



CAUSAL FACTORS OF EMPLOYEE ENGAGEMENT IN NATURAL RUBBER PLANTATION: A STUDY OF A MALYSIAN FIRM

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ABSTRACT:

The natural rubber plantation sector is labor-intensive. The employee turnover problem has affected Hamid Sawmill Sendirian Berhad (HSSB) in Johor, Malaysia. The purpose of this applied business research is to investigate the influences of engaging leadership, working conditions, and reward and recognition on employee engagement to help the company reduce employee turnover. Data were gathered from 50 workers of the company through a survey approach using a self-administered questionnaire. The collected data were analyzed using multiple regression analysis. The proposed regression model is an integrated framework developed based on the employee engagement literature. The findings highlight that all input variables: engaging leadership, working conditions, and reward and recognition, had significant positive influences on employee engagement. The most influential factors of employee engagement are reward and recognition. The present study helps the top management to improve employee engagement. The emphasis on employee engagement factors will help the company formulating effective organizational policies and practices to reduce its employee turnover. The findings also provide the company with ideas to develop a competitive advantage in the rubber plantation industry. This research could be a reference for other related companies, and it also directly contributes to the body of academic knowledge, primarily involving workers in the plantation industry.

KEYWORDS:

EMPLOYEE ENGAGEMENT, ENGAGING LEADERSHIP, WORKING CONDITION, REWARD AND RECOGNITION.

1. INTRODUCTIONS

The COVID-19 pandemic situated the global rubber industry in one of the terrible crises in the world economy's history and dragged the stakeholders in the entire value chain into despondency and turmoil. It not only impacts large companies but small and medium-sized enterprises (SME) are also appallingly affected (Omar et al., 2020). HSSB was also one of the affected natural rubber

SMEs. Natural rubber was a labour-intensive crop in which rubber products' production highly depends on the labour force. Hence, the emphasis on employees' welfare was significant as it could affect employees' emotions in the long run and the workplace atmosphere. SWOT analysis was used as situational analysis to identify problems of HSSB systematically, as in Table 1.1 below.

TABLE 0.1: SWOT ANALYSIS OF HSSB

	Favourable to attaining the goals	Unfavourable to attaining the goals
Internal aspect (Features of the organization)	<p style="text-align: center;">Strengths</p> <ul style="list-style-type: none"> – Availability of landmass – Favourable support from the Government of Malaysia – Support from industry players 	<p style="text-align: center;">Weaknesses</p> <ul style="list-style-type: none"> – The problem of high employee turnover rates

External aspect (Features of the environment)	<p>Opportunities</p> <ul style="list-style-type: none"> - Serve additional customer groups or market segments - Take advantage of emerging technological developments to innovate - Expand the firm's product line to meet a broader range of customer needs 	<p>Treats</p> <ul style="list-style-type: none"> - Intense competition with substitute products - Shortage of supply of skilled labour - Rubber price fluctuation
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The researchers found that this company experienced high employee turnover (as in Table 1.1). Considering its internal weaknesses and external threats, the company should reduce the internal imperfections to achieve a competitive advantage in the natural rubber industry by retaining existing employees as the shortage of skilled workforce resources is beyond its control. For the plantation industry, Sudirman et al. (2017) suggested that

employee turnover could be decreased by higher employee engagement since there was a negative relationship. Therefore, the researchers would help the company solve the issue by recommending the best approaches to improve employee engagement. Based on unstructured interviews with managers on 9 November 2020, the employee turnover rate of HSSB is as in Figure XX.

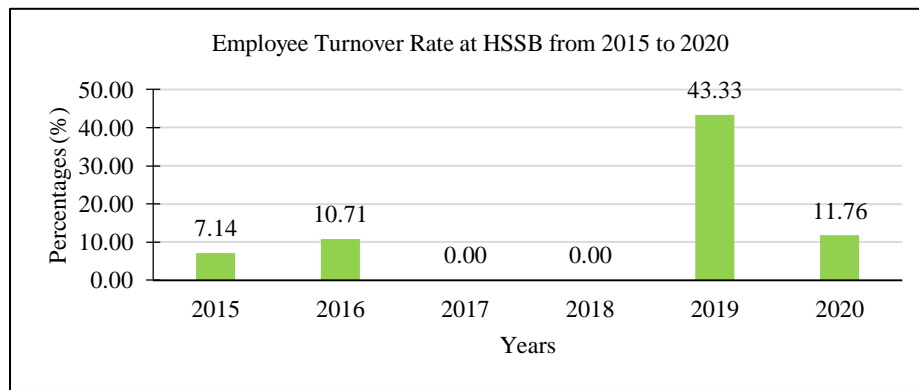


FIGURE 0.1: EMPLOYEE TURNOVER RATE AT HSSB FROM 2015 TO 2020

According to the data in Figure 1.1, the employee turnover rate increased tremendously in 2019. This increase had been the concern of top management of the company as the increase in employee turnover rate adversely affected

organizational performance (Babatunde & Laoye, 2011; De Winne et al., 2018; Motyka, 2018), and the company also suffered a decline in natural rubber production starting two years ago as in Figure 1.2.

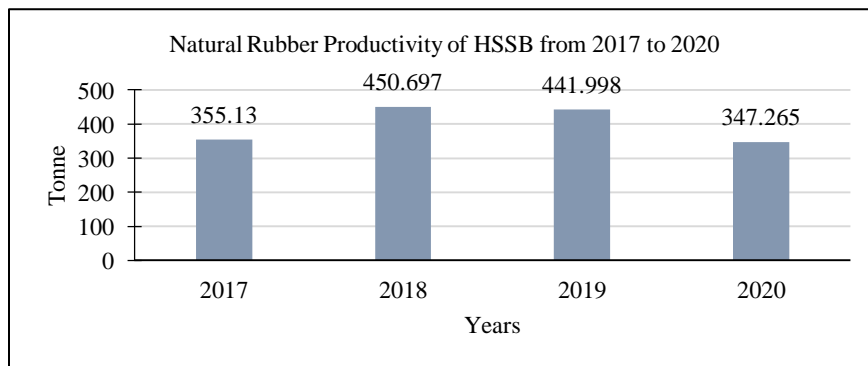


FIGURE 0.2: NATURAL RUBBER PRODUCTIVITY OF HSSB FROM 2017 TO 2020

Considering the information above coupled with volatile natural rubber prices (Norlee et al., 2019), the firm needs to ensure that its staff is intensely engaged in providing higher productivity of the business (Moletsane et al., 2019) as employee engagement had a significant effect on employee performance (Anitha, 2014). Higher employee engagement would also decrease the company's employee turnover rate as there was a negative and significant relationship between the two in the plantation industry

(Sudirman et al., 2017). For HSSB, the researchers identified three relevant factors that affect employee engagement, namely: (1) engaging leadership (Rahmadani, Schaufeli, Stouten, et al., 2020), (2) working conditions (Dileep Kumar et al., 2014), and (3) reward and recognition (Sudirman et al., 2017). Apart from studying the extent of these factors' influence on employee engagement, the researchers also wanted to know the most significant factors influencing employee engagement

to provide the company's best recommendations to increase employee engagement. Despite scant studies on employee engagement in Malaysia's plantation sector; even it was one of the major contributors to Malaysia's

revenue and numerous theories and studies on employee engagement discussed by the scholars, this research filled the gap by proposing the research framework as in Figure 1.3.

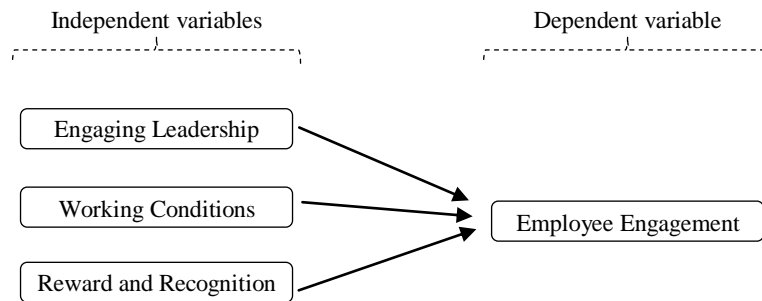


FIGURE 0.3: RESEARCH FRAMEWORK

Based on Figure 1.3, the explanatory parameters are engaging leadership, working conditions, and reward and recognition, while the explained parameter is an employee's engagement level. The arrow's direction from left to right indicates the explanatory variables influence the explained variable. Specifically, this study has three objectives: (1) to examine the influences of engaging leadership, working conditions, and reward and recognition on employee engagement, plus the extent to which these determinants influence employee engagement, (2) to determine the most influential determinant of employee engagement, and (3) to provide suggestions to HSSB to improve its employee engagement and achieve a competitive advantage in the Malaysian rubber industry.

