

4-30-2022

Motivating First-Generation Factory Employees: A Case Study of the Garment Industry in Myanmar

Eitaro Kojima
Japan External Trade Organization

Akihiko Ohno
Aoyama Gakuin University, acharya7ohno@yahoo.co.jp

Follow this and additional works at: <https://scholarhub.ui.ac.id/seam>



Part of the [Management Information Systems Commons](#), and the [Management Sciences and Quantitative Methods Commons](#)

Recommended Citation

Kojima, Eitaro and Ohno, Akihiko (2022) "Motivating First-Generation Factory Employees: A Case Study of the Garment Industry in Myanmar," *The South East Asian Journal of Management*. Vol. 16: No. 1, Article 3. DOI: 10.21002/seam.v16i1.1004
Available at: <https://scholarhub.ui.ac.id/seam/vol16/iss1/3>

This Article is brought to you for free and open access by UI Scholars Hub. It has been accepted for inclusion in The South East Asian Journal of Management by an authorized editor of UI Scholars Hub.

Motivating First-Generation Factory Employees: A Case Study of the Garment Industry in Myanmar

Eitaro Kojima

Overseas Research Planning Division, Overseas Research Department,
Japan External Trade Organization, Tokyo, Japan

Akihiko Ohno*

School of International Politics and Economics,
Aoyama-Gakuin University, Tokyo, Japan

Abstract

Research Aims: This study investigates how to foster and motivate factory employees at the onset of industrialisation.

Design/methodology/approach: A total of 728 employees of the garment sector in Myanmar were surveyed using a structured questionnaire.

Research Findings: The results of this study indicate 1) that employees' maladaptation to factory discipline leads to workplace stress and fuels employees' counter-productive behaviour and 2) that employees who perceive benevolence from the factory manager take on pro-organizational (vs counter-productive) behaviour based on social exchange rooted in indigenous patron-client ties.

Theoretical Contribution/Originality: This study discusses the singular aspects of human resource management (HRM) at the onset of industrialisation. The cause of workplace stress differs from what is widely claimed in industrialised societies. Organisational commitment is deeply affected by cultural settings.

Managerial Implications in the South East Asian Context: This study offers insights for cultivating and motivating factory employees hailing from indigenous societies. Moreover, HRM practices based on patron-client ties that persist in southeast Asian societies can be effective measures to enhance organisational commitment.

Research Limitations & Implications: The current study does not cover either white-collar or skilled employees in the capital-intensive industry.

Keywords: organisational maladaptation, motivation, factory discipline, workplace stress, social exchange, Myanmar

INTRODUCTION

Motivating factory employees is a classic topic of interest in the field of human resource management (HRM). Cross-cultural studies (e.g., Hofstede, 1991; Fischer & Smith, 2003; Guiso et al., 2006; Triandis, 1995) revealed that motivation mechanisms differ across countries with distinct social and cultural settings. Analogously, the motivation mechanisms in the embryonic stages of industrialisation may differ from those in industrialised countries (Thompson & McHugh, 2002). However, little attention has been paid to HRM for first-generation factory employees.

Then, the following question arises: Do the HRM practices developed in industrialised countries have universal effects in developing countries? At the onset of industrialisation, factory employees hailing from indigenous societies are required to assimilate to the unduly extraneous factory system by accepting the attitudes and values prevalent in modern industrialised societies. As posited by Kerr et al. (1960), the discipline warranted by factories and the mundane lifestyle whereof require employees in industrialised societies to make significant adjustments. Diligent and conscientious workers in pre-industrial societies do not necessarily comply with the requirements of the modern factory system. We refer to this attitudinal adaptive process as organisational adaptation. This process is a historical phenomenon, primarily when workers are supplied from rural villages. Thus, it is a managerial imperative to acculturate the newly emerged workforce into the factory system in the early industrialisation stage.

Two research questions regarding work motivation are posed in the context of first-generation factory employees. First, what hinders organisational adaptation, and what are the consequences for work motivation? Second, are the motivation mechanisms in factory organisations the same irrespective of development stages?

