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**THE INFLUENCE OF WORK REWARDS ON JOB  
SATISFACTION: EVIDENCE FROM AN AUTOMOTIVE  
MANUFACTURING AND ENGINEERING CORPORATION IN  
MALAYSIA**



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FEBRUARY 2026**

**THE INFLUENCE OF WORK REWARDS ON JOB SATISFACTION:  
EVIDENCE FROM AN AUTOMOTIVE MANUFACTURING AND  
ENGINEERING CORPORATION IN MALAYSIA**



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Management**



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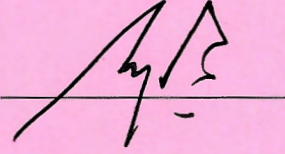
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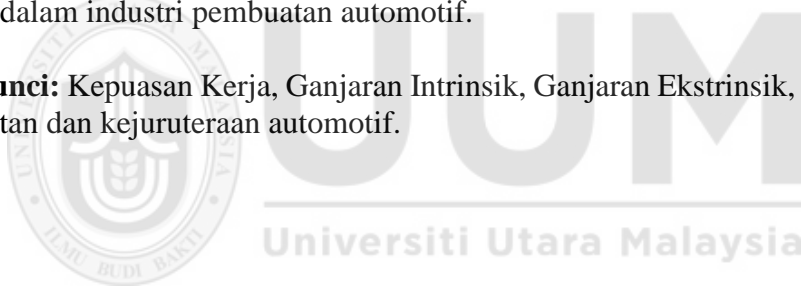


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## Abstrak

Kajian ini menganalisis pengaruh ganjaran kerja terhadap kepuasan kerja pekerja dalam industri pembuatan dan kejuruteraan automotif Malaysia. Kajian ini akan mengenal pasti jenis insentif kerja yang paling ketara mempengaruhi kepuasan kerja pekerja dan mengkaji potensi variasi jantina dalam mengurangkan hubungan ini. Penyelidikan menganalisis dua jenis ganjaran pekerjaan: ganjaran intrinsik (autonomi, perkaitan, dan penglibatan dalam tugas) dan ganjaran ekstrinsik (insentif sosial dan organisasi). Sampel terdiri daripada 361 pekerja bukan eksekutif dan peringkat pertengahan daripada syarikat automotif terpilih di Shah Alam, Batu Berendam dan Pekan, dikumpulkan menggunakan soal selidik. Statistik deskriptif, analisis korelasi, analisis regresi, dan ujian-t sampel bebas telah dijalankan menggunakan SPSS versi 29. Penemuan menunjukkan bahawa insentif kerja adalah petunjuk signifikan kepuasan kerja, dengan ganjaran ekstrinsik menunjukkan korelasi yang lebih besar sedikit daripada ganjaran intrinsik. Para penyelidik mengenal pasti tiada perbezaan yang ketara dalam tahap kepuasan kerja antara pekerja lelaki dan wanita. Penemuan ini menekankan keperluan untuk melaksanakan sistem ganjaran yang mengintegrasikan kedua-dua faktor intrinsik dan ekstrinsik untuk meningkatkan kepuasan dan pengejalan pekerja dalam industri pembuatan automotif.

**Kata kunci:** Kepuasan Kerja, Ganjaran Intrinsik, Ganjaran Ekstrinsik, Jantina, industri pembuatan dan kejuruteraan automotif.



## Abstract

This study analyzes the influence of work rewards on employee job satisfaction within the Malaysian automotive manufacturing and engineering industry. The study would identify the sorts of work incentives that most significantly influence employee job satisfaction and examine potential gender variations in mitigating this relationship. The research analyzed two types of employment rewards: intrinsic rewards (autonomy, relevance, and engagement in tasks) and extrinsic rewards (social and organizational incentives). The samples consisted of 361 non-executive and mid-level employees from the chosen automotive companies in Shah Alam, Batu Berendam, and Pekan, collected using questionnaires. Descriptive statistics, correlation analysis, regression analysis, and independent samples t-tests were conducted utilizing SPSS version 29. The findings suggest that work incentives are significant indicators of job satisfaction, with extrinsic rewards exhibiting a marginally greater correlation than intrinsic rewards. The researchers identified no substantial disparity in job satisfaction levels between male and female employees. The findings underscore the need of implementing reward systems that integrate both intrinsic and extrinsic factors to improve employee satisfaction and retention in the automotive manufacturing and engineering industry.

**Keywords:** Job Satisfaction, Intrinsic Rewards, Extrinsic Rewards, Gender, Automotive Manufacturing and Engineering Industry.



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## List of Abbreviations

|                     |  |
|---------------------|--|
| ANOVA               | Analysis of Variance   |
| Cronbach's $\alpha$ | Cronbach's Alpha (measure of internal consistency/reliability) |
| df                  | Degrees of Freedom   |
| ER                  | Extrinsic Rewards  |
| F-value             | F-Test Statistic (used in ANOVA and regression analysis)       |
| HR                  | Human Resources  |
| HRM                 | Human Resource Management                                      |
| IR                  | Intrinsic Rewards  |
| JS                  | Job Satisfaction   |
| M                   | Mean   |
| N                   | Number of Respondents / Sample Size                            |
| p                   | Probability Value (Significance Level)                         |
| r                   | Pearson Correlation Coefficient                                |
| R <sup>2</sup>      | Coefficient of Determination                                   |
| Sig.                | Significance (Statistical Significance)                        |
| SPSS                | Statistical Package for the Social Sciences                    |
| Std. Dev.           | Standard Deviation   |
| UUM                 | Universiti Utara Malaysia                                      |
| $\alpha$            | Level of Significance (Alpha)                                  |

## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background of the Study

Job satisfaction is one of the core elements that determine the health and success of employees. Satisfied employees have high motivation, high productivity and commitment to the organizational goals. On the contrary, dissatisfied employees often demonstrate absenteeism, high turnover, low morale, and poor performance. In the modern competitive and dynamic business landscape, employee satisfaction has become one of the strategic concerns of organizations that want to secure long-term growth and competitiveness (Loo et al., 2024).

The automotive manufacturing and engineering industry is very important in the context of economic growth in Malaysia. The industry significantly contributes to the national economy by generating employment opportunities and fostering industrial development. Nevertheless, it is also marked by the hard working conditions, high performance expectations and constant technological changes. These issues ensure that it is important to know what factors impact employee satisfaction and retention in this industry (Zulkarnain et al., 2025).

Work rewards are some of the other determinants of job satisfaction. The rewards could be classified into two broad groups namely intrinsic rewards e.g. task autonomy, job significance, recognition and involvement in the decision making process and extrinsic rewards e.g. salary, benefits, job security and formal recognition systems. These two categories of rewards are motivational strategies that can boost job satisfaction, turnover, and performance of an organization (Mahmud et al., 2021).

Recent empirical research in Malaysia underscores the significance of rewards in influencing job satisfaction. The authors found that intrinsic rewards are

important, as non-financial rewards such as recognition and feedback significantly influence job satisfaction among employees in Selangor, with a strong positive effect (Hamzah & Matkhairuddin, 2023). A study by Mahmud et al. (2021) indicated that in an automotive manufacturing plant, job satisfaction significantly influenced turnover intention, highlighting its critical role in employee retention. Hassan and Govindhasamy (2020) identified that both intrinsic and extrinsic rewards serve as significant predictors of employee retention among Generation Y employees in Malaysian manufacturing firms. Mojolou et al. (2023) found that reward systems contributed to over 60% of job satisfaction levels among non-academic employees at Universiti Malaysia Sabah, highlighting the significant impact of rewards in different organizational contexts.

Additionally, Zulkarnain et al. (2025) investigated the effects of four primary HR practices—performance management, career development, rewards and benefits, and leadership behavior—on employee retention in a Peninsular Malaysian automaker. The findings indicate that career development has the strongest correlation with employee retention among the four HR activities. This essay emphasises that in order to guarantee employees' long-term loyalty to the company, HR policies should be in line with their expectations.

Despite these findings, additional study on intrinsic and extrinsic rewards and their impact on job satisfaction within the Malaysian automotive manufacturing and engineering industry remains essential. Identifying the components of rewards that most significantly influence job satisfaction provides valuable insights for human resource managers on strategies to attract and retain employees. Furthermore, analysing the potential disparities in job satisfaction across genders may aid organisations in

developing reward programs that cater to the varied demands of employees, hence enhancing performance and workforce retention.

It is based on this that the current research aims at investigating how work rewards affect job satisfaction within a Malaysian automotive manufacturing and engineering industry. Investigating intrinsic and extrinsic rewards and taking into account the gender differences, the proposed study would determine the most significant factors that contribute to employee satisfaction and make recommendations based on it to develop an effective reward strategy.

## **1.2 Problem Statement**

Job satisfaction among employees remains one of the most burning issues of the organizations all over the world and especially in the automotive manufacturing and engineering industry. Even with competitive remuneration and other benefits, most businesses struggle to retain employees, have high turnover, absentees, and low morale (Hamzah & Matkhairuddin, 2023). The automotive manufacturing and engineering industry in the Malaysian case is no exception since it is often typified by high work demands, hard production goals, and a fast-evolving technology. With no balance between sufficient rewards and recognition systems, these pressures tend to reduce the well-being and satisfaction of employees (Mahmud et al., 2021).

The emerging literature highlights the fact that rewards in job satisfaction are predominantly financial and non-financial in determining job satisfaction. As an example, Hassan and Govindhasamy (2020) underscored that extrinsic incentives, such as compensation and job security, are crucial in retaining Generation Y personnel inside Malaysian manufacturing firms. Conversely, intrinsic elements, including recognition, career development, and personal accomplishment are also crucial in the long-term satisfaction (Mojolou et al., 2023). This indicates that job satisfaction cannot be

achieved purely on monetary incentives but it depends on intangible incentives that are used to satisfy the psychological and social needs of the employees.

Nevertheless, available data suggests that there is still a gap in the reward practice and employee expectations in the Malaysian auto industry. Zulkarnain et al., (2025) discovered that despite the important impact of HR practices on retention, most employees indicated a dissatisfaction with reward systems, which indicated that organizational strategies and employee achievements do not align. Likewise, Loo et al., (2024) found that younger employees also had generational differences in reward preferences with most young employees focusing on recognition and work-life balance, and older employees focused on financial stability. This complication indicates that a single set of rewards system no longer works in the present diverse workforce.

Moreover, the main research gap is that the existing research on rewards and job satisfaction in Malaysia has concentrated either on a particular type of rewards or on a small sample organizational setting thus the combined effects of intrinsic and extrinsic rewards in the automotive manufacturing and engineering industry remain unclear. This divide is particularly pronounced given the industry significant role in Malaysia's economy, with a substantial proportion of lower and middle-level employees comprising its workforce. This gap needs to be taken care of not only to increase job satisfaction but also to enhance retention, productivity and general sustainability of the organizations.

Therefore, the objective of the investigation is to ascertain and analyze how work rewards including intrinsic and extrinsic work rewards influence job satisfaction in a Malaysian automotive manufacturing and engineering company. In this manner, it would meet the urgent demand of evidence-based HR practices that can match the

expectations of the employees, decrease the turnover risks, and create more satisfied and engaged labor force.

### **1.3 Research Questions**

This study seeks to examine the effect of the independent variable, work rewards and gender on the dependent variable among employees in an automotive manufacturing and engineering industry in Malaysia. Work incentives comprise two dimensions: intrinsic rewards and extrinsic rewards and also see difference gender to job satisfaction. The dependent variable is job satisfaction. This study's question design would clarify the influence of work rewards on job satisfaction. The following research questions might be formulated for the study, based on the previously given independent and dependent variables:

RQ1 : Is there a relationship between intrinsic rewards and job satisfaction?

RQ2: Is there a relationship between extrinsic rewards and job satisfaction?

RQ3 : Is there any difference in the level of job satisfaction by gender in the organization?

### **1.4 Research Objectives**

This study seeks to determine the relationships between work rewards and job satisfaction. The research would identify which work rewards (intrinsic or extrinsic) are most significant to employees' job happiness. On the gender, the researcher wants to see there any imbalance rewards received by gender. The findings of this study would aid the organization in comprehending employees' perspectives on work rewards. It would also furnish essential insights for the decision-making process in enhancing the entire reward system. Ultimately, enhancements to the compensation system should

seek to cultivate or alter the organization's work culture. In response to the aforementioned issue, the following primary study objectives have been established:

RO1 : To determine the relationship between intrinsic rewards and job satisfaction.

RO2 : To determine the relationship between extrinsic rewards and job satisfaction.

RO3 : To identify the difference in the level of job satisfaction between male and female employees in the organization.

### **1.5 Significance of the Study**

This investigation contributes to the current understanding of employee job satisfaction and reward systems, specifically in the Malaysian automotive manufacturing and engineering industry. Although comprehensive research has explored the connection between incentives and employee satisfaction in several industries, there is a paucity of empirical studies addressing this particular industrial context. This study concurrently analyzes intrinsic and extrinsic incentives, providing theoretical contributions that enhance motivation theories. In the Malaysian context, Mojolou et al., (2023) revealed that organizational reward systems substantially affect job satisfaction, accounting for about 60% of the variance within non-academic personnel at Universiti Malaysia Sabah.