2. LITERATURE REVIEW

2.1 EMPLOYEE ENGAGEMENT

Internationally, engagement is critical for companies to attract talented employees (Anitha, 2014; Garg & Dhar, 2017) and assess the variety of organizational competence, enhancement, and efficiency (Rich et al., 2010). The use of engagement has been widespread in various fields such as business management, politics, sociology, psychology, and others (Saks, 2006). Engagement is mainly related to organizational and management literature, while academic study focuses on employee engagement (Bakker, 2011). Kahn (1990) demonstrated that engagement consists of three fundamental facets: safety, availability, and meaningfulness. He described engagement as "the harnessing of members of the organization in their work roles; in engagement, individuals employ and express themselves during role performances physically, cognitively and emotionally." Engagement relates to how individuals express themselves during their task performance, concentrating on employees' psychological experience while achieving their job goals (Kahn, 1990). Building on Kahn's findings, Rich et al. (2010) reported that high motivated workers are emotionally related to their tasks, resulting in high performance.

Engagement plays a spontaneous role in workers'

continuous involvement and efforts (Prasad et al., 2018). The principle of employee engagement is optimistic assertiveness (Robinson et al., 2004). Conversely, Saks (2006) claimed that employee engagement is a psychosomatic condition rather than assertiveness. Macey and Schneider (2008) defined employee engagement as a multifaceted system comprising personality characteristics and other behavior constructs. They expressed the disputes in the literature and incorporated sentiments regarding the employee engagement concept, meaning that integrating individual behavior with situational facets contributes to the managerial condition and behavioral engagement.

Sudirman et al. (2017) proved that engaged workers would have lower intentions to leave their employers in the plantation sector. Not only that, Santhanam and Srinivas (2019), in their study at a manufacturing company, found that disengaged blue-collar workers were likely to leave the company. Johnson (2004) elaborated that Cargill Incorporated, an international processor, marketer, and distributor of agricultural, food, financial, and industrial products, and services, had strategized "engaged employees" one of four corporate-wide performance measures instead of HR programs solely. The engagement survey data motivated some Cargill business units to reform their compensation programs and develop individual recognition systems. Others have made leadership reforms or enhanced their career development programs, and several have improved communication between senior management and employees. The corporation certainly believed that these efforts would allow it to achieve sustained business results, lower turnover, and increased retention of the right people. In 2015, Achievers awarded Cargill as one of its Achievers 50 Most Engaged Workplaces™ in North America (Cargill Incorporated, 2015). This strategy was in line with Albrecht et al. (2015), who stated that strategies that prioritize human resource stability, particularly low employee turnover, usually involved employers emphasizing "employee engagement," of which workers feel vigorous, dedicated, and absorbed at work. Besides,

the study conducted by Durst, Moore, Ritter, and Barkema (2018) on employee management in large US dairy farms suggested that employers must identify management shortcomings to increase employee engagement and retention. Overall, most studies regarding employee engagement in the plantation industry and other related sectors proved that employee engagement could decrease employee turnover.

Commonly, employee engagement measurement referred to the Utrecht Work Engagement Scale (UWES), which already has internal consistency reliability (Schaufeli et al., 2006, 2019; Schaufeli & Bakker, 2004). In plantation-related sectors, Rahmadani, Schaufeli, and Stouten (2020) measured work engagement among employees in an agribusiness state-owned firm using the nine-item version of the UWES (Schaufeli et al., 2006) with five-point Likert scales. The UWES involved three aspects of work engagement; vigor, dedication, and absorption, with Cronbach's alpha values ranging from 0.86 to 0.87. In the plantation sector, the literature review explained three main factors that influence employee engagement: engaging leadership (Rahmadani & Schaufeli, 2020), working conditions (Govindarajo et al., 2014), and reward and recognition (Sudirman et al., 2017).

2.2 ENGAGING LEADERSHIP AND EMPLOYEE ENGAGEMENT

Besides the individual capabilities and traits, various forms of job resources and attributes, like autonomy (Halbesleben, 2010) and leadership (Jessica & Helena, 2011), are essential to work engagement. Despite the significance and positive relationship between various leadership styles – such as transformational leadership, servant leadership, authentic leadership and ethical leadership – and employee engagement, there is scant research on the relationship between leadership and employee engagement (Carasco-Saul et al., 2015; Jessica & Helena, 2011; Tims et al., 2011). Existing literature fails to capture thorough insight into a leader's role in influencing the relationship between proactive personality and work engagement (Zhang et al., 2012). To fill the gap, we draw on awareness and understanding of “engaging leadership” and “nearby” transformational leadership (see, e.g., Alban-Metcalf & Alimo-Metcalf, 2013).

Theoretically, engaging leadership is a specific form of leadership for fostering work engagement (Rahmadani, Schaufeli, Stouten, et al., 2020). Shuck and Herd (2012) suggested that leaders who wish to build engaging climates should cultivate self-awareness (i.e., an awareness about what they say and how they behave), the conceptual foundation of emotional intelligence, and in several respects, leadership that encourages engagement and with a desire to adapt to them, pay attention to the specific needs of followers.

Engaging leaders could stimulate employee engagement through increasing job resources based on the Job Demands-Resources (JD-R) model and fulfilling basic psychological needs at work based on the

Self-Determination Theory (SDT) (Rahmadani, Schaufeli, & Stouten, 2020; Schaufeli, 2015). SDT is the theory that supports the positive relationship between essential psychological need fulfillment at work and job engagement (Schreurs et al., 2014; Sulea et al., 2015; Van Den Broeck et al., 2008). Robijn et al. (2020) used the engaging leadership scale (Schaufeli, 2016) to measure engaging leadership. The four dimensions of engaging leadership: inspiring, strengthening, connecting, and empowering, would be calculated using 12 questions with three questions each, using a Likert scale ranging from 1 (= completely disagree) to 5 (= completely agree). Previous research demonstrated that job resources are positively related to engagement, and this interaction is relatively stable across different resource categories, such as job autonomy, feedback, growth opportunities, reward and recognition, job diversity, and person-role fit (Crawford et al., 2010). Interestingly, Rahmadani and Schaufeli (2020) and Rahmadani, Schaufeli, and Stouten (2020) found a positive relationship between engaging leadership and work engagement in the agricultural industry.

2.3 WORKING CONDITIONS AND EMPLOYEE ENGAGEMENT

Based on the JD-R model, Saks and Gruman (2014) eloquently defined the working conditions as one of the antecedents of employee engagement through two main aspects: job demands and job resources. Job demands relate to a job's physical, psychological, social, or organizational characteristics that demand an employee's continuous physical, emotional, and psychological commitment, contributing to physiological and psychological costs. Job resources refer to a functional work's physical, psychological, social, or organizational characteristics that help accomplish job goals; minimize job demands; and promote personal development, learning, and growth.

Crawford et al. (2010), in their study on the influence of working conditions on engagement and burnout according to the JD-R model, found that job demands positively correlated with burnout while job resources have a negative relationship with burnout and a positive relationship with engagement. Attridge (2009) stated that work engagement would improve by adopting workplace behavioral health practices that address supervisory communication, job design, resource support, working conditions, corporate culture, and leadership style. The idea was congruent with Santhanam and Srinivas (2019), who mentioned that blue-collar workers' employee engagement could increase by proper working conditions due to reduced burnout and turnover intention. In the oil palm plantation sector, the working conditions are one reason employees disengage (Govindarajo et al., 2014).