This study empirically addresses these two questions by relying on the data obtained from 728 garment sector employees in Myanmar, a latecomer in ASEAN industrialisation. In 2011, when a semi-civilian government replaced the military government, Myanmar embarked on economic liberalisation. The U.S. and EU lifted their trade sanctions in 2012 and 2013. Since then, garment factories have mushroomed, mainly in the Yangon area. The UN Comtrade shows that textiles and apparel accounted for nearly 30% of Myanmar's total merchandise exports in 2019.

The fast-paced rise of the labour-intensive industry demands the emergence of masses of factory employees, mostly females from rural villages (Enlightened Myanmar Research Foundation and Andaman Research & Advisory, 2017). Recent literature on Myanmar's garment industry offers a contrasting perspective. Tanaka (2020) identified improved working conditions in garment factories, and Molina and Tanaka (in press) revealed that employment in garment factories promoted female emancipation, as measured by women's participation in household decision-making and their experiences of domestic violence.

In contrast, Right (2016) and the Enlightened Myanmar Research Foundation, and Andaman Research & Advisory (2017) revealed significant non-compliance of garment factories, particularly with regard to the laws on working hours and overtime. In addition, severe labour disputes are reported in the industry (Lin et al., 2019). These dark sides of factory employment are likely to cause workplace stress and a high employee turnover rate (Bernhardt et al., 2017). Offering insights into the above two research questions from the perspective of first-generation factory employees would be crucial for fostering an eligible factory workforce.

LITERATURE REVIEW

Organisational maladaptation and workplace stress of factory employees

First-generation factory workers from indigenous milieus require a more patient effort to adapt to the factory system than those socialised in industrial societies where modern factories are ubiquitous. Noteworthy is the difference in task characteristics. The idea of task orientation was dominant in pre-industrial societies, where most people worked at their individual discretion with natural rhythms, whereas time orientation became the rule in modern factories. Thus, time discipline regulates employees in the modern factory (Clark, 1994; O'Malley, 1990; Thompson, 1967), in which managers set the pace of work and working hours and dictate how their employees conduct tasks, particularly in manufacturing sections. Tasks in garment manufacturing offer a typical example of time orientation. The assembly process in this industry is segmented into small operations, and each operator deployed in a sewing line performs one small part of the whole process. They must pay constant attention to their repetitive assignments for a smooth workflow, obeying the standardised time set by the manager.

Historians have provided a large body of evidence showing that the factory is a device of discipline and control (Clawson, 1980; Marglin, 1974; Pollard, 1963; Thompson, 1967). Landes (1969) described the newly emerged factory system by saying, "the factory is a new kind of prison, the clock a new kind of jail" and "factory equals discipline cum supervision" (p. 58).

The rule-bound factory system evoked resistance to the organisation among new-sprung employees (Smith, 1988; Thompson, 1967).

First-generation factory employees are unaccustomed to the modern factory system. To date, little has been done to examine this historical catastrophe in HRM studies. Working in modern factories in developed countries often triggers workplace stress (Mackey et al., 2017) and occupational fatigue (Di Fabio et al., 2021). Over time, these mental difficulties can adversely affect organisational efficiency (Anderson & Pulich, 2001). We assume a different mechanism behind workplace stress for first-generation factory employees in that they are likely to be subject to workplace stress caused by maladaptation to the factory system and factory discipline, among other factors. Consequently, workplace stress results in counter-productive behaviour of employees, such as high employee turnover rate and labour shirking. In this vein, we propose the following hypotheses.

H₁-a: Factory discipline induces workplace stress among first-generation factory employees.

H₁-b: Workplace stress leads to counter-productive behaviour of employees.

Motivating first-generation factory employees

People in pre-industrial societies are primarily subsistence-oriented and, hence, are stability-oriented rather than income maximisers (Malinowski, 2014; Sahlins, 1972). Patron–client ties offer subsistence security in the livelihoods of low-income people. Scott (1976) claimed that peasants in Southeast Asia are incorporated into patron-client ties. Following Scott (1972), we define a patron-client relationship as a particular case of dyadic ties in which an individual of higher socioeconomic status (patron) uses his influence to provide protection or benefits, or both, for a person of lower status (client). A client feels an obligation to reciprocate by offering a voluntary work effort to a patron.