The findings would assist corporate leaders, HR professionals, and policymakers in formulating effective compensation strategies that enhance employee satisfaction and decrease turnover. Understanding which type of reward, whether intrinsic or extrinsic, most significantly influences work satisfaction was enable firms to utilize their resources more effectively and enhance their reward systems. Vasudevan and Nathan (2024) shown that job motivation among manufacturing workers in Penang is a significant predictor of income, promotion, and recognition, hence reinforcing the

concept of extrinsic rewards to sustain employee commitment in the workplace. Similarly, Samad and Chong (2024) discovered that rewards, alongside employee professional growth and work-life equilibrium, are drivers of job satisfaction within the Selangor manufacturing industry. These results highlight the necessity of aligning compensation systems with consumer expectations of employees, a factor that also fosters organizational growth and competitiveness.

### **1.6 Scope of the Study**

The research focuses on examining the relationship among work rewards, gender, and job satisfaction within the automotive manufacturing and engineering industry in Shah Alam (Selangor), Batu Berendam (Melaka), and Pekan (Pahang). These areas are picked due to their status as significant automotive hubs in Malaysia. Shah Alam hosts several automotive assembly plants, Batu Berendam in Melaka is characterized by numerous concentrated suppliers of automotive components, and Pekan in Pahang serves as a significant automotive hub with substantial assembly operations, including Proton and DRB-HICOM. These areas collectively constitute the automotive manufacturing and engineering industry in Malaysia.

The study adopts a quantitative methodology. The data were gathered by an online questionnaire distributed to 361 participants, as specified by the sample size table established by Krejcie and Morgan (1970). The questionnaire was disseminated by instant messaging platforms, such as WhatsApp. The study especially focuses on non-executive and middle-level personnel, including production operators, technicians, administrative staff, and supervisors, to ensure consistency, as they are most affected by organizational reward systems due to the uniformity of their compensation structures.

The scope of the proposed research is confined to non-executive and middle-level employees at selected automotive manufacturing and engineering industry in Shah Alam, Batu Berendam, and Pekan, examining the relation between work rewards, gender, and job satisfaction.

## **1.7 Definition of Key Terms**

### **1.7.1 Work Rewards**

Work rewards are the benefits that employees receive in recognition of their contributions to the organization. They consist of both extrinsic and intrinsic incentives that affect employee motivation, retention, and job satisfaction (Zulkarnain et al., 2025).

### **1.7.2 Intrinsic Rewards**

Intrinsic incentives, which are non-financial benefits derived from the labor itself, encompass acknowledgment, autonomy, personal progress, and a sense of achievement. These incentives fulfill the psychological and emotional requirements, hence enhancing employee job satisfaction (Hamzah & Matkhairuddin, 2023).

### **1.7.3 Extrinsic Rewards**

Extrinsic rewards are physical incentives offered by the organization, encompassing salary, allowances, performance bonuses, perks, and job security. They are designed to motivate employees and enhance job satisfaction, particularly in a structured work environment like manufacturing (Mojolou et al., 2023).

### **1.7.3 Job Satisfaction**

Job satisfaction describes the extent of contentment employees feel regarding their roles and work environment. It is influenced by incentives, work environment, and

organizational policies, and is essential for employee performance and retention (Mahmud et al., 2021).

#### **1.7.4 Gender**

The term gender categorizes employees as either male or female. This is a demographic variable since it was examine potential disparities in job satisfaction between males and females, corroborated by prior research in Malaysian manufacturing contexts (Hassan and Govindhasamy, 2020).

### **1.8 The Organisation of the Study**

This research report comprises five chapters. Chapter One (Introduction) delineates the problem and provides the research background. The chapter subsequently addresses the research purpose, including its general and specific objectives, along with the study hypothesis, culminating in a conclusion. The study relies on a sufficiently substantial body of literature detailed inside the Literature Review of Chapter Two. The definitions of terms, literature review, and conceptual framework are examined within a theoretically or thematically organized structure of the research. Chapter Three, or Methodology, involves the selection of a research plan to structure the thesis. This design may be classified as a survey design, a questionnaire design, or an examination of a certain population's interests. The chapter delineates the chosen design by correlating the components with the research goals and objectives established by the student, drawing upon the literature on research technique. This section outlines the recommended solution or strategy for maintaining the framework and methodologies for data collection and analysis, encompassing quantitative, qualitative, secondary, and primary data. Chapter four is headed Data Analysis and Results, providing an extensive overview of the data collection methods and procedures employed. The techniques

involved the utilization of a specialized instrument developed by the researcher. As a quantitative study, the researcher created a questionnaire and conducted a pilot study to assess its reliability and validity. Chapter Five, titled Discussions, encompasses the examination and elucidation of the results outlined in Chapter Four in relation to the study's objectives. The conclusion shall encompass a comprehensive disclosure of the study's aim, objectives, and hypothesis, together with a succinct overview of the findings, inferences, and recommendations from the preceding chapters.



## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

Literature review is an important aspect of any research. It allows making comparisons between the present work and the past studies, which offers an insightful background and understanding. Moreover, the literature review would act as a guideline to enhance the research structure. This chapter would also elaborate the ideas on job satisfaction, intrinsic rewards and extrinsic rewards. These variables are evidenced by a number of scholarly articles. Lastly, empirical evidence would also be provided as to the relations between the independent and dependent variables. Overall, the literature review assists in the formulation of a concrete theoretical framework, the problem statement refinement and clarity in the research direction. Moreover, it enables researchers to build their knowledge based on the previous studies. The information used to make this review is found in academic journals, books, newspapers and past research results.

#### **2.2 Underpinning Theory**

##### **2.2.1 Maslow's Hierarchy of Needs**

The Maslows Hierarchy of Needs (Maslow, 1943) offers a general framework on which other levels of human needs can be explored in regard to employee motivation and performance. The theory assigns the five tiers of needs in a hierarchy namely physiological, safety, social, esteem, and self-actualization. The needs of lower level demand to be fulfilled before one is stimulated to attain higher level psychological and self fulfillment needs.

Extrinsic rewards like salary, employment stability and secure working environments in the Human Resource Management context would be the physiological

needs and safety needs. These incentives give the necessary base to employees to be safe and stable at their work place. Once these basic needs are met, employees were able to concentrate on intrinsic rewards, which are associated with the needs on higher levels, like esteem and self-actualization. These are recognition, self development, independence and significant work.

The social need is achieved as employees get positive work relations, teamwork, and a feeling of belonging. The esteem needs are fulfilled by extrinsic (e.g. promotions, formal recognition) and intrinsic (e.g. a sense of accomplishment and personal value) rewards. Self-actualization, the highest level of the hierarchy, is centered on meaningful work, creativity and achievement of personal potential.

The current studies keep confirming the theory established by Maslow in contemporary organizational scenario. To illustrate, a research conducted by Nurjanah and Suherman (2022) confirmed that all five needs levels have an essential impact on the motivation of employees, and esteem and self-actualization are paramount to the continuity of engagement. On the same note, Taş (2024) came up with recognition, development, and growth as intrinsic elements that elevate the level of engagement of employees, especially at elevated levels of the hierarchy. Another systematic review by Elmadag and Ellinger (2024) also established that intrinsic rewards are more successful in enhancing overall job satisfaction, well-being, and dedication than extrinsic benefits, though the latter is essential to fulfilling the basic needs.

The Maslow theory is thus in favour of the notion that organizations ought to embrace a balanced reward system, that considers the extrinsic and intrinsic needs. Financial compensation alone cannot keep employees motivated in the long-term, as it only fulfilled lower level needs. Higher-order fulfillment by providing growth,

recognition, and meaningful contribution to employees is another factor that should be considered to obtain sustainable performance.



**Figure 1**  
*Theory of Maslow's Hierarchy of Needs (1943)*

## 2.3 Conceptual Literature

### 2.3.1 Job Satisfaction

Job satisfaction is the feeling that employees develop regarding their jobs, which is either positive or negative. It is a generalized attitude and it shows the level of satisfaction and contentedness of the people with the job duties and working conditions. Ge et al. (2021) note that job satisfaction results when an employee compares the rewards, they anticipate to get and those they actually achieve out of their work. It is an emotional rating that identifies commitment, engagement and performance of an personnel within organization.

The issue of job satisfaction has continued to be one of the most researched topics in industrial studies and organizational behavior. However, recent studies define it as an attitudinal variable which determines how much employees like their job and the different elements in a job, including pay and supervision, working environment and growth opportunities (Anwar et al., 2024; Al-Sabhan et al., 2022; Tauqeer Abdullah

et al., 2023). It is an important aspect since it is associated with better job performance, motivation, commitment to the organization, and lower turnover and absenteeism rates (Umami Naiemah et al., 2021). Positive work values, as a result of high levels of satisfaction, and reduced burnout is of particular importance in the labor-intensive sector, such as the automotive manufacturing and engineering industry.

Jobs can also provide satisfaction in the context of industrial operations whereby the work is well aligned with the values, expectations and standards of the employees. The workers feel that their job fulfills their personal and professional needs, which boosts their commitment and performance (Zakaria et al., 2024). On the other hand, dissatisfaction can be a result of supervision, communication and remuneration systems. In a Malaysian automotive production plant, a study carried out by Mahmud et al., (2021) found an impact of intrinsic factors including achievement, acknowledgement, and the characteristics of labour on satisfaction, and extrinsic factors, including compensation and employment stability, played substantial effects. This shows that intrinsic and extrinsic rewards are still focal to job satisfaction in the manufacturing setting.

The sense of job satisfaction is another variable that needs to be examined in terms of motivation factors that drive people at work. Motivation theories can be categorised into process and content theories. Content theories can be used to find out the needs and goals that motivate behavior, whereas process theories concentrate on how expectations and perceptions can be used to formulate satisfaction (Alkandi et al., 2023). Among the theories of the fundamental content is the Maslows hierarchy of needs that is still frequently referred to in the contemporary organizational psychology (Yurdakul and Arar, 2023).

The employees in the industry of automotive manufacturing and engineering industry that a higher level of this hierarchy reached, especially esteem and self-actualization, were more likely to report greater job satisfaction and increased loyalty to their organization (Loo et al., 2024). The framework proposed by Maslow is thus applicable in the contemporary working environments since it aids in the gradual nature of employee motivation wherein the satisfaction of the lower needs of salary and security is followed by the intrinsic satisfaction of the fuels of accomplishment and appreciation.

Hence, job satisfaction may be referred to as a multidimensional construct that includes emotional, cognitive, and behavioral aspects of job satisfaction that represents how employee appraise their work experiences. It combines intrinsic motivators and extrinsic conditions that influence the employee attitude and performance. In the context of automotive manufacturing and engineering industry, a balance between the latter factors, i.e. equitable rewarding, supervisory supportive, professional development, and safe working conditions can lead to the increase of higher levels of satisfaction, which subsequently leads to productivity and organizational prosperity.

### **2.3.2 Intrinsic Rewards**

Intrinsic rewards are regarded as the work characteristic and the attributes that are attached to the job as it stands on its own like ability to give workers a sense of accomplishment, interest, responsibility or achievement (Kalleberg, 1977). The valuation of this dimension shows what the worker would like to receive at work the curiosity and difficulty in the task and the capability to use skills gained in the workplace. In recent studies, the issues of intrinsic rewards remain in the spotlight to

raise the motivation, satisfaction, and commitment of employees towards the organization (Anjum et al., 2021; Godás Otero et al., 2023; Manzoor et al., 2021).

Clifford (1985) listed intrinsic rewards as task autonomy, task significance and task involvement. Task autonomy is the amount of freedom in accomplishing a task, the significance of the task by the importance of the work, and task involvement of the degree the work is engaging or demanding. These traditional dimensions are applicable in the present-day studies. To illustrate, as recent research indicates, job autonomy and intrinsic motivation are important predictors of professional identity and job satisfaction in employees, including the social work sphere (Li et al., 2022).

The payoffs that result out of the intrinsic elements of work tend to be essential motivating variables to individuals especially in those jobs where workers seek to contribute relevantly. Along with extrinsic motivation, intrinsic motivation, in turn, includes recognition, involvement in decision-making, and challenging tasks that are closely connected with the commitment and satisfaction of employees (Anjum et al., 2021; Godás Otero et al., 2023; Manzoor et al., 2021). This intersection of traditional theory with the empirical findings of the recent past points out the persistent significance of intrinsic rewards in promoting employee motivation and well-being.

### **2.3.3 Extrinsic Rewards**

Extrinsic rewards are physical rewards that organisational offers to employees to encourage them and maintain desirable work behaviours, which are sought. These rewards are external, that is, they are rewarded by causes that are not personal satisfaction. Salary, bonuses, allowances, incentives, promotions, recognition, benefits, and job security are the common types of extrinsic rewards. These rewards are critical in influencing the work attitudes, performance and commitment among employees

especially in organized work industry like automotive manufacturing and engineering industry.

Extrinsic rewards in most organisations are strategic elements in attracting, retaining and motivating workers. According to recent research, competitive pay scales, incentives based on performance, and full benefits packages would have a favorable impact on employee motivation, satisfaction, and performance (Alimawi and Muda @ Ismail, 2022; Syahfitri and Hamsal, 2024; Wang and Villanueva, 2024). The above results reveal that employees react favorably when they feel that the rewards are fair, transparent, and consistent with their efforts.