Working conditions are one of the hygiene factors in Herzberg's Motivation-Hygiene theory (Herzberg, 1987) that functions to reduce job dissatisfaction (Alshmemri et al., 2017). Berry and Morris (2008) stated that employee engagement factors have a negative influence on turnover

intention. It also negatively influenced turnover intention through a positive relationship with job satisfaction (as a mediating variable). However, job satisfaction negatively affected turnover intention. According to Kamaruddin et al. (2018), the most significant factor contributing to reducing job satisfaction among employees in the oil palm plantation sector is the oil palm plantation's working condition, which is associated with the terms "Dirty, Dangerous and Difficult (3D)". Besides, Amfo et al. (2020) found that migrant workers of cocoa farms in Ghana were not satisfied with their working conditions, especially welfare and health/safety conditions. This situation is also in line with the finding of Negede et al. (2015), who revealed that most industrial timber plantation workers in Ethiopia experienced poor working conditions in terms of safety. Sok (2019) validated employees' dissatisfaction with working conditions in the plantation sector by stating that the enforcement of labor laws in Malaysia's plantation sector is still weak to ensure the proper working conditions for migrant workers.

The plantation work environment is different from the office work environment because most plantation sector workers are from low-income countries such as Indonesia and the Philippines who work in remote areas that are challenging due to many factors (Govindarajo et al., 2014). Working conditions in the plantation sector are essential as the Malaysian government is also committed to improving working conditions in the plantation industry by ensuring that the protection of employees' rights is on par with international standards and complies with the International Labour Organization (ILO) conventions (Ministry of Plantation Industries and Commodities of Malaysia, 2018).

Given the importance of working conditions in Malaysia's plantation sector, Dileep Kumar et al. (2014), based on their qualitative study using the Delphi technique in the Sabah region of the Eastern Part of Malaysia, divided the method of measuring precarious working conditions in oil palm plantations into two parts: working conditions (16 categories) and living conditions (14 categories). As there are still no studies that measure the working conditions in the plantation sector quantitatively, the researchers will use the categories that have been listed by Dileep Kumar et al. (2014) because those categories described the actual situation of working conditions in the plantation sector in Malaysia.

2.4 REWARD, RECOGNITION, AND EMPLOYEE ENGAGEMENT

Fisher (2015) defined reward as monetary and non-monetary items that participants receive in a motivation program, while recognition is a formal congratulatory program for moving above the scope of duty and accomplishing something outstanding as determined by the organization's values. Recognition does not necessarily involve rewards, although it could do so. Reward and recognition are essential tools the organization offers that inspire workers to achieve

corporate objectives. As seen by Karatepe (2013), sufficient reward will encourage workers to have exemplary customer support. Furthermore, workers also convey their views regarding employers through the reward and recognition they obtain from that organization (Ninemeier, 2009). A lack of reward could contribute to an uncomfortable atmosphere that decreases the work effort induced by job withdrawal (Lytle & Timmerman, 2006). Nevertheless, Choo and Nasuridin (2014) noticed that reward was negligible to engagement. They claimed that the cause might be workers' belief that their reward does not reflect their success.

Based on the social exchange theory, Karatepe (2013) noticed that when workers obtain sufficient reward and recognition from their employer, they feel indebted to their employer, contributing to a higher employee engagement. Robinson et al. (2004) have noticed the expression of workers' reciprocity actions that the degree of employee engagement relies on the rewards workers obtain from their organizations. Workers with sufficient socio-emotional support such as reward and recognition feel motivated to pay back their employer and demonstrate a higher degree of engagement (Cropanzano & Mitchell, 2005).

Reward and recognition are of crucial concern for every worker to carry out their tasks efficiently. Attractive reward and recognition reflect a high degree of conceptual engagement and correlates with good organizational performance (Rich et al., 2010). Reward aims to create a more robust work contract, reduce turnover, and retain productive workers. Recognition refers to a positive standing within an organization granted to employees. Both are essential aspects to the morale, excitement, and work satisfaction of the workers. Oliver and Kerrin (2002) explained that inappropriate reward and recognition would ruin the business through the absence of competent staff. Besides, Kahn (1990) noted that employee engagement results from expectations of the workforce's rewards. Mihyo (2007) emphasized that workers' success occurs through the essence of the employees' reward, recognition, and behavior.

Saks (2006) showed that reward and recognition are significant employee engagement developers, enhancing employee efficiency explicitly or implicitly. He observed that when workers acquire reward and recognition from their employers, they feel motivated to respond with higher engagement levels. Additionally, Mihyo (2007) said that managers should identify a person's need to know the behavior to inspire each employee. Rewarding is a tool that could contribute to a company's effectiveness by affecting individuals and groups' performance (Oliver & Kerrin, 2002). Moreover, Rai et al. (2018) found that reward and recognition significantly impact in-role and out-role performances. An essential aspect of the reward program is maintaining the workforce's motivation to work more effectively. Fair compensation is a critical determinant in increased engagement as well as the performance of the force.

Sudirman et al. (2017) found that reward and recognition have positive and significant relationships with employee engagement in the plantation sector. In research concerning textile mills, Ali et al. (2019) indicated that reward and recognition positively relate to employee engagement. Pankaj M. Madhani (2020) outlined five critical factors: holistic, integrated, aligned, measurable, and delivered for the practical reward and recognition strategy to improve employee engagement. In terms of

measurement, Ali et al. (2019) measured the effect of reward and recognition on the textile sector's employee engagement using four items with a five-point Likert scale. The measurement is also applicable to the plantation sector because reward and recognition were part of the job resources (Crawford et al., 2010), one of the antecedents of employee engagement (Saks & Gruman, 2014).

Based on the literature review, the researchers derived four hypotheses as follows:

HYPOTHESIS 1

H_A: There is a significant positive influence of engaging leadership on employee engagement.

$$(H_A: \beta_{\text{Engaging Leadership}} \neq 0)$$

HYPOTHESIS 2

H_A: There is a significant positive influence of working conditions on employee engagement.

$$(H_A: \beta_{\text{Working Conditions}} \neq 0)$$

HYPOTHESIS 3

H_A: There is a significant positive influence of reward and recognition on employee engagement.

$$(H_A: \beta_{\text{Reward and Recognition}} \neq 0)$$

HYPOTHESIS 4

H₀: There is no significant positive influence between engaging leadership, working conditions, reward and recognition, and employee engagement.

$$(H_0: \beta_1 = \beta_2 = \beta_3 = 0)$$

H_A: Not all slope coefficients are simultaneously equal to zero.

$$(H_A: H_0 \text{ is not true})$$

3. RESEARCH METHODOLOGY

Guided by the quantitative approach, causal research, classified under a non-experimental study, was chosen as a study purpose to attain the research goals. This study attempted to discover a cause-and-effect association between two parameters, namely regressor and regressand. In this research, the researchers considered three causal (or suspected factors) variables: engaging leadership, working conditions, and reward and recognition, together with their effects on one outcome parameter: employee engagement. The hypotheses testing could be tested and proven using statistical and econometric approaches once the correlation between the predictor variables and the predictand variable is determined.

To attain the study objectives, the researchers used survey research as a strategy for collecting information. Academically, it helped this study's researchers to gather quantitative data and gauge the dependant parameter (employee engagement) based on a set of predictors selected in this study. The researchers conducted a one-time survey using self-administered questionnaires (paper copy) completed independently by each respondent with minimal researcher inference. Technically, it is called a field study where the researchers executed the research in a natural setting. In terms of units of analysis, all employees employed with HSSB constitute the study population. Based on this company's employee

records (updated on 9 November 2020), 50 employees worked actively. The researchers specified the employee list as a sampling frame for this study, and the unit of analysis is the individuals. The researchers picked a sample of 100% of the study population using a non-probability sampling method, namely complete enumeration sampling since the population is small, clearly identified, and following Roscoe's (1975) rules of thumb. The time horizon for this study was a one-shot or single cross-sectional study, of which the researchers collected the required data just once from one sample of respondents drawn from the target population in January 2021. It is inexpensive and enables quick data collection.

The researchers developed the questionnaire with an attractive introduction, clear instructions, and organized questions and response choices for easiness and better responses. The questionnaire consisted of five parts of clearly and conveniently ordered queries, including Part A (Employee Demographics), Part B (Engaging Leadership), Part C (Working Conditions), Part D (Reward and Recognition), and Part E (Employee Engagement) with clear instructions.

Part A – Demographics of the Workers. All demographic data such as gender, age, country of origin, religion, race, marital status, job tenure, and income level (range) were collected by single direct queries using multiple-choice

questions (MCQ).

