation’s touchpoints through the facility, with the employees and in various channels, media and communications (Lemon and Verhoef, 2016). Customer experience management stemmed from mapping out processes from the customer’s perspective in the customer’s journey from prepurchase, purchase and postpurchase stages with the entire range of organizational functions, facilities and personnel.

The concept of zone management incorporated customer experience journey asserted by Lemon and Verhoef with the concepts of service blueprinting, service encounter,

service relationship and servicescape (Shostack, 1987; Bitner, 1990; Bitner, 1995; Czepiel, 1990). Zone management became an operations management practice adopted by some visitor attractions that centred on the customer or guest experience. This involved clustering or creating groups of meaningful touchpoints from the basis of the customer experience journey and physical environment and layout of the facility.

## **7.2 Zone Management in Practice**

The traditional operating structure of attractions is based on operational functions. The typical structure of an attractions operations team is made up of departments like admission, ticketing, attractions operations, exhibits, shows, entertainment, facilities, maintenance and security. These are based on how an attraction should be managed and operated based on job roles, functions, skills and capabilities of the staff.

An attraction which adopts and practices zone management will structure its team and operations based on customer or guest touchpoints, and clusters of meaningful touchpoints.

Let's examine the typical flow of a guest when he or she arrives at a visitor attraction: from arriving, buying a ticket and then entering an attraction. The guest would likely arrive at an attraction either by taking public transport, dropped off by a taxi, self-driven or walked. Then the guest is likely to make his way to the entrance of the attraction, greeted by a host, inquired about the various ticketing promotions and packages and then purchase a ticket before entering the attraction.

The functional structure of an attraction would have divided and deployed the staff into the following departments: car park, transport, reception hosts, ticketing and admission. There will also be support departments such as security and facility management.

However, in zone management, these functions can be classified into one single zone - Arrival Plaza. Staff in zone management structures will be trained with the appropriate skills and capabilities in all aspects managing the Arrival Plaza - directing of guest and vehicular traffic, queue management, ticketing operations, hosting and greeting guests, cleaning and facility management, plus have a heightened awareness of the surroundings such as guests who are lost or need assistance, baggage left unattended, loitering passer-by... etc. These are all the touchpoints within the Arrival Plaza where the guests experience and are exposed to before entering the attraction.

The basis of this classification and clustering into a single zone stems from the perspective of the guest or customer. The guest makes his way to the attraction from various possible means for access and transport, will need to navigate to the ticketing counter, consider the ticketing and promotions possibilities, makes a purchase and then enters the attraction. A zone-managed attraction will want to ensure that the guest starts his experience with a positive impression from how the entry plaza is presented, information displayed in the most easily understood manner and the entire decision-making and purchasing process is as seamless as possible.

In zone management, it is not any one specific staff's duty to provide service and experience but everyone's duty to do so.

Zone management allows for staff to be cross-trained and multi-skilled in all aspects of the zone from a guest's perspective. This also provides for operational scalability in managing peak and off-peak times and sudden traffic surges. Over time, staff who are trained and experienced in all functions of the zone can move up the structure as zone managers; they will be readier to take on the entire zone and not rely on single set of skills if they were in a functional structure.

Not only are staff provided training for the various skills to perform the functions within the zone, they will also be given the most up-to-date information on what is available, the promotions, way-finding and direction, show timings and knowledge on how to deal with anticipated guest stress and distress situations. These could include: a lost child, lost baggage or belongings, injuries, crowd control, queue management... etc. In zones within the park, staff are also provided training to offer information on exhibits, displays, rides, flora and fauna.

However, some fundamental principles need to be in place for zone management to work effectively and optimally. Firstly, the operations of the entire attraction must first be mapped out based on customer or guest touchpoints and grouped accordingly. The basis of clustering touchpoints should be from the perspective of the guests' perception and experience. Secondly, for staff to multi-task, they should be multi-skilled and trained in all the functions, skills and capabilities required for the zone. Thirdly, zone managers and their staff should also be empowered to make a

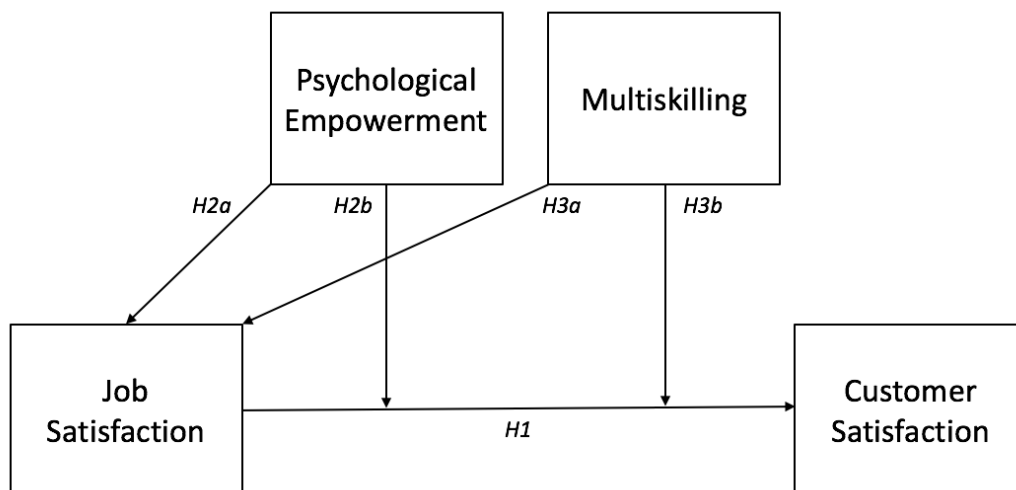


judgment on the zone's situation. During peak times, staff should be deployed to direct traffic, ease the queue and process inquiries and purchases, rather than sweeping the floor or changing the light bulbs. During off-peak times when there is no queue or traffic to manage, staff should focus on the cleanliness, orderliness and back-of-house functions. It is also typical that both peak and off-peak times exist everyday of operations. Therefore, zone managers must be given the autonomy to exercise judgement and deploy their charges accordingly.

What are the tenets of zone management? Or how do we know if an attraction practices zone management?

- Generalised and zone-based job titles (as opposed to functional job titles)
- Organised and managed based on clusters of meaningful guest touchpoints
- Staff are multiskilled and cross-trained in all functions of the zone
- Staff roles and jobs are rotated and rostered frequently

## 8 PROPOSED FRAMEWORK



## Figure 1: Proposed Job Satisfaction and Customer Satisfaction Framework

*Hypothesis 1 (H1): Job satisfaction is positively associated with customer satisfaction*

*Hypothesis 2a (H2a): Psychological empowerment is positively associated with job satisfaction*

*Hypothesis 2b (H2b): Psychological empowerment moderates the relationship between job satisfaction and customer satisfaction*

*Hypothesis 3a (H3a): Multiskilling is positively associated with job satisfaction*

*Hypothesis 3b (H3b): Multiskilling moderates the relationship between job satisfaction and customer satisfaction*

## **9 METHODOLOGY**

Two survey questionnaires were designed: SERVQUAL questionnaire for visitors and guests; and, the Generic Job Satisfaction Scale together with the Psychological Empowerment survey formed the questionnaire for employees of the following 6 attractions in the Philippines and Singapore: Star City (Philippines), Manila Ocean

Park (Philippines), KidZania (Singapore), Skyline Luge (Singapore), Science Centre (Singapore) and Wild Wild Wet (Singapore).

These scales were specifically selected to target guests' responses to service received and how employees delivered these services, while not seeking out responses that are related to the product, exhibit, show or ride. Similarly, employees were asked for their responses to the working relationships, ability, confidence and decision-making; again, nothing specific to the product, exhibit, show or ride.

Some 80 visitors and guests at each of these attractions were randomly chosen to respond to the questionnaire where 40 were conducted on an off-peak weekday and 40 on a peak weekend. These were conducted at the exit of the attractions, so that the respondents would have already visited the attraction, taken some rides and have had an experience of the attraction.

So as not to interrupt peak day operations, 40 employees were randomly chosen to respond to the employee questionnaire on a weekday. These were conducted in staff rest areas or back-of-house during their lunch or rest break times.

These questionnaires were given out in hard copy by hand and respondents were given 10 minutes to complete them.

Besides the questionnaire, visitor respondents were also asked their age (by age brackets), gender, if the visit was recommended by a previous visitor and if it was their first time visiting the attraction.

Employee respondents were also asked to provide some job details such as their age (in age brackets), gender, nationality, employment status (in Singapore), length of service with the respective organisation, job title, role description and training provided during employment. Job title and role description would help the researcher analyse how the respective attraction organizes their teams. Training provided by the organisation would lead to the type of multiskilling the frontline employee had received. These were likely to affect job satisfaction and customer satisfaction.

Employee participants would need to respond to two questions on multiskilling: (1) “have you had skills training activities that enable you to work in different functional areas (departments)”; and, (2) “have you had skills training activities that enable you to work with diverse tasks inside your functional area (department)” (Frazer and Lawley, 2000).

The SERVQUAL Instrument (Parasuraman, Zeithaml, Berry, 1988)	
S1.	XYZ has up-to-date equipment.
S2.	XYZ’s physical facilities are visually appealing.
S3.	XYZ’s employees are well dressed and appear neat.
S4.	The appearance of the physical facilities of XYZ is in keeping with the sypte of service provided.
S5.	When XYZ promises to do something by a certain time, it does so.
S6.	When you have problems, XYZ is sympathetic and reassuring.

- S7. XYZ is dependable.
- S8. XYZ provides its services at the time it promises to do so.
- S9. XYZ keeps its records accurately.
- S10. XYZ does not tell customers exactly when services will be performed. (-)
- S11. You do not receive prompt service from XYZ's employees. (-)
- S12. Employees of XYZ are not always willing to help customers. (-)
- S13. Employees of XYZ are too busy to respond to customer requests promptly.  
(-)
- S14. You can trust employees of XYZ.
- S15. You feel safe in your transactions with XYZ's employees.
- S16. Employees of XYZ are polite.
- S17. Employees get adequate support from XYZ to do their jobs well.
- S18. XYZ does not give you individual attention. (-)
- S19. Employees of XYZ do not give you personal attention. (-)
- S20. Employees of XYZ do not know what your needs are. (-)
- S21. XYZ does not have your best interests at heart. (-)
- S22. XYZ does not have operating hours convenient to all their customers. (-)

*Table 1: SERVQUAL Instrument (Parasuraman, Zeithaml, Berry, 1988)*

Job Satisfaction Scale (Macdonald, MacIntyre, 1997)	
J1.	I receive recognition for a job well done.
J2.	I feel close to the people at work.
J3.	I feel good about working at this company.

J4.	I feel secure about my job.
J5.	I believe management is concerned about me.
J6.	On the whole, I believe work is good for my physical health.
J7.	My wages are good.
J8.	All my talents and skills are used at work.
J9.	I get along with my supervisors.
J10.	I feel good about my job.

*Table 2: Job Satisfaction Scale (Macdonald, MacIntyre, 1997)*

Psychological Empowerment (Spreitzer, 1995)
Meaning
EM1. The work I do is very important to me (meaning 1).
EM2. My job activities are personally meaningful to me (meaning 2).
EM3. The work I do is meaningful to me (meaning 3).
Competence
EC1. I am confident about my ability to do my job (competence 1).
EC2. I am self-assured about my capabilities to perform my work activities (competence 2).
EC3. I have mastered the skills necessary for my job (competence 3).
Self-Determination

- ES1. I have significant autonomy in determining how I do my job (self-determination 1).
- ES2. I can decide on my own how to go about doing my work (self-determination 2).
- ES3. I have considerable opportunity for independence and freedom in how I do my job (self-determination 3).

#### Impact

- EI1. My impact on what happens in my department is large (impact 1).
- EI2. I have a great deal of control over what happens in my department (impact 2).
- EI3. I have significant influence over what happens in my department (impact 3).

*Table 3: Psychological Empowerment (Spreitzer, 1995)*

Measurement of the participants' responses to each item was based on a 5-point Likert scale: 1 = strongly disagree, 2 = disagree, 3 = neutral or indifferent, 4 = agree, and, 5 = strongly agree.

## **10 DATA SAMPLE**

## **10.1 Description of Visitor Attractions**

### **Star City, Philippines**

Star City is an indoor amusement park and family entertainment centre located in the Pasay area of Manila, Philippines. This 35,000 square metre facility was opened in 1991 and has an annual attendance of 1.5 million visitors. Most of the park is all-weather, air-conditioned and indoor. The park's 30 over rides and attractions include a double-decker carousel, 60-metre tall giant Ferris wheel, 4 roller coasters and a snow play area and snow ski slope.

### **Manila Ocean Park, Philippines**

Opened in 2008, Manila Ocean Park is located in the Rizal Park area of Manila, Philippines. The facility has an oceanarium which has over 10,000 sea creatures from more than 270 species housed in 7 sections and has a walk-through tunnel. Besides the oceanarium, Manila Ocean Park also has a penguin enclosure, an aviary featuring birds of prey and an area exhibiting reptiles and insects called World of Creepy Crawlies.

### **KidZania, Singapore**

KidZania Singapore is a role-play edutainment centre opened in 2016 on Sentosa, Singapore. KidZania is themed as a scaled-down model or replica of a make-believe city which has banks, shops, theatres, futsal court and buildings that houses a police



station, court and other amenities. Child visitors can role-play various occupations such as being a cook, model, storekeeper, police officer, paramedic, judge and courier. A decommissioned Boeing 737 fuselage is iconic to KidZania, where visitors can role-play a pilot, flight engineer and air steward.

### **Skyline Luge Sentosa, Singapore**

Skyline Luge Sentosa is an adventure facility located on Sentosa, Singapore. Luge is a gravity-based, non-powered, self-propelled cart system where riders use the handlebar to steer, brake and control the speed. This facility was opened in 2005 and offers 3 downhill tracks – the 628-metre Jungle Trail, 638-metre Kupu Kupu Trail and 688-metre Dragon Trail. Riders will take the luge ride from Sentosa's Imbiah Lookout to the beach and then take a chairlift back up the hill for another luge ride.

### **Science Centre Singapore, Singapore**

Science Centre Singapore is an edutainment centre that focuses on promoting science, technology and innovation located in the Jurong area of Singapore. This facility was opened in 1977 and has undergone several expansions and renovations over the years. The Science Centre Singapore features over 800 exhibits in 8 exhibition galleries and welcomes more than 1 million visitors a year. The facility also offers an OmniMax theatre and an Observatory.

### **Wild Wild Wet, Singapore**

Wild Wild Wet is a water theme park located in the Pasir Ris area of Singapore. This water theme park is part of a larger leisure entertainment destination called Downtown East which has holiday chalets, bowling and food outlets. Wild Wild Wet opened in 2004 and its 38,000 square metre area offers a range of 15 water-based rides and attractions. Thrill adventure rides include the Vortex, 4-lane mat-based slide Kraken Racer, near vertical drop Free Fall, and, group ride Royal Flush. Family-friendly rides and attractions include Kidz Zone, Splash Play, Professor's Playground, and, Shiok River. Wild Wild Wet also offers a large wave pool called Tsunami.

## 10.2 Description of Employee Respondents

Attraction	Frequency	Percent
Star City	40	16.3
Manila Ocean Park	40	16.3
Kidzania	42	17.1
Luge	41	16.7
Science Centre	40	16.3
Wild Wild Wet	42	17.1
Total	245	100.0

*Table 4: Employee Respondents – Attraction Participation*

Gender	Frequency	Percent
Male	120	49.0
Female	125	51.0
Total	245	100.0

*Table 5: Employee Respondents – Gender*

Age Group	Frequency	Percent
< 20	53	21.6
21 - 30	125	51.0
31 - 40	35	14.3
41 - 50	20	8.2
51 - 60	6	2.4
60 >	1	0.4
Total	240	98.0
Missing	5	2.0
Total	245	100.0

*Table 6: Employee Respondents – Age Group*

Length of Service	Frequency	Percent
20 years or more	5	2.0
6 to 19 years	49	20.0
2 to 5 years	59	24.1
Less than 2 years	122	49.8
Total	235	95.9
Missing	10	4.1
Total	245	100.0

*Table 7: Employee Respondents – Length of Service*

Multiskilling (Areas)	Frequency	Percent
Yes	164	66.9
No	78	31.8
Total	242	98.8
Missing	3	1.2

Total	245	100.0
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*Table 8: Employee Respondents – Multiskilling in Different Areas*

Multiskilling (Tasks)	Frequency	Percent
Yes	199	81.2
No	42	17.1
Total	241	98.4
Missing	4	1.6
Total	245	100.0

*Table 9: Employee Respondents – Multiskilling in Different Tasks*

Zone Management	Frequency	Percent
Non-Zone Managed	165	67.3
Zone Managed	80	32.7
Total	245	100.0

*Table 10: Employee Respondents – Zone Managed Attraction*

A total of 245 employees from Star City (Philippines), Manila Ocean Park (Philippines), KidZania (Singapore), Skyline Luge (Singapore), Science Centre (Singapore) and Wild Wild Wet (Singapore) participated in the Employee Survey, of which 120 or 49% were male employees and 125 or 51% were female employees.

In terms of age, 21.6% were 20 years old or younger; 51% were between 21 and 30 years old; 14.3% were between 31 and 40 years old; 8.2% were between 41 and 50

years old; 2.4% were between 51 and 60 years old; 0.4% were 61 years old or older; and, 2.0% did not respond.

In terms of length of service, 2.0% have been employed in the same organisation for 20 years or more; 20.0% had 6 to 19 years of service; 24.1% had 2 to 5 years of service; 49.8% had less than 2 years of service; and, 4.1% did not respond.

In terms of multiskilling, 66.9% responded that they received training in skills outside their functional areas; 31.8% did not; and, 1.2% did not respond. 81.2% responded that they received training in skills for different tasks within their functional areas; 17.1% did not; and, 1.6% did not respond.

Finally, 32.7% or 80 employees were employed in a zone-managed visitor attraction (Manila Ocean Park and Science Centre Singapore); and, 67.3% or 165 were employed in a visitor attraction that does not practice zone management (Star City, KidZania, Skyline Luge and Wild Wild Wet).