Nevertheless, researchers also underline that the success of extrinsic rewards is also conditioned by contextual variables, including organisational culture, fairness perception and employee expectations. Although extrinsic rewards could increase motivation, its excessive use can also lower intrinsic motivation to work when employees concentrate too much on external rewards (Ryan & Deci et al., 2020). Thus, to have an efficient reward system, there must be a balanced mix of both the intrinsic and extrinsic factors to have the maximum level of employee participation and job satisfaction.

#### **2.3.4 Gender**

Gender is a demographic aspect that is significant in how workers perceive and experience the workplace. When it comes to job satisfaction, gender differences usually arise because of the differences in expectations and values of work and work experiences. The differences have some impact on the manner in which male and female employees perceive intrinsic and extrinsic rewards, which were eventually impact their overall workplace satisfaction.

It has been established that male workers are usually more motivated using extrinsic rewards, which are salary, promotion prospects, and job security. Conversely, female workers are more highly rated on intrinsic aspects, such as appreciation, friendliness at work, and significant job descriptions (Rožman et al., 2021; Milovanska-Farrington, 2023). The trends can be seen throughout different industries such as the automotive production and engineering processes, where the different gender roles have traditionally influenced the workplace hierarchy and the working conditions of the employees.

Gender-based inequality is especially apparent in the automotive manufacturing and engineering industry. There are many obstacles to career promotion, workplace atmosphere, and unequal pay, women can experience less job satisfaction than male colleagues (Manufacturing Institute, 2022; Hegewisch et al., 2023). Nevertheless, in case business establishments adopt an inclusive reward mechanism, equitable promotion guidelines, and skill enhancement opportunities, job satisfaction and retention rates among female workers increase drastically. This underscores the need to have fair and transparent human resource policies in male dominated industries.

Other than automotive manufacturing and engineering industry, the same gender-related trends have been reported in other industries. To illustrate, Liu et al. (2021) discovered substantial gender disparities in job satisfaction based on the work life balance and workload in the healthcare industry. Sarker et al. (2024) discovered that in the gig economy, gender moderates the impact of workplace conditions and job satisfaction, especially with flexible and less secure work conditions. The results highlight that gender is not a simple demographic variable, but rather a moderating component that influences the perception of the working employees about their working environment.

To conclude, gender is one element that is very vital in the way employees identify and react to both intrinsic and extrinsic rewards. By identifying such differences, organizations with such differences especially in male dominated industry like automotive manufacturing and engineering industry can develop more inclusive and effective reward systems that can facilitate all employees to have job satisfaction.

## **2.4 Development of Hypotesis**

### **2.4.1 Relationship between Work Rewards and Job Satisfaction**

Rewards that are rewarded in the workplace are significantly relevant and critical in determining employee job satisfaction. Work rewards are important features that involve intrinsic and extrinsic aspects that influence how employees perceive their jobs, how they become motivated, engaged, and have overall satisfaction. According to Maslow Hierarchy of Needs (1943), employees get motivated when their lower and higher-level needs are fulfilled with tangible and intangible rewards. Likewise, Elmadag and Ellinger (2024) point out that the properly designed reward systems directly and positively influence job satisfaction and organizational results.

This statement is also supported by the recent empirical research. Nurjanah and Suherman (2022) found that intrinsic reward (meaningful work, recognition, and opportunities to develop) and extrinsic reward (salary, benefits, job security) are both essential in motivating and satisfying employees. Besides this, Taş (2024) noted that there should be recognition, the ability to use skills, and self-development, which are important sources of satisfaction. Hassan and Govindhasamy (2020) established that intrinsic and extrinsic rewards are very strong predictors of retention and satisfaction within employees in the manufacturing sector, whereas Vasudevan and Nathan (2024) also established that salary, promotion, and recognition are effective in motivating and improve job satisfaction in the manufacturing industry.

Even amidst these positive effects, there are a number of factors, which may determine how strong this relationship can be. Lack of congruence between the expectations of the employees and the real rewards may diminish the levels of satisfaction. When employees feel reward systems are unfair or inadequate, they were frustrated or demotivated and engage less and produce less. Moreover, when organizations do not provide information about the way rewards were assigned, then employees could have a wrong perception of their worth and become disgruntled.

However, job satisfaction and turnover may be decreased when companies adopt equitable, transparent, and significant reward systems. Embracing a better organized incentive system would cover both the economic and psychological needs of the employees to help create a more driven and dedicated workforce.

**H1:** *Work rewards are positively related with job satisfaction.*

#### **2.4.2 Relationship between Intrinsic Rewards and Job Satisfaction**

Intrinsic rewards are extremely important in determining every aspect of job satisfaction among the employees. Intrinsic rewards are included in the nature of the work, unlike extrinsic rewards like salary or benefits, which comprise factors like personal growth, recognition, autonomy, importance of the task at work and meaningful work. Hierarchy of Needs (1943) revealed that employees have a motive towards achievement, self-belonging, esteem and self-actualization are motivated once the fundamental needs are satisfied. According to this theoretical approach, employees become more satisfied with their job when they sense that they get personal meaning and value in their work.

This theoretical background is shown to be supported by empirical research. Taş (2024) listed intrinsic motivation like recognition, personal growth, and meaningful

work as the important factors that define employee engagement and satisfaction. Likewise, Nurjanah and Suherman (2022) observed that intrinsic motivation is a strong motivator and satisfaction factor of employees. Hassan and Govindhasamy (2020) noted that intrinsic rewards, such as the ability to use a skill and autonomy of tasks, have a favorable effect on employee retention and job satisfaction in a manufacturing setting. The intrinsic rewards also promote the psychological attachment of employees at work resulting in long-run engagement and loyalty.

Nevertheless, the relationship between job satisfaction and intrinsic rewards may depend on a number of factors. An example of this is when job roles are very organized where there is less autonomy employees may not be motivated even with other types of recognition. Also, the absence of substantial feedback or development can undermine the positive impacts of intrinsic rewards. Some organizations do not recognize or value the contributions of employees, and in that case, Job satisfaction is probable to be on the decline, despite availability of other tangible benefits.

Employees perceive themselves as valued, empowered, and linked to their work when organizations focus on intrinsic rewards in terms of opportunities to develop, be recognized, work on meaningful tasks which they have control over. This leads to an increased degree of satisfaction and involvement.

**H1a:** *Intrinsic rewards are positively related with job satisfaction.*

### **2.4.3 Relationship between Extrinsic Rewards and Job Satisfaction**

Extrinsic rewards constitute the concrete advantages given to the employees in an organization by the organization, which may include salary, job security, promotions, bonuses, benefits and other financial and material items or rewards. These rewards are very important in influencing job attitudes and behaviors of employees. The Hierarchy

of Needs states that extrinsic rewards mostly satisfied lower and middle level needs of employees like physiological and safety needs (Maslow, 1943). Organizations can provide their employees with these basic needs, which establishes the base on which they can feel secure, valued, and satisfied at work.

The literature surrounding this subject is producing positive conclusions regarding the relation between extrinsic rewards and job satisfaction. Elmadag and Ellinger (2024) discovered that reward systems and especially financial compensation and structured benefits directly increase employee satisfaction and organizational commitment. On the same note, Nurjanah and Suherman (2022) found out that extrinsic rewards like salary and job security are important motivators that have a great influence on the level of satisfaction. Vasudevan and Nathan (2024) in the manufacturing environment showed that salary, promotion, and recognition are key elements that boost employee motivation and satisfaction, and Hassan and Govindhasamy (2020) have highlighted the impact of extrinsic benefits on retention and good work attitude among employees.

Nevertheless, the influence of extrinsic rewards on job satisfaction can be different based on the distribution of the extrinsic rewards based on their equity and transparency. When the employees feel that the pay or benefits are not fair or are not consistent, they may develop dissatisfaction and demotivation. On the same note, extrinsic rewards that are not matched with performance or expectations can be ineffective in promoting long-term satisfaction. On the contrary, extrinsic rewards can be competitive, fair and clearly communicated, which promoted the feeling of security, value and satisfaction of employees.

Offering relevant extrinsic rewards is also among the most efficient methods of organization to improve the satisfaction levels, decreasing the turnover rates and

maintaining the motivation level, in particular, in such sphere as automotive manufacturing and engineering industry where the monetary aspects and the ability to be secure in the workplace are one of the most important aspects in the employment choices.

**H1b:** *Extrinsic rewards are positively related with job satisfaction.*

#### **2.4.4 Gender Differences in the Perception of Job Satisfaction**

Gender has also received a lot of acknowledgment as a critical factor in influencing the attitude of employees to work and job satisfaction. There is an emerging amount of evidence that men and women tend to value varying job qualities. Extrinsic rewards, including salary, promotion prospects, and job security, are generally more significant to male employees, and intrinsic ones, including recognition, supportive work conditions, and meaningful work, are generally more significant to female employees (Rožman et al., 2021; Milovanska-Farrington, 2023). These differences affect the degree of job satisfaction, motivation and commitment of the employees towards the organization.

Such gender disparities are highly manifested in the manufacturing industry due to historical gender inequities in the labor force. There are obstacles associated with career promotion, organizational culture, and unequal salaries, which diminish job satisfaction among women in comparison with male colleagues (Manufacturing Institute, 2022; Hegewisch et al., 2023). Industry reports also suggest that women job satisfaction and retention rates go so high when companies put in place reward systems that are fair in startup, inclusive in nature, and skill development programs.

Other industries have recorded comparable trends besides the manufacturing sectors. Liu et al. (2021) observed significant gender disparities in job

satisfaction and work-life balance in the healthcare sector, as female respondents had low degree of job satisfaction because of workload and emotional burden. Gender moderates the relation between workplace conditions and the level of satisfaction in post-flexible and unstable work arrangements, and Sarker et al. (2024) found that these findings were observed in the gig economy. Gender has also been associated with dissimilarity in the perceptions of career development and inherent job worth in the service industry (Lokmanalhakim and Hasbullah, 2022).

These results are consistent across industries and demonstrate the increased applicability of gender as a moderating variable in job satisfaction. Thus, the study anticipates the existence of major disparities in the perceptions of the job satisfaction among male and female employees, both in the automotive manufacturing and engineering industry and trends across the workforce.

**H2:** *Difference between genders with the perception of the job satisfaction.*

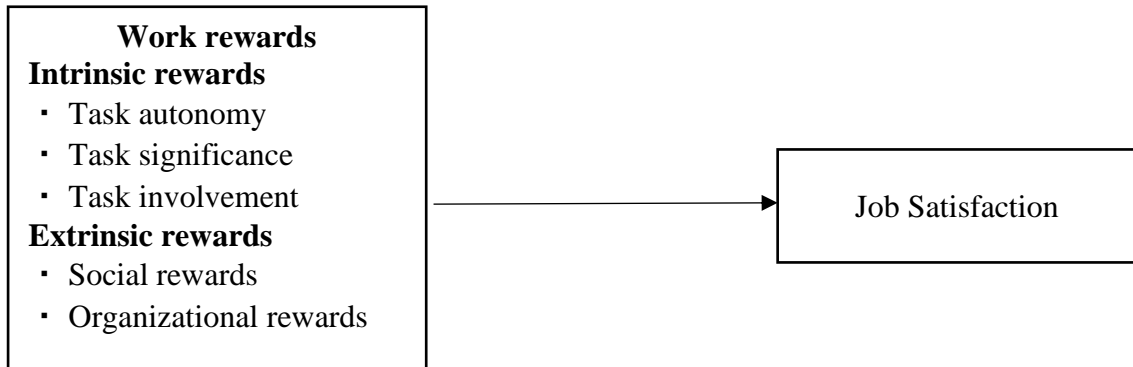
## **2.5 Research Framework**

The purpose of this study is to determine the factors that affect job satisfaction among employees in the automotive manufacturing and engineering industry. This part focuses on the discussion that forms the conceptual foundation of the study. The model emphasizes intrinsic rewards, extrinsic rewards and gender as the independent variables, and job satisfaction as the dependent variable.

Figure 2 presents the proposed model, which comprises all independent variables to examine whether they have a significant relationship with the dependent variable, job satisfaction.

### Independent Variables

### Dependent Variable



**Figure 2**

*Job satisfaction model*

## **2.6 Summary of the Chapter**

The chapter has provided an extensive literature review of the studies conducted to identify the relation that exists between work rewards, gender and job satisfaction in automotive manufacturing and engineering industry. Both intrinsic and extrinsic rewards have been cited as some of the important elements that shape employee motivation, attitudes and general job satisfaction. Psychological engagement and commitment are achieved through intrinsic rewards (acknowledgment, personal development, meaningful work, etc.), whereas extrinsic rewards (salary, job security, benefits, etc.) give tangible incentives, which develop employee satisfaction.

In addition, gender moderates the perceptions and values of the rewards among employees. Employees of male gender tended to overrate extrinsic benefits as opposed to female employees who give higher priority on intrinsic factors and conducive work environments. Such differences are most applicable in the traditionally male-dominated industry, wherein work arrangements and reward systems can influence the experience of employees in various ways based on gender.