Part B - Engaging Leadership. This independent parameter denoted the engaging leadership level of leaders at HSSB perceived by its workers. The measurement of this parameter allowed the researchers to discernibly determine how changes in the engaging leadership level experienced by the workers influence their engagement level and the magnitude of its effect. The researchers were keen to measure this explanatory parameter using the engaging leadership scale (Schaufeli, 2016) adopted by Robijn et al. (2020). The four dimensions that defined engaging leadership, namely inspiring, strengthening, connecting, and empowering, were measured using four statements with a five-point Likert scale composed of “completely disagree,” “disagree,” “moderate,” “agree,” and “completely agree” to allow respondents to indicate how strongly they agree with or disagree with the statements in the questionnaire. In the questionnaire, the statement for inspiring: “My supervisor can enthuse team members with his/her plans,” for strengthening: “My supervisor encourages team members to develop their talents as much as possible,” for connecting: “My supervisor encourages collaboration among team members,” and for empowering: “My supervisor gives team members enough freedom and responsibility to complete their tasks.” Technically, the 12 items used by Robijn et al. (2020) have internal consistency reliability (Cronbach’s alpha value = 0.85), which proved its reliability as they reached the threshold of 0.70 (Tavakol & Dennick, 2011).

Part C - Working Conditions. This explanatory parameter represented a measure of the comfort level of working conditions experienced by the workers. This parameter’s measurement helped the researchers determine how the changes in the comfort level of working conditions experienced by the workers influence their degree of engagement. The method described by Dileep Kumar et al. (2014) was the basis because the defined categories portrayed the actual situation of working conditions in the plantation sector in Malaysia. The researchers considered and adapted only five categories out of the 16 work conditions discussed by Dileep Kumar et al. (2014). The five categories are remote location, forced labor, rigid rules and regulations, hazardous jobs, and lack of group cohesiveness. In the questionnaire, the statement for remote location: “The farm where I work is located in the remote location,” for forced labor: “I was treated like forced labor,” for rigid rules and regulations: “The rules at my workplace are too strict,” for the dangerous job: “Most of the work I do is hazardous work,” and for lack of group cohesiveness: “There is less cohesiveness among my colleagues.” The validity and reliability of the results based on this measure were robust because, according to Dileep Kumar et al. (2014), the team of experts consisted of specialists with high experience and plantation-related expertise. As consultants, government bodies, top-level managers, NGOs, consulates, professors, researchers, and academicians, they are

familiar with the plantation and experienced in providing reasonable opinions and an acceptable interpretation of living and working conditions. Much like the engaging leadership assessment method, the researchers measured this exogenous parameter using a Likert system of five points.

Part D - Reward and Recognition. This exogenous parameter communicated the degree of reward and recognition acquired by workers during serving under the firm. The measurement of this parameter facilitated the researchers measuring how changes in the degree of reward and recognition received by the employees influence their engagement level and the extent of the influence. The researchers gauged this parameter based on four items constructed by Ali et al. (2019) to measure this variable in the textile sector because reward and recognition were part of the job resources (Crawford et al., 2010), which was one of the antecedents of employee engagement (Saks & Gruman, 2014). The four items are: (1) “The compensation is proportional to the contributions I make?” (2) “The salary package, pays and perks of my company are on par with the best in the industry?” (3) “My performance has a significant increase in my pay increase?” (4) “In my company, the overall benefit plans fulfill all mine and my family’s needs?”. Technically, the four items used by Ali et al. (2019) have discriminate validity and internal consistency reliability (Cronbach’s alpha value = 0.714). Like the measurement scale mentioned earlier, the researchers measured this independent parameter using a five-point Likert scale.

Part E - Employee Engagement. This dependent parameter denoted employee engagement level. In an agribusiness state-owned company, Rahmadani, Schaufeli, and Stouten (2020) measured work engagement with the nine-item version of the UWES (Schaufeli et al., 2006) using a five-point Likert scale based on three aspects of work engagement: vigor, dedication, and absorption with the values of Cronbach’s alpha ranging between 0.86 to 0.87. As Rahmadani, Schaufeli, and Stouten (2020) practiced, the researchers decided to assess employee engagement at HSSB using nine relevant items of the UWES (Schaufeli et al., 2006), with the same Likert scale based on those three aspects. In the questionnaire, three statements for vigor: “At my job, I feel strong and vigorous”, “At my job, I am very resilient, mentally”, and “At my work, I always persevere, even when things do not go well”. Three items for dedication: “I find the work that I do full of meaning and purpose”, “I am enthusiastic about my job”, and “To me, my job is challenging”. Three statements for absorption: “Time flies when I am working”, “I feel happy when I am working intensely”, and “I get carried away when I am working”.

For data analysis, the researchers used IBM’s software, namely Statistical Product and Service Solutions (SPSS), for statistical data analysis, especially for descriptive statistics such as frequencies, plots, charts, measures of central tendency, measures of dispersion, and multiple regression analysis. Technically, the researchers executed

data coding by assigning the quantitative values to the participants' responses to be stored in a database and get the data ready for analysis. The researchers used a coding sheet to key in the data and transcribed the data from the questionnaire. For instance, in coding the "country of origin" data (from the demographic profile) in Part A, the researchers employed a coding method assigning a 1 = Indonesia, a 2 = Philippine, a 3 = Vietnam, and a 4 = Other. Nonetheless, for a particular case such as "gender," a nominal parameter with just two groups, the researchers used dummy coding using 0 = male and 1 = female. Meanwhile, for the parameters in Part B, C, D, and E that use the five-point Likert scale, the researchers inputted data (the responses circled by the participants) into the computer based on the following code: "completely disagree = 1"; "disagree = 2"; "moderate = 3"; "agree = 4"; and "completely agree = 5". While doing data entry into an SPSS spreadsheet, the researchers noticed that each editor row would reflect 50 participants of this research, and each column would reflect different information categories in the questionnaires. For identifying purposes, the researchers filled out the first column with each questionnaire's specified identification code. It helped the researchers to equate the data in the SPSS spreadsheet with the responses of the participants.

For good accuracy of the collected data, the researchers carried out data editing to identify and fix illogical answers (like an outlier response), contradictory responses, irregular data, and omissions in the details received back by the survey participants. For the case of omissions, in the study's data collection, only questionnaires of 10% and below unanswered questions would be considered in the data analysis. There was less tendency of omissions since the researchers independently checked the questionnaires' completeness before gathering them.

The researchers also undertook data transformation for the subsequent data analysis process by integrating a quantitative variable's initial numerical response into another variable. The data transformation was essential in this analysis as the researchers employed multiple questions to quantify the predictor and predicted parameters. Once the evaluation of consistency between the element (Cronbach's alpha) was satisfied, the researchers merged the values rounded by the participants on the original questions into a single figure, for example, concerning four items for evaluating the engaging leadership level in the questionnaire. The researchers measured Cronbach's alpha value first before the participants' scores on the four items were summed up and divided by four. After that, in a new column in SPSS, the combined scores would be generated as average values. Fundamentally, the researchers carried out the Cronbach's alpha test for all parameters of this research before performing further steps. The closer Cronbach's alpha to 1, the higher the internal consistency reliability.

The researchers used a bivariate analysis for hypothesis testing, including a Pearson correlation matrix and a multivariate method, called multiple regression analysis, to test this research's hypotheses. These approaches addressed the research queries and satisfied the research goals of this research. Proving the relationships between the independent parameters and the dependent parameter served as a basis in this research.

4. FINDINGS AND DISCUSSION

All 22 items of the considered variables have internal consistency reliability since their respective Cronbach's alpha values passed the threshold criterion of 0.70 (Tavakol & Dennick, 2011). Table 4.1 explains the demographic of the workers, while Table 4.2 demonstrates descriptive statistics of the study sample.