<b>Job Titles of Employee Respondents</b>
Administrator (Turnstile)
Area Coordinator
Assistant Guest Services Manager
Cashier
Cleaner
Cleaning Supervisor
Cluster Marshal
Customer Service Officer
Facilities Coordinator

Food Service Attendant
Food Kiosk Attendant
Guest Relations Officer
Guest Services Officer
Guest Services Executive
In-House Marshall
Lifeguard
Lifeguard Executive
Luge Operator
Operation Host
Operations Supervisor
Operation Officer
Paramedic
Park Facilitator
Photographer
Reservations Assistant
Retail Assistant
Ride Attendant
Role Play (Activities)
Role Play Supervisor
Safety and Security Officer
Safety Supervisor
Sales & Ticketing Assistant
Science Educator
Security Guard
Senior Lifeguard
Senior Officer, Operations Programmes
Senior Science Educator
Senior Team Leader
Senior Team Leader, Photography
Slide Operator
Team Leader, Park Facilitator
Technical Supervisor
Technician

Ticket Seller
Ticketing Host
Token Marshall
Tour Guide
Visitor Services Assistant
Visitor Services Supervisor

*Table 11: Employee Respondents – List of Job Titles*

Lastly, employee respondents targeted for this research were involved in frontline, customer or guest interfacing roles and in the course of their typical day, it was necessary for these employees to be seen and work in full view of the guest. Some roles were highly focused on providing information and advice to guests, interact and deliver service, and even part of the service experience, such as ticketing, tour services, ride operations, food service and hosting. Some are more passive and reactive to a potential situation like an emergency – these will include water safety lifeguarding, security, safety, technical services and customer service. Others are more in the background where these positions are highly visible but their work are not quite guest-interacting, such as cleaning services.

The research avoided survey responses from 3 groups of employees: senior management staff; subject matter specialists, such as programme creators, curators and researchers; and, commercial and business service specialists, such as accountants, human resource personnel, sales and marketing personnel. These positions were more focused on “back-of-house” work and much less customer or guest interfacing.

### 10.3 Description of Guest Respondents

Attraction	Frequency	Percent
Star City	80	15.9
Manila Ocean Park	80	15.9
Kidzania	82	16.3
Luge	90	17.9
Science Centre	85	16.9
Wild Wild Wet	85	16.9
Total	502	100.0

*Table 12: Guest Respondents – Attraction Participation*

Gender	Frequency	Percent
Male	227	45.2
Female	271	54.0
Total	498	99.2
Missing	4	0.8
Total	502	100.0

*Table 13: Guest Respondents – Gender*

Age Group	Frequency	Percent
< 20	77	15.3
21 - 30	126	25.1
31 - 40	135	26.9
41 - 50	126	25.1
51 - 60	18	3.6
60 >	8	1.6
Total	490	97.6
Missing	12	2.4



Total	502	100.0
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*Table 14: Guest Respondents – Age Group*

Nationality	Frequency	Percent
Singaporean	141	28.1
Malaysian	9	1.8
Indonesia	24	4.8
Thai	1	0.2
Vietnamese	4	0.8
Filipino	168	33.5
Indian	26	5.2
Bangladeshi	1	0.2
Sri Lankan	1	0.2
Chinese/HK/Taiwanese	14	2.8
Japanese	11	2.2
Korean	5	1.0
Australian	45	9.0
New Zealander	4	0.8
North American	16	3.2
Colombian	1	0.2
United Kingdom	8	1.6
Italian	2	0.4
French	6	1.2
German	2	0.4
Dutch	2	0.4
Austrian	1	0.2
Finnish	1	0.2
Spanish	1	0.2
Russian	2	0.4
Omani	1	0.2
South African	1	0.2
Total	498	99.2

Missing	4	0.8
Total	502	100.0

*Table 15: Guest Respondents – Nationality*

First Visit	Frequency	Percent
Yes	270	53.8
No	231	46.0
Total	501	99.8
Missing	1	0.2
Total	502	100.0

*Table 16: Guest Respondents – First Time Visitors*

Recommended by previous visit	Frequency	Percent
Yes	230	45.8
No	269	53.6
Total	499	99.4
Missing	3	0.6
Total	502	100.0

*Table 17: Guest Respondents – Recommended Visit*

Zone Management	Frequency	Percent
Non-Zone Managed	337	67.1
Zone Managed	165	32.9
Total	502	100.0

*Table 18: Guest Respondents – Zone-Managed Attraction*

A total of 502 guests participated in the Guest Survey at Star City (Philippines), Manila Ocean Park (Philippines), KidZania (Singapore), Skyline Luge (Singapore), Science Centre (Singapore) and Wild Wild Wet (Singapore), of which 45.2% were male guests, 54.0% were female guests and 0.8% did not respond.

In terms of age, 15.3% were 20 years old or younger; 25.1% were between 21 and 30 years old; 26.9% were between 31 and 40 years old; 25.1% were between 41 and 50 years old; 3.6% were between 51 and 60 years old; 1.6 % were 61 years old or older; and, 2.4% did not respond.

Respondents were primarily from Singapore (28.1%), the Philippines (33.5%) and Australia (9.0%). 28.6% of guest respondents came from Malaysia, Indonesia, Thailand, Vietnam, India, Bangladesh, Sri Lanka, Hong Kong, Taiwan, China, Japan, Korea, New Zealand, North America, Colombia, United Kingdom, Italy, France, Germany, the Netherlands, Austria, Finland, Spain, Russia, Oman and South Africa. 0.8% did not respond.

53.8% of the respondents responded that it was their first visit to the respective visitor attraction; 46.0% respondent that it was not their first visit; and, 0.2% did not respond. 45.8% responded that their visit was recommended by a previous visitor; 53.6% responded that their visit was due to a recommendation; and, 0.6% did not respond.

Finally, 32.9% of the respondents were taken from a zone-managed visitor attraction (Manila Ocean Park and Science Centre Singapore), and, 67.1% were from a non-zone-managed visitor attraction (Star City, KidZania Singapore, Skyline Luge and Wild Wild Wet).

#### **10.4 Zone Management At Manila Ocean Park**

Manila Ocean Park and Star City were chosen in the Philippines because there is a distinct difference in how both visitor attractions are managed.

Star City practices the conventional and traditional functional management structure where job roles and functions are fixed to functional positions and staff are not deployed across functions. For example: on a peak day where entry queues are long, security staff continue with their sentry duties and do not assist with queue management; and, the number of ticketing counters are opened based on the number of ticketing staff are on duty. Supervisors were observed to be watching at a distance rather than assisting with ticketing, admission and security screening procedures. It was also observed that cleaners were busy sweeping the floor at the arrival or entry plaza on a similar peak day although there were long meandering queues of guests waiting to purchase their tickets and to enter the park.

On the other hand, Manila Ocean Park practices a formal zone management structure where staff are deployed to man different areas at different times and for different operational situations. These will depend on the demand and traffic conditions of the park.

For example: Ticketing, guest operations and photo operations all come under the same department. Cashiers or ticketing staff duty at the main and central ticketing are trained and are required to perform duties beyond that of a cashier, including guest relations, admission operations, queue management and information dissemination. These staff are rotated on a regular basis.

Another example is the supply management department. Teams are deployed to manage all the food outlets and retail or souvenir outlets within the park – in the visitor attractions business, these are known as non-gate or non-admission revenue sources. Members of the team are trained to perform various duties including waitering, cashiering, cleaning, food prepping and hosting within the same outlet. Therefore, a retail or food outlet is deemed to be a “zone”.

At Manila Ocean Park, although security services are outsourced to a third party external service provider, the managers and supervisors of the security department are internal staff of the park. They determine the training needs, conduct the training and manage the deployment of the outsourced security guards. While the outsourced security guards are expected to be proficient in areas of safety and security, they are also cross-trained for handling guests enquiries, wayfinding, loss-and-found, complaints, managing crowds, managing queues... they are also trained for fire-fighting and are part of the emergency response team. Under normal circumstances and at other facilities, outsourced security guards perform "policing" or security work, they do not handle and manage guests - so this is something different in MOP.

The zone management philosophy at Manila Ocean Park is a combination of location, and, anticipated and identified guest needs. This stems from how the management defines meaningful clusters of activities and touchpoints from the perspective of the guest needs and operating conditions.

### **10.5 Zone Management At Science Centre Singapore**

While it was initiating thought that all the selected visitor attractions in Singapore did not practice zone management, it was found that Science Centre Singapore did have their own version of zone management.

Science Centre's zone management evolved from the usual functional operations structure over 10 years ago. Some of the facility's operations managers attended a programme conducted by the Disney Institute and returned to form a "visitor experience committee". This visitor experience committee started to explore and experiment different forms of operating structures with the perspective and objective to enhance guest experience and create a more memorable visit.

As a result, it was the Science Centre's operating mantra to train their frontline staff to be all-rounders in 2 broad staff categories: Visitor Service Officers, and, Educators.

Visitor Service Officers are trained and operationalized in a variety of skills: first aid; loss-and-found; cashiering; admission operations; enquiry handling; emergency and

medical evacuation; emergency response; grievance handling and management; queue and crowd control; hosting and greeting; and, event registration and ushering.

Educators are trained to organize, plan and execute school programmes; show and exhibit management; deliver shows, talks and programmes; meet, greet and host; conduct and guide tours; crowd control and queue management; and, storytelling.

Even Science Centre's outsourced staff such as security guards and cleaners are trained by in-house staff to be play larger roles. Security guards are trained to greet visitors; manage vehicular traffic and manage crowds and queues; handle and direct grievances; and, wayfinding and enquiry handling. Cleaners are also expected to be security and safety vigilant, looking out for visitors behaving in a suspicious manner and unattended baggage. Both these outsourced staff are also trained in loss-and-found, and, in first aid, and they are involved in the daily operations briefings at the start of each business day and handing over of shifts.

Although Science Centre did not term this as "zone management" and did not design and structure their operations as "zone management", their mode of operations, staff roles and training mirrored the principles of zone management and clustered various tasks, skills and knowledge based on visitor experience.

## 11 RESEARCH FINDINGS

### 11.1 Means Analysis (Hypotheses Tests)

			Job Satisfaction Score	Psychological Empowerment Score	Guest Satisfaction Score
Philippines	Non-Zone Managed	Mean	4.0803	3.8921	3.5727
		N	40	40	80
		Std. Deviation	0.85582	0.81730	0.51151
	Zone Managed	Mean	4.2375	4.3604	3.7169
		N	40	40	80
		Std. Deviation	0.59644	0.45228	0.58590
	Total	Mean	4.1589	4.1263	3.6448
		N	80	80	160
		Std. Deviation	0.73719	0.69733	0.55298
Singapore	Non-Zone Managed	Mean	3.4956	3.4782	3.8372
		N	125	125	257
		Std. Deviation	0.54954	0.47717	0.57086
	Zone Managed	Mean	3.7939	3.6375	4.0356
		N	40	40	85
		Std. Deviation	0.42902	0.39834	0.71405
	Total	Mean	3.5679	3.5168	3.8865
		N	165	165	342
		Std. Deviation	0.53716	0.46323	0.61451
Total	Non-Zone Managed	Mean	3.6374	3.5785	3.7744
		N	165	165	337
		Std. Deviation	0.68240	0.60221	0.56790
	Zone Managed	Mean	4.0157	3.9990	3.8811
		N	80	80	165
		Std. Deviation	0.56241	0.55823	0.67234



Total	Mean	3.7609	3.7158	3.8095
	N	245	245	502
	Std. Deviation	0.66858	0.61941	0.60563

*Table 19: Mean and Standard Deviation of Job Satisfaction Scores, Guest Satisfaction Scores and Psychological Empowerment Scores by Country, Zone and Non-Zone Managed Attractions*

Based on total sample population, employee job satisfaction in zone-managed attractions ( $M = 4.0157$ ,  $SD = 0.56241$ ) is higher than employee job satisfaction in non-zone-managed attractions ( $M = 3.6374$ ,  $SD = 0.68240$ ). Employee psychological empowerment in zone-managed attractions ( $M = 3.9990$ ,  $SD = 0.55823$ ) is also higher than employee psychological empowerment in non-zone-managed attractions ( $M = 3.5785$ ,  $SD = 0.60221$ ). Guest satisfaction in zone-managed attractions ( $M = 3.8811$ ,  $SD = 0.67234$ ) is also higher than guest satisfaction in non-zone-managed attractions ( $M = 3.7494$ ,  $SD = 0.62498$ ).

Based on data collected in the Philippines, employee job satisfaction in zone-managed attractions ( $M = 4.2375$ ,  $SD = 0.59644$ ) is higher than employee job satisfaction in non-zone-managed attractions ( $M = 4.0803$ ,  $SD = 0.85582$ ). Employee psychological empowerment in zone-managed attractions ( $M = 4.3604$ ,  $SD = 0.45228$ ) is also higher than employee psychological empowerment in non-zone-managed attractions ( $M = 3.8921$ ,  $SD = 0.81730$ ). Guest satisfaction in zone-managed attractions ( $M = 3.7169$ ,  $SD = 0.58590$ ) is also higher than guest satisfaction in non-zone-managed attractions ( $M = 3.5727$ ,  $SD = 0.51151$ ).

Based on data collected in Singapore, employee job satisfaction in zone-managed attractions (M = 3.7939, SD = 0.42902) is higher than employee job satisfaction in non-zone-managed attractions (M = 3.4956, SD = 0.54954). Employee psychological empowerment in zone-managed attractions (M = 3.6375, SD = 0.39834) is also higher than employee psychological empowerment in non-zone-managed attractions (M = 3.4782, SD = 0.47717). Guest satisfaction in zone-managed attractions (M = 4.0356, SD = 0.71405) is also higher than guest satisfaction in non-zone-managed attractions (M = 3.8372, SD = 0.57086).

## 11.2 Correlation Analysis

Correlation analysis was conducted to analyse the relationship between job satisfaction and guest satisfaction, job satisfaction and psychological empowerment, multiskilling by tasks and job satisfaction, and, multiskilling by areas and job satisfaction by total data population, by country and by zone-managed attractions.

### By Total Population

		(1)	(2)	(3)	(4)	(5)
(1) Job Satisfaction	Pearson Correlation	1	.923**	-.527**	.170**	0.062
	Sig. (2-tailed)		0.000	0.000	0.008	0.334
	N	747	747	747	241	242
(2) Psychological Empowerment	Pearson Correlation	.923**	1	-.491**	.190**	0.102
	Sig. (2-tailed)	0.000		0.000	0.003	0.114
	N	747	747	747	241	242
(3) Guest Satisfaction	Pearson Correlation	-.527**	-.491**	1	-.143*	-0.075
	Sig. (2-tailed)	0.000	0.000		0.026	0.242
	N	747	747	747	241	242

(4) Multi-skilling (Tasks)	Pearson Correlation	.170**	.190**	-.143*	1	.435**
	Sig. (2-tailed)	0.008	0.003	0.026		0.000
	N	241	241	241	241	240
(5) Multi-skilling (Areas)	Pearson Correlation	0.062	0.102	-0.075	.435**	1
	Sig. (2-tailed)	0.334	0.114	0.242	0.000	
	N	242	242	242	240	242

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

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

*Table 20: Correlation between Job Satisfaction, Guest Satisfaction, Psychological Empowerment, Multiskilling by Tasks and Multiskilling by Areas (Total Sample Population)*

#### By Country

Country		(1)	(2)	(3)	(4)	(5)	
Philippines	(1) Job Satisfaction	Pearson Correlation	1	1.000**	1.000**	0.052	0.029
		Sig. (2-tailed)		0.000	0.000	0.649	0.796
		N	240	240	240	80	80
	(2) Psychological Empowerment	Pearson Correlation	1.000**	1	1.000**	0.052	0.029
		Sig. (2-tailed)	0.000		0.000	0.649	0.796
		N	240	240	240	80	80
	(3) Guest Satisfaction	Pearson Correlation	1.000**	1.000**	1	0.052	0.029
		Sig. (2-tailed)	0.000	0.000		0.649	0.796
		N	240	240	240	80	80
	(4) Multi-skilling (Tasks)	Pearson Correlation	0.052	0.052	0.052	1	.220*
		Sig. (2-tailed)	0.649	0.649	0.649		0.050
		N	80	80	80	80	80
	(5) Multi-skilling (Areas)	Pearson Correlation	0.029	0.029	0.029	.220*	1
		Sig. (2-tailed)	0.796	0.796	0.796	0.050	
		N	80	80	80	80	80

Singapore	(1) Job Satisfaction	Pearson Correlation	1	.916**	.409**	-0.025	-0.120
		Sig. (2-tailed)		0.000	0.000	0.753	0.128
		N	507	507	507	161	162
	(2) Psychological Empowerment	Pearson Correlation	.916**	1	.618**	0.000	-0.080
		Sig. (2-tailed)	0.000		0.000	0.998	0.314
		N	507	507	507	161	162
	(3) Guest Satisfaction	Pearson Correlation	.409**	.618**	1	0.035	0.047
		Sig. (2-tailed)	0.000	0.000		0.663	0.551
		N	507	507	507	161	162
	(4) Multi-skilling (Tasks)	Pearson Correlation	-0.025	0.000	0.035	1	.481**
		Sig. (2-tailed)	0.753	0.998	0.663		0.000
		N	161	161	161	161	160
	(5) Multi-skilling (Areas)	Pearson Correlation	-0.120	-0.080	0.047	.481**	1
		Sig. (2-tailed)	0.128	0.314	0.551	0.000	
		N	162	162	162	160	162

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

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

*Table 21: Correlation between Job Satisfaction, Guest Satisfaction, Psychological Empowerment, Multiskilling by Tasks and Multiskilling by Areas (By Country)*

#### By Zone-Managed Attractions

			(1)	(2)	(3)	(4)	(5)
Non-Zone Managed	(1) Job Satisfaction	Pearson Correlation	1	.961**	-.914**	0.128	0.012
		Sig. (2-tailed)		0.000	0.000	0.105	0.878
		N	502	502	502	161	162
	(2) Psychological Empowerment	Pearson Correlation	.961**	1	-.877**	.157*	0.058
		Sig. (2-tailed)	0.000		0.000	0.046	0.466
		N	502	502	502	161	162

		N	502	502	502	161	162
	(3) Guest Satisfaction	Pearson Correlation	-.914**	-.877**	1	-0.137	-0.049
		Sig. (2-tailed)	0.000	0.000		0.082	0.537
		N	502	502	502	161	162
	(4) Multi-skilling (Tasks)	Pearson Correlation	0.128	.157*	-0.137	1	.461**
		Sig. (2-tailed)	0.105	0.046	0.082		0.000
		N	161	161	161	161	160
	(5) Multi-skilling (Areas)	Pearson Correlation	0.012	0.058	-0.049	.461**	1
		Sig. (2-tailed)	0.878	0.466	0.537	0.000	
		N	162	162	162	160	162
Zone Managed	(1) Job Satisfaction	Pearson Correlation	1	1.000**	-1.000**	.254*	0.164
		Sig. (2-tailed)		0.000	0.000	0.023	0.147
		N	245	245	245	80	80
	(2) Psychological Empowerment	Pearson Correlation	1.000**	1	-1.000**	.254*	0.164
		Sig. (2-tailed)	0.000		0.000	0.023	0.147
		N	245	245	245	80	80
	(3) Guest Satisfaction	Pearson Correlation	-1.000**	-1.000**	1	-.254*	-0.164
		Sig. (2-tailed)	0.000	0.000		0.023	0.147
		N	245	245	245	80	80
	(4) Multi-skilling (Tasks)	Pearson Correlation	.254*	.254*	-.254*	1	.372**
		Sig. (2-tailed)	0.023	0.023	0.023		0.001
		N	80	80	80	80	80
	(5) Multi-skilling (Areas)	Pearson Correlation	0.164	0.164	-0.164	.372**	1
		Sig. (2-tailed)	0.147	0.147	0.147	0.001	
		N	80	80	80	80	80

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

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

*Table 22: Correlation between Job Satisfaction, Guest Satisfaction, Psychological Empowerment, Multiskilling by Tasks and Multiskilling by Areas (By Zone Managed Attractions)*

Correlations were computed among Job Satisfaction, Psychological Empowerment and Guest Satisfaction scales on data from 502 guests visiting zone-managed and non-zone-managed attractions and 245 employees working in zone-managed and non-zone-managed attractions.