The study is structured in a systematic manner that follows the conceptual framework, literature review, and conceptual analysis, which forms a sound theoretical basis of the study. The upcoming chapter described the research methodology that can be applied to gather and analyze the data to test these relationships in an empirical way.



## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter aims at describing the methodology that was employed in this study. It comprises approach was used and the way in which data has been collected and analyzed. This chapter discloses the techniques applied to analyzing the connection between the independent factors and dependent factors; research design, variables, population and sampling, research instruments, data collection approach and statistical analysis. In this chapter, discuss further on the methodology and designs that would be used to support the study. Other than that this chapter also involves the explanation of the manner of detailed description of the research process undergone by the research.

#### **3.2 Research Design**

In this research, the design used is quantitative. The most common way of obtaining quantitative data is through a questionnaire or survey. There are a number of speculations that are developable that should be tested. It is made in accordance with the purpose of this research and the research question that aimed to answer a type of study under correlation and relations on analyzing process on the independent variables have been selected. The relationships between work rewards and job satisfaction were analyzed using questionnaires. The research applies the different statistical tests and statistical package of social science (SPSS) version 29 to understand the outcomes of the data.

### **3.3 Source of Data**

This research used primary and secondary sources of data in order to attain the research objectives and increase the reliability of the findings.

#### **3.3.1 Primary Data**

The data was gathered by the use of the structured questionnaire to the employees of the automotive manufacturing and engineering sector in Malaysia. The questionnaire was formulated in line with the objectives and hypotheses of the study, and to gauge intrinsic rewards, extrinsic rewards, gender and job satisfaction. The questionnaire was done through Google Forms and the questionnaire link was provided to the respondents through WhatsApp. This was the most convenient way to choose this method, as it is mostly cost-effective and was able to cover a large number of respondents within a restricted time. Primary data allowed the researcher to access first-hand and current data directly relating to the respondents about their attitudes towards reward systems and job satisfaction.

#### **3.3.2 Secondary Data**

The secondary data was acquired in the form of academic journals, textbooks, published research articles, and valid online databases. The sources were mainly utilized in order to reinforce the literature review, theoretical framework, research model, and hypothesis development. Also, past empirical researches were consulted to determine validated measurement tools, especially those questionnaire items that were modified by Rehman et al. (2010). The secondary data was used to make sure that the study was based on the established theories and previous empirical findings.

### **3.3.3 Justification of Data Sources**

The combination of primary and secondary data strengthened the validity and credibility of the study. Primary data allowed for direct empirical examination of the relationships between the variables, while secondary data provided theoretical support and methodological guidance. This integrated approach enhanced the overall quality and robustness of the research findings.

### **3.4 Population and Sampling**

This section describes the population, sampling technique, and sample size adopted in the study.

#### **3.4.1 Population of study**

Target population of this study entailed the employees of the automotive manufacturing and engineering industry in Malaysia. In particular, the study targets non-executive and middle level workers like production operators, technicians, clerical workers and supervisors. These groups were chosen due to the fact that they are the majority within the workforce in the industry and they are the ones that are directly impacted by the reward systems in the organization. Their attitudes towards intrinsic and extrinsic rewards should offer important information on the effect of such rewards in job satisfaction.

Automotive manufacturing and engineering industry was selected because of the vital contribution in the economic growth of Malaysia and the high level of competitiveness in the working environment. It is a high-performance, technical, and flexible industry to adapt to technological change that is why the motivation and satisfaction of their employees are also important in the success of the organization.

The targeted audience is based on three key automotive centers in Malaysia which are Shah Alam (Selangor), Batu Berendam (Melaka) and Pekan (Pahang). Selection of these areas are based on the fact as they are considered the hub of automotive manufacturing and engineering industry and component manufacturing in the country with large scale companies like Proton, DRB-HICOM and even Tier-1 and Tier-2 suppliers in automotive and engineering industry. The total population of this study is said to be around 5,973 workers according to the company records which in these chosen organizations.

### **3.4.2 Sample Size**

Quantitative research method was used in this study and included employees of the chosen automotive manufacturing and engineering industry in Shah Alam (Selangor), Batu Berendam (Melaka), and Pekan, Pahang. The selection of these areas was based on the fact that they are major automotive centres in Malaysia, which are home to various assembly centres and component makers. The overall number of employees in these chosen organizations was 5,973 people.

The table of sample size determination by Krejcie and Morgan (1970) shows that a population of 5,973 would need at least 361 respondents to have confidence level of 95 per cent and 5 per cent margin of error. Thus, 361 employees have been chosen to take part in this research. The online questionnaire was utilized in collecting the data, and the survey were used WhatsApp messaging service. The invitations contained a hyperlink to the Google Form questionnaire; <https://forms.gle/1gde5C6M4A65KPNR8> that was developed with the purpose of this research.

| N  | S  | N   | S   | N   | S   | N    | S   | N      | S   |
|----|----|-----|-----|-----|-----|------|-----|--------|-----|
| 10 | 10 | 100 | 80  | 280 | 162 | 800  | 260 | 2800   | 338 |
| 15 | 14 | 110 | 86  | 290 | 165 | 850  | 265 | 3000   | 341 |
| 20 | 19 | 120 | 92  | 300 | 169 | 900  | 269 | 3500   | 246 |
| 25 | 24 | 130 | 97  | 320 | 175 | 950  | 274 | 4000   | 351 |
| 30 | 26 | 140 | 103 | 340 | 181 | 1000 | 276 | 4500   | 351 |
| 35 | 32 | 150 | 108 | 360 | 186 | 1100 | 285 | 5000   | 357 |
| 40 | 36 | 160 | 113 | 380 | 181 | 1200 | 291 | 6000   | 361 |
| 45 | 40 | 180 | 118 | 400 | 196 | 1300 | 297 | 7000   | 364 |
| 50 | 44 | 190 | 123 | 420 | 201 | 1400 | 302 | 8000   | 367 |
| 55 | 48 | 200 | 127 | 440 | 205 | 1500 | 306 | 9000   | 368 |
| 60 | 52 | 210 | 132 | 460 | 210 | 1600 | 310 | 10000  | 373 |
| 65 | 56 | 220 | 136 | 480 | 214 | 1700 | 313 | 15000  | 375 |
| 70 | 59 | 230 | 140 | 500 | 217 | 1800 | 317 | 20000  | 377 |
| 75 | 63 | 240 | 144 | 550 | 225 | 1900 | 320 | 30000  | 379 |
| 80 | 66 | 250 | 148 | 600 | 234 | 2000 | 322 | 40000  | 380 |
| 85 | 70 | 260 | 152 | 650 | 242 | 2200 | 327 | 50000  | 381 |
| 90 | 73 | 270 | 155 | 700 | 248 | 2400 | 331 | 75000  | 382 |
| 95 | 76 | 270 | 159 | 750 | 256 | 2600 | 335 | 100000 | 384 |

Note: "N" is Population Size  
"S" is Sample Size.

**Figure 3**  
*Sample Size of Population Table*

### 3.4.3 Sample Techniques

Respondents been selected by simple random sampling technique. This is the best way to have an equal opportunity of any member of the given population to be selected so that researcher biasness is reduced as well as the sample was a true reflection of the rest of the population. According to Sekaran and Bougie (2025), random sampling is an organized method of gathering and analyzing the pertinent data that help researchers on addressing the research questions, formulate the hypotheses, and make valid conclusions. The sampling frame was composed of records of employees that were offered by the Human Resource Department of the organizations used. Based on this frame, a random number process was computed and the respondents were selected randomly. This brought objectivity and fairness in the selection process.

In the study, the researchers only targeted the non-executive and middle-level staff, such as production workers, technicians, clerks and supervisors, because they are the ones that get affected most by the reward systems in the organization. The data collected were used as a primary data in the research and analyzed by using Statistical Package of the Social Sciences (SPSS) version 29 to study the relationships between variables and test the hypotheses put forward in the research.

### **3.5 Measurement of Instrumentation**

#### **3.5.1 Demographic Measurement**

The questionnaire comprises four sections measured using a Likert scale, except for Section A, which contains demographic information and is measured using a nominal scale. The nominal scale enables the researcher to categorize respondents into specific groups. The nominal scale is commonly employed to gather personal information, including age, gender, race, duration of service, educational background, and other variables.

According to Sekaran and Bougie (2025), the questionnaire is an effective method of data collection because it offers opportunities for researcher to administer personally, by distributions at the organizations. In this study, the research data were closed questions. A questionnaire is distributed to the respondent and the respondent group in the department. The items of the demographic questionnaire in the first section in Table 1.1. Sections B, C, and D aimed to assess factors associated with work rewards, including intrinsic rewards, extrinsic rewards, and job satisfaction. Section A consists the information about the profile of the respondent.

**Table 1**  
*Demographic Items*

| Operational Definition  | Items   |
|---|---|
| Demographic are the background variables of the respondents which outline their profile in the study. Demographic information was crucial in defining the sample and finding differences in the various groups. Sekaran and Bougie (2025) | <ol style="list-style-type: none"> <li>1. Age</li> <li>2. Gender</li> <li>3. Race</li> <li>4. Married Status</li> <li>5. Education</li> <li>6. Work Experience</li> </ol> |

Source: Sekaran and Bougie (2025)

### **3.5.2 Job satisfaction Measurement**

As stated by Rehman et al.(2010), job satisfaction is an emotion that is reacted by a person towards different areas of his/her job or how much they are satisfied with their job expectations and experiences in the work place. It is a general feeling of satisfaction and good mood that an employee has towards his work duties and the workplace environment. The authors also highlighted that job satisfaction is indicator of attitude towards the work of an employee and it is influential in shaping the results of motivation and performance.

The scales applied in the current research to assess job satisfaction were modified based on Rehman et al. (2010). The respondents were instructed to indicate their level of agreement with each statement using a five-point Likert scale.

**Table 2**  
*Jobs Satisfaction Measurement Items*

| Operational Definition   | Items   |
|--|---|
| Job satisfaction can be defined as the general feeling and the contentment of an individual with different issues in his/her job. It indicates the levels to which the work experiences meet the expectations and needs of employees. Rehman et al. (2010) | <ol style="list-style-type: none"> <li>1. Generally speaking, I am satisfied with this job.</li> <li>2. If I had the opportunity to start over again, I would choose the same type of work I presently do.</li> <li>3. Taking into consideration all things about my job, I am very satisfied.</li> </ol> |

Source: Rehman et al. (2010)

### 3.5.3 Intrinsic Reward Measurement

Rehman et al. (2010) emphasized that intrinsic rewards are internal rewards that are directly based on the nature of work. These rewards are meant to show the sense of achievement, accountability and the perceived importance of the work by an employee. The authors also maintained that intrinsic rewards are crucial in the background of job satisfaction because they determine the perceptions of employees towards their work in terms of level of engagement and satisfaction.

In the present research, the intrinsic reward items were modified according to Rehman et al. (2010). To measure the perceptions pertaining to job satisfaction, respondents are requested to respond to the question in terms of the degree of their agreement on a five point Likert scale, starting with strongly disagree and going up to strongly agree.

**Table 3**  
*Intrinsic Rewards Measurement Items*

| Operational Definition  | Operational Definition   |
|---|--|
| <p>Intrinsic rewards are personal gratification and fulfilment of the employees when doing their job work. These rewards do not rely on outside elements like salaries or promotions but arise out of the job itself, which is a sense of accomplishment, duties, self-development, and sense of contribution. Intrinsic rewards are operationalized in this study in three dimensions- task autonomy, task significance and Task involvement. Rehman et al. (2010)</p> | <ol style="list-style-type: none"> <li>1. I have a good deal of freedom in the performance of my daily task.</li> <li>2. I make most work decisions without first consulting my superior.</li> <li>3. I am not able to make changes regarding my job activities.</li> <li>4. I make my own decisions in the performance of my work role.</li> <li>5. My work is a significant contribution to the successful operation of the organization.</li> <li>6. Sometimes I am not sure I completely understand the purpose of what I'm doing.</li> <li>7. My work is really important and worthwhile.</li> <li>8. I understand how my work role fits into the overall operation of this organization.</li> <li>9. I do not feel a sense of accomplishment in the type of work I do.</li> <li>10. My work provides me with a sense of personal fulfillment.</li> <li>11. I have little opportunity to use my real abilities and skills in the type of work I do.</li> <li>12. My work is interesting and challenging.</li> </ol> |

Source: Rehman et al. (2010)

### 3.5.4 Extrinsic Rewards

As mention by Rehman et al. (2010) that extrinsic rewards are rewards that are given by the organization to employees as a reward of their efforts and input. These rewards are concrete like salary, fringe benefits, promotion opportunities and favorable working conditions. Extrinsic rewards are critical in determining the level of job satisfaction, especially in scenarios where economic stability and organizational stability are considered very important.

The scales applied in the current study to measure extrinsic rewards were use in Rehman et al. (2010). The respondents were requested to react on statements by using a five-point Likert scale, ranging from strongly disagree to strongly agree.