Such ties are often used to describe the social relations in agrarian societies (Platteau, 1995). At the outset of industrialisation, factory employees emerge primarily from traditional societies where indigenous patron-client ties persist. This makes a cultural mentality of patronage pervasive in the employment relationships of factory organisations. Thus, first-generation factory employees are assumed to intensify patron-client ties when they perceive that the organisation assures their subsistence. It follows that the more employees perceive patron-client ties, the more they take on pro-organizational behaviours and avoid counterproductive behaviours based on the notion of reciprocity.

To hypothesise the above statements for statistical testing, we need to amplify the concept of patron-client ties. These ties have been discussed in different academic disciplines with different terminologies, such as social exchange in sociology (Blau, 1964; Kuvaas et al., 2020; Shore et al., 2006), gift exchange in anthropology (Malinowski, 2014; Mauss, 1990; Sahlins, 1972) and economics (Akerlof, 1982; Fehr and Kirchsteiger, 1998; Kube et al., 2012), and the association between perceived organisational support (POS) and organisational commitment in organisational psychology.

An underlying tenet of these concepts is reciprocity, a basic norm governing human behaviour (Gouldner, 1960). As these terms are almost synonymous, we use social exchange to manifest the feature of patron-client ties. The social exchange theory posits that exchange partners are required to trust each other to discharge their obligations and accept the norm of reciprocity that obligates an individual to return favourable treatment (Coyle-Shapiro et al., 2004). Employees in large enterprises are primarily in long-term employment relationships with the organisation. Additionally, the hierarchical nature of factory organisations makes social exchange akin to a patron-client relationship. These arguments offer a substantial reason to view the employer-employee relationship as a form of social exchange rather than economic exchange.

Organisational psychology advocates social exchange as a major model for examining employees' behaviour in organisations. Eisenberger et al. (1986) explored social exchange in organisations as the association between POS and organisational commitment. We apply the framework developed in organisational psychology to assess the patron-client ties in modern organisations.

POS refers to employees' perception concerning the extent to which the organisation values their contribution and cares about their well-being (Eisenberger et al., 1986). Of the two elements of caring and valuing, we focus on caring about employees' well-being to comprehend the patron's benevolence toward clients. Organisational commitment is defined as "the worker's emotional attachment to, identification with, and involvement in the organisation" (Allen and Meyer 1990). The organisational commitment represents congruence between a worker's behaviour and the organisation's goals. Numerous empirical studies in behavioural science conclude that organisational commitment is an essential antecedent of pro-organizational behaviour not only in Western Industrialised countries but also in South East Asia (e.g., Harwiki, 2013; Ohno, 2012; Dung et al., 2019; Pingping & Huang, 2019; Sittisom, 2020).

The positive association between POS and organisational commitment has been extensively explored in organisational studies (Kurtessis et al., 2017; Rhoades et al., 2001), suggesting the

functioning of patron-client ties in organisations. The POS model argues that employees who receive nonmonetary rewards from their organisation enhance their commitment to the organisation and consequently feel the need to reciprocate by adopting pro-organizational behaviours, including high morale, low shirking, and low employee turnover (e.g., Allen & Shanock, 2013). In this vein, we propose the following hypotheses:

H₂-a: POS is an antecedent of organisational commitment.

H₂-b: Organisational commitment facilitates pro-organizational behaviour and deters counterproductive behaviours.

RESEARCH METHOD

The questionnaire was first prepared in English and then translated into Burmese by two bilingual translators. The results were cross-checked to guarantee the quality of translation. After carrying out a writing test for some garment employees, we modified some questionnaire items so that less-educated employees could understand them properly and easily.

Our survey was conducted in February and March 2021 in collaboration with the Myanmar Garment Manufacturers Association. The three export-oriented Myanmar-owned garment factories were randomly selected from the list of association members. Random sampling for employees was precluded because we were not permitted to use the rosters of employees. Questionnaires were distributed to blue-collar employees through human resource managers of the factories. Each completed questionnaire was returned in a sealed envelope to assure the confidentiality of the responses. We obtained 832 responses, of which 728 (87,5%) were complete. The data were processed using SPSS 27.0.