The results suggest that Job Satisfaction and Guest Satisfaction were strongly correlated for total sample population  $r(745) = -.527, p < .01$ , respondents in the Philippines  $r(238) = 1.000, p < .01$ , in Singapore  $r(505) = .409, p < .01$ , non-zone managed attractions  $r(500) = -.914, p < .01$ , and, zone-managed attractions  $r(243) = 1.000, p < .01$ ; Job Satisfaction and Psychological Empowerment were strongly correlated, for total sample population  $r(745) = .923, p < .01$ , respondents in the Philippines  $r(238) = 1.000, p < .01$ , in Singapore  $r(505) = .916, p < .01$ , non-zone managed attractions  $r(500) = -.961, p < .01$ , and, zone-managed attractions  $r(243) = 1.000, p < .01$ ; and, Guest Satisfaction and Psychological Empowerment were strongly correlated,  $r(745) = -.491, p < .01$ , respondents in the Philippines  $r(238) = 1.000, p < .01$ , in Singapore  $r(505) = .618, p < .01$ , non-zone managed attractions  $r(500) = -.877, p < .01$ , and, zone-managed attractions  $r(243) = 1.000, p < .01$ .

### **11.3 Moderation Analysis**

Moderation analysis was conducted to analyse the moderating effect of psychological empowerment, multiskilling by tasks and multiskilling by areas on guest satisfaction, by total data population, by country and by zone-managed attractions.

By Total Data Population

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.527 <sup>a</sup>	0.278	0.276	0.12212
2	.711 <sup>b</sup>	0.505	0.503	0.10117

a. Predictors: (Constant), Psychological Empowerment, Job Satisfaction

b. Predictors: (Constant), Psychological Empowerment, Job Satisfaction, JSaxPEa

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.274	2	2.137	143.302	.000 <sup>b</sup>
	Residual	11.095	744	0.015		
	Total	15.369	746			
2	Regression	7.765	3	2.588	252.909	.000 <sup>c</sup>
	Residual	7.604	743	0.010		
	Total	15.369	746			

a. Dependent Variable: Guest Satisfaction

b. Predictors: (Constant), Psychological Empowerment, Job Satisfaction

c. Predictors: (Constant), Psychological Empowerment, Job Satisfaction, JSaxPEa

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
		B	Std. Error			
1	(Constant)	4.700	0.053		88.435	0.000
	Job Satisfaction	-0.226	0.036	-0.503**	-6.199	0.000
	Psychological Empowerment	-0.012	0.036	-0.026**	-0.322	0.747
2	(Constant)	-28.817	1.815		-15.875	0.000
	Job Satisfaction	7.088	0.397	15.812	17.848	0.000

Psychological Empowerment	10.373	0.563	23.446	18.423	0.000
JSaxPEa	-2.315	0.125	-39.047	-18.469	0.000

a. Dependent Variable: Guest Satisfaction

*Table 23: Regression Analysis for Guest Satisfaction as Dependent Variable and Psychological Empowerment as Moderator (Total Data Population).*

Variable	Mean	Standard Deviation	Correlation with Guest Satisfaction	Multiple Regression Weights	
				B	$\beta$
Guest Satisfaction	3.8089	0.14354			
Job Satisfaction	3.7591	0.32023	-0.527**	-0.226	-0.503
Psychological Empowerment	3.7125	0.32444	-0.491**	-0.012	-0.026

\*p < .05 \*\*p < .01 \*\*\* p < .001

*Table 24: Summary of Regression Analysis for Guest Satisfaction as Dependent Variable and Psychological Empowerment as Moderator (Total Data Population).*

By Country

Country	R	Model Summary		
		R Square	Adjusted R Square	Std. Error of the Estimate
Philippines 1	1.000 <sup>a</sup>	1.000	1.000	0.00000
Singapore 1	.731 <sup>b</sup>	0.534	0.532	0.06519

a. Predictors: (Constant), Psychological Empowerment

b. Predictors: (Constant), Psychological Empowerment, Job Satisfaction

ANOVA<sup>a</sup>



Country		Sum of Squares	df	Mean Square	F	Sig.
Philippines	1 Regression	1.248	1	1.248		. <sup>b</sup>
	Residual	0.000	238	0.000		
	Total	1.248	239			
Singapore	1 Regression	2.452	2	1.226	288.478	.000 <sup>c</sup>
	Residual	2.142	504	0.004		
	Total	4.594	506			

a. Dependent Variable: Guest Satisfaction

b. Predictors: (Constant), Psychological Empowerment

c. Predictors: (Constant), Psychological Empowerment, Job Satisfaction

Country		Coefficients <sup>a</sup>				t	Sig.
		Unstandardized Coefficients		Standardized Coefficients Beta			
		B	Std. Error				
Philippines	1 (Constant)	2.374	0.000				
	Psychological Empowerment	0.308	0.000	1.000			
Singapore	1 (Constant)	0.454	0.146		3.102	0.002	
	Psychological Empowerment	1.467	0.074	1.505	19.908	0.000	
	Job Satisfaction	-0.483	0.038	-0.969	-12.819	0.000	

a. Dependent Variable: Guest Satisfaction

*Table 25: Regression Analysis for Guest Satisfaction as Dependent Variable and Psychological Empowerment as Moderator (By Country).*

Variable	Mean	Standard Deviation	Correlation with Guest Satisfaction	Multiple Regression Weights	
				B	$\beta$
Philippines					
Guest Satisfaction	3.6448	0.07226			
Job Satisfaction	4.1589	0.07878	Nil	Nil	Nil

Psychological Empowerment	3.1263	0.23466	Nil	0.308	1.000
Singapore					
Guest Satisfaction	3.8866	0.09528			
Job Satisfaction	3.5698	0.19115	0.409**	-0.483	-0.969
Psychological Empowerment	3.5167	0.09779	0.618**	1.467	1.505
*p < .05 **p < .01 *** p < .001					

Table 26: Summary of Regression Analysis for Guest Satisfaction as Dependent Variable and Psychological Empowerment as Moderator (By Country).

By Zone-Managed Attractions

Model Summary					
AttractionZone Recode		R	R Square	Adjusted R Square	Std. Error of the Estimate
Non-Zone Managed	1	.914 <sup>a</sup>	0.836	0.835	0.04915
	2	1.000 <sup>b</sup>	1.000	1.000	0.00000
Zone Managed	1	1.000 <sup>c</sup>	1.000	1.000	0.00000

a. Predictors: (Constant), Psychological Empowerment Aggregate, Job Satisfaction Aggregate

b. Predictors: (Constant), Psychological Empowerment Aggregate, Job Satisfaction Aggregate, JSaxPEa

c. Predictors: (Constant), Psychological Empowerment Aggregate

ANOVA <sup>a</sup>							
AttractionZone Recode			Sum of Squares	df	Mean Square	F	Sig.
Non-Zone Managed	1	Regression	6.131	2	3.065	1268.842	.000 <sup>b</sup>
		Residual	1.206	499	0.002		
		Total	7.336	501			
Non-Zone Managed	2	Regression	7.336	3	2.445	2.455 x 10 <sup>13</sup>	.000 <sup>c</sup>
		Residual	0.000	498	0.000		
		Total	7.336	501			
Zone Managed	1	Regression	6.218	1	6.218		. <sup>d</sup>
		Residual	0.000	243	0.000		

Total	6.218	244		
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a. Dependent Variable: Guest Satisfaction

b. Predictors: (Constant), Psychological Empowerment, Job Satisfaction

c. Predictors: (Constant), Psychological Empowerment, Job Satisfaction, JSaxPEa

d. Predictors: (Constant), Psychological Empowerment

AttractionZone Recode		Coefficients <sup>a</sup>				
		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
		B	Std. Error			
Non-Zone Managed	1 (Constant)	5.167	0.059		87.018	0.000
	Job Satisfaction	-0.390	0.028	-0.925	-14.150	0.000
	Psychological Empowerment	0.007	0.042	0.011	0.171	0.864
	2 (Constant)	-19.751	0.000		-2.754 x 10 <sup>6</sup>	0.000
	Job Satisfaction	5.626	0.000	13.345	3.237 x 10 <sup>6</sup>	0.000
	Psychological Empowerment	7.348	0.000	11.553	3.455 x 10 <sup>6</sup>	0.000
Zone Managed	1 (Constant)	-1.778	0.000	-25.563	-3.479 x 10 <sup>6</sup>	0.000
	Psychological Empowerment	5.639	0.000			
	Psychological Empowerment	-0.441	0.000	-1.000		
	JSaxPEa					

a. Dependent Variable: Guest Satisfaction

Table 27: Regression Analysis for Guest Satisfaction as Dependent Variable and Psychological Empowerment as Moderator (By Zone-Managed Attractions).

Variable	Mean	Standard Deviation	Correlation with Guest Satisfaction	Multiple Regression Weights	
				B	β
Non-Zone Managed					
Guest Satisfaction	3.7745	0.12101			
Job Satisfaction	3.6360	0.28704	-0.914**	-0.390	-0.925
Psychological Empowerment	3.5763	0.19028	-0.877**	0.007	0.011
Zone Managed					

Guest Satisfaction	3.8795	0.15964			
Job Satisfaction	4.0112	0.22221	Nil	Nil	Nil
Psychological Empowerment	3.9916	0.36212	Nil	-0.441	-1.000
*p < .05 **p < .01 *** p < .001					

*Table 28: Summary of Regression Analysis for Guest Satisfaction as Dependent Variable and Psychological Empowerment as Moderator (By Zone-Managed Attractions).*

Multiple linear regression was carried out to investigate the relationship between Psychological Empowerment and Guest Satisfaction. There was a significant relationship between psychological empowerment and guest satisfaction for the total sample population ( $p < 0.001$ ), respondents in Singapore ( $p < 0.001$ ), and, non-zone managed attractions ( $p < 0.001$ ). There was a .012 increase in guest satisfaction for every rating point increase in psychological empowerment (total sample population); 1.467 rating point increase in guest satisfaction for every rating point increase in psychological empowerment (Singapore); and, .007 rating point increase in guest satisfaction for every rating point increase in psychological empowerment (non-zone managed attractions).

The  $R^2$  value was 0.278 so 27.8% (total sample population), 0.534 or 53.4% (Singapore), and, 0.836 or 83.6% of the variation in guest satisfaction can be explained by the model containing psychological empowerment. The scatterplot of standardized predicted values versus standardised residuals, showed that the data met the assumptions of homogeneity of variance and linearity and the residuals were approximately normally distributed.

By Total Sample Population

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.544 <sup>a</sup>	0.296	0.290	0.12208
2	.552 <sup>b</sup>	0.305	0.296	0.12159

a. Predictors: (Constant), Multiskilling (Tasks) Recode, Job Satisfaction

b. Predictors: (Constant), Multiskilling (Tasks) Recode, Job Satisfaction, JSaxMSTasksR

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.494	2	0.747	50.128	.000 <sup>b</sup>
	Residual	3.547	238	0.015		
	Total	5.041	240			
2	Regression	1.538	3	0.513	34.668	.000 <sup>c</sup>
	Residual	3.504	237	0.015		
	Total	5.041	240			

a. Dependent Variable: Guest Satisfaction

b. Predictors: (Constant), Multiskilling (Tasks), Job Satisfaction

c. Predictors: (Constant), Multiskilling (Tasks), Job Satisfaction, JSaxMSTasksR

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
		B	Std. Error			
1	(Constant)	4.743	0.095		50.057	0.000
	Job Satisfaction	-0.239	0.025	-0.533	-9.661	0.000
	Multiskilling (Tasks)	-0.020	0.021	-0.052	-0.948	0.344
2	(Constant)	3.821	0.547		6.984	0.000
	Job Satisfaction	0.014	0.150	0.031	0.092	0.926
	Multiskilling (Tasks)	0.470	0.287	1.232	1.639	0.103
	JSaxMSTasksR	-0.134	0.078	-1.491	-1.713	0.088

a. Dependent Variable: Guest Satisfaction

Table 29: Regression Analysis for Guest Satisfaction as Dependent Variable and Multiskilling by Tasks as Moderator (Total Data Population).

Variable	Mean	Standard Deviation	Correlation with Guest Satisfaction	Multiple Regression Weights	
				B	$\beta$
Guest Satisfaction	3.8080	0.14493			
Job Satisfaction	3.7648	0.32353	-0.542**	-0.239	-0.533
Multiskilling (Tasks)	1.8257	0.38013	-0.143*	-0.020	-0.052

\*p < .05 \*\*p < .01 \*\*\* p < .001

Table 30: Summary of Regression Analysis for Guest Satisfaction as Dependent Variable and Multiskilling by Tasks as Moderator (Total Data Population).

By Country

Model Summary					
Country		R	R Square	Adjusted R Square	Std. Error of the Estimate
Philippines	1	1.000 <sup>a</sup>	1.000	1.000	0.00000
	2	1.000 <sup>b</sup>	1.000	1.000	0.00000
Singapore	1	.394 <sup>a</sup>	0.155	0.144	0.08759
	2	.394 <sup>b</sup>	0.155	0.139	0.08784

a. Predictors: (Constant), Multiskilling (Tasks), Job Satisfaction

b. Predictors: (Constant), Multiskilling (Tasks), Job Satisfaction, JSaxMSTasksR

ANOVA <sup>a</sup>						
Country		Sum of Squares	df	Mean Square	F	Sig.

Philippines	1	Regression	0.416	2	0.208		. <sup>b</sup>
		Residual	0.000	77	0.000		
		Total	0.416	79			
	2	Regression	0.416	3	0.139		. <sup>c</sup>
		Residual	0.000	76	0.000		
		Total	0.416	79			
Singapore	1	Regression	0.222	2	0.111	14.484	.000 <sup>b</sup>
		Residual	1.212	158	0.008		
		Total	1.434	160			
	2	Regression	0.223	3	0.074	9.635	.000 <sup>c</sup>
		Residual	1.211	157	0.008		
		Total	1.434	160			

a. Dependent Variable: Guest Satisfaction

b. Predictors: (Constant), Multiskilling (Tasks), Job Satisfaction

c. Predictors: (Constant), Multiskilling (Tasks), Job Satisfaction, JSaxMSTasksR

Country			Coefficients <sup>a</sup>			t	Sig.
			Unstandardized Coefficients		Standardized Coefficients		
			B	Std. Error	Beta		
Philippines	1	(Constant)	-0.170	0.000			
		Job Satisfaction	0.917	0.000	1.000		
		Multiskilling (Tasks)	2.067E-18	0.000	0.000		
	2	(Constant)	-0.170	0.000			
		Job Satisfaction	0.917	0.000	1.000		
		Multiskilling (Tasks)	-2.191E-13	0.000	0.000		
		JSaxMSTasksR	5.286E-14	0.000	0.000		
Singapore	1	(Constant)	3.189	0.131		24.254	0.000
		Job Satisfaction	0.191	0.036	0.392	5.361	0.000
		Multiskilling (Tasks)	0.010	0.016	0.044	0.607	0.545
	2	(Constant)	3.012	0.572		5.262	0.000
		Job Satisfaction	0.241	0.160	0.494	1.506	0.134

	Multiskilling (Tasks)	0.109	0.312	0.485	0.349	0.728
	JSaxMSTasksR	-0.028	0.087	-0.450	-0.317	0.752

a. Dependent Variable: Guest Satisfaction

Table 31: Regression Analysis for Guest Satisfaction as Dependent Variable and Multiskilling by Tasks as Moderator (By Country).

Variable	Mean	Standard Deviation	Correlation with Guest Satisfaction	Multiple Regression Weights	
				B	$\beta$
Philippines					
Guest Satisfaction	3.6448	0.07256			
Job Satisfaction	4.1589	0.07911	Nil	0.917	1.000
Multiskilling (Tasks)	1.9375	0.24359	0.052	$2.067 \times 10^{-17}$	0.000
Singapore					
Guest Satisfaction	3.8891	0.09468			
Job Satisfaction	3.5690	0.19416	0.391**	0.191	0.392
Multiskilling (Tasks)	1.7702	0.42203	0.035	0.010	0.044
*p < .05 **p < .01 *** p < .001					

Table 32: Summary of Regression Analysis for Guest Satisfaction as Dependent Variable and Multiskilling by Tasks as Moderator (By Country).