**Table 4**  
*Extrinsic Rewards Measurement Items*

| Operational Definition   | Operational Definition   |
|--|--|
| Extrinsic rewards are the tangible, external rewards that employees obtain in their organization as rewards in their contribution and work performance. These are normally monetary or material rewards which are meant to fulfill the external needs of the employees like job security, income and career growth. Rehman et al. (2010) | <ol style="list-style-type: none"> <li>1. I found supervisors as perceived, are supportive and helpful in job matters.</li> <li>2. I believe my colleagues are supportive and helpful.</li> <li>3. There are adequate supplies; equipment, time and the environment to do a good job are available to me.</li> <li>4. I feel my salary is comparable to others performing the same or similar jobs.</li> <li>5. I am satisfied with “job provides” opportunity for advancement.</li> <li>6. I feel the pension plan, medical coverage, and the like are sufficient.</li> </ol> |

Source: Rehman et al. (2010)

### **3.6 Data Collection Process**

Scientific procedure that is used by researchers to access pertinent, precise and dependable information of the chosen sources, through the use of relevant instruments and techniques to answer research questions, test hypotheses, and draw reliable conclusions within the bounds of ethical considerations.

#### **3.6.1 Pre-testing of Questionnaires**

The questionnaire employed in the pilot study had questions that captured the intrinsic rewards, extrinsic rewards, and job satisfaction adapted to the study by Rehman et al. (2010). The measurement of responses was done in terms of a five-point Likert scale where strongly disagree (1) was the lowest score and strongly agree (5) was the highest score. Cronbach alpha was used to determine the reliability of the questionnaire. The findings showed that all scales of measurement had acceptable values of reliability and over the expected value of 0.70 that implies good internal consistency. Thus, the questionnaire was considered as reliable and could be used in the real data collection.

The survey, which is described in Appendix B, collected socio-demographic information from automotive manufacturing and engineering industry employees. This contains the data on age, gender, race, marital status, education, professional experience, along with the association between work incentives, gender and job satisfaction. This survey contains a total of 27 questions which have been divided into 4 different sections i.e. section A, B, C and D. To complete the questionnaire, the participants are required to make choices on a five-point Likert scale. The questionnaire used Likert scale, as the answers include strongly disagree (1) until strongly agree (5) with exception on Section A. The participants are more willing to give correct responses when the framework is clear.

In section A that which measure demographic using a nominal scale, the participants were asked to answer multiple-choice questions that dealt with age, gender, race, marital status, education and years of work experience. The nominal scale allows the researcher to categorize the respondents into some category. The reason why this information is included is upon the need to determine the accuracy of the samples in the representation of the larger population. Section B,C and D includes the domains of work rewards; intrinsic, extrinsic rewards and job satisfaction, the standardized Likert scale which includes 43 items. The questionnaires used in this paper were based on Muhammed zia Ur Rehman (2010).

**Table 5**  
*Questionnaire measurement items*

| <b>Variable</b>   | <b>Items</b> | <b>Scale</b>              | <b>Source</b>                 |
|-------------------|--------------|---------------------------|-------------------------------|
| Demographic       | 7            | Nominal                   | Researcher                    |
| Intrinsic Rewards | 12           | 5-point Likert (Interval) | Muhammed zia Ur Rehman (2010) |
| Extrinsic Rewards | 12           | 5-point Likert (Interval) | Muhammed zia Ur Rehman (2010) |
| Job satisfaction  | 19           | 5-point Likert (Interval) | Muhammed zia Ur Rehman (2010) |

### **3.6.2 Pilot Study**

Pilot study been done in order to determine the validity, internal consistency and research instrument reliability. Pilot tests are essential in making research tools accurate and robust because they allow a researcher to test the coherence, layout and order of items in a questionnaire, prior to the actual survey (Sundram & Ramli., 2023). This facilitated the removal of vague questions and thus the probability of misinterpretation amongst the respondents is minimized.

The pilot study involved a sample of hundred people who were all employees of the organization under study. The pilot test was based on the recommendation that enough respondents of around 30 were adequate to assess the

reliability of a research instrument by using Cronbachs alpha analysis (Bujang et al., 2024).

Table 1.6 presents the demographic profile of the respondents who participated in the pilot project and table 3.7 is the internal consistency analysis outcome. The results showed that the measurement scales of all scales had acceptable reliability levels, which means that the instrument can be used in the primary research (Yusoff et al., 2024). Thus, the questionnaire was considered to have acceptable reliability and validity to continue the process of data collection.

**Table 6**  
*Demographic Data for Pilot Study*

| Demographic Data   | Options            | Percentage (%) |
|--------------------|--------------------|----------------|
| Age                | 19-29 years        | 30             |
|                    | 30-39 years        | 27             |
|                    | 40-49 years        | 17             |
|                    | 50-60 years        | 26             |
| Gender             | Male               | 82             |
|                    | Female             | 18             |
| Married Status     | Single             | 39             |
|                    | Married Status     | 61             |
| Race               | Malay              | 94             |
|                    | Chinese            | 1              |
|                    | Indian             | 1              |
|                    | Others             | 4              |
| Education          | Secondary          | 58             |
|                    | Diploma            | 42             |
|                    | 1-2 years          | 9              |
| Working Experience | 3-5 years          | 28             |
|                    | 6-10 years         | 30             |
|                    | More than 10 years | 33             |

**Table 7**  
*Results for Internal Consistency Analysis of Pilot Study*

| Scale             | Number of Items | Cronbach's Alpha |
|-------------------|-----------------|------------------|
| Jobs Satisfaction | 3               | 0.882            |
| Intrinsic Rewards | 12              | 0.974            |
| Extrinsic Rewards | 6               | 0.947            |

### **3.6.3 Data Collection Procedures**

The questionnaire was the main data collection instrument used by the researcher. The sample size of 361 was selected out of the total population of 5,973 workers in the company, according to the Table of sample size that was constructed by Krejcie and Morgan (1970) (see Figure 3.1). The study utilized a Google Form as the primary data collection instrument, which was distributed to participants through WhatsApp. The entire data collection process spanned about four weeks. The sample being selected by using a simple random sampling method and every employees had equal opportunity to participate on this study. In cases where it was important, respondents were informed of the reason why the research was being conducted. They were promised the anonymity of their answers and they were advised to respond to every item according to their perceptions.

### **3.7 Techniques of Data Analysis**

The Statistical Package of Social Sciences (SPSS) version 29 is utilized to analyze the collected data. The SPSS program facilitates researchers in assessing data findings. This study employed correlation analysis and descriptive statistics for the analysis. The regression analysis was employed to evaluate the hypotheses.

### **3.7.1 Descriptive Statistics**

Descriptive analysis involves statistical analysis tools such as central tendency, distribution, and variability to examine and understand data (Fulk, 2023). The technique is common to provide a summary of the large volumes of data, including demographic data of the participants, including age, gender, ethnicity, marital status, educational attainment, and years of professional experience. It is also useful in assisting the researcher to analyse and describe information acquired using questionnaires in a way that is understandable and significant.

### **3.7.2 Regression Analysis**

The regression analysis is used to examine a relation between an independent variables and a dependent variable. It allows determining the extent of the variance of the dependent variable, which can be accounted for by the independent variable(s), in terms of the coefficient of determination ( $R^2$ ) and the significance of the overall model (F-value) (Roustaei, 2024). Moreover, regression analysis was helpful in determining the strength of the variables and also predicting the future outcomes.  $R^2$  value is used to signify the percentage change in the dependent variable which is explained by the model whereas F-value and level of significance is used to infer the overall fit and statistical validity of the model.

### **3.7.3 Correlation Analysis: Pearson Correlation**

The researchers also adopted correlation analysis in order to explore the connection across the independent and dependent variables. A comprehensive review was conducted to determine the influence of training and development, performance management, employee motivation and pay management on performance of the employees in the automotive manufacturing and engineering industry workforce. The

coefficient of correlation has a range which is indicated by the  $r$  value and is equal to  $+1.00$  to  $-1.00$ . The negative linear relationship was indicated when  $r$  is close to  $-1$ , and the positive linear relationship is indicated when  $r$  is close to  $+1$ . Conversely, when the  $r$  value tends to be close to zero, it would indicate the variables do not have a linear relationship. The Pearson correlation coefficient was applied in this research in order to investigate the relationships between the variables. Pallant (2020) claims that correlation coefficient reveals the strength and direction of the linear relationship between two continuous variables as presented in Table 3.8.

**Table 8**  
*Correlation Coefficient Value*

| <b>Correlation Coefficient Value</b> | <b>Strength</b> | <b>Direction</b> |
|--------------------------------------|-----------------|------------------|
| Greater than 0.5                     | Strong          | Positive         |
| Between 0.3 and 0.5                  | Moderate        | Positive         |
| Between 0 and 0.3                    | Weak            | Positive         |
| 0                                    | None            | None             |
| Between 0 and -0.3                   | Weak            | Negative         |
| Between -0.3 and -0.5                | Moderate        | Negative         |
| Less than -0.5                       | Strong          | Negative         |

Source: Pallant (2020)

### **3.8 Ethical Considerations**

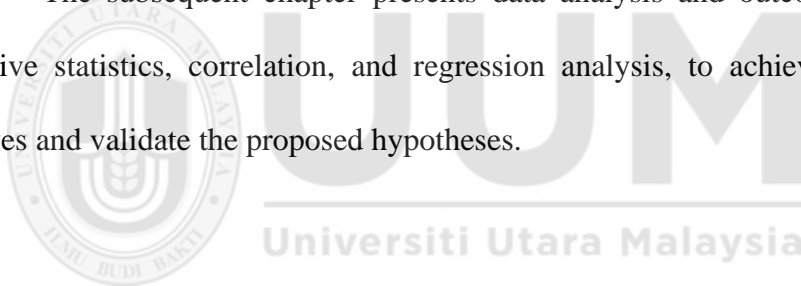
The ethical grounds behind this research project played a vital role in safeguarding the interests, well-being, and privacy of all respondents. All of the participants gave their consent to make sure that the study project was done in an ethical way and that no one was forced to take part or given false information. Further, a letter was dispatched with an invitation to participate, which contained the objectives of the study, its expected results and the role of the participant in the study (see to Appendix A). Also, they clarified the participants on the concepts of anonymity, confidentiality, and withdrawal

rights. No individuals pertaining to the vulnerable groups were involved in the research to the best understanding of the researcher.

### **3.9 Summary of the Chapter**

In conclusion, research design were use in this study was quantitative in nature because it aimed to explore the relationships among the identified variables. The online questionnaire was conducted with the use of a simple random sampling method on collecting the data. In this research, work rewards such as intrinsic, extrinsic along with gender, as independent variables while job satisfaction serves as the dependent variable. The ethical principles of consent, confidentiality, and voluntary participation were adhered to in accordance with the research's ethical considerations.

The subsequent chapter presents data analysis and outcomes, including descriptive statistics, correlation, and regression analysis, to achieve the research objectives and validate the proposed hypotheses.



## **CHAPTER FOUR**

### **RESULTS**

#### **4.1 Introduction**

This chapter presents the finding of data analysis performed on the data obtained on the respondent. It relies on the research goals that are congruent in chapter one wherein to examine the effect of independent variables that are the intrinsic rewards and extrinsic rewards with dependent variables that are job satisfaction. The research sought to respond to the research objectives and research questions that were identified in chapter one. This research is also aimed at confirming the hypothesis formulated in chapter two.

Three methods of analysis that were employed to analyze the data and test the research hypotheses which is the reliability test, descriptive analysis and inferential statistic (t-test, Pearson correlation and multiple regression analysis). To test the hypotheses, the statistical approach of Pearson correlation was employed in this study to establish whether there is any relationship between the independent variable (work rewards) and dependent variable (job satisfaction). The regression analysis performed was aimed at analyzing which of the three independent variables of work rewards had the biggest impact on the job satisfaction. The descriptive analysis was done to profile the respondents (demographic).

#### **4.2 Role of Response**

This research paper entailed the administration of 400 questionnaires to the respondents in the chosen population. A sample size of 362 out of the sampled questionnaires out of the total questionnaires distributed were effectively collected and this gave a response rate of 90.5 %. The questionnaires collected were entirely filled and could be analyzed appropriately with no unanswered and unusable responses noted.

The response rate recorded during this study is high meaning that there was good participation and cooperation of the respondents. Based on the research methodology standards, response rate of 70 or more is a satisfactory response rate in a quantitative study and therefore, the response rate obtained in this study is more than satisfactory. The data collected is further improved in the light of reliability and validity due to the completeness of the questionnaires that were returned. Thus, 362 valid responses were deemed as suitable and representative of the population under study and were then further statistically analyzed.