Table 1. Descriptive statistics of the sample

Factory	A	B	C	Total
Characteristics of the factories				
Location	Yangon city	Outskirts of Yangon city	Yangon city	
Distance from the Port of Yangon	28 km	50 km	20 km	
Export destination	Japan	EU	EU	
Export ratio	98 %	100 %	100 %	
Number of employees	Approx. 800	1,284	Approx. 400	
Female employees	Approx. 600	971	Approx. 325	
Products	Work uniform	Knit-goods	Knit-goods	
Respondents				
Respondents	203	268	257	728
Supervisors	22	38	20	80
Female	149	213	214	576
Average age	27.4 (6.9)	26.7 (5.1)	26.6 (7.6)	26.8 (6.6)
Married (%)	28.1	49.6	34.2	38.2
Having a child/children (%)	7.9	29.1	9.3	16.2
Rural origin (%)	54.7	53.4	59.9	56.0
Length of service (month)	71.9 (57.9)	31.8 (18.4)	45.7 (41.8)	47.9 (43.9)
Monthly wage (Kyat)	222,659.8 (48,113.1) [170]	277,553.9 (112,565.4) [264]	282,903.2 (58,370.5) [218]	265,029.5 (86,299.4) [652]

Notes: Standard deviations in parenthesis. The numbers of respondents are in square brackets for a monthly wage. The data do not cover the entire sample, as 76 respondents refused to disclose their income levels. 1 USD = 1409.16 Kyat (March 1, 2021).

Table 1 presents the profile of the sample factories and employees. Among the respondents, 79,1% were female, 56,0% came from a rural origin, the average age was 26,8 years old, and the average monthly income was 188,10 USD, including overtime pay. Timework is applied as the factories export their products to quality-conscious developed countries. Piecework encourages work effort but often at the expense of product quality, as employees concentrate on quantity over quality. Note that timework requires intensive monitoring in eliciting work effort, resulting in the concerns mentioned in H₁-a and H₁-b.

RESULTS AND DISCUSSIONS

Variables in our model were measured as employees' subjective perceptions rather than as objectively gauged indicators. Our variables are grouped into behavioural, attitudinal, and control variables. We adopt the assumption of behavioural science that attitudes are antecedents of behaviours.

Behavioural variables

Behavioural variables were captured as behavioural intentions, as employee behaviour *per se* is difficult to measure. Four items were prepared to measure pro-organizational and counterproductive behaviours (Table 2): morale and overtime for the former and shirking and employee turnover for the latter. Shirking denotes a reduction of work effort counter to a supervisor's direction or a labour contract, whereas morale is demonstrated by an employee's voluntary effort to meet standards exceeding a supervisor's directions.

Table 2. Behavioural variables

	Keyword
I have an intention to work hard in this factory.	Morale
I want to do overtime work as much as I can.	Overtime
I have lost enthusiasm for my work.	Neglect
Turnover intention	
How do you feel about quitting the present factory?	
Very unlikely to leave this factory.	= 1
As far as I can see ahead, I intend to stay in this factory.	= 2
Though I'm not looking for another job, I'd like to change jobs.	= 3
I am seriously considering quitting this factory.	= 4

In economics, motivation problems only arise when contracts cannot be wholly described or when they cannot be enforced due to asymmetric information (Milgrom and Roberts, 1992). Thus, shirking is a motivation problem in economics, and designing appropriate pay-for-performance systems becomes the central objective of motivation management. Economics explores shirking, whereas behavioural sciences focus on morale rather than shirking. Shirking and morale are often deemed as polar ends of a one-dimensional continuum. However, we regard them as distinct behaviours determined by different variables (Ohno, 2012). This dichotomy thus concerns the question of which behaviour organisations attempt to manage.

As we cannot expect employees to give a candid response regarding their intentions to shirk due to social desirability bias, response options that suggest neglectful behaviour toward their tasks were used to represent the intention to shirk. Each item required a response on a 5-point scale (1 = *not true*, 5 = *true*). Employee turnover was measured as an intention to quit the

present factory.

Attitudinal Variables

The employment relationship is often discussed in terms of different modes of exchange: economic exchange and social exchange (Shore et al., 2006). Economics focuses on economic exchange, whereas behavioural sciences focus on social exchange. Economic exchange was measured as economic incentives, whereas social exchange was measured as the association between organisational commitment and perceived organisational support.