By Zone-Managed Attractions

Model Summary				
AttractionZone Recode	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.920 <sup>a</sup>	0.846	0.844	0.04888



Non-Zone Managed	2	.922 <sup>b</sup>	0.849	0.847	0.04849
Zone Managed	1	1.000 <sup>a</sup>	1.000	1.000	0.00000
	2	1.000 <sup>b</sup>	1.000	1.000	0.00000

a. Predictors: (Constant), Multiskilling (Tasks), Job Satisfaction

b. Predictors: (Constant), Multiskilling (Tasks), Job Satisfaction, JSaxMSTasksR

ANOVA<sup>a</sup>

AttractionZone Recode		Sum of Squares	df	Mean Square	F	Sig.	
Non-Zone Managed	1	Regression	2.075	2	1.038	434.376	.000 <sup>b</sup>
		Residual	0.377	158	0.002		
		Total	2.453	160			
	2	Regression	2.084	3	0.695	295.389	.000 <sup>c</sup>
		Residual	0.369	157	0.002		
		Total	2.453	160			
Zone Managed	1	Regression	2.031	2	1.016		. <sup>b</sup>
		Residual	0.000	77	0.000		
		Total	2.031	79			
	2	Regression	2.031	3	0.677		. <sup>c</sup>
		Residual	0.000	76	0.000		
		Total	2.031	79			

a. Dependent Variable: Guest Satisfaction

b. Predictors: (Constant), Multiskilling (Tasks), Job Satisfaction

c. Predictors: (Constant), Multiskilling (Tasks), Job Satisfaction, JSaxMSTasksR

Coefficients<sup>a</sup>

AttractionZone Recode		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
		B	Std. Error	Beta			
Non-Zone Managed	1	(Constant)	5.201	0.050		104.682	0.000
		Job Satisfaction	-0.389	0.013	-0.917	-29.144	0.000
		Multiskilling (Tasks)	-0.006	0.010	-0.020	-0.633	0.528
	2	(Constant)	4.689	0.277		16.939	0.000
		Job Satisfaction	-0.245	0.077	-0.579	-3.170	0.002

	Multiskilling (Tasks)	0.266	0.146	0.851	1.831	0.069
	JSaxMSTasksR	-0.076	0.041	-0.975	-1.878	0.062
Zone Managed	1 (Constant)	6.761	0.000		4.867 x 10 <sup>7</sup>	0.000
	Job Satisfaction	-0.718	0.000	-1.000	-2.014 x 10 <sup>7</sup>	0.000
	Multiskilling (Tasks)	1.284E-16	0.000	0.000	0.000	1.000
	2 (Constant)	6.761	0.000		7.087 x 10 <sup>7</sup>	0.000
	Job Satisfaction	-0.718	0.000	-1.000	-2.923 x 10 <sup>7</sup>	0.000
	Multiskilling (Tasks)	5.217E-13	0.000	0.000	0.000	1.000
	JSaxMSTasksR	-1.341E-13	0.000	0.000	0.000	1.000

a. Dependent Variable: Guest Satisfaction

*Table 33: Regression Analysis for Guest Satisfaction as Dependent Variable and Multiskilling by Tasks as Moderator (By Zone-Managed Attractions).*

Variable	Mean	Standard Deviation	Correlation with Guest Satisfaction	Multiple Regression Weights	
				B	$\beta$
Non-Zone Managed					
Guest Satisfaction	3.7741	0.12381			
Job Satisfaction	3.6402	0.29208	-0.920**	-0.389	-0.917
Multiskilling (Tasks)	1.8075	0.39553	-0.137*	-0.006	-0.020
Zone Managed					
Guest Satisfaction	3.8763	0.16035			
Job Satisfaction	4.0157	0.22320	-1.000**	-0.718	-1.000
Multiskilling (Tasks)	1.8625	0.34655	-0.254*	5.217E-13	0.000
*p < .05 **p < .01 *** p < .001					

*Table 34: Summary of Regression Analysis for Guest Satisfaction as Dependent Variable and Multiskilling by Tasks as Moderator (By Zone-Managed Attractions).*

Multiple linear regression was carried out to investigate the relationship between Multiskilling by Tasks and Guest Satisfaction. There was a significant relationship between multiskilling by tasks and guest satisfaction for the total sample population ( $p < 0.05$ ), non-zone managed attractions ( $p < 0.05$ ), and, non-zone managed attractions ( $p < .05$ ). There was a -.02 increase in guest satisfaction for every increase in multiskilling by tasks (total sample population); .007 rating point increase in guest satisfaction for every rating point increase in psychological empowerment (non-zone managed attractions).

The  $R^2$  value was 0.278 so 27.8% (total sample population), 1.000 or 100% (Philippines), and, .836 or 83.6% of the variation in guest satisfaction can be explained by the model containing psychological empowerment. The scatterplot of standardised predicted values versus standardised residuals, showed that the data met the assumptions of homogeneity of variance and linearity and the residuals were approximately normally distributed.

By Total Data Population

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.541 <sup>a</sup>	0.293	0.287	0.12204
2	.542 <sup>b</sup>	0.294	0.285	0.12219

a. Predictors: (Constant), Multiskilling (Areas), Job Satisfaction

b. Predictors: (Constant), Multiskilling (Areas), Job Satisfaction, JSaxMSAreaAR

		ANOVA <sup>a</sup>				
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.472	2	0.736	49.422	.000 <sup>b</sup>
	Residual	3.560	239	0.015		
	Total	5.032	241			
2	Regression	1.479	3	0.493	33.021	.000 <sup>c</sup>
	Residual	3.553	238	0.015		
	Total	5.032	241			

a. Dependent Variable: Guest Satisfaction

b. Predictors: (Constant), Multiskilling (Areas), Job Satisfaction

c. Predictors: (Constant), Multiskilling (Areas), Job Satisfaction, JSaxMSAreaAR

		Coefficients <sup>a</sup>				
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.736	0.095		49.893	0.000
	Job Satisfaction	-0.241	0.024	-0.537	-9.845	0.000
	Multiskilling (Areas)	-0.013	0.017	-0.042	-0.770	0.442
2	(Constant)	4.492	0.377		11.912	0.000
	Job Satisfaction	-0.176	0.101	-0.391	-1.746	0.082
	Multiskilling (Areas)	0.127	0.210	0.412	0.605	0.546
	JSaxMSAreaAR	-0.037	0.056	-0.487	-0.668	0.505

a. Dependent Variable: Guest Satisfaction

Table 35: Regression Analysis for Guest Satisfaction as Dependent Variable and Multiskilling by Areas as Moderator (Total Data Population).

Variable	Mean	Standard Deviation	Correlation with Guest Satisfaction	Multiple Regression Weights	
				B	$\beta$
Guest Satisfaction	3.8076	0.14450			

Job Satisfaction	3.7652	0.32215	-0.539**	-0.241	-0.537
Multiskilling (Areas)	1.6777	0.46833	-0.075	-0.013	-0.042
*p < .05 **p < .01 *** p < .001					

Table 36: Summary of Regression Analysis for Guest Satisfaction as Dependent Variable and Multiskilling by Areas as Moderator (Total Data Population).

By Country

Model Summary					
Country		R	R Square	Adjusted R Square	Std. Error of the Estimate
Philippines	1	1.000 <sup>a</sup>	1.000	1.000	0.00000
	2	1.000 <sup>b</sup>	1.000	1.000	0.00000
Singapore	1	.404 <sup>a</sup>	0.163	0.152	0.08732
	2	.406 <sup>b</sup>	0.165	0.149	0.08748

a. Predictors: (Constant), Multiskilling (Areas), Job Satisfaction

b. Predictors: (Constant), Multiskilling (Areas), Job Satisfaction, JSaxMSAreaAR

ANOVA <sup>a</sup>							
Country			Sum of Squares	df	Mean Square	F	Sig.
Philippines	1	Regression	0.416	2	0.208		<sup>b</sup>
		Residual	0.000	77	0.000		
		Total	0.416	79			
	2	Regression	0.416	3	0.139		<sup>c</sup>
		Residual	0.000	76	0.000		
		Total	0.416	79			
Singapore	1	Regression	0.236	2	0.118	15.469	.000 <sup>b</sup>
		Residual	1.212	159	0.008		
		Total	1.448	161			
	2	Regression	0.239	3	0.080	10.418	.000 <sup>c</sup>
		Residual	1.209	158	0.008		
		Total	1.448	161			

Total	1.448	161		
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a. Dependent Variable: Guest Satisfaction Aggregate

b. Predictors: (Constant), Multiskilling (Areas), Job Satisfaction

c. Predictors: (Constant), Multiskilling (Areas), Job Satisfaction, JSaxMSAreaAR

Country		Coefficients <sup>a</sup>				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
Philippines	1 (Constant)	-0.170	0.000			
	Job Satisfaction	0.917	0.000	1.000		
	Multiskilling (Areas)	1.881E-17	0.000	0.000		
	2 (Constant)	-0.170	0.000			
	Job Satisfaction	0.917	0.000	1.000		
	Multiskilling (Areas)	5.301E-14	0.000	0.000		
	JSaxMSAreaAR	-1.275E-14	0.000	0.000		
Singapore	1 (Constant)	3.149	0.133		23.619	0.000
	Job Satisfaction	0.198	0.036	0.404	5.524	0.000
	Multiskilling (Areas)	0.019	0.014	0.096	1.309	0.193
	2 (Constant)	2.845	0.483		5.891	0.000
	Job Satisfaction	0.283	0.134	0.576	2.109	0.037
	Multiskilling (Areas)	0.199	0.277	1.014	0.721	0.472
	JSaxMSAreaAR	-0.050	0.077	-0.915	-0.654	0.514

a. Dependent Variable: Guest Satisfaction

Table 37: Regression Analysis for Guest Satisfaction as Dependent Variable and Multiskilling by Areas as Moderator (By Country).

Variable	Mean	Standard Deviation	Correlation with Guest Satisfaction	Multiple Regression Weights	
				B	$\beta$

Philippines					
Guest Satisfaction	3.6448	0.07256			
Job Satisfaction	4.1589	0.07911	Nil	0.917	1.000
Multiskilling (Areas)	1.7625	0.42824	0.029	???	0.000
Singapore					
Guest Satisfaction	3.8880	0.09485			
Job Satisfaction	3.5708	0.19300	0.392**	0.198	0.404
Multiskilling (Areas)	1.6358	0.48270	0.047	0.019	0.096
*p < .05 **p < .01 *** p < .001					

Table 38: Summary of Regression Analysis for Guest Satisfaction as Dependent Variable and Multiskilling by Areas as Moderator (By Country).

#### By Zone-Managed Attractions

Model Summary					
AttractionZone Recode		R	R Square	Adjusted R Square	Std. Error of the Estimate
Non-Zone Managed	1	.918 <sup>a</sup>	0.843	0.841	0.04911
	2	.919 <sup>b</sup>	0.844	0.841	0.04904
Zone Managed	1	1.000 <sup>a</sup>	1.000	1.000	0.00000
	2	1.000 <sup>b</sup>	1.000	1.000	0.00000

a. Predictors: (Constant), Multiskilling (Areas), Job Satisfaction

b. Predictors: (Constant), Multiskilling (Areas), Job Satisfaction, JSaxMSAreaAR

ANOVA <sup>a</sup>						
AttractionZone Recode		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.054	2	1.027	425.946	.000 <sup>b</sup>

Non-Zone Managed	Residual	0.383	159	0.002		
	Total	2.438	161			
	2 Regression	2.058	3	0.686	285.257	.000 <sup>c</sup>
	Residual	0.380	158	0.002		
	Total	2.438	161			
Zone Managed	1 Regression	2.031	2	1.016	2.040 x 10 <sup>16</sup>	.000 <sup>b</sup>
	Residual	0.000	77	0.000		
	Total	2.031	79			
	2 Regression	2.031	3	0.677	1.342 x 10 <sup>16</sup>	.000 <sup>c</sup>
	Residual	0.000	76	0.000		
	Total	2.031	79			

a. Dependent Variable: Guest Satisfaction

b. Predictors: (Constant), Multiskilling (Areas), Job Satisfaction

c. Predictors: (Constant), Multiskilling (Areas), Job Satisfaction, JSaxMSAreaAR

AttractionZone Recode		Coefficients <sup>a</sup>			t	Sig.
		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta		
Non-Zone Managed	1 (Constant)	5.205	0.050		103.261	0.000
	Job Satisfaction	-0.388	0.013	-0.917	-29.146	0.000
	Multiskilling (Areas)	-0.010	0.008	-0.038	-1.198	0.233
	2 (Constant)	4.975	0.197		25.195	0.000
	Job Satisfaction	-0.325	0.054	-0.767	-6.006	0.000
	Multiskilling (Areas)	0.123	0.110	0.472	1.113	0.267
	JSaxMSAreaAR	-0.036	0.030	-0.534	-1.205	0.230
Zone Managed	1 (Constant)	6.761	0.000		4.722 x 10 <sup>8</sup>	0.000
	Job Satisfaction	-0.718	0.000	-1.000	-1.993 x 10 <sup>8</sup>	0.000
	Multiskilling (Areas)	-1.544E-16	0.000	0.000	0.000	1.000
	2 (Constant)	6.761	0.000		1.201 x 10 <sup>7</sup>	0.000
	Job Satisfaction	-0.718	0.000	-1.000	-5.070 x 10 <sup>7</sup>	0.000
	Multiskilling (Areas)	-5.190E-14	0.000	0.000	0.000	1.000



JSaxMSAreaAR	1.299E-14	0.000	0.000	0.000	1.000
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a. Dependent Variable: Guest Satisfaction

Table 39: Regression Analysis for Guest Satisfaction as Dependent Variable and Multiskilling by Areas as Moderator (By Zone Managed Attractions).

Variable	Mean	Standard Deviation	Correlation with Guest Satisfaction	Multiple Regression Weights	
				B	$\beta$
Non-Zone Managed					
Guest Satisfaction	3.7737	0.12305			
Job Satisfaction	3.6415	0.29041	-0.917**	-0.388	-0.917
Multiskilling (Areas)	1.6667	0.47287	-0.049	-0.010	-0.038
Zone Managed					
Guest Satisfaction	3.8763	0.16035			
Job Satisfaction	4.0157	0.22320	-1.000**	-0.718	-1.000
Multiskilling (Areas)	1.7000	0.46115	-0.164	-5.190E-14	0.000
*p < .05 **p < .01 *** p < .001					

Table 40: Summary of Regression Analysis for Guest Satisfaction as Dependent Variable and Multiskilling by Areas as Moderator (By Zone Managed Attractions).

Multiple linear regression was carried out to investigate the relationship between Multiskilling by Areas and Guest Satisfaction. There was a no significant relationship between multiskilling by areas and guest satisfaction for the total sample population, respondents in the Philippines and Singapore, and, zone and non-zone managed attractions ( $p < 0.001$ ).

## 11.4 Prediction Analysis

Prediction analysis was conducted to analyse the predicting effect of job satisfaction on guest satisfaction, psychological empowerment on job satisfaction, multiskilling by tasks and multiskilling by areas on job satisfaction, by total data population, by country and by zone-managed attractions.

By Total Data Population

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.527 <sup>a</sup>	0.278	0.277	0.12205

a. Predictors: (Constant), Job Satisfaction

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.273	1	4.273	286.846	.000 <sup>b</sup>
	Residual	11.097	745	0.015		
	Total	15.369	746			

a. Dependent Variable: Guest Satisfaction

b. Predictors: (Constant), Job Satisfaction

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
		B	Std. Error			
1	(Constant)	4.697	0.053		89.229	0.000
	Job Satisfaction	-0.236	0.014	-0.527	-16.937	0.000

a. Dependent Variable: Guest Satisfaction

Table 41: Regression Analysis for Guest Satisfaction as Dependent Variable and Job Satisfaction as Predictor (Total Data Population).

Variable	Mean	Standard Deviation	Correlation with Guest Satisfaction	Multiple Regression Weights	
				B	$\beta$
Guest Satisfaction	3.8089	0.14354			
Job Satisfaction	3.7591	0.32023	-0.527**	-0.236	-0.527

\*p < .05 \*\*p < .01 \*\*\* p < .001

Table 42: Summary of Regression Analysis for Guest Satisfaction as Dependent Variable and Job Satisfaction as Predictor (Total Data Population).

By Country

Model Summary				
Country	R	R Square	Adjusted R Square	Std. Error of the Estimate
Philippines 1	1.000 <sup>a</sup>	1.000	1.000	0.00000
Singapore 1	.409 <sup>a</sup>	0.167	0.165	0.08705

a. Predictors: (Constant), Job Satisfaction

ANOVA <sup>a</sup>						
Country		Sum of Squares	df	Mean Square	F	Sig.
Philippines 1	Regression	1.248	1	1.248		. <sup>b</sup>
	Residual	0.000	238	0.000		
	Total	1.248	239			
Singapore 1	Regression	0.768	1	0.768	101.320	.000 <sup>b</sup>
	Residual	3.826	505	0.008		
	Total	4.594	506			

a. Dependent Variable: Guest Satisfaction

b. Predictors: (Constant), Job Satisfaction

Country		Coefficients <sup>a</sup>		Standardized Coefficients Beta	t	Sig.
		Unstandardized Coefficients				
		B	Std. Error			
Philippines 1	(Constant)	-0.170	0.000			
	Job Satisfaction	0.917	0.000	1.000		
Singapore 1	(Constant)	3.159	0.072		43.653	0.000
	Job Satisfaction	0.204	0.020	0.409	10.066	0.000

a. Dependent Variable: Guest Satisfaction

Table 43: Regression Analysis for Guest Satisfaction as Dependent Variable and Job Satisfaction as Predictor (By Country).

Variable	Mean	Standard Deviation	Correlation with Guest Satisfaction	Multiple Regression Weights	
				B	$\beta$
Philippines					
Guest Satisfaction	3.6448	0.07226			
Job Satisfaction	4.1589	0.07878	Nil	0.917	1.000
Singapore					
Guest Satisfaction	3.8866	0.09528			
Job Satisfaction	3.5698	0.19115	0.409**	0.204	0.409

\*p < .05 \*\*p < .01 \*\*\* p < .001

Table 44: Summary of Regression Analysis for Guest Satisfaction as Dependent Variable and Job Satisfaction as Predictor (By Country).