**Table 9**  
*Response Rate of the Questionnaire*

| Item                       | Total | Percentages (%) |
|----------------------------|-------|-----------------|
| Distributed Questionnaires | 400   | 100             |
| Collected Questionnaires   | 362   | 90.5            |
| Completed Questionnaires   | 362   | 90.5            |
| Uncompleted                | 0     | 0               |

### 4.3 Demographic Profile

**Table 10**  
*Demographic Profile (n= 361)*

| No. | Demographic | Categories | Frequency | Percentage |
|-----|-------------|------------|-----------|------------|
| 1.  | Age         | 19-29      | 82        | 22.7       |
|     |             | 30-39      | 86        | 23.8       |
|     |             | 40-49      | 91        | 25.2       |
|     |             | 50-60      | 102       | 28.3       |
| 2.  | Gender      | Male       | 283       | 78.4       |
|     |             | Female     | 78        | 21.6       |
| 3.  | Status      | Single     | 136       | 37.7       |
|     |             | Married    | 225       | 62.3       |
| 4.  | Race        | Malay      | 334       | 92.5       |
|     |             | Chinese    | 7         | 1.9        |
|     |             | Indian     | 15        | 4.2        |

|    |            |                    |              |      |
|----|------------|--------------------|--------------|------|
|    | Others     | 5                  | 1.4          |      |
| 5. | Education  | Primary            | 7            | 1.9  |
|    |            | Secondary          | 222          | 61.5 |
|    |            | Diploma            | 128          | 35.5 |
|    |            | Bachelors Degree   | 4            | 1.1  |
|    |            | Master Degree      | 0            | 0    |
| 6. | Experience | 1-2 years          | 41           | 11.4 |
|    |            | 3-5 years          | 71           | 19.7 |
|    |            | 6-10 years         | 97           | 26.9 |
|    |            | More than 10 years | 152          | 42.1 |
|    |            |                    | <b>N=361</b> |      |

All the demographic information of the respondents was acquired in frequency distributions. A total of 361 respondents were used. The sample is composed of male respondents (283) and female respondents (78). Considering age, the highest percentage of the respondents falls in between 50 to 60 years old, 28.3% (102), then it goes to 40 to 49 years old, 25.2% (91), then 30 to 39 years old, 22.7% (82).

With regard to race, most of the respondents are Malay 92.5% (334) followed by Indian respondents 4.2% (15) and Chinese respondents 1.9% (7) and others. Regarding the marital status, there are married respondents (225) and single respondents (136), respectively.

In terms of educational background, majority of the respondents have had secondary education with 61.5 taking the lead at 222, 35.5 with diploma with 128, primary and bachelor degree with 1.9 and 1.1 respectively. No respondents were of a masters degree.

In regards to the work experience, the group with over 10 years of work experience comprises the majority of respondents, at 42.1% (152), the next highest group is 6 to 10 years at 26.9% (97), then 3 to 5 years at 19.7% (71), and 1 to 2 years

at 11.4% (41). The information about demographic features of this survey can be considered on the questionnaire form depicted in Appendix B.

#### 4.4 Internal Consistency Analysis

**Table 11**  
*Internal Consistency Analysis*

| Scale             | Variables   | Number of Items | Cronbach's Alpha |
|-------------------|-------------|-----------------|------------------|
| Job satisfaction  | Dependent   | 3               | 0.914            |
| Intrinsic rewards | Independent | 12              | 0.983            |
| Extrinsic rewards | Independent | 6               | 0.959            |

Internal consistency is usually evaluated by using Cronbachs alpha a statistical value that is produced by the correlation of items to each other. The internal consistency scale is a 0-1 scale. According to a generally accepted rule, a 0.6-0.7 range is a satisfying degree of reliability, and a 0.8 or higher is a high degree of reliability.


Table 4.2 of the internal consistency analysis study also shows that the variables exhibit an excellent internal consistency as illustrated by the values of Cronbach alpha above 0.9. The degree of internal consistency of the variable that represents Intrinsic Rewards is the highest, and its coefficient is 0.983. This is succeeded by Extrinsic Rewards that also indicates a very high value of reliability with Cronbachs alpha of 0.959. Job satisfaction is the dependent variable with high internal consistency with a Cronbachs alpha value of 0.914.

#### 4.5 Normality Test / Data Normality Analysis

To test the assumed parameters that are needed to perform parametric statistical tests, i.e., Pearson correlation, t-test as well as multiple regression analysis, normality testing was done to verify that the data fit the conditions of the tests. Pallant (2020) argues that one of the key preliminary procedures before inferential statistics are conducted is the

evaluation of data normality. Skewness and kurtosis were used in this research to test the normality of data. This method is suitable when the sample size is large i.e. 200 or above respondents because normality test like Shapiro-Wilk is highly sensitive with large samples. According to Pallant (2020), the values of skewness and kurtosis within the range between  $\pm 2$  indicate that the data is nearly normally distributed. The outcome of the normality test revealed that skewness and kurtosis values of all the key variables intrinsic rewards, extrinsic rewards and job satisfaction were within the acceptable range of  $\pm 2$ . It means that the data were normally distributed and could be analyzed with further parametric methods. Conclusion: thus, it can be stated that the normality of the assumption was met, and the Pearson correlation analysis, independent samples t t-test, and regression analysis were the correct ones to use in the current study.

**Table 12**  
*Data Normality Analysis*



**Tests of Normality**

|    | Kolmogorov-Smirnov <sup>a</sup> |     |       | Shapiro-Wilk |     |       |
|----|---------------------------------|-----|-------|--------------|-----|-------|
|    | Statistic                       | df  | Sig.  | Statistic    | df  | Sig.  |
| JS | .526                            | 361 | <.001 | .201         | 361 | <.001 |
| IR | .526                            | 361 | <.001 | .212         | 361 | <.001 |
| ER | .524                            | 361 | <.001 | .226         | 361 | <.001 |

a. Lilliefors Significance Correction

#### 4.6 Pearson Correlation Coefficient Analysis

The result in Table 4.3 shows a matrix of correlations and sample statistics of all variables. The relationship between work rewards (intrinsic and extrinsic) and job satisfaction was examined using the Pearson correlation coefficient. Preliminary

analyses were conducted to ensure that there was no violation of the assumptions of normality, linearity, and homoscedasticity.

The findings indicate a strong positive correlation between intrinsic rewards and job satisfaction ( $r = 0.833, p < .001$ ), as well as between extrinsic rewards and job satisfaction ( $r = 0.817, p < .001$ ). In addition, there was a strong positive correlation between intrinsic rewards and extrinsic rewards ( $r = 0.807, p < .001$ ). This concludes that both dimensions of work rewards have a significant and positive relationship with job satisfaction in the present study.

As suggested by Turney (2024), correlation strength can be interpreted as follows: values between 0.00 and 0.30 indicate a weak relationship, 0.30 to 0.50 indicate a moderate relationship, and values above 0.50 indicate a strong relationship. Therefore, all correlations in this study fall within the strong range, showing a high level of association among the variables.

**Table 13**  
*Pearson correlation analysis result*

|                  | <b>Job satisfaction</b> | <b>Intrinsic reward</b> | <b>Extrinsic reward</b> |
|------------------|-------------------------|-------------------------|-------------------------|
| Job satisfaction | 1                       | 0.833**                 | 0.817**                 |
| Intrinsic reward |                         | 1                       | 0.807**                 |
| Extrinsic reward |                         |                         | 1                       |

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

#### **4.7 T-test on Job Satisfaction and Gender**

A T-test was used as an independent one to compare job satisfaction and gender in the field of automotive manufacturing and engineering industry. Table 4.4 revealed that the difference of perception of job satisfaction in the organization of study by male

respondent ( $M = 4.9364$ ) and female respondent ( $F = 4.9573$ ) is not different. There is no difference between the gender and job satisfaction.

Thus, **this hypothesis is accepted.**

**Table 14**

*T-test on job satisfaction and gender result*

| Group Statistics |        |     |        |                |                 |
|------------------|--------|-----|--------|----------------|-----------------|
|                  | SEX    | N   | Mean   | Std. Deviation | Std. Error Mean |
| Job satisfaction | Male   | 283 | 4.9364 | 0.30860        | 0.01834         |
|                  | Female | 78  | 4.9573 | 0.25402        | 0.02876         |

| Independent Samples Test |                             |   |      |                              |         |                 |                 |                       |   |       |
|--------------------------|-----------------------------|---|------|------------------------------|---------|-----------------|-----------------|-----------------------|---|-------|
|                          |                             | Levene's Test for Equality of Variances |      | t-test for Equality of Means |         |                 |                 |                       | 95% Confidence Interval of the Difference |       |
|                          |                             | F                                       | Sig. | t                            | Df      | Sig. (2-tailed) | Mean Difference | Std. Error Difference | Lower                                     | Upper |
|                          |                             |   |      |                              |         |                 |                 |                       |   |       |
| Job satisfaction         | Equal variances assumed     | 1.154                                   | .283 | -.548                        | 359     | .584            | -.02087         | .03808                | -.09575                                   | .5401 |
|                          | Equal variances not assumed |   |      | -.612                        | 145.794 | .542            | -.02087         | .03411                | -.08829                                   | .4655 |

#### 4.8 Regression between Work Rewards and Job Satisfaction

The value of  $R^2$  (.755), which indicates the explained variance, in Table 4.5, is the square of the multiple correlation coefficient  $R$  (.869<sup>a</sup>). This means that both independent variables, intrinsic rewards and extrinsic rewards explain 75.5 percent of the variance in job satisfaction. The remaining 24.5 percent of the ability could be due

to other reasons that were not considered in the present study. These findings indicate that intrinsic and extrinsic rewards are very powerful and have strong impact on job satisfaction among the employees.

The results of the ANOVA as are shown in Table 4.6 show that the regression model is significant ( $F = 550.295, p < .001^b$ ). This proves that no less than one of the independent variables has a significant effect in forecasting job satisfaction. Hence, the model fits well in the explanation of the outcomes between work rewards and job satisfaction.

Intrinsic rewards ( $b = .498, p < .001$ ) and extrinsic rewards ( $b = .416, p < .001$ ) both have significance as predictors of job satisfaction as shown in the Table 4.7. The two variables, the intrinsic rewards have a marginal impact on job satisfaction as compared to the extrinsic rewards. This means that when employees feel that they get higher intrinsic rewards like recognition, autonomy, and sense of achievement, then they are likely to increase job satisfaction even though extrinsic rewards, such as payment and benefits are also significant.

**Table 15**  
*Regression of work rewards and job satisfaction*

| Model Summary <sup>b</sup> |                   |          |                   |                            |
|----------------------------|-------------------|----------|-------------------|----------------------------|
| Model                      | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1                          | .869 <sup>a</sup> | .755     | .753              | .14777                     |

a. Predictors: (Constant), Extrinsic Rewards (ER), Intrinsic Rewards (IR)

Table 4.6: Anova

| ANOVA <sup>a</sup> |            |                |    |             |         |                    |
|--------------------|------------|----------------|----|-------------|---------|--------------------|
| Model              |            | Sum of Squares | df | Mean Square | F       | Sig.               |
|                    | Regression | 24.033         | 2  | 12.016      | 550.295 | <.001 <sup>b</sup> |

|   |          |        |     |      |
|---|----------|--------|-----|------|
| 1 | Residual | 7.817  | 358 | .022 |
|   | Total    | 31.850 | 360 |      |

a. Dependent Variable: Job Satisfaction (JS)

b. Predictors: (Constant), Extrinsic Rewards (ER), Intrinsic Rewards (IR)

**Table 16**  
*Regression Coefficients*

|       |                         | Coefficients <sup>a</sup>   |            |                           |        |       |
|-------|-------------------------|-----------------------------|------------|---------------------------|--------|-------|
|       |                         | Unstandardized Coefficients |            | Standardized Coefficients | t      | Sig.  |
| Model |                         | B                           | Std. Error | Beta                      |        |       |
| 1     | (Constant)              | .759                        | .138       |                           | 5.485  | <.001 |
|       | Intrinsic Rewards (IR)  | .527                        | .047       | .498                      | 11.225 | <.001 |
|       | Extrinsic Rewards (ER), | .321                        | .034       | .416                      | 9.369  | <.001 |

a. Dependent Variable: Job Satisfaction (JS)

**Table 16**  
*Summarization of Research Hypothesis*

|      | Hypothesis  | Result   |
|------|---|----------|
| H1:  | Work rewards are positively related with job satisfaction.              | Accepted |
| H1a: | Intrinsic rewards are positively related with job satisfaction.         | Accepted |
| H1b: | Extrinsic rewards are positively related with job satisfaction          | Accepted |
| H2:  | Difference between genders with the perception of the job satisfaction. | Rejected |

#### **4.9 Summary of the Chapter**

Result of the study, encompass the response rate, respondents' socio demographic background, descriptive analysis, correlation analysis, multiple regression and hypothesis testing in this chapter. It also summarized the supported hypotheses from the multiple regression analysis. Discussion recommendations for future research, and a conclusion were presented in the next chapter.



## CHAPTER FIVE

### DISCUSSION

#### 5.1 Introduction

This chapter offers a brief summary of the study results and their implications, acknowledges the study limitations, presents recommendations for future research, and concludes with a review of the overall conclusions.

#### 5.2 Discussion

##### 5.2.1 Relationship between Work Rewards and Job Satisfaction

This study indicate work rewards and job satisfaction have a strong and significant positive correlation between employees in the automotive manufacturing and engineering industry. The result of the correlation analysis and regression indicate that intrinsic incentive and extrinsic incentive play an important role in employee satisfaction with the regression model ( $R^2 = .755$ ) indicating that 75.5 percent of job satisfaction variation is caused by work rewards. This implies that reward system adopted in the organization is have an authoritative position in determining overall satisfaction and involvement of employees.