We advance three attitudinal concepts to design the employment relationship research: organisational commitment, perceived organisational support, and economic incentives. Additionally, co-worker support and extrinsic job satisfaction were considered. Except for workplace stress, the attitudinal variables were measured as latent constructs obtained from the factor analysis. Items used as indicators of each variable are listed in Table 3. Items composing a scale were found to be unidimensional, as a single construct was extracted for the five attitudinal variables. The validity and reliability test of the attitudinal constructs shows satisfactory results, as all constructs have Cronbach's alpha values greater than 0.80 and Kaiser-Meyer-Olkin values greater than 0.70.

Table 3. Results of factor analysis on attitudinal variables

	Factor loadings	h^2
POS		
The manager takes care of me as if I were his child.	0.83	0.67
The manager cares about my well-being.	0.82	0.68
The manager is trustworthy.	0.77	0.59
The manager treats me with respect.	0.75	0.56
The manager is like my parent or <i>saya</i> (teacher).	0.74	0.55
The manager considers our religious activities.	0.58	0.34
Eigenvalue = 3.37, Cronbach's alpha = 0.88, Variance = 56.21%, KMO = 0.85		
AC		
I feel a part of a family in this factory.	0.78	0.61
I feel attached to this factory.	0.77	0.60
I feel loyalty toward this factory.	0.70	0.49
I feel happy to hear about our factory growing.	0.70	0.49
I am proud to tell others I work for this factory.	0.66	0.44
I recommend that friends come to work in this factory.	0.57	0.33
Eigenvalue = 2.95, Cronbach's alpha = 0.84, Variance = 49.12%, KMO = 0.88		

Table 3. Results of factor analysis on attitudinal variables (Continued)

Economic incentives		
In this factory:		
Hard work promises high wages.	0.85	0.70
Hard work promises promotion.	0.80	0.65
Acquiring skills leads to higher wages.	0.73	0.53
Eigenvalue = 1.89, Cronbach's alpha = 0.84, Variance = 63.00%, KMO = 0.72		
Coworker support		
Help is available from my coworkers when I have a problem.	0.80	0.63
My coworkers are supportive of my skill development.	0.74	0.54
I have many friends at worksites.	0.68	0.47
My coworkers care about me even outside work.	0.59	0.34
Eigenvalue = 2.00, Cronbach's alpha = 0.80, Variance = 50.00%, KMO = 0.78		
Extrinsic job satisfaction		
Cleanliness of workplace environment	0.80	0.63
Cleanliness of toilet	0.70	0.49
Drinking water	0.70	0.49
Lighting	0.69	0.42
Length of lunchtime	0.65	0.42
Canteen/lunch meal	0.56	0.32
Holiday and working hours	0.54	0.29
Eigenvalue = 3.12, Cronbach's alpha = 0.83, Variance = 44.58%, KMO = 0.88		

Note: KMO stands for the Kaiser-Meyer-Olkin value.

Perceived organisational support and organisational commitment

Eisenberger et al. (1986) conceptualise non-pecuniary intangible rewards comprehensively as POS. Eisenberger et al.'s POS scale (Eisenberger et al., 1986) consists of 36 items encompassing both intangible and tangible benevolence. As the effects of tangible benevolence suggest practical managerial practices toward human resources, we construct POS with items on intangible benevolence and then examine how tangible benevolence affects POS to develop effective policies on HRM.

In this study, POS was measured using six items (1 = *not true*, 5 = *true*), three of which, representing trust, care, and respect, were selected from Eisenberger et al.'s POS scale. We added another three items that entail elements of Myanmar culture: "the manager takes care of me as if I were his child," "the manager is like my parent or *saya*," and "the manager considers our religious activities." In the employer-employee relationships of Myanmar, employees are likely to regard their manager as a quasi-parent or *saya*, expecting benevolence in times of trouble. *Saya* in Myanmar implies a schoolteacher but also loosely connotes a person who is superior to others. The third item concerns whether a manager offers an understanding of the employees' religious activities.

We performed factor analysis on the six items. Following Harris's (1967) definition of a robust factor, this study extracted a single factor with an eigenvalue larger than 1,0; commonalities (h^2) are greater than 0,20, and factor loadings are greater than 0.35. The resultant single-factor score had an acceptable internal consistency (Cronbach's alpha = 0.88) and accounts for 63.18 per cent of the total variance. The Anderson–Rubin factor score (a mean equal to 0 and a standard deviation or variance equal to 1) is used to represent the latent variable. Higher values reflect greater POS. The same procedures were applied to other latent variables, and each of them was confirmed to have unidimensionality of scale.