By Zone Managed Attractions

**Model Summary**

AttractionZone Recode		R	R Square	Adjusted R Square	Std. Error of the Estimate
Non-Zone Managed	1	.914 <sup>a</sup>	0.836	0.835	0.04910
Zone Managed	1	1.000 <sup>a</sup>	1.000	1.000	0.00000

a. Predictors: (Constant), Job Satisfaction

**ANOVA<sup>a</sup>**

AttractionZone Recode			Sum of Squares	df	Mean Square	F	Sig.
Non-Zone Managed	1	Regression	6.131	1	6.131	2542.591	.000 <sup>b</sup>
		Residual	1.206	500	0.002		
		Total	7.336	501			
Zone Managed	1	Regression	6.218	1	6.218		. <sup>b</sup>
		Residual	0.000	243	0.000		
		Total	6.218	244			

a. Dependent Variable: Guest Satisfaction

b. Predictors: (Constant), Job Satisfaction

**Coefficients<sup>a</sup>**

AttractionZone Recode		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
		B	Std. Error			
Non-Zone Managed	1 (Constant)	5.176	0.028		185.673	0.000
	Job Satisfaction	-0.385	0.008	-0.914	-50.424	0.000
Zone Managed	1 (Constant)	6.761	0.000			
	Job Satisfaction	-0.718	0.000	-1.000		

a. Dependent Variable: Guest Satisfaction

*Table 45: Regression Analysis for Guest Satisfaction as Dependent Variable and Job Satisfaction as Predictor (By Zone Managed Attractions).*

Variable	Mean	Standard Deviation	Correlation with Guest Satisfaction	Multiple Regression Weights	
				B	$\beta$
Non-Zone Managed					
Guest Satisfaction	3.7745	0.12101			
Job Satisfaction	3.6360	0.28704	-0.914**	-0.385	-0.914
Zone Managed					
Guest Satisfaction	3.8795	0.15964			
Job Satisfaction	4.0112	0.22221	Nil	-0.718	-1.000
*p < .05 **p < .01 *** p < .001					

*Table 46: Summary of Regression Analysis for Guest Satisfaction as Dependent Variable and Job Satisfaction as Predictor (By Zone Managed Attractions).*

Multiple linear regression was carried out to investigate the relationship between Job Satisfaction and Guest Satisfaction. There was a significant relationship between job satisfaction and guest satisfaction for the total sample population ( $p < 0.001$ ), respondents in Singapore ( $p < 0.001$ ), and, non-zone managed attractions ( $p < 0.001$ ). There was a -.236 increase in guest satisfaction for every rating point increase in job satisfaction (total sample population); .204 rating point increase in guest satisfaction for every rating point increase in job satisfaction (Singapore); and, -.385 rating point increase in guest satisfaction for every rating point increase in job satisfaction (non-zone managed attractions).

The  $R^2$  value was 0.278 so 27.8% (total sample population), .167 or 16.7% (Singapore), and, .836 or 83.6% (non-zone managed attractions) of the variation in guest satisfaction can be explained by the model containing job satisfaction. The scatterplot of standardised predicted values versus standardised residuals, showed

that the data met the assumptions of homogeneity of variance and linearity and the residuals were approximately normally distributed.

By Total Data Population

<b>Model Summary</b>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.789 <sup>a</sup>	0.622	0.620	0.41193

a. Predictors: (Constant), Psychological Empowerment

<b>ANOVA<sup>a</sup></b>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	67.835	1	67.835	399.771	.000 <sup>b</sup>
	Residual	41.234	243	0.170		
	Total	109.069	244			

a. Dependent Variable: Job Satisfaction

b. Predictors: (Constant), Psychological Empowerment

<b>Coefficients<sup>a</sup></b>						
Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
		B	Std. Error			
1	(Constant)	0.598	0.160		3.728	0.000
	Psychological Empowerment	0.851	0.043	0.789	19.994	0.000

a. Dependent Variable: Job Satisfaction

*Table 47: Regression Analysis for Job Satisfaction as Dependent Variable and Psychological Empowerment as Predictor (Total Data Population).*

Variable	Mean	Standard Deviation	Correlation with Guest Satisfaction	Multiple Regression Weights	
				B	$\beta$
Job Satisfaction	3.7609	0.66858			
Psychological Empowerment	3.7158	0.61941	0.789**	0.851	0.789

\*p < .05 \*\*p < .01 \*\*\* p < .001

Table 48: Summary of Regression Analysis for Job Satisfaction as Dependent Variable and Psychological Empowerment as Predictor (Total Data Population).

By Country

Model Summary				
Country	R	R Square	Adjusted R Square	Std. Error of the Estimate
Philippines 1	.772 <sup>a</sup>	0.595	0.590	0.47195
Singapore 1	.709 <sup>a</sup>	0.503	0.500	0.37972

a. Predictors: (Constant), Psychological Empowerment

ANOVA <sup>a</sup>						
Country		Sum of Squares	df	Mean Square	F	Sig.
Philippines 1	Regression	25.559	1	25.559	114.752	.000 <sup>b</sup>
	Residual	17.373	78	0.223		
	Total	42.933	79			
Singapore 1	Regression	23.819	1	23.819	165.198	.000 <sup>b</sup>
	Residual	23.502	163	0.144		
	Total	47.322	164			

a. Dependent Variable: Job Satisfaction

b. Predictors: (Constant), Psychological Empowerment



Country		Coefficients <sup>a</sup>				
		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
		B	Std. Error			
Philippines	1 (Constant)	0.793	0.319		2.490	0.015
	Psychological Empowerment	0.816	0.076	0.772	10.712	0.000
Singapore	1 (Constant)	0.675	0.227		2.971	0.003
	Psychological Empowerment	0.823	0.064	0.709	12.853	0.000

a. Dependent Variable: Job Satisfaction

*Table 49: Regression Analysis for Job Satisfaction as Dependent Variable and Psychological Empowerment as Predictor (By Country).*

Variable	Mean	Standard Deviation	Correlation with Guest Satisfaction	Multiple Regression Weights	
				B	$\beta$
Philippines					
Job Satisfaction	4.1589	0.73719			
Psychological Empowerment	4.1263	0.69733	0.772**	0.816	0.772
Singapore					
Job Satisfaction	3.5679	0.53716			
Psychological Empowerment	3.5168	0.46323	0.709**	0.823	0.709

\*p < .05 \*\*p < .01 \*\*\* p < .001

*Table 50: Summary of Regression Analysis for Job Satisfaction as Dependent Variable and Psychological Empowerment as Predictor (By Country).*

By Zone Managed Attractions

### Model Summary

AttractionZone Recode		R	R Square	Adjusted R Square	Std. Error of the Estimate
Non-Zone Managed	1	.810 <sup>a</sup>	0.656	0.654	0.40130
Zone Managed	1	.666 <sup>a</sup>	0.444	0.437	0.42212

a. Predictors: (Constant), Psychological Empowerment

			ANOVA <sup>a</sup>				
AttractionZone Recode			Sum of Squares	df	Mean Square	F	Sig.
Non-Zone Managed	1	Regression	50.121	1	50.121	311.235	.000 <sup>b</sup>
		Residual	26.249	163	0.161		
		Total	76.370	164			
Zone Managed	1	Regression	11.089	1	11.089	62.234	.000 <sup>b</sup>
		Residual	13.899	78	0.178		
		Total	24.988	79			

a. Dependent Variable: Job Satisfaction

b. Predictors: (Constant), Psychological Empowerment

			Coefficients <sup>a</sup>				
AttractionZone Recode			Unstandardized Coefficients		Standardized Coefficients	t	Sig.
			B	Std. Error	Beta		
Non-Zone Managed	1	(Constant)	0.352	0.189		1.866	0.064
		Psychological Empowerment	0.918	0.052	0.810	17.642	0.000
Zone Managed	1	(Constant)	1.332	0.343		3.877	0.000
		Psychological Empowerment	0.671	0.085	0.666	7.889	0.000

a. Dependent Variable: Job Satisfaction

*Table 51: Regression Analysis for Job Satisfaction as Dependent Variable and Psychological Empowerment as Predictor (By Zone Managed Attractions).*

Variable	Mean	Standard Deviation	Correlation with Guest Satisfaction	Multiple Regression Weights
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				B	$\beta$
Non-Zone Managed					
Job Satisfaction	3.6374	0.68240			
Psychological Empowerment	3.5785	0.60221	0.810**	0.918	0.810
Zone Managed					
Job Satisfaction	4.0157	0.56241			
Psychological Empowerment	3.9990	0.55823	0.666**	0.671	0.666
*p < .05 **p < .01 *** p < .001					

*Table 52: Summary of Regression Analysis for Job Satisfaction as Dependent Variable and Psychological Empowerment as Predictor (By Zone Managed Attractions).*

Multiple linear regression was carried out to investigate the relationship between Psychological Empowerment and Job Satisfaction. There was a significant relationship between psychological empowerment and job satisfaction for the total sample population ( $p < 0.001$ ), respondents in the Philippines ( $p < 0.001$ ), Singapore ( $p < 0.001$ ), non-zone managed attractions ( $p < 0.001$ ), and zone managed attractions ( $p < 0.001$ ). There was a .851 increase in job satisfaction for every rating point increase in psychological empowerment (total sample population); .816 rating point increase in job satisfaction for every rating point increase in psychological empowerment (Philippines); .823 rating point increase in job satisfaction for every rating point increase in psychological empowerment (Singapore); .918 rating point increase in job satisfaction for every rating point increase in psychological empowerment (non-zone managed attractions); and, .671 rating point increase in job satisfaction for every rating point increase in psychological empowerment (zone managed attractions);.

The R<sup>2</sup> value was 0.622 so 62.2% (total sample population), .595 or 59.5% (Philippines), .503 or 50.3% (Singapore), .656 or 65.6% (non-zone managed attractions), and, .444 or 44.4% (zone-managed attractions) of the variation in job satisfaction can be explained by the model containing psychological empowerment. The scatterplot of standardised predicted values versus standardised residuals, showed that the data met the assumptions of homogeneity of variance and linearity and the residuals were approximately normally distributed.

By Total Data Population

#### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.183 <sup>a</sup>	0.033	0.029	0.66030

a. Predictors: (Constant), Multiskilling (Tasks)

#### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.607	1	3.607	8.273	.004 <sup>b</sup>
	Residual	104.204	239	0.436		
	Total	107.812	240			

a. Dependent Variable: Job Satisfaction

b. Predictors: (Constant), Multiskilling (Tasks)

#### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
		B	Std. Error			
1	(Constant)	3.174	0.209		15.178	0.000

Multiskilling (Tasks)	0.323	0.112	0.183	2.876	0.004
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a. Dependent Variable: Job Satisfaction

Table 53: Regression Analysis for Job Satisfaction as Dependent Variable and Multiskilling by Tasks as Predictor (Total Data Population).

Variable	Mean	Standard Deviation	Correlation with Guest Satisfaction	Multiple Regression Weights	
				B	$\beta$
Job Satisfaction	3.7623	0.67023			
Multiskilling by Tasks	1.8257	0.38013	0.183*	0.323	0.183

\*p < .05 \*\*p < .01 \*\*\* p < .001

Table 54: Summary of Regression Analysis for Job Satisfaction as Dependent Variable and Multiskilling by Tasks as Predictor (Total Data Population).

By Country

Model Summary				
Country	R	R Square	Adjusted R Square	Std. Error of the Estimate
Philippines 1	.148 <sup>a</sup>	0.022	0.009	0.73369
Singapore 1	.220 <sup>a</sup>	0.049	0.043	0.52492

a. Predictors: (Constant), Multiskilling (Tasks)

ANOVA <sup>a</sup>						
Country		Sum of Squares	df	Mean Square	F	Sig.
Philippines 1	Regression	0.946	1	0.946	1.757	.189 <sup>b</sup>
	Residual	41.987	78	0.538		
	Total	42.933	79			

Singapore	1	Regression	2.236	1	2.236	8.115	.005 <sup>b</sup>
		Residual	43.811	159	0.276		
		Total	46.047	160			

a. Dependent Variable: Job Satisfaction

b. Predictors: (Constant), Multiskilling (Tasks)

Country	1		Coefficients <sup>a</sup>				
			Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
			B	Std. Error			
Philippines	1	(Constant)	5.029	0.662		7.601	0.000
		Multiskilling (Tasks)	-0.449	0.339	-0.148	-1.326	0.189
Singapore	1	(Constant)	3.069	0.179		17.156	0.000
		Multiskilling (Tasks)	0.280	0.098	0.220	2.849	0.005

a. Dependent Variable: Job Satisfaction Score

Table 55: Regression Analysis for Job Satisfaction as Dependent Variable and Multiskilling by Tasks as Predictor (By Country).

Variable	Mean	Standard Deviation	Correlation with Guest Satisfaction	Multiple Regression Weights	
				B	$\beta$
Philippines					
Job Satisfaction	4.1589	0.73719			
Multiskilling by Tasks	1.9375	0.24359	-0.148	-0.449	-0.148
Singapore					
Job Satisfaction	3.5653	0.53646			
Multiskilling by Tasks	1.7702	0.42203	0.220**	0.280	0.220

\*p < .05 \*\*p < .01 \*\*\* p < .001

Table 56: Summary of Regression Analysis for Job Satisfaction as Dependent Variable and Multiskilling by Tasks as Predictor (By Country).

By Zone Managed Attractions

**Model Summary**

		R	R Square	Adjusted R Square	Std. Error of the Estimate
Non-Zone Managed	1	.177 <sup>a</sup>	0.031	0.025	0.67652
Zone Managed	1	.154 <sup>a</sup>	0.024	0.011	0.55924

a. Predictors: (Constant), Multiskilling (Tasks)

**ANOVA<sup>a</sup>**

			Sum of Squares	df	Mean Square	F	Sig.
Non-Zone Managed	1	Regression	2.366	1	2.366	5.170	.024 <sup>b</sup>
		Residual	72.770	159	0.458		
		Total	75.137	160			
Zone Managed	1	Regression	0.593	1	0.593	1.897	.172 <sup>b</sup>
		Residual	24.394	78	0.313		
		Total	24.988	79			

a. Dependent Variable: Job Satisfaction

b. Predictors: (Constant), Multiskilling (Tasks)

**Coefficients<sup>a</sup>**

			Unstandardized Coefficients		Standardized Coefficients	t	Sig.
			B	Std. Error			
						Beta	
Non-Zone Managed	1	(Constant)	3.081	0.250		12.315	0.000
		Multiskilling (Tasks)	0.307	0.135	0.177	2.274	0.024
Zone Managed	1	(Constant)	3.550	0.344		10.323	0.000
		Multiskilling (Tasks)	0.250	0.182	0.154	1.377	0.172

a. Dependent Variable: Job Satisfaction

*Table 57: Regression Analysis for Job Satisfaction as Dependent Variable and Multiskilling by Tasks as Predictor (By Zone Managed Attractions).*

Variable	Mean	Standard Deviation	Correlation with Guest Satisfaction	Multiple Regression Weights	
				B	$\beta$
Non-Zone Managed					
Job Satisfaction	3.6364	0.68528			
Multiskilling by Tasks	1.8075	0.39553	0.177*	0.307	0.177
Zone Managed					
Job Satisfaction	4.0157	0.56241			
Multiskilling by Tasks	1.8625	0.34655	0.154	0.250	0.154
*p < .05 **p < .01 *** p < .001					

*Table 58: Summary of Regression Analysis for Job Satisfaction as Dependent Variable and Multiskilling by Tasks as Predictor (By Zone Managed Attractions).*

Multiple linear regression was carried out to investigate the relationship between Multiskilling by Tasks and Job Satisfaction. There was a significant relationship between multiskilling by tasks and job satisfaction for the total sample population ( $p < 0.05$ ), respondents in Singapore ( $p < 0.01$ ), and, non-zone managed attractions ( $p < 0.05$ ). There was a .323 increase in job satisfaction for every increase in multiskilling by tasks (total sample population); .280 increase in job satisfaction for every increase in multiskilling by tasks (Singapore); and, .307 increase in job satisfaction for every increase in multiskilling by tasks (non-zone managed attractions).



The R<sup>2</sup> value was 0.033 so 3.3% (total sample population), .049 or 4.9% (Singapore), and, .031 or 3.1% (non-zone managed attractions) of the variation in job satisfaction can be explained by the model containing psychological empowerment. The scatterplot of standardised predicted values versus standardised residuals, showed that the data met the assumptions of homogeneity of variance and linearity and the residuals were approximately normally distributed.

By Total Data Population

#### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.097 <sup>a</sup>	0.009	0.005	0.66652

a. Predictors: (Constant), Multiskilling (Areas)

#### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.014	1	1.014	2.283	.132 <sup>b</sup>
	Residual	106.619	240	0.444		
	Total	107.633	241			

a. Dependent Variable: Job Satisfaction

b. Predictors: (Constant), Multiskilling (Areas)

#### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
		B	Std. Error			
1	(Constant)	3.533	0.160		22.128	0.000
	Multiskilling (Areas)	0.139	0.092	0.097	1.511	0.132

a. Dependent Variable: Job Satisfaction

Table 59: Regression Analysis for Job Satisfaction as Dependent Variable and Multiskilling by Areas as Predictor (Total Data Population).

Variable	Mean	Standard Deviation	Correlation with Guest Satisfaction	Multiple Regression Weights	
				B	$\beta$
Job Satisfaction	3.7654	0.66829			
Multiskilling by Areas	1.6777	0.46833	0.097	0.139	0.097

\*p < .05 \*\*p < .01 \*\*\* p < .001

Table 60: Summary of Regression Analysis for Job Satisfaction as Dependent Variable and Multiskilling by Areas as Predictor (Total Data Population).