Similar to the findings of the past studies, when employees feel that their reward systems are equitable, encouraging, and responsive to their effort, they are likely to record increased job satisfaction (Vasudevan & Nathan, 2024). Reports indicate that both financial and non-financial incentives significantly influence job satisfaction among Malaysian industrial employees (Hamzah & Matkhairuddin, 2023).

Jamil et. al, (2021) revealed that both intrinsic incentive and extrinsic incentive have a positive relationship with employee engagement, which is directly

related to job satisfaction. These findings indicate that a balanced reward scheme should be adopted on the basis of lower and higher needs in organization to enhance employees satisfaction, commitment and performance.

The findings underscore the significance of human resource practices in coming up with effective reward systems that can adequately balance the intrinsic and extrinsic factors. By incorporating extensive reward systems, organizations have a high chance of ensuring that they retain a motivated workforce, improve performance and encourage retention. Furthermore, this study emphasizes the significance strategic reward management since poor or unfair rewards can give negative impacts on employee morale, engagement and commitment towards organization.

Altogether, the facts indicate that a properly designed reward system in the modern manufacturing environment in Malaysia does not only contribute to the satisfaction levels of the employees but is also one of the primary sources of organizational performance and effective workforce management.

### **5.2.2 Relationship between Intrinsic Rewards and Job Satisfaction**

Current research, the intrinsic rewards and job satisfaction were shown to have a strong positive correlation ( $r = .833, p < .001$ ). According to this finding, employees who feel that they exercise autonomy, meaningful tasks, are recognized, and positively involved in decision-making have reported greater levels of job satisfaction. Intrinsic rewards are thus very important in making employees get engaged as well as committed to the organization over the long term.

These findings are explained by prior studies in Malaysia. Intrinsic rewards such as recognition, personal growth opportunities, and meaningful work were important in job satisfaction among the non-academic staff and explained over 60% of the variance (Mojolou et al., 2023). Equally, Jamil et. al, (2021) established that intrinsic rewards are related to employee engagement in a positive manner, which is inextricably connected with job satisfaction. Hamzah & Matkhairuddin, (2023) also added that the chances to develop and be recognized are factors that greatly affect the motivation and satisfaction of employees in Malaysian organizations.

The HR leaders in the automotive manufacturing and engineering industry need to emphasize the improvements of their intrinsic rewards through offering meaningful work to employees, offering them opportunities of skill development, recognizing employees, and involving them in making decisions within an organization. The strategies are necessary to ensure that the employee satisfaction, motivation, and retention levels remain high.

### **5.2.3 Relationship between Extrinsic Rewards and Job Satisfaction**

The present analysis indicates that the extrinsic rewards and job satisfaction have a significant positive correlation ( $r = .817, p < .001$ ). The correlation shows that tangible benefits like salary, job security, allowances and promotion prospects still have important part to play in satisfaction of the employees. This implies that extrinsic rewards are an essential part in motivation and retention of the workforce.

Companies in the automotive manufacturing and engineering industry are struggling to keep their employees satisfied because of changing demands in regards to

remuneration and benefits. Samad and Chong (2024) pointed out that in the manufacturing industry, good employees should be retained with fair and organized compensation packages. By the same token, Vasudevan and Nathan (2024) have indicated that extrinsic variables, such as remuneration, benefits, and promotion, also have considerable effects on job satisfaction by workers in the industrial sector. Elmadag and Ellinger (2024) further stated that employee satisfaction and organizational commitment increases with competitive compensation and benefits programs.

As a result, extrinsic rewards in the labor-intensive industry like the automotive industry have become a vital basis of employee satisfaction, especially to employees whose primary concern is the financial and job security. To avoid the perceptions of inequity, human resource leaders should be able to be fair, transparent, and consistent in rewarding extrinsic benefits so that motivation and retention were not adversely impacted. Correctly designed extrinsic reward systems, therefore, are vital in preserving the engagement of the workforce and enhancing the overall performance of the organization.

#### **5.2.4 Gender Differences in Job Satisfaction**

In this research, it becomes clear that the job satisfaction of male and female staff does not differ significantly ( $p = .542$ ). The independent t -test shows that both genders have a similar opinion about their working conditions, incentives, and overall job satisfaction. This implies that gender does not play a significant role in the level of satisfaction of employees in the automotive manufacturing and engineering industry.

This observation concurs with recent studies which show that gender may not necessarily play a major role in job satisfaction in the cases where organizations employ reward systems and fair workplace policies that are fair and equitable. Milovanska-Farrington (2023) and Sarker et al. (2024) noted that in the environment where equal opportunities are established, both men and women also report equal job satisfaction. One reason could be that automotive manufacturing and engineering industry in Malaysia are becoming more equitable in their HR practices, including clear promotion policies, systematic reward systems, and a uniform recognition program, which minimizes possible gender differences.

This outcome, however, is opposite to the studies in other industries, including the field of healthcare as gender-related differences in job satisfaction have already been documented (Liu et al., 2021). These differences could be because of the different job requirements, organizational culture, and work-life balance pressures which are different in industries. Therefore, although there is gender imbalance in satisfaction in some situations, the present results indicate that in the Malaysian automotive manufacturing and engineering industry, fairness in human resources has reduced the disparities. Human resource managers are expected to persist with fair and open policies to make sure that gender is not the cause of inequality among employees in terms of satisfaction.

### **5.3 Contribution of the study**

The present research was of great importance to the field of human resource management (HRM) especially in the Malaysian automotive manufacturing and engineering industry. In theory, Maslows Hierarchy of Needs can be used to support

the explanation of the dimensions of job satisfaction with the help of the study. The results show that intrinsic and extrinsic rewards can be regarded as both significant predictors of employee satisfaction, thus supporting the idea that job satisfaction is a complex construct which also depends on a number of motivational factors.

The research also has empirical evidence based on quantitative data, which demonstrates that gender did not have any relationship between the work rewards and job satisfaction. This finding can be added to the developing debate about equality and inclusivity in the workplace reward systems, especially in the industrial context where gender relations are commonly believed to play a role in the attitude towards the sense of fairness. The findings also confirm the idea that when equal policies are applied, workers rated their work conditions in the same way, irrespective of gender.

In practical terms, the research was useful to the human resource practitioners and organizational leaders in the formulation of more elaborate reward plans. The results indicate the need to have a balance between financial and non-financial rewards, which includes salary, benefits, recognition, autonomy and career development opportunities, to improve employee satisfaction and retention. In addition, the fact that gender disparities are not that great can imply that the organizations still need to empower gender-neutral reward and recognition practices in order to promote equity and inclusivity. The practices could eventually result in low turnover, increase in engagement and overall organizational performance in the automotive manufacturing and engineering industry.

#### **5.4 Limitation of the study**

As much as this study has been able to add value in examining the relationship between human resource practices and job satisfaction, there are some limitations that should be noted because they may have affected the interpretation and generalizability of the findings. It is imperative to acknowledge these constraints in the effort to direct future research efforts, as well as enhance the validity of future research.

To begin with, the research was restricted to employees that worked in the automotive manufacturing and engineering industry in a given geographical area, which was Shah Alam, Batu Berendam, and Pekan. Consequently, the results may not be a complete reflection or be generalized of the employees in other areas or industries that have different organizational cultures, management structures, and economic situations. Therefore, one should take a lot of care when generalizing the findings to the general Malaysian work force or other industries beyond the automotive industry.

Secondly, a cross-sectional research design was used in the study, which represents the perceptions of employees at a particular time. This method does not allow one to see changes or variability of job satisfaction which might be as a result of changing organizational policies, market, or personal career growth over a period. Instead, a longitudinal design would allow researchers of the future to analyze the causal relations and monitor employee satisfaction and HR practices dynamics over various periods.

Thirdly, self-administered questionnaires were used to gather data to be used in this study and as such, the research is prone to response bias and social desirability influence. The respondents could have given responses which they felt were

socially acceptable instead of what they thought or what they experienced. To overcome this shortcoming, the future researchers may contemplate using a mixed-methods approach that incorporates a qualitative method (interviews or focus group discussion). These strategies would enable to further elaborate on the perceptions of employees and get more comprehensive and detailed answers to the factors that affect job satisfaction.

Although these limitations do not compromise validity of this study, they serve as an indicator of the areas the research can be expanded in the future in order to conduct a more comprehensive analysis of the relation of human resource practices and job satisfaction in different organizational and industrial background.

### **5.5 Recommendation for the Future Research**

This study can be developed in a number of significant directions in future research. To begin with, it is recommended that future research should expand to cover other industrial sectors like electronic, services and education industries. This broad coverage would enable comparison and a more detailed picture on how job satisfaction and reward perception differ between industries and organizational contexts. Secondly, a longitudinal research design was advantageous to determine how job satisfaction and employees perception of rewards changed over time. This would help the researchers to determine trends, patterns, and possible causal links that a cross-sectional research design would not be able to capture. Thirdly, in the future, it is possible to use qualitative methods like interviews or focus group discussions to investigate the perceptions of the employees in more detail. The combination of the qualitative data would be a supplement to the quantitative findings and could provide more comprehensive information about the experience of employees, their motivation, and

their attitudes to the work environment. Moreover, other variables that could affect job satisfaction, such as leadership style, work-life balance, and the organizational culture, would be worth the examination. These considerations might offer a more comprehensive picture of the determinants that influence the employee satisfaction and engagement in the workplace. Finally, cross-cultural comparisons might also be done between the countries of the ASEAN region to consider the way cultural context might affect reward preferences and reward satisfaction. This kind of research would serve the overall region in gaining more knowledge about the human resource practices and their effectiveness in various cultural set ups.

## **5.6 Conclusion**

This research arrives at the conclusion that intrinsic and extrinsic rewards play a major and positive role in employee job satisfaction of the Malaysian automotive manufacturing and engineering industry. These findings substantiate the argument that work rewards account 75.5 percent of job satisfaction variation, which highlights the importance of the rewards in determining the attitude and motivation of employees. Further, the gender difference does not indicate that there is a disparity in the perception of satisfaction as demonstrated by equal HR practices, between both genders of employees. On balance, the research gives empirical evidence to the existing theories of motivation and offers practical suggestions of how reward systems can be developed to be effective. It is likely that organizations able to harmonize both intrinsic and extrinsic incentives in order to attain a higher level of satisfaction, engagement and retention contributed to greater competitive in the long-run as the Malaysian industrial environment was competitive.

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## Appendix A

### Ethical Considerations

#### UNIVERSITI UTARA MALAYSIA

Othman Yeop Abdullah Graduate School of Business (OYAGSB)



#### SURVEY QUESTIONNAIRE

Yang Berhormat Peserta,,

Saya Nasrul Ain bin Ahmad merupakan pelajar Sarjana Pengurusan Sumber Manusia Universiti Utara Malaysia di bawah seliaan Dr Luqman Mahmud. Saya sedang menjalankan penyelidikan tentang pengaruh ganjaran kerja terhadap kepuasan kerja: kajian kes di sebuah syarikat pembuatan dan kejuruteraan automotif di Malaysia

Anda telah dipilih secara rawak untuk mengambil bahagian dalam kajian ini dan saya amat menghargai sekiranya anda boleh menjawab semua soal selidik dengan setepat mungkin. Ia akan mengambil masa kira-kira 10-15 minit untuk melengkapkan kesemua 27 soalan soalan selidik tinjauan ini dan maklumat yang anda berikan akan mempengaruhi ketepatan dan kejayaan kajian ini.

**Jawapan anda akan dirahsiakan dan akan digunakan untuk tujuan akademik sahaja.** Sekiranya anda mempunyai sebarang pertanyaan mengenai penyelidikan ini, jangan teragak-agak untuk menghubungi saya. Penyertaan anda dalam kajian ini amat dihargai.

Terima kasih atas masa dan kerjasama anda dalam melengkapkan soal selidik ini.

**Yang benar,**

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## Appendix B

### Part A / Bahagian A: Demographic Information

The following questions are for analysis purposes only. Please answer by marking (√) the appropriate box. / Soalan berikut adalah untuk tujuan analisis sahaja. Sila jawab dengan menandakan (√) pada petak yang berkenaan.

1. Age / Umur:

- 19-29  30-39  40-49  50 ke 60

2. Gender / Jantina:

- Male / Lelaki  Female / Perempuan

3. Race / Bangsa:

- Malay / Melayu  Chinese / Cina  Indian / India  Others / lain-lain. Please stated / Sila Nyatakan:

.....