Allen and Meyer (1990) created a three-component model of organisational commitment, of which affective commitment (AC) is an essential component of organisational commitment (Reichers, 1985). We focus on AC as employees' requital to POS. It was assessed with five items (1 = *not true*, 5 = *true*) modified from the Allen and Meyer's AC scale.

Economic incentives

Organisations have complex exchange systems, and, as such, different systems may govern employment relationships simultaneously. The economic exchange theory that is central to mainstream economics assumes that the pecuniary remuneration system contingent on performance deters shirking. We measured the remuneration system using three items of employees' assessments of performance–outcome instrumentalities (1 = *not true*, 5 = *true*).

Coworker support

When people worked in a group in pre-industrial societies, coworkers were generally members of the same local community. However, coworkers in modern large-scale factories are more likely to be strangers. This situation engenders a sense of alienation among first-generation factory employees. In such circumstances, maintaining good terms with coworkers is assumed to mitigate industrial stress and facilitate job performance (Beehr et al., 2000). Coworker support was measured using a five-item scale (1 = *not true*, 5 = *true*).

Extrinsic job satisfaction

For employees in low-income countries, intrinsic elements of the job are still inconsequential. We measured job satisfaction using seven items on extrinsic elements of the job on a 5-point scale (1 = *unsatisfied*, 5 = *satisfied*). The extracted construct is referred to as extrinsic job satisfaction (JS).

Control variables

As control variables, besides factory dummies, we included individuals' demographic information, such as age, gender, marital status, number of children, educational attainment, job rank (production workers and supervisors), the experience of job change, residence dummies (with parents, factory dormitory), birthplace (rural or urban). Education level was measured using five categories: primary school, junior and senior high school, vocational school, and university. Additionally, an alternative job prospect is included as a control variable to gauge how employees see labour market conditions: "To what extent do you think it is easy to get an alternative job that assures you the same wage level? (1 = *difficult*, 5 = *easy*). They were included in our regression analyses but not displayed in the tables.

Regression Analysis of Workplace Stress

To examine the determinants of workplace stress, we used items presented in Table 4. Besides variables related to factory discipline, two organisational items of task characteristics (tedious tasks) and coworker support were considered as possible determinants of workplace stress. The variables used for analysis were measured using a 5-point Likert scale (1 = *not true*, 5 = *true*).

Table 4. Determinants of workplace stress (ordered logit)

	Keyword	
Dependent variable		
I feel frustrated while working	Workplace stress	
Independent variables		
I am under persistent surveillance while working.	Surveillance	
Labour regulations are too strict.	Regulation	
I feel pressed for time while working.	Time-pressed	
My supervisor often scolds subordinates.	Scolding	
My task is tedious and repetitive.	Tedious tasks	
	Model 1	Models 2
Discipline items		
Surveillance	0.20 (10.31) **	0.18 (7.76) **
Regulation	0.29 (19.30) **	0.28 (17.54) **
Time-pressed	0.20 (15.38) **	0.21 (17.21) **
Scolding	0.36 (45.65) **	0.34 (41.74) **
Organisational variables		
Tedious tasks	0.08 (1.57)	0.06 (0.85)
Coworker support	0.05 (0.06)	
AC		-0.18 (4.84) *
Pseudo R-squared (Cox and Snell)	0.25	0.26
Log-Likelihood	1951.71	1959.21

Notes: Wald statistics in parentheses. Control variables are included but not displayed.

** $p < 0.01$, * < 0.05 .

Table 4 reports the estimation results (ordered logit) for workplace stress. Two models are presented due to a high correlation between coworker support and AC ($r = 0,48, p < 0,01$). Discipline-related variables significantly increase workplace stress, whereas tedious tasks and coworker support show insignificant effects. The job rank dummy, though not displayed, shows a significant coefficient, indicating that blue-collar employees who work under factory discipline are subject to more workplace stress than supervisors.

Although being on good terms with coworkers and being committed to the organisation may mitigate workplace stress, they have insignificant effects. Thus, workplace stress is primarily caused by tight control through labour discipline. These results support H_{1-a}, presenting a unique stressor for first-generation factory employees.