By Country

Model Summary				
Country	R	R Square	Adjusted R Square	Std. Error of the Estimate
Philippines 1	.023 <sup>a</sup>	0.001	-0.012	0.74170
Singapore 1	.094 <sup>a</sup>	0.009	0.003	0.53495

a. Predictors: (Constant), Multiskilling (Areas)

ANOVA <sup>a</sup>						
Country		Sum of Squares	df	Mean Square	F	Sig.
Philippines 1	Regression	0.023	1	0.023	0.042	.837 <sup>b</sup>
	Residual	42.909	78	0.550		
	Total	42.933	79			
Singapore 1	Regression	0.408	1	0.408	1.427	.234 <sup>b</sup>
	Residual	45.787	160	0.286		
	Total	46.195	161			

a. Dependent Variable: Job Satisfaction

b. Predictors: (Constant), Multiskilling (Areas)

Country		Coefficients <sup>a</sup>				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
Philippines 1	(Constant)	4.230	0.353		11.971	0.000
	Multiskilling (Areas)	-0.040	0.195	-0.023	-0.206	0.837
Singapore 1	(Constant)	3.400	0.149		22.832	0.000
	Multiskilling (Areas)	0.104	0.087	0.094	1.195	0.234

a. Dependent Variable: Job Satisfaction

*Table 61: Regression Analysis for Job Satisfaction as Dependent Variable and Multiskilling by Areas as Predictor (By Country).*

Variable	Mean	Standard Deviation	Correlation with Guest Satisfaction	Multiple Regression Weights	
				B	$\beta$
Philippines					
Job Satisfaction	4.1589	0.73719			
Multiskilling by Areas	1.7625	0.42824	-0.023	-0.040	-0.023
Singapore					
Job Satisfaction	3.5711	0.53566			
Multiskilling by Areas	1.6358	0.48270	0.094	0.104	0.094

\*p < .05 \*\*p < .01 \*\*\* p < .001

*Table 62: Summary of Regression Analysis for Job Satisfaction as Dependent Variable and Multiskilling by Areas as Predictor (By Country).*

By Zone Managed Attractions

		<b>Model Summary</b>			
		R	R Square	Adjusted R Square	Std. Error of the Estimate
Non-Zone Managed	1	.098 <sup>a</sup>	0.010	0.003	0.68210
Zone Managed	1	.077 <sup>a</sup>	0.006	-0.007	0.56432

a. Predictors: (Constant), Multiskilling (Areas)

		<b>ANOVA<sup>a</sup></b>					
			Sum of Squares	df	Mean Square	F	Sig.
Non-Zone Managed	1	Regression	0.716	1	0.716	1.539	.217 <sup>b</sup>
		Residual	74.442	160	0.465		
		Total	75.158	161			
Zone Managed	1	Regression	0.148	1	0.148	0.465	.497 <sup>b</sup>
		Residual	24.840	78	0.318		
		Total	24.988	79			

a. Dependent Variable: Job Satisfaction

b. Predictors: (Constant), Multiskilling (Areas)

		<b>Coefficients<sup>a</sup></b>					
			Unstandardized Coefficients		Standardized Coefficients	t	Sig.
			B	Std. Error	Beta		
Non-Zone Managed	1	(Constant)	3.407	0.197		17.301	0.000
		Multiskilling (Areas)	0.141	0.114	0.098	1.241	0.217
Zone Managed	1	(Constant)	3.856	0.242		15.907	0.000
		Multiskilling (Areas)	0.094	0.138	0.077	0.682	0.497

a. Dependent Variable: Job Satisfaction

*Table 63: Regression Analysis for Job Satisfaction as Dependent Variable and Multiskilling by Areas as Predictor (By Zone Managed Attractions).*

Variable	Mean	Standard Deviation	Correlation with Guest Satisfaction	Multiple Regression Weights	
				B	$\beta$
Non-Zone Managed					
Job Satisfaction	3.6418	0.68324			
Multiskilling by Areas	1.6667	0.47287	0.098	0.141	0.098
Zone Managed					
Job Satisfaction	4.0157	0.56241			
Multiskilling by Areas	1.7000	0.46115	0.077	0.094	0.077
*p < .05 **p < .01 *** p < .001					

*Table 64: Summary of Regression Analysis for Job Satisfaction as Dependent Variable and Multiskilling by Areas as Predictor (By Zone Managed Attractions).*

Multiple linear regression was carried out to investigate the relationship between Multiskilling by Areas and Job Satisfaction. There was a no significant relationship between multiskilling by areas and job satisfaction for the total sample population, respondents in the Philippines, Singapore, non-zone managed and zone-managed attractions.

#### Effect of Zone Management on Guest Satisfaction and Job Satisfaction

Model Summary <sup>b</sup>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate

1	.924 <sup>a</sup>	0.854	0.854	0.05487
a. Predictors: (Constant), Attraction Zone, Job Satisfaction				
b. Dependent Variable: Guest Satisfaction				

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13.130	2	6.565	2180.580	.000 <sup>b</sup>
	Residual	2.240	744	0.003		
	Total	15.369	746			
a. Dependent Variable: Guest Satisfaction						
b. Predictors: (Constant), Attraction Zone, Job Satisfaction						

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error			
1	(Constant)	5.172	0.025		204.972	0.000
	Attraction Zone Recode	0.278	0.005	0.909	54.240	0.000
	Job Satisfaction Aggregate	-0.461	0.008	-1.028	-61.305	0.000

*Table 65: Regression Analysis for Guest Satisfaction as Dependent Variable and Job Satisfaction and Zone-Managed Attractions as Predictors.*

A multiple regression was carried out to investigate whether Zone Management and Job Satisfaction could significantly predict Guest Satisfaction. The results of the regression indicated that the model explained 85.4% of the variance and that the model was a significant predictor of Guest Satisfaction,  $F(2, 744) = 2180.580$ ,  $p = .000$ . Both Zone Management ( $B = 0.278$ ,  $p < .000$ ); and, Job Satisfaction ( $B = -0.461$ ,  $p < .000$ ) contributed significantly to the model. The final predictive model

was:

$$\text{Guest Satisfaction} = 5.172 + (0.278 * \text{Zone Management}) + (-0.461 * \text{Job Satisfaction})$$

Correlation and multiple regression analyses were conducted to examine the relationship between Guest Satisfaction and various potential predictors (Zone Management and Job Satisfaction). Table 66 summarises the descriptive statistics and analysis results. As can be seen, Job Satisfaction is negatively and significantly correlated with the criterion, indicating that visitor attractions with higher ratings on these variables tend to have lower Guest Satisfaction. Zone Management is positively correlated with Guest Satisfaction (coded as 1 = Non-Zone-Managed, 2 = Zone-Managed), indicating that Zone-Managed attractions have a higher Guest Satisfaction ratings.

The multiple regression model with all predictors produced  $R^2 = .854$ ,  $F(2, 744) = 2180.580$ ,  $p < .000$ . As can be seen in Table 66, Job Satisfaction had significant negative regression weights, indicating visitor attractions with higher ratings on these scales were expected to have lower Guest Satisfaction rating, after controlling for the other variables in the model.

Variable	Mean	Standard Deviation	Correlation with Guest Satisfaction	Multiple Regression Weights	
				B	$\beta$
Guest Satisfaction	3.8089	.14354			
Job Satisfaction	3.7591	.32023	-.527**	-.461	-1.028

Zone-Managed ^	1 = Non-Zone-Managed 2 = Zone-Managed	67.3%, 32.7%	.344**	.278	.909
^ coded as 1 = Non-Zone-Managed; 2 = Zone-Managed *p < .05 **p < .01 *** p < .001					

Table 66: Summary of Regression Analysis for Guest Satisfaction as Dependent Variable and Job Satisfaction and Zone-Managed Attractions as Predictors.

Model Summary <sup>b</sup>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.941 <sup>a</sup>	0.885	0.884	0.10883
a. Predictors: (Constant), Attraction Zone, Guest Satisfaction b. Dependent Variable: Job Satisfaction				

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	67.686	2	33.843	2857.202	.000 <sup>b</sup>
	Residual	8.812	744	0.012		
	Total	76.498	746			
a. Dependent Variable: Job Satisfaction b. Predictors: (Constant), Attraction Zone, Guest Satisfaction						

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
		B	Std. Error			
1	(Constant)	9.911	0.109		90.817	0.000
	Attraction Zone	0.565	0.009	0.829	62.602	0.000



Guest Satisfaction	-1.812	0.030	-0.812	-61.305	0.000
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Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	11.607	0.119		97.782	0.000
	Guest Satisfaction	-1.812	0.030	-0.812	-61.305	0.000
	Attraction Zone	0.565	0.009	-0.829	62.602	0.000

a. Dependent Variable: Job Satisfaction

*Table 67: Regression Analysis for Job Satisfaction as Dependent Variable and Guest Satisfaction and Zone-Managed Attractions as Predictors.*

A multiple regression was carried out to investigate whether Guest Satisfaction and Zone Management could significantly predict Job Satisfaction. The results of the regression indicated that the model explained 88.5% of the variance and that the model was a significant predictor of Job Satisfaction,  $F(2,744) = 2857.202$ ,  $p < .000$ . Both Guest Satisfaction ( $B = -1.812$ ,  $p < .000$ ); and, Zone Management ( $B = 0.565$ ,  $p < .000$ ) contributed significantly to the model. The final predictive model was:

$$\text{Job Satisfaction} = 11.607 + (-1.812 * \text{GuestSatisfaction}) + (0.565 * \text{ZoneManagement})$$

Correlation and multiple regression analyses were conducted to examine the relationship between Job Satisfaction and various potential predictors (Guest Satisfaction and Zone-Management). Table 68 summarises the descriptive statistics

and analysis results. As can be seen, each of the predictors (Guest Satisfaction) is negatively and significantly correlated with the criterion, indicating that visitor attractions with higher ratings on these variables tend to have lower Job Satisfaction. Zone Management is positively correlated with Job Satisfaction (coded as 1 = Non-Zone-Managed, 2 = Zone-Managed), indicating that Zone-Managed attractions have a higher Guest Satisfaction ratings.

The multiple regression model with all predictors produced  $R^2 = .0885$ ,  $F(2, 744) = 97.782$ ,  $p < .000$ . As can be seen in Table 68, Guest Satisfaction had significant negative regression weights, indicating visitor attractions with higher ratings on these scales were expected to have lower Job Satisfaction rating, after controlling for the other variables in the model.

Variable	Mean	Standard Deviation	Correlation with Job Satisfaction	Multiple Regression Weights	
				B	$\beta$
Job Satisfaction	3.7591	.32023			
Guest Satisfaction	3.8089	.14354	-.527**	-1.821	-.812
Zone-Managed ^	1 = Non-Zone-Managed 2 = Zone-Managed	67.3%, 32.7%	.550**	.565	.829
^ coded as 1 = Non-Zone-Managed; 2 = Zone-Managed * $p < .05$ ** $p < .01$ *** $p < .001$					

*Table 68: Summary of Regression Analysis for Job Satisfaction as Dependent Variable and Guest Satisfaction and Zone-Managed Attractions as Predictors.*

## 11.5 Employee Findings

		(1)	(2)	(3)	(4)	(5)	(6)
(1) Job Satisfaction Score	Pearson Correlation	1	.789**	0.097	.183**	.197**	.266**
	Sig. (2-tailed)		0.000	0.132	0.004	0.002	0.000
	N	245	245	242	241	235	245
(2) Psychological Empowerment Score	Pearson Correlation	.789**	1	0.111	.230**	.248**	.319**
	Sig. (2-tailed)	0.000		0.086	0.000	0.000	0.000
	N	245	245	242	241	235	245
(3) Multiskilling (Areas)	Pearson Correlation	0.097	0.111	1	.435**	0.128	0.034
	Sig. (2-tailed)	0.132	0.086		0.000	0.052	0.603
	N	242	242	242	240	233	242
(4) Multiskilling (Tasks)	Pearson Correlation	.183**	.230**	.435**	1	0.092	0.068
	Sig. (2-tailed)	0.004	0.000	0.000		0.161	0.291
	N	241	241	240	241	232	241
(5) Service Length	Pearson Correlation	.197**	.248**	0.128	0.092	1	.203**
	Sig. (2-tailed)	0.002	0.000	0.052	0.161		0.002
	N	235	235	233	232	235	235
(6) Zone Employee	Pearson Correlation	.266**	.319**	0.034	0.068	.203**	1
	Sig. (2-tailed)	0.000	0.000	0.603	0.291	0.002	
	N	245	245	242	241	235	245

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

*Table 69: Correlation of Job Satisfaction, Psychological Empowerment, Multiskilling, Length of Service and Employees in Zone-Managed Attractions.*

Correlations were computed among Job Satisfaction, Psychological Empowerment, Multiskilling in different areas, Multiskilling in different tasks and Service Length

scales on data from 245 employees in zone-managed and non-zone-managed attractions.

The results suggest that Job Satisfaction and Psychological Empowerment were strongly correlated,  $r(243) = .789, p < .01$ ; Job Satisfaction and Multiskilling in different tasks were strongly correlated,  $r(239) = .183, p < .01$ ; Job Satisfaction and Service Length were strongly correlated,  $r(233) = .197, p < .01$ ; Psychological Empowerment and Multiskilling in different tasks were strongly correlated,  $r(239) = .230, p < .01$ ; and, Psychological Empowerment and Service Length were strongly correlated,  $r(233) = .248, p < .01$ .

The correlations of Multiskilling in different areas with Job Satisfaction, Psychological Empowerment and Service Length were not significant.

The correlations of Employees in zone-managed attractions with Job Satisfaction,  $r(243) = .266, p < .01$ ; Psychological Empowerment,  $r(243) = .319, p < .01$ ; and, Service Length,  $r(233) = .203, p < .01$ , were statistically significant.

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. I receive recognition for a job well done.	Pearson Correlation	1	.439**	.509**	.491**	.495**	.342**	.336**	.516**	.315**	.454**	.453**	.263**	.434**	.361**	.280**
	Sig. (2-tailed)		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	N	243	243	242	243	243	242	243	242	243	243	243	243	242	242	243
2. I feel close to the people at work.	Pearson Correlation	.439**	1	.540**	.462**	.335**	.332**	.207**	.354**	.421**	.440**	.449**	.470**	.403**	.254**	.219**
	Sig. (2-tailed)	0.000		0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001
	N	243	245	244	245	245	244	245	244	245	245	245	245	244	244	245
3. I feel good about	Pearson Correlation	.509**	.540**	1	.699**	.659**	.524**	.545**	.459**	.548**	.734**	.744**	.531**	.453**	.373**	.267**
	Sig. (2-tailed)															
	N	243	245	244	245	245	244	245	244	245	245	245	245	244	244	245

working at this company.	Sig. (2-tailed)	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	N	242	244	244	244	244	243	244	243	244	244	244	244	243	243	244
4. I feel secure about my job.	Pearson Correlation	.491**	.462**	.699**	1	.642**	.523**	.509**	.529**	.479**	.620**	.630**	.528**	.489**	.439**	.166**
	Sig. (2-tailed)	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.009
	N	243	245	244	245	245	244	245	244	245	245	245	245	244	244	245
5. I believe management is concerned about me.	Pearson Correlation	.495**	.335**	.659**	.642**	1	.536**	.582**	.446**	.534**	.586**	.547**	.390**	.490**	.478**	.154*
	Sig. (2-tailed)	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.016
	N	243	245	244	245	245	244	245	244	245	245	245	245	244	244	245
6. On the whole, I believe work is good for my physical health.	Pearson Correlation	.342**	.332**	.524**	.523**	.536**	1	.497**	.384**	.479**	.491**	.509**	.382**	.402**	.336**	.167**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.009
	N	242	244	243	244	244	244	244	243	244	244	244	244	243	243	244
7. My wages are good.	Pearson Correlation	.336**	.207**	.545**	.509**	.582**	.497**	1	.476**	.415**	.516**	.510**	.382**	.427**	.386**	0.056
	Sig. (2-tailed)	0.000	0.001	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.386
	N	243	245	244	245	245	244	245	244	245	245	245	245	244	244	245
8. All my talents and skills are used at work.	Pearson Correlation	.516**	.354**	.459**	.529**	.446**	.384**	.476**	1	.438**	.559**	.508**	.426**	.453**	.408**	.205**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.001
	N	242	244	243	244	244	243	244	244	244	244	244	244	243	243	244
9. I get along with my supervisors.	Pearson Correlation	.315**	.421**	.548**	.479**	.534**	.479**	.415**	.438**	1	.593**	.534**	.499**	.509**	.379**	.217**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.001
	N	243	245	244	245	245	244	245	244	245	245	245	245	244	244	245
10. I feel good about my job.	Pearson Correlation	.454**	.440**	.734**	.620**	.586**	.491**	.516**	.559**	.593**	1	.763**	.601**	.603**	.433**	.259**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000
	N	243	245	244	245	245	244	245	244	245	245	245	245	244	244	245
11. Psychological Empowerment (Meaning) Score	Pearson Correlation	.453**	.449**	.744**	.630**	.547**	.509**	.510**	.508**	.534**	.763**	1	.611**	.536**	.451**	.360**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000
	N	243	245	244	245	245	244	245	244	245	245	245	245	244	244	245
12. Psychological Empowerment (Competence) Score	Pearson Correlation	.263**	.470**	.531**	.528**	.390**	.382**	.382**	.426**	.499**	.601**	.611**	1	.570**	.413**	.203**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.001
	N	243	245	244	245	245	244	245	244	245	245	245	245	244	244	245
13. Psychological Empowerment (Self-Determination) Score	Pearson Correlation	.434**	.403**	.453**	.489**	.490**	.402**	.427**	.453**	.509**	.603**	.536**	.570**	1	.581**	.217**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.001
	N	242	244	243	244	244	243	244	243	244	244	244	244	244	243	244
14. Psychological Empowerment (Impact) Score	Pearson Correlation	.361**	.254**	.373**	.439**	.478**	.336**	.386**	.408**	.379**	.433**	.451**	.413**	.581**	1	.233**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
	N	242	244	243	244	244	243	244	243	244	244	244	244	243	244	244
15. Zone Employee	Pearson Correlation	.280**	.219**	.267**	.166**	.154*	.167**	0.056	.205**	.217**	.259**	.360**	.203**	.217**	.233**	1
	Sig. (2-tailed)	0.000	0.001	0.000	0.009	0.016	0.009	0.386	0.001	0.001	0.000	0.000	0.001	0.001	0.000	

N	243	245	244	245	245	244	245	244	245	245	245	245	244	244	245
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\*\* . Correlation is significant at the 0.01 level (2-tailed).

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

*Table 70: Correlation of the Constructs of Job Satisfaction and Psychological Empowerment*

Correlations were computed among 10 constructs of the Job Satisfaction scale and 4 constructs of Psychological Empowerment scale on data for 245 employees working in zone-managed and non-zone-managed attractions.

The results suggest that correlations of the constructs of Job Satisfaction and Psychological Empowerment were statistically significant and were greater or equal to  $r(240) = .207, p < .01$ .

The correlations of Employees in zone-managed attractions with the constructs of Job Satisfaction and Psychological Empowerment were strongly significant, except for Employees in zone-managed attractions with 2 Job Satisfaction constructs: “I believe management is concerned about me”,  $r(243) = .154, p < .05$ ; and, “My wages are good”,  $r(243) = .056, p > .05$ .

In general, the results suggested that employees who have high job satisfaction tend to be more psychologically empowered except for their rating for “My wages are good”.