4. Marital Status / Taraf Perkahwinan:

- Single / Bujang  Married / Berkahwin

5. Education / Pendidikan:

- Primary / Rendah  Secondary / Menengah  Diploma / Diploma  
 Degree / Ijazah Sarjana Muda  Master Degree / Ijazah Sarjana

6. Work Experience / Pengalaman kerja :

- 1-2 Years / Tahun  3-5 Years / Tahun  6-10 Years / Tahun  
 More Than 10 Years / Lebih Dari 10 Tahun

**Part B / Bahagian B: Job satisfaction / Kepuasan kerja**  
(3 Questions / Soalan)

\*\*\*Please tick (√) the appropriate answer. / Sila tandakan (√) jawapan yang sesuai.

| <b>Strongly disagree /<br/>Sangat tidak setuju</b> | <b>Disagree /<br/>Tidak Setuju</b> | <b>Neutral /<br/>Tidak Pasti</b> | <b>Agree /<br/>Setuju</b> | <b>Strongly agree<br/>/<br/>Sangat Setuju</b> |
|--|------------------------------------|----------------------------------|---------------------------|---|
| 1  | 2                                  | 3                                | 4                         | 5   |

| <b>No</b> | <b>Items</b>   | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|-----------|--|----------|----------|----------|----------|----------|
| 1         | Generally speaking, I am satisfied with this job. / Secara keseluruhannya, saya berpuas hati dengan kerja ini.   |          |          |          |          |          |
| 2         | If I had the opportunity to start over again, I would choose the same type of work I presently do. / Sekiranya saya diberi peluang untuk bermula semula, saya akan memilih jenis pekerjaan yang sama seperti yang saya lakukan sekarang. |          |          |          |          |          |
| 3         | Taking into consideration all things about my job, I am very satisfied. / Dengan mengambil kira semua perkara tentang pekerjaan saya, saya sangat berpuas hati.  |          |          |          |          |          |

**Part C / Bahagian C: Intrinsic rewards / Ganjaran intrinsik**  
(12 Questions / Soalan)

\*\*\*Please tick (√) the appropriate answer. / Sila tandakan (√) jawapan yang sesuai.

| <b>Strongly disagree /<br/>Sangat tidak setuju</b> | <b>Disagree /<br/>Tidak Setuju</b> | <b>Neutral /<br/>Tidak Pasti</b> | <b>Agree /<br/>Setuju</b> | <b>Strongly agree<br/>/<br/>Sangat Setuju</b> |
|--|------------------------------------|----------------------------------|---------------------------|---|
| 1  | 2                                  | 3                                | 4                         | 5   |

| <b>No</b> | <b>Items</b>   | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|-----------|--|----------|----------|----------|----------|----------|
| 1         | I have a good deal of freedom in the performance of my daily task. / Saya mempunyai tahap kebebasan yang baik dalam melaksanakan tugas harian saya                   |          |          |          |          |          |
| 2         | I make most work decisions without first consulting my superior. / Saya membuat sebahagian besar keputusan kerja tanpa terlebih dahulu merujuk kepada penyelia saya. |          |          |          |          |          |
| 3         | I am not able to make changes regarding my job activities. / Saya tidak dapat membuat perubahan berkaitan dengan aktiviti kerja saya.                                |          |          |          |          |          |

|    |   |  |  |  |  |
|----|---|--|--|--|--|
| 4  | I make my own decisions in the performance of my work role. / <i>Saya membuat keputusan sendiri dalam melaksanakan peranan kerja saya.</i>  |  |  |  |  |
| 5  | My work is a significant contribution to the successful operation of the organization. / <i>Kerja saya merupakan sumbangan yang penting kepada kejayaan operasi organisasi.</i>   |  |  |  |  |
| 6  | Sometimes I am not sure I completely understand the purpose of what I'm doing. / <i>Kadangkala saya tidak pasti sama ada saya benar-benar memahami tujuan apa yang saya lakukan.</i>  |  |  |  |  |
| 7  | My work is really important and worthwhile. / <i>Kerja saya benar-benar penting dan berbaloi untuk dilakukan.</i>   |  |  |  |  |
| 8  | I understand how my work role fits into the overall operation of this organization. / <i>Saya memahami bagaimana peranan kerja saya menyumbang kepada keseluruhan operasi organisasi ini.</i>                               |  |  |  |  |
| 9  | I do not feel a sense of accomplishment in the type of work I do. / <i>Saya tidak merasakan suatu pencapaian dalam jenis kerja yang saya lakukan.</i>   |  |  |  |  |
| 10 | My work provides me with a sense of personal fulfillment. / <i>Kerja saya memberikan saya satu rasa kepuasan peribadi.</i>  |  |  |  |  |
| 11 | I have little opportunity to use my real abilities and skills in the type of work I do. / <i>Saya mempunyai sedikit peluang untuk menggunakan kebolehan dan kemahiran sebenar saya dalam jenis kerja yang saya lakukan.</i> |  |  |  |  |
| 12 | My work is interesting and challenging. / <i>Kerja saya adalah menarik dan mencabar.</i>  |  |  |  |  |

**Part D / Bahagian D: Extrinsic rewards / Ganjaran ekstrinsik  
(6 Questions / Soalan)**

\*\*\*Please tick (✓) the appropriate answer. / *Sila tandakan (✓) jawapan yang sesuai.*

| <b>Strongly disagree /<br/>Sangat tidak setuju</b> | <b>Disagree /<br/>Tidak Setuju</b> | <b>Neutral /<br/>Tidak Pasti</b> | <b>Agree /<br/>Setuju</b> | <b>Strongly agree<br/>/<br/>Sangat Setuju</b> |
|--|------------------------------------|----------------------------------|---------------------------|---|
| 1  | 2                                  | 3                                | 4                         | 5   |

| No | Items   | 1 | 2 | 3 | 4 | 5 |
|----|---|---|---|---|---|---|
| 1  | I found supervisors as perceived, are supportive and helpful in job matters. / <i>Saya mendapati penyelia, sebagaimana yang saya rasakan, adalah penyokong dan banyak membantu dalam hal-hal kerja.</i>                   |   |   |   |   |   |
| 2  | I believe my colleagues are supportive and helpful. / <i>Saya percaya rakan sekerja saya adalah penyokong dan banyak membantu.</i>  |   |   |   |   |   |
| 3  | There are adequate supplies; equipment, time and the environment to do a good job are available to me. / <i>Terdapat bekalan, peralatan, masa dan persekitaran yang mencukupi untuk saya melakukan kerja dengan baik.</i> |   |   |   |   |   |
| 4  | I feel my salary is comparable to others performing the same or similar jobs. / <i>Saya merasakan gaji saya adalah setara dengan orang lain yang melaksanakan kerja yang sama atau hampir sama.</i>                       |   |   |   |   |   |
| 5  | I am satisfied with “job provides” opportunity for advancement. / <i>Saya berpuas hati kerana kerja ini memberikan peluang untuk kemajuan kerjaya.</i>  |   |   |   |   |   |
| 6  | I feel the pension plan, medical coverage, and the like are sufficient. / <i>Saya merasakan pelan pencen, perlindungan perubatan, dan seumpamanya adalah mencukupi.</i>   |   |   |   |   |   |

- FINISH / TAMAT -

**Thank you for your time and cooperation!**

***Terima kasih atas masa dan kerjasama anda!***

## Appendix C

### Reliability Analysis for Pilot Test

#### 1. Job Satisfaction

| Case Processing Summary |                       |     |       |
|-------------------------|-----------------------|-----|-------|
|                         |                       | N   | %     |
| Cases                   | Valid                 | 100 | 100.0 |
|                         | Excluded <sup>a</sup> | 0   | .0    |
|                         | Total                 | 100 | 100.0 |

| Reliability Statistics |            |
|------------------------|------------|
| Cronbach's             |            |
| Alpha                  | N of Items |
| .882                   | 3          |

a. Listwise deletion based on all variables in the procedure.

#### 2. Intrinsic Rewards

| Case Processing Summary |                       |     |       |
|-------------------------|-----------------------|-----|-------|
|                         |                       | N   | %     |
| Cases                   | Valid                 | 100 | 100.0 |
|                         | Excluded <sup>a</sup> | 0   | .0    |
|                         | Total                 | 100 | 100.0 |

| Reliability Statistics |            |
|------------------------|------------|
| Cronbach's             |            |
| Alpha                  | N of Items |
| .974                   | 12         |

a. Listwise deletion based on all variables in the procedure.

#### 3. Extrinsic Rewards

| Case Processing Summary |                       |     |       |
|-------------------------|-----------------------|-----|-------|
|                         |                       | N   | %     |
| Cases                   | Valid                 | 100 | 100.0 |
|                         | Excluded <sup>a</sup> | 0   | .0    |
|                         | Total                 | 100 | 100.0 |

| Reliability Statistics |            |
|------------------------|------------|
| Cronbach's             |            |
| Alpha                  | N of Items |
| .947                   | 6          |

a. Listwise deletion based on all variables in the procedure.

## Appendix D

### *Demographic Analysis for Actual Study*

#### 1. Demographic Analysis

##### AGE OF RESPONDENT

|             | N  | %     |
|-------------|----|-------|
| 19-29 years | 30 | 30.0% |
| 30-39 years | 27 | 27.0% |
| 40-49 years | 17 | 17.0% |
| 50-60 years | 26 | 26.0% |

##### GENDER OF RESPONDENT

|        | N  | %     |
|--------|----|-------|
| MALE   | 82 | 82.0% |
| FEMALE | 18 | 18.0% |

##### MARRIED STATUS OF RESPONDENT

|         | N  | %     |
|---------|----|-------|
| SINGLE  | 39 | 39.0% |
| MARRIED | 61 | 61.0% |

##### RACE OF RESPONDENT

|         | N  | %     |
|---------|----|-------|
| MALAY   | 94 | 94.0% |
| CHINESE | 1  | 1.0%  |
| INDIAN  | 1  | 1.0%  |
| OTHER   | 4  | 4.0%  |

##### EDUCATION OF RESPONDENT

|           | N  | %     |
|-----------|----|-------|
| SECONDARY | 58 | 58.0% |
| DIPLOMA   | 42 | 42.0% |

##### EXPERIENCE OF RESPONDENT

|                    | N  | %     |
|--------------------|----|-------|
| 1-2 years          | 9  | 9.0%  |
| 3-5 years          | 28 | 28.0% |
| 6-10 years         | 30 | 30.0% |
| More than 10 years | 33 | 33.0% |

## Appendix E

### Reliability Analysis for Actual Study

#### 1. Job Satisfaction

##### Case Processing Summary

|       |                       | N   | %     |
|-------|-----------------------|-----|-------|
| Cases | Valid                 | 361 | 100.0 |
|       | Excluded <sup>a</sup> | 0   | .0    |
|       | Total                 | 361 | 100.0 |

a. Listwise deletion based on all variables in the procedure.

##### Reliability Statistics

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .914             | 3          |

#### 2. Intrinsic Rewards

##### Case Processing Summary

|       |                       | N   | %     |
|-------|-----------------------|-----|-------|
| Cases | Valid                 | 361 | 100.0 |
|       | Excluded <sup>a</sup> | 0   | .0    |
|       | Total                 | 361 | 100.0 |

a. Listwise deletion based on all variables in the procedure.

##### Reliability Statistics

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .983             | 12         |

#### 3. Extrinsic Rewards

##### Case Processing Summary

|       |                       | N   | %     |
|-------|-----------------------|-----|-------|
| Cases | Valid                 | 361 | 100.0 |
|       | Excluded <sup>a</sup> | 0   | .0    |
|       | Total                 | 361 | 100.0 |

a. Listwise deletion based on all variables in the procedure.

##### Reliability Statistics

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .959             | 6          |

## Appendix F

### T-Test Analysis for Actual Study

| <b>Group Statistics</b> |        |     |        |                |                 |
|-------------------------|--------|-----|--------|----------------|-----------------|
| GENDER OF RESPONDENT    |        | N   | Mean   | Std. Deviation | Std. Error Mean |
| JS                      | MALE   | 283 | 4.9364 | .30860         | .01834          |
|                         | FEMALE | 78  | 4.9573 | .25402         | .02876          |



## Appendix G

### Pearson Correlations Analysis for Actual Study

|    |                     | Correlations |        |        |
|----|---------------------|--------------|--------|--------|
|    |                     | JS           | IR     | ER     |
| JS | Pearson Correlation | 1            | .833** | .817** |
|    | Sig. (2-tailed)     |              | <.001  | <.001  |
|    | N                   | 361          | 361    | 361    |
| IR | Pearson Correlation | .833**       | 1      | .807** |
|    | Sig. (2-tailed)     | <.001        |        | <.001  |
|    | N                   | 361          | 361    | 361    |
| ER | Pearson Correlation | .817**       | .807** | 1      |
|    | Sig. (2-tailed)     | <.001        | <.001  |        |
|    | N                   | 361          | 361    | 361    |

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



## Appendix H

### Regression Analysis for Actual Study

#### Model Summary

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1     | .869 <sup>a</sup> | .755     | .753              | .14777                     |

a. Predictors: (Constant), ER, IR

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

| Model |            | Sum of Squares | df  | Mean Square | F       | Sig.               |
|-------|------------|----------------|-----|-------------|---------|--------------------|
| 1     | Regression | 24.033         | 2   | 12.016      | 550.295 | <.001 <sup>b</sup> |
|       | Residual   | 7.817          | 358 | .022        |         |                    |
|       | Total      | 31.850         | 360 |             |         |                    |

a. Dependent Variable: JS

b. Predictors: (Constant), ER, IR

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

| Model |            | Unstandardized Coefficients |            | Standardized | t      | Sig.  |
|-------|------------|-----------------------------|------------|--------------|--------|-------|
|       |            | B                           | Std. Error | Beta         |        |       |
| 1     | (Constant) | .759                        | .138       |              | 5.485  | <.001 |
|       | IR         | .527                        | .047       | .498         | 11.225 | <.001 |
|       | ER         | .321                        | .034       | .416         | 9.369  | <.001 |

a. Dependent Variable: JS