TABLE 0.1: DEMOGRAPHICS OF THE WORKERS

Demographics of the Workers		Frequency	Percentage
Gender	Male	47	94.0
	Female	3	6.0
Age	25 - 29 years	5	10.0
	30 - 34 years	17	34.0
	35 - 39 years	24	48.0
	40 years and above	4	8.0
Country of Origin	Malaysia	7	14.0
	Indonesia	43	86.0
Religion	Islam	50	100.0
Marital Status	Single	35	70.0
	Married	15	30.0
Job Tenure	Less than one year	13	26.0

	1-2 years	28	56.0
	3-4 years	8	16.0
	Five years and above	1	2.0
Income Level	RM1,001.00 to RM2,000.00	46	96.0
	RM2,001.00 to RM3,000.00	3	6.0
	RM3,001.00 and above	1	2.0

TABLE 0.2: DEMOGRAPHICS OF THE WORKERS

		Engaging Leadership	Working Conditions	Reward and Recognition	Employee Engagement
Measure of Central Tendency	Mean	2.9900	2.7600	2.8450	2.9533
	Median	3.0000	2.8000	3.000	3.0556
	Mode	3.00	3.00	3.00	3.11
Measure of Dispersion	Standard Deviation	0.54154	0.57711	0.42824	0.40099
	Variance	0.293	0.333	0.183	0.161
Measure of Shape	Skewness	-2.268	-1.767	-1.005	-1.655

TABLE 0.3: OF COEFFICIENTS

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.466	.216		2.153	0.037
Engaging Leadership	0.330	0.068	0.446	4.877	0.000
Working Conditions	0.127	0.056	0.183	2.253	0.029
Reward and Recognition	0.404	0.083	0.432	4.848	0.000

Based on Table 4.3, the resulting multiple regression models was as follows:

$$\widehat{EE} = 0.466 + 0.330 EL + 0.127 WC + 0.404 RR + \varepsilon$$

\widehat{EE} : Estimated employee engagement

RR: Reward and recognition

EL: Engaging leadership

ε : Error term

WC: Working conditions

Based on Equation 1, the value of Y-intercept = 0.466 showed the average employee engagement level when the values of engaging leadership, working conditions, and reward and recognition were zero.

Meanwhile, the value of $\beta_1 = 0.330$, which measured the line's slope, indicated that as the engaging leadership level increased by one unit, the estimated increase in the employee engagement level was about 0.330 units, holding all other predictor variables were constant. Concerning this variable's significance, the p-value of engaging leadership was 0.000, smaller than $\alpha = 0.05$. Therefore, the researchers rejected the null hypothesis in Hypothesis 1. The coefficient of engaging leadership was statistically significant. This result showed that engaging leadership has a significant positive influence on employee

engagement, and it was consistent with the previous studies in the agricultural industry by Rahmadani and Schaufeli (2020) and Rahmadani, Schaufeli, and Stouten (2020).

The coefficient value of β_2 slope = 0.127 denoted that as the working conditions level increased by one unit, the estimated increase in the employee engagement level was about 0.127, holding all other input variables constant. Regarding this predictor's significance, the p-value of working conditions was 0.029, smaller than $\alpha = 0.05$. Hence, the researchers rejected the null hypothesis in Hypothesis 2. The coefficient of working conditions was statistically significant. This result denoted that working conditions have a significant positive effect on employee engagement. The finding was consistent with Santhanam

and Srinivas (2019). They mentioned that blue-collar workers' employee engagement could increase by providing proper working conditions to reduce burnout and turnover intention, and it also proved that working conditions were one of the reasons employees disengage in the oil palm plantation sector (Govindarajo et al., 2014). This result also supported the positive effect of working conditions on engagement through the job resources (Crawford et al., 2010) and a positive relationship between work engagement and working conditions (Attridge, 2009).

The coefficient value of β_3 slope = 0.404 specified that as the reward and recognition level increased by one unit, the estimated increase in the employee engagement level was

about 0.404 unit, holding all other input variables were constant. About this predictor's significance, the p-value of reward and recognition was 0.000, smaller than $\alpha = 0.05$. Thus, the researchers rejected the null hypothesis in Hypothesis 3. The coefficient of reward and recognition was statistically significant. This result indicated that reward and recognition have a significant positive impact on employee engagement. This result was consistent with Sudirman et al. (2017), who found a positive and significant relationship between reward and recognition and employee engagement in the plantation sector. It was also congruent with Ali et al. (2019), who indicated that reward and recognition were positively related to textile mill workers' employee engagement.

TABLE 0.4: MODEL SUMMARY

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.868	0.754	0.738	0.20524

Based on Table 4.4, the correlation coefficient, $R = 0.868$, indicated a strong positive correlation between engaging leadership, working conditions, reward and recognition, and employee engagement. The value of the coefficient of determination, $R^2 = 0.754$, indicated that 75.40% of the employee engagement variation was explained by

variation in the independent variables, namely engaging leadership, working conditions, and reward and recognition. The model did not explain the other 24.60% of the total variation of employee engagement. Considering that the coefficient of determination, R^2 , can be at most 1, the regression line fits the data very well.

Table 0.5: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.941	3	1.980	47.011	.000
	Residual	1.938	46	.042		
	Total	7.879	49			

Regarding Hypothesis 4, the p-value = 0.000 in Table 4.5, which is less than $\alpha = 0.05$, led to the rejection of the null hypothesis in Hypothesis 4 and proved that the overall model was significant in explaining the variation of employee engagement at HSSB. As a result, the regression model was valid for forecasting.

5. CONCLUSION AND RECOMMENDATIONS

5.1. CONCLUSION

The researchers concluded that engaging leadership, working conditions, and reward and recognition have a significant favorable influence on employee engagement at HSSB and the findings were consistent with the previous studies in the plantation or plantation-related industries by Rahmadani and Schaufeli (2020), Rahmadani, Schaufeli, and Stouten (2020), Govindarajo et al. (2014), Crawford et al. (2010), Attridge (2009), and Sudirman et al. (2017).

Concerning the extent to which these determinants influence employee engagement and the most influential factor of employee engagement, the researchers found that reward and recognition was the most significant

determinant of employee engagement at the company, followed by engaging leadership and working conditions.

Based on each independent variable's coefficient value, the reward and recognition level changes led to the highest employee engagement changes compared to other predictors.

The researchers also found that the input variables and the output variable were highly correlated. Technically, most of the variation in employee engagement was explained by variation in the regressors. Given that the value of the coefficient of determination, R^2 , is closer to 1, the regression model's explanatory power on employee engagement was high. As a result, this regression model is acceptable.

Overall, the findings proclaimed that the overall model was significant to explain the changes in employee engagement of HSSB at a 95% confidence interval. Correspondingly, the regression model is valid for prediction.

5.2. RECOMMENDATIONS

Given that this research is applied business research, this section focused on recommendations to HSSB to increase employee engagement. Based on the resulting regression model, the company needed to focus on the three variables: engaging leadership, working conditions, reward and recognition, and emphasizing the most

influential variable, namely reward and recognition. Beyond that, researchers also conducted a TOWS analysis

in Table 5.1 to improve its current position and competitive advantage in the related markets.

TABLE 0.6: TOWS ANALYSIS OF HSSB

	Internal Strength (S)	Internal Weaknesses (W)
	<ol style="list-style-type: none"> 1) Availability of landmass 2) Favorable support from the Government of Malaysia 3) Support from industry players 	<ol style="list-style-type: none"> 1) The problem of high employee turnover rates
External Opportunities (O)	SO	WO
<ol style="list-style-type: none"> 1) Serve additional customer groups or market segments 2) Take advantage of emerging technological developments to innovate 3) Expand the firm’s product line to meet a broader range of customer needs 	<ol style="list-style-type: none"> 1) Develop a strategic alliance with the industry players to diversify its products and serve on new markets. (S3, O1, O3) 2) Make knowledge sharing with the government body to develop innovation in the industry. (S2, O2) 	<ol style="list-style-type: none"> 1) Recruit a sustainable number of workers to serve new market segments. (W1, O1) 2) Invest new technology in rubber plantation activities. (W1, O2)
External Treats (T)	ST	WT
<ol style="list-style-type: none"> 1) Intense competition with substitute products 2) Shortage of supply of skilled labor 3) Rubber price fluctuation 	<ol style="list-style-type: none"> 1) Provide training for the existing workers in developing the tapping skills. (S2, T2) 	<ol style="list-style-type: none"> 1) Recruit more laborers from a new source. (W1, T2) 2) Apply a cost-effective strategy for the worker’s payroll. (W1, T3)