## 11.6 Guest Findings

		1	2	3	4
1. Guest Satisfaction	Pearson Correlation	1	.093*	.167**	.349**
	Sig. (2-tailed)		0.037	0.000	0.000
	N	747	501	499	502
2. First Visit	Pearson Correlation	.093*	1	.145**	-0.042
	Sig. (2-tailed)	0.037		0.001	0.349
	N	501	501	499	501
3. Recommended by previous visitor	Pearson Correlation	-.167**	.145**	1	-0.026
	Sig. (2-tailed)	0.000	0.001		0.561
	N	499	499	499	499
4. Zone Guest	Pearson Correlation	.349**	-0.042	-0.026	1
	Sig. (2-tailed)	0.000	0.349	0.561	
	N	502	501	499	502

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

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

*Table 71: Correlation of Guest Satisfaction, First-Time Visitors, Recommended Visits and Guests Visiting Zone-Managed Attractions.*

Correlations were computed among Guest Satisfaction, First Visit and Recommended by Previous Visitor scales on data for 502 guests visiting zone-managed and non-zone-managed attractions.

The results suggest that Guest Satisfaction and First Visit were significantly correlated,  $r(499) = .093$ ,  $p < .05$ ; Guest Satisfaction and Recommended by Previous

Visitor were strongly correlated,  $r(497) = .167, p < .01$ ; and, First Visit and Recommended by Previous Visitor were strongly correlated,  $r(497) = .145, p < .01$ .

Guests visiting zone-managed attractions and Guest Satisfaction were strongly correlated,  $r(500) = .349, p < .01$ , but there was no correlation significance between Guests visiting zone-managed attractions with First Visit and Recommended by Previous Visitor.

In general, guests visiting based on recommendations and guests visiting zone-managed attractions were more likely to be more satisfied.

		1	2	3	4	5	6	7	8
1. Tangibility	Pearson Correlation	1	.610**	.288**	.888**	.149**	.217**	-.100*	-.372**
	Sig. (2-tailed)		0.000	0.000	0.000	0.000	0.000	0.025	0.000
	N	747	747	747	747	747	501	499	502
2. Reliability	Pearson Correlation	.610**	1	.134**	.770**	.130**	.144**	-.123**	.165**
	Sig. (2-tailed)	0.000		0.000	0.000	0.000	0.001	0.006	0.000
	N	747	747	747	747	747	501	499	502
3. Responsiveness	Pearson Correlation	.288**	.134**	1	.495**	.924**	0.017	-.124**	.543**
	Sig. (2-tailed)	0.000	0.000		0.000	0.000	0.707	0.006	0.000
	N	747	747	747	747	747	501	499	502
4. Assurance	Pearson Correlation	.888**	.770**	.495**	1	.371**	.139**	-.174**	-0.080
	Sig. (2-tailed)	0.000	0.000	0.000		0.000	0.002	0.000	0.074
	N	747	747	747	747	747	501	499	502
5. Empathy	Pearson Correlation	.149**	.130**	.924**	.371**	1	-0.045	-.115*	.659**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000		0.317	0.010	0.000
	N	747	747	747	747	747	501	499	502
6. First Visit	Pearson Correlation	.217**	.144**	0.017	.139**	0.045	1	.145**	-0.042



	Sig. (2-tailed)	0.000	0.001	0.707	0.002	0.317		0.001	0.349
	N	501	501	501	501	501	501	499	501
7. Recommended by previous visitor	Pearson Correlation	-.100*	-.123**	-.124**	-.174**	-.115*	.145**	1	-0.026
	Sig. (2-tailed)	0.025	0.006	0.006	0.000	0.010	0.001		0.561
	N	499	499	499	499	499	499	499	499
8. Zone Guest	Pearson Correlation	-.372**	.165**	.543**	-0.080	.659**	-0.042	-0.026	1
	Sig. (2-tailed)	0.000	0.000	0.000	0.074	0.000	0.349	0.561	
	N	502	502	502	502	502	501	499	502

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

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

*Table 72: Correlation of SERVQUAL constructs, First-Time Visitors, Recommended Visits and Guests Visiting Zone-Managed Attractions.*

Correlations were computed among the constructs of Guest Satisfaction, First Visit and Recommended by Previous Visitor scales on data for 502 guests visiting zone-managed and non-zone-managed attractions.

The results suggest that the constructs of Guest Satisfaction and First Visit were strongly correlated except for First Visit and Responsiveness,  $r(499) = .017$ ,  $p = .707$ ; and, First Visit and Empathy,  $r(499) = .045$ ,  $p = .317$ .

The results suggest that the constructs of Guest Satisfaction and Recommended by Previous Visitor were strongly correlated except for Recommended by Previous Visitor and Tangibility,  $r(497) = -.100$ ,  $p < .05$ ; and, Empathy,  $r(497) = -.115$ ,  $p < .05$ .

The correlation of Guests visiting zone-managed attractions with the constructs of Guest Satisfaction were significantly correlated except for Assurance,  $r(500) = -.080$ ,

$p = .074$ ; First Visit,  $r(499) = -.042$ ,  $p = .349$ ; and, Recommended by Previous Visitor,  $r(497) = -.026$ ,  $p = .561$ .

Model Summary <sup>c</sup>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.527 <sup>a</sup>	0.278	0.276	0.12212
2	.711 <sup>b</sup>	0.505	0.503	0.10117

a. Predictors: (Constant), Psychological Empowerment, Job Satisfaction  
b. Predictors: (Constant), Psychological Empowerment, Job Satisfaction, JS x PE  
c. Dependent Variable: Guest Satisfaction

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.274	2	2.137	143.302	.000 <sup>b</sup>
	Residual	11.095	744	0.015		
	Total	15.369	746			
2	Regression	7.765	3	2.588	252.909	.000 <sup>c</sup>
	Residual	7.604	743	0.010		
	Total	15.369	746			

a. Dependent Variable: Guest Satisfaction  
b. Predictors: (Constant), Psychological Empowerment, Job Satisfaction  
c. Predictors: (Constant), Psychological Empowerment, Job Satisfaction, JSaxPEa

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.700	0.053		88.435	0.000
	Job Satisfaction	-0.226	0.036	-0.503	-6.199	0.000
	Psychological Empowerment	-0.012	0.036	-0.026	-0.322	0.747

2	(Constant)	-28.817	1.815		-15.875	0.000
	Job Satisfaction	7.088	0.397	15.812	17.848	0.000
	Psychological Empowerment	10.373	0.563	23.446	18.423	0.000
	JS x PE	-2.315	0.125	-39.047	-18.469	0.000
a. Dependent Variable: Guest Satisfaction						

*Table 73: Regression Analysis for Guest Satisfaction as Dependent Variable and Job Satisfaction and Psychological Empowerment as Predictors.*

A multiple linear regression was calculated to predict Guest Satisfaction based on Job Satisfaction and Psychological Empowerment. A significant regression equation was found ( $F(2,744) = 143.302, p < .000$ ), with an  $R^2$  of .278. Participants' predicted Guest Satisfaction is equal to  $4.700 - 0.012$  (Job Satisfaction) +  $0.226$  (Psychological Empowerment), where both Job Satisfaction and, Psychological Empowerment were coded or measured as rating points. Guest Satisfaction rating points increased 0.226 rating points for each Job Satisfaction rating point and 0.012 for each Psychological Empowerment rating point. Job Satisfaction and Psychological Empowerment were significant predictor of Guest Satisfaction. Psychological Empowerment had a significant interacting effect between Guest Satisfaction and Job Satisfaction.

Correlation and multiple regression analyses were conducted to examine the relationship between Guest Satisfaction and various potential predictors (Job Satisfaction and Psychological Empowerment). Table 74 summarises the descriptive statistics and analysis results. As can be seen, each of the predictors (Job Satisfaction and Psychological Empowerment) is negatively and significantly

correlated with the criterion, indicating that visitor attractions with higher ratings on these variables tend to have lower Guest Satisfaction.

The multiple regression model with all predictors produced  $R^2 = .278$ ,  $F(2,744) = 143.302$ ,  $p < .000$ . As can be seen in Table 74, Job Satisfaction had significant negative regression weights, indicating visitor attractions with higher ratings on these scales were expected to have lower Guest Satisfaction rating, after controlling for the other variables in the model. Psychological Empowerment did not contribute to the multiple regression model.

Variable	Mean	Standard Deviation	Correlation with Guest Satisfaction	Multiple Regression Weights	
				B	$\beta$
Guest Satisfaction	3.8089	.14354			
Job Satisfaction	3.7591	.32023	-.527**	-.226	-.503
Psychological Empowerment	3.7125	.32444	-.491**	-.012	-.026
*p < .05 **p < .01 *** p < .001					

*Table 74: Summary of Regression Analysis for Guest Satisfaction as Dependent Variable and Job Satisfaction and Psychological Empowerment as Predictors.*

Model Summary <sup>c</sup>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate

1	.544 <sup>a</sup>	0.296	0.290	0.12208
2	.552 <sup>b</sup>	0.305	0.296	0.12159

a. Predictors: (Constant), Skills Training (Tasks), Job Satisfaction  
b. Predictors: (Constant), Skills Training (Tasks), Job Satisfaction, JS x MStasks  
c. Dependent Variable: Guest Satisfaction

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.494	2	0.747	50.128	.000 <sup>b</sup>
	Residual	3.547	238	0.015		
	Total	5.041	240			
2	Regression	1.538	3	0.513	34.668	.000 <sup>c</sup>
	Residual	3.504	237	0.015		
	Total	5.041	240			

a. Dependent Variable: Guest Satisfaction  
b. Predictors: (Constant), Skills Training (Tasks), Job Satisfaction  
c. Predictors: (Constant), Skills Training (Tasks), Job Satisfaction, JS x MStasks

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.704	0.094		49.995	0.000
	Job Satisfaction	-0.239	0.025	-0.533	-9.661	0.000
	Skills Training (Tasks)	0.020	0.021	0.052	0.948	0.344
2	(Constant)	4.760	0.099		47.901	0.000
	Job Satisfaction	-0.254	0.026	-0.566	-9.714	0.000
	Skills Training (Tasks)	-0.470	0.287	-1.232	-1.639	0.103
	JSaxMStasks	0.134	0.078	1.283	1.713	0.088

a. Dependent Variable: Guest Satisfaction

*Table 75: Regression Analysis for Guest Satisfaction as Dependent Variable and Job Satisfaction and Multiskilling in Different Tasks as Predictors.*

A multiple linear regression was calculated to predict Guest Satisfaction based on Job Satisfaction and Multiskilling in different tasks. A significant regression equation was found ( $F(2,238) = 50.128, p < .000$ ), with an  $R^2$  of .296. Participants' predicted Guest Satisfaction is equal to  $4.704 - 0.239 (\text{Job Satisfaction}) + 0.020$  (Multiskilling in different tasks), where both Job Satisfaction was coded or measured in rating points, and, Multiskilling in different tasks were coded or measured as 0 = Yes, and, 1 = No. Guest Satisfaction rating points increased 0.239 rating points for each Job Satisfaction rating point and 0.020 for employees who have received Multiskilling in different tasks. Only Job Satisfaction was significant predictor of Guest Satisfaction.

Correlation and multiple regression analyses were conducted to examine the relationship between Guest Satisfaction and various potential predictors (Job Satisfaction and Multiskilling in different tasks). Table 76 summarises the descriptive statistics and analysis results. As can be seen, each of the predictors (Job Satisfaction) is negatively and significantly correlated with the criterion, indicating that visitor attractions with higher ratings on these variables tend to have lower Guest Satisfaction. Multiskilling in different tasks is negatively correlated with Guest Satisfaction (coded as 0 = Yes, 1 = No), indicating that attractions with employees multiskilled in different tasks have a higher Guest Satisfaction ratings.

The multiple regression model with all predictors produced  $R^2 = .296, F(2,238) = 50.128, p < .000$ . As can be seen in Table 76, Job Satisfaction had significant

negative regression weights, indicating visitor attractions with higher ratings on these scales were expected to have lower Guest Satisfaction rating, after controlling for the other variables in the model. Multiskilling in different tasks did not contribute to the multiple regression model.

Variable	Mean	Standard Deviation	Correlation with Guest Satisfaction	Multiple Regression Weights	
				B	$\beta$
Guest Satisfaction	3.8089	.14354			
Job Satisfaction	3.7591	.32023	-.527**	-.239	-.533
Multiskilling in different tasks ^	0 = Yes 1 = No	82.6% 17.4%	.143*	-.030	-.052
^ coded as 0 = Yes, 1 = No *p < .05 **p < .01 *** p < .001					

*Table 76: Summary of Regression Analysis for Guest Satisfaction as Dependent Variable and Job Satisfaction and Multiskilling in Different Tasks as Predictors.*

Model Summary <sup>c</sup>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.541 <sup>a</sup>	0.293	0.287	0.12204
2	.542 <sup>b</sup>	0.294	0.285	0.12219
a. Predictors: (Constant), Skills Training (Area), Job Satisfaction b. Predictors: (Constant), Skills Training (Area), Job Satisfaction, JS x MSareas c. Dependent Variable: Guest Satisfaction				

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.472	2	0.736	49.422	.000 <sup>b</sup>
	Residual	3.560	239	0.015		
	Total	5.032	241			
2	Regression	1.479	3	0.493	33.021	.000 <sup>c</sup>
	Residual	3.553	238	0.015		
	Total	5.032	241			
a. Dependent Variable: Guest Satisfaction						
b. Predictors: (Constant), Skills Training (Area), Job Satisfaction						
c. Predictors: (Constant), Skills Training (Area), Job Satisfaction, JS x MSareas						

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.710	0.093		50.702	0.000
	Job Satisfaction	-0.241	0.024	-0.537	-9.845	0.000
	Skills Training (Area)	0.013	0.017	0.042	0.770	0.442
2	(Constant)	4.746	0.108		44.028	0.000
	Job Satisfaction	-0.250	0.028	-0.558	-8.811	0.000
	Skills Training (Area)	-0.127	0.210	-0.412	-0.605	0.546
	JS x MSareas	0.037	0.056	0.455	0.668	0.505
a. Dependent Variable: Guest Satisfaction						

*Table 77: Regression Analysis for Guest Satisfaction as Dependent Variable and Job Satisfaction and Multiskilling in Different Areas as Predictors.*

A multiple linear regression was calculated to predict Guest Satisfaction based on Job Satisfaction and Multiskilling in different areas. A significant regression equation was found ( $F(2,239) = 49.422, p < .000$ ), with an  $R^2$  of .293. Participants' predicted Guest Satisfaction is equal to  $4.710 - 0.241$  (Job Satisfaction) +  $0.013$



(Multiskilling in different areas), where both Job Satisfaction was coded or measured in rating points, and, Multiskilling in different areas were coded or measured as 0 = Yes, and, 1 = No. Guest Satisfaction rating points increased 0.241 rating points for each Job Satisfaction rating point and 0.013 for employees who have received Multiskilling in different areas. Only Job Satisfaction was significant predictor of Guest Satisfaction.

Correlation and multiple regression analyses were conducted to examine the relationship between Guest Satisfaction and various potential predictors (Job Satisfaction and Multiskilling in different areas). Table 78 summarises the descriptive statistics and analysis results. As can be seen, each of the predictors (Job Satisfaction) is negatively and significantly correlated with the criterion, indicating that visitor attractions with higher ratings on these variables tend to have lower Guest Satisfaction. Multiskilling in different areas is positively correlated with Guest Satisfaction (coded as 0 = Yes, 1 = No), indicating that attractions with employees multiskilled in different tasks have a higher Guest Satisfaction ratings.

The multiple regression model with all predictors produced  $R^2 = .293$ ,  $F(2,239) = 49.42$ ,  $p < .000$ . As can be seen in Table 78, Job Satisfaction had significant negative regression weights, indicating visitor attractions with higher ratings on these scales were expected to have lower Guest Satisfaction rating, after controlling for the other variables in the model. Multiskilling in different areas did not contribute to the multiple regression model.

Variable	Mean	Standard Deviation	Correlation with Guest Satisfaction	Multiple Regression Weights	
				B	$\beta$
Guest Satisfaction	3.8089	.14354			
Job Satisfaction	3.7591	.32023	-.527**	-.241	-.537
Multiskilling in different areas ^	0 = Yes 1 = No	67.8% 32.2%	.075	.013	.042

^ coded as 0 = Yes, 1 = No  
\*p < .05 \*\*p < .01 \*\*\* p < .001

Table 78: Summary of Regression Analysis for Guest Satisfaction as Dependent Variable and Job Satisfaction and Multiskilling in Different Areas as Predictors.

## 12 SUMMARY OF RESEARCH FINDINGS

	TOTAL	Philippines	Singapore	Zone Managed	Non-Zone Managed
H1: Job Satisfaction (JS) & Guest Satisfaction (GS)	<b>Significant</b> r(745) = -.527, p < .001	<b>Significant</b> r(238) = -1.000, p < .001	<b>Significant</b> r(505) = .409, p < .001	<b>Significant</b> r(243) = -1.000, p < .001	<b>Significant</b> r(500) = -.914, p < .001
H2a: Job Satisfaction & Psychological Empowerment (PE)	<b>Significant</b> r(745) = .923, p < .001	<b>Significant</b> r(238) = 1.000, p < .001	<b>Significant</b> r(505) = .916, p < .001	<b>Significant</b> r(243) = 1.000, p < .001	<b>Significant</b> r(500) = .961, p < .001
H3ai: Multiskilling (MS) by Tasks & JS	<b>Significant</b> r(239) = .170, p < .001	Not Significant	Not Significant	<b>Significant</b> r(78) = .254, p < .05	Not Significant
H3aii: Multiskilling (MS) by Areas & JS	Not Significant	Not Significant	Not Significant	Not Significant	Not Significant

H2b: PE as Moderator of GS & JS	<b>Significant</b> F(3,743) = 252.909, p < .001	Not Significant	<b>Significant</b> F(2,504) = 288.478, p < .001	Not Significant	<b>Significant</b> F(2,499) = 1268.842, p < .001
H3bi: MS Tasks as Moderator of GS & JS	<b>Significant</b> F(3,237) = 50.128, p < .05	Not Significant	<b>Significant</b> F(3,157) = 14.484, p < .001	Not Significant	<b>Significant:</b> F(3,158) = 434.376, p < .001
H3bii: MS Areas as Moderator of GS & JS	Not Significant	Not Significant	<b>Significant:</b> F(3,158) = 15.469, p < .001	<b>Significant:</b> F(3,76) = 2.0399 x 10 <sup>16</sup> , p < .001	<b>Significant:</b> F(3,157) = 425.946, p < .001
JS as Predictor of GS	<b>Significant</b> F(1,745) = 286.846, p < .001	Not Significant	<b>Significant</b> F(1,505) = 101.320, p < .001	Not Significant	<b>Significant</b> F(1,500) = 2542.591, p < .001
PE as Predictor of JS	<b>Significant</b> F(1,243) = 399.771, p < .001	<b>Significant</b> F(1,78) = 114.752, p < .001	<b>Significant</b> F(1,163) = 165.198, p < .001	<b>Significant</b> F(1,78) = 62.234, p < .001	<b>Significant</b> F(1,163) = 311.235, p < .001
MS Tasks as Predictor of JS	<b>Significant</b> F(1,239) = 8.273, p < .01	Not Significant	<b>Significant</b> F(1,159) = 8.115, p < .01	Not Significant	<b>Significant</b> F(1,159) = 5.170, p < .05
MS Areas as Predictor of JS	Not Significant	Not Significant	Not Significant	Not Significant	Not Significant

Table 79: Summary of Research Findings

### 13 RESEARCH ANALYSIS

Psychologically empowered employees were more likely to feel a higher or greater sense of ownership and responsibility for their work performance and performance

outcomes and therefore were more likely to be more satisfied with their jobs. Results of the survey showed significant correlation between job satisfaction and guest satisfaction as guest satisfaction or satisfied guests (Total Data Population:  $r(745) = -.527, p < .001$ ; Philippines:  $r(238) = -1.000, p < .001$ ; Singapore:  $r(505) = .409, p < .001$ ; Zone Managed Attractions:  $r(243) = -1.000, p < .001$ ; and, Non-Zone Managed Attractions:  $r(500) = -.914, p < .001$ ) could also be indicative of positive job performance outcomes. This would be especially so in the visitor attraction environment where delivering quality service and memorable guest experiences were aligned with the key objectives of attraction managers and operators.