Regression Analysis on Behaviours

Let us first confirm the patron-client relationship in factory organisations. Table 5 provides the regression results for the determinants of AC. Two models are presented due to a high correlation between economic incentives and wage satisfaction ($r = 0,58, p < 0,01$). The results identified POS as the most preponderate antecedent of AC, supporting H_{2-a}. Wage satisfaction does not affect AC, but economic incentives and extrinsic JS have significantly positive coefficients. We will scrutinise the results later.

Table 5. Antecedents of AC (OLS)

	Model 1	Models 2
POS	0.48 (12.84) **	0.54 (15.57) **
Economic incentives	0.15 (3.89) **	
Wage satisfaction	-0.01 (-0.42)	0.02 (0.59)
Extrinsic JS	0.17 (4.93) **	0.19 (5.53) **
Workplace stress	-0.01 (-0.50)	-0.01 (-0.65)
R-squared	0.56	0.55
F-value	49.35 **	50.36 **

Notes: Control variables are included but not displayed.
t-statistics in parentheses. ** $p < 0.01$.

We now look at the central issue of the determinants of employees' behaviours (Table 6). A common finding across the four regression results is that AC facilitates pro-organizational behaviours and deters counter-productive ones. These findings support H_{2-b}. Another important finding is that workplace stress leads to counter-productive behaviour. This supports H_{1-b}. Assimilating the newly emerged workforce into the factory system, especially with regard to factory discipline, is the first step to fostering a qualified workforce.

Table 6. Determinants of behaviour (Ordered logit)

	Pro-organizational behaviour		Withdrawal behaviour	
	Morale	Overtime	Neglect	Turnover
AC	1.13 (105.19) **	0.61 (41.78) **	-0.66 (45.23) **	-0.43 (18.68) **
Economic incentives	-0.04 (0.09)	0.20 (4.03) *	0.01 (0.02)	-0.40 (14.65) **
Wage satisfaction	0.09 (1.21)	-0.07 (0.98)	0.02 (0.06)	-0.08 (1.12)
Extrinsic JS	0.12 (1.30)	0.18 (3.45) †	-0.13 (1.64)	0.07 (0.51)
Workplace stress	0.08 (1.53)	0.06 (1.17)	0.46 (53.57) **	0.21 (14.06) **
Pseudo R-squared (Cox and Snell)	0.34	0.17	0.24	0.26
Log-Likelihood	1361.92	1948.14	1728.99	1537.48

Notes: Control variables are included but not displayed. Wald statistics in parentheses.

** $p < 0.01$, * $p < 0.05$, † $p < 0.10$.

Economic incentives facilitate employees' intention to do overtime work but do not affect morale. This is because overtime is rewarded in agreement with rules, but it is difficult to appraise morale for performance-based compensation. For a similar reason, economic incentives do not affect neglect behaviour. Thus, the predicted effect of economic incentives falls short of AC in eliciting work effort.

The enterprise survey in Myanmar (Bernhardt et al., 2017) reports that the annual employee turnover rate was as high as 57 percent in garment factories in 2014. The survey suggests low wages and poor working conditions as plausible causes of turnover. However, our analysis revealed that workplace stress is the primary cause of turnover. Economic incentives are another determinant of turnover intention. However, wage satisfaction does not attenuate turnover intention. This is due to the aforementioned high correlation between economic incentives and wage satisfaction. When economic incentives are excluded, wage satisfaction becomes significant (-0.19, Wald statistic = 5.76, $p < 0.05$). As such, the most significant determinant of employees' behaviour is AC. Workplace stress leads to counter-productive behaviour but does not affect pro-organizational behaviours.

Antecedents of POS in the Myanmar Context

As thus far described, our findings agree with previous studies on the POS-AC-behaviour link widely observed in industrialised countries. However, the connotation of the link may differ in the Myanmar context. We examine H₂-a in the Myanmar context to offer insights on managerial

strategies. Perceived tangible organisational benevolence is gauged with the following three items related to employees' subsistence. Each item required a response on a 5-point scale (1 = *not true*, 5 = *true*). Keywords are in parentheses.

1. 'Help is available from the manager when employees are in trouble even outside work' (perceived care).
2. 'The manager guarantees stable employment' (job security).
3. 'The manager makes an advance payment of my salary when I am faced with money problems' (advance payment).