SO means strategies that use strengths to maximize opportunities. As the company received vast support from FGV Holdings Berhad (FGVHB), it should form a strategic alliance with FGVHB to diversify its product line and serve new market segments. As mentioned above, the company planned to expand its production to latex production. The term “latex” basically refers to any polymer in a water-based liquid or viscous state. For example, latex paint does not contain natural rubber latex but does contain liquid synthetic polymers. The word latex by itself does not refer to natural rubber latex. Natural rubber latex refers to the white sap that comes from the *hevea brasiliensis* tree. Accordingly, the company could gain the opportunity as the corporation currently owned a latex concentration factory and is the sole producer of Green Rubber (Epoxidized Natural Rubber and Deproteinized Natural Rubber) in Malaysia (FGVHB, 2020). Latex and Green Rubber could also potentially serve the new markets as essential resources in producing medical gloves, automotive, engineering applications, and consumer products (Surendran & Ng, 2020). However, the strategic alliance with large firms could threaten small firms’ survival (Alvarez & Barney, 2001). Nevertheless, based on the research by Rothkegel et al. (2006), it suggested that SME could be successfully forming a partnership with the large firm, provided that both parties need to attain a clear understanding of the complexities and contradictions at the individual as well as the organizational level and careful consideration of each element is critical for strategic alliance success. Furthermore, the company could also share and gain some

knowledge from the MRB in capitalizing the innovation, such as producing green rubbers, because MRB could provide training and assistance in developing new technology rubber industry.

Besides, WO concerns with strategies that use strengths to minimize threats. Producing latex is a labor-intensive job (Venkatachalam et al., 2013), and the company should possess a sustainable number of workers to venture into the latex processing business. Based on the Managing Director of HSSB, apart from high turnover, he mentioned that the company always failed to estimate the number of sustainable workers to their operations. Thus, the company should recruit the correct number of workers for a continuous latex processing operation.

Moreover, for the company to avoid the problem of the shortage of workers in the plantation field, the company could also invest in new technology such as the “rain gutter” technology where it is like an awning-like contraption strapped to the rubber trees that prevent the rainwater from wetting the area to be tapped. The company could also practice the low-intensity tapping system (LITS) technology, where the tappers only need to yield for a few days in a week to receive a maximal amount of latex (Jamin, 2018).

The following quadrant is ST which stresses strategies that use strengths to minimize threats. This strategy emphasizes training on rubber tapping skills to the existing workers inside the plantation area, specifically to the general workers. The company needs to get assistance from the MRB to facilitate some training to the available workers as this required skill involves a tacit knowledge

that is so indigenous to MRB's knowledge.

Lastly is WT, which emphasizes strategies that minimize weaknesses and avoid threats. Based on the findings, most of the plantation workers were from Indonesia. According to Managing Director, the company faced a high turnover of workers as most of its plantation workers had to return to the country of origin out of anxiety about their family's condition back home due to the pandemic of COVID-19. Hence, perhaps the company could look for a new source of locally sourced workers, such as hiring refugees and asylum seekers listed by UNHCR as GL-2 (United Nations High Commissioner for Refugees, 2021). This mechanism could provide a sustainable supply of workers in the plantation field with a fixed-rate payment set by UNHCR.

Finally, in the rubber plantation industry, the business's profit margin is based on MRB's price fluctuation. However, as the cost of operation increased annually, it has caused the company to experience a lower profit margin, and due to that fact, the company had given a fixed salary to the plantation workers without an annual increment. Because of that, it would probably result in high turnover rates in the company. One of the effective ways the company could apply is the Activity-Based Costing (ABC) method based on the Farming Management Information System (FMIS). One of these pervasive data collection activities' efforts is to enable cost analysis, which is a core part of managerial decision-making (Carli & Canavari, 2013). Based on the findings, if the company could apply such a strategy, it could help the company compensate the workers most cost-effectively and increase employee engagement through the most influential variable, namely reward and recognition.

REFERENCES

1. Alban-Metcalf, J., & Alimo-Metcalf, B. (2013). Reliability and validity of the "leadership competencies and engaging leadership scale." *International Journal of Public Sector Management*, 26(1), 56–73. <https://doi.org/10.1108/09513551311294281>
2. Albrecht, S. L., Bakker, A. B., Gruman, J. A., Macey, W. H., & Saks, A. M. (2015). Employee engagement, human resource management practices and competitive advantage: An integrated approach. *Journal of Organizational Effectiveness*, 2(1), 7–35. <https://doi.org/10.1108/JOEPP-08-2014-0042>
3. Ali, Z., Sabir, S., & Mehreen, A. (2019). Predicting engagement and performance through firm's internal factors: Evidence from textile sector. *Journal of Advances in Management Research*, 16(5), 763–780. <https://doi.org/10.1108/JAMR-11-2018-0098>
4. Alias, N. E. (2014). Examining the Mediating Effect of Employee Engagement on the Relationship

between Talent Management Practices and Employee Retention in the Information and Technology (IT) Organizations in Malaysia. *Journal of Human Resources Management and Labor Studies*, 2, 227–242. <https://doi.org/10.15640/jhrmls>

5. Alshmemri, M., Shahwan-Akl, L., & Maude, P. (2017). Herzberg's two-factor theory. *Life Science Journal*, 14(5), 12–16. <https://doi.org/10.7537/marslsj140517.03>. Keyword s
6. Alvarez, S. A., & Barney, J. B. (2001). How entrepreneurial firms can benefit from alliances with large partners. *Academy of Management Executive*, 15(1), 139–148. <https://doi.org/10.5465/ame.2001.4251563>
7. Amfo, B., Osei Mensah, J., & Aidoo, R. (2020). Migrants' satisfaction with working conditions on cocoa farms in Ghana. *International Journal of Social Economics*. <https://doi.org/10.1108/IJSE-03-2020-0131>
8. Anitha, J. (2014). Determinants of employee engagement and their impact on employee performance. *International Journal of Productivity and Performance Management*, 63(3), 308–323. <https://doi.org/10.1108/IJPPM-01-2013-0008>
9. Attridge, M. (2009). Measuring and managing employee work engagement: A review of the research and business literature. *Journal of Workplace Behavioral Health*, 24(4), 383–398. <https://doi.org/10.1080/15555240903188398>
10. Babatunde, M. A., & Laoye, O. M. (2011). Assessing the effects of employee turnover on the performance of small and medium-scale enterprises in Nigeria. *Journal of African Business*, 12(2), 268–286. <https://doi.org/10.1080/15228916.2011.588915>
11. Bakker, A. B. (2011). An Evidence-Based Model of Work Engagement. *Current Directions in Psychological Science*, 20(4), 265–269. <https://doi.org/10.1177/0963721411414534>
12. Bakker, A. B., & Demerouti, E. (2017). Job demands–resources theory: Taking stock and looking forward. In *Journal of Occupational Health Psychology* (Vol. 22, Issue 3, pp. 273–285). Educational Publishing Foundation. <https://doi.org/10.1037/ocp0000056>
13. Berry, M. L., & Morris, M. L. (2008). The Impact of Employee Engagement Factors and Job Satisfaction On Turnover Intent. <Http://Files.Eric.Ed.Gov/Fulltext/ED501235.Pdf>, 8.
14. Breevaart, K., Bakker, A. B., Demerouti, E., & Van