In the case of zone-managed visitor attractions where employee roles were not only based on specific tasks also focused on customer or guest touchpoints, the survey indicated that employees in these attractions were more likely to be more job satisfied and more psychologically empowered, while guests visiting these attractions were more likely to be satisfied with their visits.

It was shown that psychological empowerment had a positive interacting or moderating effect between job satisfaction and guest satisfaction (Total Data Population:  $F(3,743) = 252.909, p < .001$ ; Singapore:  $F(2,504) = 288.478, p < .001$ ; and, Non Zone Managed Attractions:  $F(2,499) = 1268.842, p < .001$ ); and, that psychological empowerment was a predictor for job or employee satisfaction (Total Data Population:  $F(1,243) = 399.771, p < .001$ ; Philippines:  $F(1,78) = 114.752, p < .001$ ; Singapore:  $F(1,163) = 165.198, p < .001$ ; Zone Managed Attractions:  $F(1,78) = 62.234, p < .001$ ; and, Non Zone Managed Attractions:  $F(1,163) = 311.235, p < .001$ ). This could be explained by employees not only felt the need to provide

assistance, advice and service to guests, they were empowered or management would have set guidelines and parameters for them to do so.

Analysis also showed a two-way effect between job satisfaction and guest satisfaction. Employees felt guest satisfaction was their performance outcome and satisfied guests also increased and enhanced their individual and collective job satisfaction levels. This was an important key analysis: job satisfaction and guest satisfaction were not unidirectional but bidirectional: guest satisfaction was a positive performance or job outcome; and, job satisfaction was increased with greater guest satisfaction.

This bidirectional relationship between job satisfaction and guest satisfaction was amplified with psychological empowerment which was result of individual and team motivation and organizational factors; and, with zone management which was an organization's operating structure and strategy.

Employees' ability to exercise judgment and take appropriate steps and action to provide assistance, advice and service was not only motivated by intrinsic personality traits and desire to please and delight the guest, these employees would have been guided and organized by management to do so.

The management of zone-managed attractions would have grouped or clustered meaningful guest touchpoints into a single area or zone. These would have been based on physical proximity of the touchpoints; a clear understanding of the guest's experience journey in the attraction; the needs and anxieties of the guest in the

respective part of the journey; mapping out the roles, skills and knowledge of the employees required to deliver based on the guests' needs; and, finally developing a set of parameters to guide the zone's operations and employees. Zone management strategies would have started with the customer or guest in mind – to deliver the best experience, anticipate the guest's needs, desires and anxieties including service and experience pitfalls, and, then how to structure the team accordingly.

As a result, zone-managed visitor attractions have a direct and almost deliberate linkage between what needed to be done with how the guest would be satisfied. In doing so and in anticipating guests' needs, employees would have been guided in a range of "what-if's" and possible operating scenarios with appropriate corresponding responses and course of action. At the same time, employees in zone-managed visitor attractions would also have been empowered to size up situations, exercise judgment and take the necessary appropriate action.

Zone-managed visitor attractions were more likely to have employees more satisfied with their jobs and are more psychologically empowered to make appropriate responses to different situations. Therefore visitors to zone-managed attractions are more likely to be satisfied with their visits.

Results of the survey showed multiskilling in different tasks was significantly correlated with job satisfaction and psychological empowerment. Employees multiskilled in different tasks would have received training in various tasks, skills and knowledge in their respectively deployed departments. Training could be in the

form of in-house sessions and externally delivered courses; both of which would have been arranged, coordinated and funded by the employing organisation.

Employees would be more prepared for situations and tasks if they were first trained to perform them or to respond appropriately. Conversely employees who have not been trained to perform these tasks but now faced these situations, are more likely to feel a sense of loss and vulnerability – this would have had a negative impact on the employee's job satisfaction and psychological empowerment levels.

It was also mentioned by managers at zone-managed attractions that if employees were expected to multi-task, then the responsibility to train the employee to multi-task would be on the employing organisation. It was also remarked that it would have been unreasonable for managers to expect their staff to perform a task or carry out a duty which the employee was not trained or equipped to do so. Multiskilling was not “training for the sake of training” – training needed to be relevant and contextual to the employee's work situations.

Employees' length of service was significantly correlated with job satisfaction and psychological empowerment. The longer the employee's service the more the employee was likely to be satisfied with the job and be psychologically empowered. This was congruent with conventional thinking that employees dissatisfied with their jobs were more likely to leave or resign, such organisations were more likely to have higher staff turnover.

Employees with longer lengths of service were more experienced in the respective visitor attraction, more experienced in managing and handling guests in the same attraction and more likely to understand the management's priorities and decision-making process. These would be contributory factors to increased psychological empowerment with longer serving employees in the same visitor attraction. It would also be expected that longer serving employees were more likely to train, coach, guide and mentor newly recruited or newly deployed employees.

Employees in zone-managed attractions were likely to stay employed in the same attraction or longer lengths of service. As earlier reported where employees in zone-managed visitor attractions were more likely to be job satisfied and psychologically empowered, these employees would be more satisfied with their work environment, probably risen in rank and/or influence, and, therefore less likely to resign or to leave for another organisation. Zone management would also provide a greater scope in daily duties and more opportunities to make decisions. These would provide employees less mundane and less repetitive work, another reason for departure in the hospitality industry.

The results of the survey showed guest satisfaction to be significantly correlated with first visits and recommended visits by a previous visitor. Guests visiting zone-managed visitor attractions and guests visiting based recommendations by previous visitors were likely to be satisfied with their visits.

First-time visitors or guests were likely to be more satisfied with their visits based on the attraction's tangibility, reliability and assurance. These SERVQUAL constructs



were based on the attraction's physical appearance, employee's demeanour and presentation, overall cleanliness, wayfinding signage and timeliness in operating hours, shows and rides. Guests' observations of service quality and service standards provided first-time visitors a certain level of comfort and guest satisfaction.

Deeper interaction would warrant a different kind of service experience and level of guest satisfaction. Therefore, guests who visited based on recommendations were more likely to be satisfied with the inclusion of the other 2 SERVQUAL components, namely responsiveness and empathy. This could have been a result of recommendations from past positive experiences where personal and memorable encounters with employees and the overall visit could have been shared.

These recommendations could have been one-to-one personal interactions with previous visitors, related encounters by third party visitors and even online ratings and reviews. This underscored the importance and impact of word-of-mouth and social media advocacy influencing decisions to visit and setting service expectations. Customers would be more likely to share an experience if their encounter with the employee was memorable, albeit be the experience be good, bad or even indifferent. Therefore, positive experiences would more likely be the employees' positive response to the guests' inquiry, proactive towards the guests' needs, and, empathetic display of emotions. These employee responses and demeanour to a guest in need would more likely resonate positively with the guest and thereby making these guest-employee encounters more memorable. The guest would then be more likely to share and relate these experiences with their friends and family and even online on social media and review websites post-visit.

## **14 NEW FINDINGS FROM RESEARCH**

The research started with a question if happy workers were good workers, would good workers result in happy customers. From this premise, the research was designed and executed to seek out the relationship between job satisfaction (happy workers) and customer or guest satisfaction (happy customers).

Results from the research survey and data collected indicated that psychological empowerment had significant correlation with job satisfaction and psychological empowerment had a significant moderating effect between job satisfaction and guest satisfaction. Multiskilling in different tasks and length of service were also significantly correlated with job satisfaction but no significant interacting effect between job satisfaction and guest satisfaction; whilst visits based on recommendations were also significantly correlated with guest satisfaction.

As the research grouped the attractions based on how these organisations were managed and structured operationally, these relationships were more pronounced in attractions which were “zone-managed” or managed based on clusters of customer or guest touchpoints. The concept and application of “zone management” in visitor attractions was found to have significant impact on both job satisfaction and guest satisfaction and the factors affecting them. The data also indicated that employees in zone-managed attractions were likely to be more satisfied with their jobs and more

psychologically empowered; and, guests visiting zone-managed attractions were likely to be more satisfied with their visits to these places.

Future research could focus on the forms and components of zone management; types of organisations, businesses and industries best suited to adopt zone management; leadership and management styles best suited for zone management deployment; and, more in-depth studies on the effects of zone management on employees, customers and stakeholders.

## **15 MANAGERAL IMPLICATIONS**

This research will be of interest to visitor attractions managers:

Operational elasticity will arise from staff who are multiskilled and deployed or multitasked across a range of roles and responsibilities within a defined set of guest or customer touchpoints or zone. For example, the zone covering arrival, ticketing and entry. Staff's duties and responsibilities will not be limited to functional areas, they should be trained in cleaning, providing information, greeting and welcoming guests, managing queues, managing ticketing and handling payment transactions, directing traffic and managing the overall safety and security of the arrival or entry plaza. By having multiskilled and multitasked staff, managers should realise lower or reduced staff idle time and scale staff deployment in areas based on demand and traffic.

Staff in zone-managed attractions were found to be more satisfied with their jobs and more psychologically empowered. They were more likely to contribute positive to the visitor attraction and stay longer with the organisation. Managers will be able to realise training returns on these staff, plan their teams' development and career progression as business needs evolve. At the same time, there are also financial savings in reduced costs of recruitment and wrong or inappropriate hires.

Guests visiting zone-managed attractions were more likely to be satisfied with their visits largely due to the positive disposition of employees in these facilities. These guests were more likely to repeat their visits and patronage, share their positive experiences with others, and, bring their friends and families along with them on their next visit. Managers will be able to reap direct gains in reduced marketing resources by targeting guests who have visited their facilities; encourage social media influence through post-visit reviews; and, schemes that promote repeat visitorship.

Managers will realise that structuring and organizing their staff deployment using zone management would more likely result in greater employee satisfaction, increased psychological empowerment, and, improved guest satisfaction. These are key factors to improve and increase efficiency, productivity, profitability and sustainability.

## **16 DISCUSSION**

This research will bring practical insights into the impact of management culture on job satisfaction and guest satisfaction. Psychological empowerment is more than something managers do, but the result of their management styles and organizational culture.

Psychological empowerment is an important aspect of managing teams in the attractions industry and probably in the wider context of services businesses, because through their employees, organisations are dealing and interacting with visitors, guests, patrons and customers. When visitors to attractions approach the staff, they are probably lost and need directions, need assistance on show times, misplaced something or got separated from their tour groups. While the staff may be empowered to stop his current work to help the visitor, he also needs to be trained with the right skills and equipped with the information to assist.

However, if the organisation structures their staff based on functions such as cleaners or gardeners, some of these staff may not feel that it would be their responsibility to help a visitor in need. The visitor will likely face the all-too-common responses of “I don’t know”, “it is not my job” or “please check with the information counter”. This will negatively affect customer experience and customer satisfaction. One other question beckons: if an attraction’s operations and manpower are organized by customer touchpoints or zones (clusters or groups of touchpoints), how will this affect customer satisfaction?

Therefore, this research also explores the impact of how an attraction is structured and organized on customer satisfaction and job satisfaction.

Zone management or other various forms of customer-centric operating structures have evolved, created and implemented to be operationally elastic and scalability to demand situations. Have these resulted in better customer service experiences and satisfaction? While organisations have been mindful of operational costs, have they been more successful in maintaining and delivering quality service experiences to the customer?

Multiskilling and multitasking are cornerstones of zone management and operational scalability. Have these increased employee's job satisfaction? It is assumed that with added responsibility and training, employee's sense of belonging, ownership and autonomy, and as a result, they are likely to stay on the job longer and want to contribute more. We also assume that these will drive them to do more and "run the extra mile" for the customer.

An underlying assumption of this research is the qualitative factors will drive the quantitative outcomes of improved productivity. Better output is symbolised by customers' willingness to pay a higher price, and improved input by a satisfied employee willing to do more for the same amount or a reduced pool of employees will perform a greater number of tasks and responsibilities.

This research also aims to provide insights into how organisations should organise their operational resources from the perspective of the customer through clusters of touchpoints rather than functional capabilities. These structures will require employees to do more or multitask, but to do so, they should first need to be

multiskilled. This responsibility of multiskilling should lie with the organisation. Similarly, teams will also need to be empowered to exercise judgement on demand situations to deploy team members appropriately to deal with such situations.

This research will impact how teams are organised and structured to maximise job satisfaction and guest satisfaction, while providing insights into how team should be managed from a skills training perspective and the level of empowerment provided by the organisation. These relationships will be critical as organisations review their internal management structures, human resources policies and organisational culture.

Satisfied employees are also deemed to stay longer on the job and with the organisation. This in turn will result in reduced costs of recruitment, selection, orientation and foundation training. At the same time, staff with the potential to take on greater administrative and supervisory or managerial responsibilities would have the benefit of knowing how the organisation functions, better cultural fit, multiskilled and empowered. The succession planning from zone management, multiskilling and psychological empowerment prepares suitable candidates from within the organisation more readily for promotions.

With zone-managed operational scalability, organisations are also able to have a more elastic workforce and cost structure to meet demand and surges. Cost-cutting is no longer for the sake of reducing costs with service quality and customer experience compromised.

The combination of zone-based management, multiskilling and empowerment will likely lead to greater teamwork, trust in teams and camaraderie. Besides reviewing how their respective businesses should be organised, structured and managed, tourism organisations will also need to consider the human capital aspects of career advancement and succession planning.

Organisations will also need to review how teams are recognized, incentivised and rewarded. This study will be able to draw a direct relationship between how a zone is managed and how it impacts guest experience and satisfaction. Zone-based guest satisfaction surveys at various times of operations such as peak and off-peak can identify team performance with intended and desired outcomes of guest experience.

The impact of multiskilling and operating structure may have implications on how tourism and hospitality education institutes and vocational training schools prepare their students for employment in the attractions and services industry. Similarly, attractions businesses may need to review and realign on-the-job and employment training programmes based on the variety of skills and knowledge required to deliver positive customer experience and customer satisfaction. This poses a question for both hospitality educators and human resource practitioners: How aligned is skills training with customer satisfaction and customer touchpoints?

Tourism and hospitality vocational and education institutes could appreciate from this research that while their curriculum is based on the functional needs of the industry, these skills, competencies and knowledge will need to be taught from the objective of delivering a superior experience, and, from the perspective of guest



satisfaction and guest experience. The organisation and deployment of manpower will then come from how the service and experience are delivered to the guest in clusters of guest-interfacing touchpoints or zones. The application of skills and knowledge learnt by tourism students should be contextualised to the location and situation where they are most likely to be deployed. Tourism students will then be trained with a variety of skills that are relevant to how tourism businesses operate and how guests are received in these businesses. However what use are these if tourism students are not encouraged to exercise judgment, solve problems and make decisions? Empowerment is more than just feeling good and powerful - practicums should then be designed to expose students to real-life situations where they will need to size up the circumstances, weigh options and think through possible consequences, before deciding on what will be best for the occasion. Therefore, besides contextualised multi-skilling and zone-based management, tourism students should be mentored and guided on how to apply these skills in exercising judgment and making decisions.

This cross-cultural research will provide insights into the service experiences received by resident and foreign guests and delivered by resident and foreign employees and vice versa. What is the service expectation and satisfaction for a foreign guest if the service is delivered by a non-local or foreign employee? Especially in the case of visitor attractions, do foreign tourists expect local service delivery? How will service delivered by a foreigner impact the service experience of foreign or local guests?

"No one comes to a foreign destination to experience the service of their own countrymen" - how does this impact service experience? Is there any difference?

While this research was conducted at visitor attractions, its implications can be readily and easily applied to all forms of retail, service and customer-interfacing roles and organisations. Even banks, financial institutions, community-servicing functions of local councils, government departments and transport hubs such as airports, railway stations and coach interchanges can benefit from how zone-managed structures, management culture and skills training can provide a better work environment and better customer experience and service delivery.

It is also likely to shape the way policy-makers and strategists think about productivity and productivity initiatives. Without a focus on qualitative factors of job satisfaction and guest satisfaction, it will be a challenge to deliver the intended and desired quantitative productivity increases. Qualitative factors of empowerment and multiskilling, and the focus on service satisfaction are the key components of zone management or organising operations resources based on customer touchpoints. These will then lead to productivity gains.

Labour productivity is the factor between the value guests pay for their experience and the costs of manpower resources. For an attraction visit, value guests pay is purely experiential – there is virtually no functional value in visiting an attraction. The price paid is also a promise of a good and memorable time. The visitor's expectation of a wow experience is the result of positive word-of-mouth, peer recommendations, social media reviews and ratings, and the attraction's marketing

messages. These are largely positive experiences from satisfied visitors or customers, who then justify the price or value paid for a visit. Satisfied employees are likely to stay on the job longer with less intention to leave the organisation. Multiskilled and empowered employees take on more responsibilities and duties and run the extra mile for the customer. These result in relatively lower manpower costs. Therefore, qualitative focus on job satisfaction and customer satisfaction will drive quantitative gains in labour productivity.

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