- Den Heuvel, M. (2015). Leader-member exchange, work engagement, and job performance. *Journal of Managerial Psychology*, 30(7), 754–770. <https://doi.org/10.1108/JMP-03-2013-0088>
15. Breevaart, K., Bakker, A., Hetland, J., Demerouti, E., Olsen, O. K., & Espevik, R. (2014). Daily transactional and transformational leadership and daily employee engagement. *Journal of Occupational and Organizational Psychology*, 87(1), 138–157. <https://doi.org/10.1111/joop.12041>
16. Carasco-Saul, M., Kim, W., & Kim, T. (2015). Leadership and Employee Engagement: Proposing Research Agendas Through a Review of Literature. *Human Resource Development Review*, 14(1), 38–63. <https://doi.org/10.1177/1534484314560406>
17. Cargill Incorporated. (2015). *Cargill recognized as one of the Achievers Most Engaged Workplaces™ in North America*. <https://www.cargill.com/news/releases/2015/NA31757900.jsp>
18. Carli, G., & Canavari, M. (2013). Introducing Direct Costing and Activity based Costing in a Farm Management System: A Conceptual Model. *Procedia Technology*, 8(Haicta), 397–405. <https://doi.org/10.1016/j.protcy.2013.11.052>
19. Choo, L. S., & Nasurdin, A. (2014). An empirical investigation into the influence of human resource management practices on work engagement: The case of customer-contact employees in Malaysia. *International Journal of Culture*, 8. <https://doi.org/10.1108/IJCTHR-12-2013-0083>
20. Crawford, E. R., LePine, J. A., & Rich, B. L. (2010). Linking job demands and resources to employee engagement and burnout: A theoretical extension and meta-analytic test. In *Journal of Applied Psychology* (Vol. 95, Issue 5, pp. 834–848). American Psychological Association. <https://doi.org/10.1037/a0019364>
21. Cropanzano, R., & Mitchell, M. S. (2005). Social Exchange Theory: An Interdisciplinary Review. *Journal of Management*, 31(6), 874–900. <https://doi.org/10.1177/0149206305279602>
22. De Gieter, S., De Cooman, R., Pepermans, R., & Jegers, M. (2008). *Manage through rewards, not only through pay: Establishing the Psychological Reward Satisfaction Scale (PReSS)* (pp. 97–117). Pabst Science Publishers.
23. De Winne, S., Marescaux, E., Sels, L., Van Beveren, I., & Vanormelingen, S. (2018). The impact of employee turnover and turnover volatility on labor productivity: a flexible non-linear approach. *International Journal of Human Resource Management*, 30(21), 3049–3079. <https://doi.org/10.1080/09585192.2018.1449129>
24. Dileep Kumar, M., Ismail, N. A., & Govindarajo, N. S. (2014). Way to measure the concept precarious working conditions in oil palm plantations. *Asian Social Science*, 10(21), 99–108. <https://doi.org/10.5539/ass.v10n21p99>
25. Durst, P. T., Moore, S. J., Ritter, C., & Barkema, H. W. (2018). Evaluation by employees of employee management on large US dairy farms. *Journal of Dairy Science*, 101(8), 7450–7462. <https://doi.org/10.3168/jds.2018-14592>
26. FGV Holdings Berhad. (2020). *FGV Expands its Rubber Business to Europe and North America*. https://www.fgvholdings.com/press_release/fgv-expands-its-rubber-business-to-europe-and-north-america/
27. Fisher, J. G. (2015). *Strategic Reward and Recognition: Improving employee performance through non-monetary incentives*. Kogan Page Limited. [http://dl.n.jaipuria.ac.in:8080/jspui/bitstream/123456789/7929/1/Strategic Reward and Recognition_Improving Employee Performance Through Non-monetary Incentives.pdf](http://dl.n.jaipuria.ac.in:8080/jspui/bitstream/123456789/7929/1/Strategic%20Reward%20and%20Recognition_Improving%20Employee%20Performance%20Through%20Non-monetary%20Incentives.pdf)
28. Garg, S., & Dhar, R. (2017). Employee service innovative behavior: The roles of leader-member exchange (LMX), work engagement, and job autonomy. *International Journal of Manpower*, 38(2), 242–258. <https://doi.org/10.1108/IJM-04-2015-0060>
29. Gitanjali, Sharma, Y., & Sharma, B. R. (2010). Search for the Drivers of Employee Engagement among Executives of a Manufacturing Organisation. *Management and Labour Studies*, 35(2), 189–207. <https://econpapers.repec.org/RePEc:sae:manlab:v:35:y:2010:i:2:p:189-207>
30. Govindarajo, N. S., Dileep Kumar, M., & Ramulu, S. S. (2014). Why workers disengage? Factors from “head” or “heart” to be tagged on? *Asian Social Science*, 10(17), 108–119. <https://doi.org/10.5539/ass.v10n17p108>
31. Halbesleben, J. R. B. (2010). A meta-analysis of work engagement: Relationships with burnout, demands, resources, and consequences. In *Work engagement: A handbook of essential theory and research*. (pp. 102–117). Psychology Press.
32. Herzberg, F. (1987). One more time: How do you

- motivate your employees. *Hbr*, 6(5), 76–86. <http://books.google.com/books?hl=en&lr=&pg=PA433&dq=One+More+Time:+How+do+you+motivate+employees?&ots=DFj7sD-UAh&sig=mrZPhn5DYEbC8Xe3JmlS0wqOtsc>
33. Jamin, S. (2018, December 12). Tapping into technology. *New Straits Times Press*. <https://www.nst.com.my/opinion/columnists/2018/12/439755/tapping-technology>
34. Jessica, X., & Helena, C. T. (2011). How can leaders achieve high employee engagement? *Leadership & Organization Development Journal*, 32(4), 399–416. <https://doi.org/10.1108/01437731111134661>
35. Johnson, M. (2004). *The New Rules of Engagement: Life-work Balance and Employee Commitment*. CIPD Publishing.
36. Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692–724. <https://doi.org/10.5465/256287>
37. Kamaruddin, R., Abdullah, N., & Ayob, M. A. (2018). Determinants of job satisfaction among Malaysian youth working in the oil palm plantation sector. *Journal of Agribusiness in Developing and Emerging Economies*, 8(4), 678–692. <https://doi.org/10.1108/JADEE-06-2017-0063>
38. Karatepe, O. M. (2013). High-performance work practices and hotel employee performance: The mediation of work engagement. *International Journal of Hospitality Management*, 32, 132–140. <https://doi.org/10.1016/j.ijhm.2012.05.003>
39. Ling, S. C., Norslah, M., & Mohammed, A. (2013). Organizational practices and employee engagement: a case of Malaysia electronics manufacturing firms. *Business Strategy Series*, 14(1), 3–10. <https://doi.org/10.1108/17515631311295659>
40. Lytle, R., & Timmerman, J. (2006). Service orientation and performance: An organizational perspective. *Journal of Services Marketing*, 20, 136–147. <https://doi.org/10.1108/08876040610657066>
41. Macey, W. H., & Schneider, B. (2008). The Meaning of Employee Engagement. *Industrial and Organizational Psychology*, 1(1), 3–30. <https://doi.org/10.1111/j.1754-9434.2007.0002.x>
42. Maslach, C., & Leiter, M. P. (2008). Early predictors of job burnout and engagement. In *Journal of Applied Psychology* (Vol. 93, Issue 3, pp. 498–512). American Psychological Association. <https://doi.org/10.1037/0021-9010.93.3.498>
43. Miho, B. . (2007). Staff Retention in African Universities and Link with Diaspora Study. In *Report on Working Group on Higher Education*.
44. Ministry of Plantation Industries and Commodities of Malaysia. (2018). *The Employment Survey in Oil Palm Plantations, Malaysia 2018*. https://www.mpic.gov.my/mpic/images/01-Bahagian/PSA/MPIC_EmploymentSurvey2018_FINAL.pdf
45. Moletsane, M., Tefera, O., & Migiro, S. (2019). The relationship between employee engagement and organisational productivity of sugar industry in South Africa: the employees' perspective. *African Journal of Business and Economic Research*, 14(1), 113–134. <https://doi.org/10.31920/1750-4562/2019/v14n1a6>
46. Motyka, B. (2018). Employee engagement and performance: a systematic literature review. *International Journal of Management and Economics*, 54(3), 227–244. <https://doi.org/10.2478/ijme-2018-0018>
47. Negede, B., Pirard, R., & Kassa, H. (2015). Employment in industrial timber plantations: an Ethiopian case supported by a global review. *CIFOR Infobrief*, 122, 8-pp. <https://doi.org/10.17528/cifor/005610>
48. Ninemeier, D. K. H. J. D. (2009). *Human Resources Management in the Hospitality Industry*. John Wiley & Sons, Inc.
49. Norlee, R., Fahmee, A. H. M., Abdul, B. U., Rozilee, A., Farisan, W. S. W., Nabila, A. B. E., Fatimah, C. S. N., & Norlee, R. (2019). Rubber Price Volatility and Inequality in Economic Development. In *Issues and Challenges in the Malaysian Economy* (pp. 79–93). Emerald Publishing Limited. <https://doi.org/10.1108/978-1-83867-479-320191006>
50. Oliver, N., & Kerrin, M. (2002). Collective and individual improvement activities: the role of reward systems. *Personnel Review*, 31, 320–337.
51. Omar, A. R. C., Ishak, S., & Jusoh, M. A. (2020). The impact of Covid-19 Movement Control Order on SMEs' businesses and survival strategies. *Malaysian Journal of Society and Space*, 16(2), 139–150. <https://doi.org/10.17576/geo-2020-1602-11>
52. Prasad, S., Shankar, R., Gupta, R., & Roy, S. (2018). A TISM modeling of critical success factors of blockchain based cloud services. *Journal of Advances in Management Research*, 15(4), 434–456. <https://doi.org/10.1108/JAMR-03-2018-0027>

53. Presbitero, A. (2017). How do changes in human resource management practices influence employee engagement? A longitudinal study in a hotel chain in the Philippines. *Journal of Human Resources in Hospitality & Tourism*, 16(1), 56–70. <https://doi.org/10.1080/15332845.2016.1202061>
54. Rahmadani, V. G., & Schaufeli, W. B. (2020). Engaging leadership and work engagement as moderated by “diuwongke”: an Indonesian study. *International Journal of Human Resource Management*, 0(0), 1–29. <https://doi.org/10.1080/09585192.2020.1799234>
55. Rahmadani, V. G., Schaufeli, W. B., & Stouten, J. (2020). How engaging leaders foster employees' work engagement. *Leadership and Organization Development Journal*, 41(8), 1155–1169. <https://doi.org/10.1108/LODJ-01-2020-0014>
56. Rahmadani, V. G., Schaufeli, W. B., Stouten, J., Zhang, Z., & Zulkarnain, Z. (2020). Engaging leadership and its implication for work engagement and job outcomes at the individual and team level: A multi-level longitudinal study. *International Journal of Environmental Research and Public Health*, 17(3). <https://doi.org/10.3390/ijerph17030776>
57. Rai, A., Ghosh, P., Chauhan, R., & Singh, R. (2018). Improving in-role and extra-role performances with rewards and recognition: Does engagement mediate the process? *Management Research Review*, 41. <https://doi.org/10.1108/MRR-12-2016-0280>
58. Rich, B. L., LePine, J. A., & Crawford, E. R. (2010). Job engagement: Antecedents and effects on job performance. *Academy of Management Journal*, 53(3), 617–635. <https://doi.org/10.5465/AMJ.2010.51468988>
59. Robijn, W., Euwema, M. C., Schaufeli, W. B., & Deprez, J. (2020). Leaders, teams and work engagement: a basic needs perspective. *Career Development International*, 25(4), 373–388. <https://doi.org/10.1108/CDI-06-2019-0150>
60. Robinson, D., Perryman, S., & Hayday, S. (2004). *The Drivers of Employee Engagement, Report 408*. <https://www.employment-studies.co.uk/system/files/s/resources/files/408.pdf>
61. Roscoe, J. T. (1975). *Fundamental research statistics for the behavioural sciences* (2nd ed). Holt, Rinehart and Winston.
62. Rothkegel, S., Erakovic, L., & Shepherd, D. (2006). Strategic alliances between SMEs and large firms: An exploration of the dynamic process. *Management Revue*, 17(1), 50–71. <http://hdl.handle.net/10419/78877>
63. Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21(7), 600–619. <https://doi.org/10.1108/02683940610690169>
64. Saks, A. M., & Gruman, J. A. (2014). What Do We Really Know About Employee Engagement? *Human Resource Development Quarterly*, 25(2), 155–182. <https://doi.org/https://doi.org/10.1002/hrdq.21187>
65. Santhanam, N., & Srinivas, S. (2019). Modeling the impact of employee engagement and happiness on burnout and turnover intention among blue-collar workers at a manufacturing company. *Benchmarking*, 27(2), 499–516. <https://doi.org/10.1108/BIJ-01-2019-0007>
66. Sarti, D. (2014). Job Resources as Antecedents of Engagement at Work: Evidence From a Long-Term Care Setting. *Human Resource Development Quarterly*, 25(2), 213–237. <https://doi.org/10.1002/hrdq.21189>
67. Schaufeli, W. B. (2015). Engaging leadership in the job demands-resources model. *Career Development International*, 20(5), 446–463. <https://doi.org/10.1108/CDI-02-2015-0025>
68. Schaufeli, W. B. (2016). *Engaging Leadership and Need Satisfaction: Concepts and Measurement*. Conceptual Document from the Author, Utrecht.
69. Schaufeli, W. B., & Bakker, A. B. (2004). Utrecht work engagement scale Preliminary Manual Version 1.1. *Occupational Health Psychology Unit Utrecht University*, December, 1–60. <https://doi.org/10.1037/t01350-000>
70. Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and Psychological Measurement*, 66(4), 701–716. <https://doi.org/10.1177/0013164405282471>
71. Schaufeli, W. B., Shimazu, A., Hakanen, J., Salanova, M., & De Witte, H. (2019). An ultra-short measure for work engagement: The UWES-3 validation across five countries. *European Journal of Psychological Assessment*, 35(4), 577–591. <https://doi.org/10.1027/1015-5759/a000430>
72. Schreurs, B., Hetty van Emmerik, I. J., Van den Broeck, A., & Guenter, H. (2014). Work values and work engagement within teams: The mediating role of need satisfaction. *Group Dynamics*, 18(4), 267–281. <https://doi.org/10.1037/gdn0000009>

73. Shuck, B., & Herd, A. M. (2012). Employee Engagement and Leadership: Exploring the Convergence of Two Frameworks and Implications for Leadership Development in HRD. *Human Resource Development Review*, 11(2), 156–181. <https://doi.org/10.1177/1534484312438211>
74. Sok, S. (2019). Challenges and constraints in achieving appropriate working and living conditions for Cambodian temporary migrant workers in Malaysia. *South East Asia Research*, 27(4), 361–377. <https://doi.org/10.1080/0967828X.2019.1699368>
75. Sudirman, N., Md Husin, M., Rizal, A., Kamarudin, S., & Singh, H. (2017). Employee Engagement and Turnover Intention: An Empirical Investigation in the Plantation Industry. *Advanced Science Letters*, 23, 3046–3048. <https://doi.org/10.1166/asl.2017.7647>
76. Sulea, C., van Beek, I., Sarbescu, P., Virga, D., & Schaufeli, W. B. (2015). Engagement, boredom, and burnout among students: Basic need satisfaction matters more than personality traits. *Learning and Individual Differences*, 42(4), 132–138. <https://doi.org/10.1016/j.lindif.2015.08.018>
77. Surendran, S., & Ng, J. (2020, August 31). Cover Story: Development of the rubber industry in Malaysia. *The Edge Malaysia Weekly*. <https://www.theedgemarkets.com/article/cover-story-development-rubber-industry-malaysia>
78. Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53–55. <https://doi.org/10.5116/ijme.4dfb.8dfd>
79. Tims, M., Bakker, A. B., & Xanthopoulou, D. (2011). Do transformational leaders enhance their followers' daily work engagement? *The Leadership Quarterly*, 22(1), 121–131. <https://doi.org/10.1016/j.leaqua.2010.12.011>
80. United Nations High Commissioner for Refugees. (2021). *Local Employment Opportunities*. <https://www.unhcr.org/en-my/local-employment-opportunities.html>
81. Van Den Broeck, A., Vansteenkiste, M., De Witte, H., & Lens, W. (2008). Explaining the relationships between job characteristics, burnout, and engagement: The role of basic psychological need satisfaction. *Work and Stress*, 22(3), 277–294. <https://doi.org/10.1080/02678370802393672>
82. Venkatachalam, P., Geetha, N., & Sangeetha, P. (2013). Natural rubber producing plants: An overview. *African Journal of Biotechnology*, 12(12), 1297–1310. <https://doi.org/10.5897/AJBX12.016>
83. Zhang, Z., Wang, M., & Shi, J. (2012). Leader-follower congruence in proactive personality and work outcomes. In *The mediating role of leader-member exchange* (Vol. 55, Issue 1, pp. 111–130). <https://doi.org/10.5465/amj.2009.0865>