The first item denotes general help from the manager, assuming that patron-client ties are extended to the everyday life of employees. The second presumes that subsistence-oriented Myanmar employees avoid precarity (Michael, 2019). Thus, employees perceive employment security as benevolence from the manager. Respondents handed over 59.5 percent (152,907 kyat) of their monthly salary (264,945 kyat/month) to their parents. This implies that working in garment factories would assist the subsistence of parents as well. The third item is based on the fact that the managers in Myanmar often make advance payments to employees' salaries. Although managers are thought to use such payments as a form of debt bondage to retain employees, an advance payment can be an insurance device to smooth consumption for shock-stricken employees. In such cases, employees perceive advance payments as benevolence from the manager.

Table 7. Managerial practices and POS (OLS)

	Model 1	Model 2
Job security	9.32 (14.95) **	0.23 (10.70) **
Perceived care	0.21 (9.54) **	0.12 (5.48) **
Advance payment	0.11 (5.20) **	0.06 (2.83) **
Economic incentives		0.24 (2.82) **
Wage satisfaction		0.18 (4.84) **
Workplace stress	-0.10 (-5.35) **	-0.08 (-4.25) **
R-squared	0.55	0.63
F-value	46.40 **	55.3 **

Notes: Control variables are included but not displayed.
t-values in parenthesis. ** $p < 0.01$.

Table 7 reports the regression estimates for POS. The three tangible benevolence items have significantly positive coefficients, indicating that employees perceive POS when the manager ensures the subsistence security of employees. Additionally, economic incentives and wage satisfaction positively affect POS, as shown in model 2. Recall that wage satisfaction did not affect either AC (Table 5) or behaviour, except turnover intention (Table 6). However, it has a

significantly positive effect on POS (model 2 in Table 7). These findings imply that employees perceive wage satisfaction not as remuneration for work effort but as a manager's benevolence that assures their subsistence.

In contrast, economic incentives showed a positive effect on AC (Table 5), some behaviours (Table 6), and POS (Table 7). These findings suggest multifaceted features of economic incentives. Although economic incentives seem to work as economics predicts to some extent (Table 6), the items of economic incentives simultaneously represent organisational fairness in the remuneration system, in the sense that economic incentives have an overtone of fairness and trust with regard to the manager. In this instance, economic incentives constitute POS. Factor analysis performed on the five variables shown in Table 7 extracted a single factor (eigenvalue = 2,12, Cronbach's alpha = 0,77, variance = 42,36). This factor can be interpreted as integrated tangible benevolence. When the factor score replaces the five variables in Table 7, its coefficient comes to 0,72 (t -values = 26,33, $p < 0,01$, $R^2 = 0,62$). Thus, economic incentives and wage satisfaction may constitute a unidimensional construct with the three items of tangible benevolence. The continuing strong presence of patron-client ties in organisations suggests that people from indigenous societies are less responsive to cash stimuli, contrary to the expectation of economists. Thus, the effect of economic incentives appears unclear in this stage of industrialization.

The peculiar effect of wage satisfaction is interpretable from the perspective of crowding effects (Frey, 1997). Crowding effects are divided into crowding-out and crowding-in effects. The former posits a negative association between intrinsic and extrinsic motivation, whereas the latter indicates a positive association. For low-skilled factory employees engaging in simple tasks, intrinsic motivation may play an insignificant role. However, as a corollary of a crowding-out thesis, an overemphasis on wage as a primary motivator is assumed to lower AC, which is related to intrinsic motivation by nature. Wage satisfaction has no significant effect on AC (Table 5), whereas it has a significantly positive effect on POS (Table 7). This suggests a crowding-in effect of wage satisfaction. In other words, performance-contingent pecuniary incentives are unlikely to create desired results in the early stages of industrialization.

MANAGERIAL IMPLICATIONS IN THE SOUTH EAST ASIAN CONTEXT

The industrialization of Southeast Asian countries started in labour-intensive industries, typically garment manufacturing, demanding the emergence of masses of factory employees. As first-generation factory employees are from indigenous societies, they are unaccustomed to the factory system, especially factory discipline. The findings from this study support H₁ and H₂ and shed light on the HRM strategies for first-generation factory employees. Practitioners may use the research findings to foster and motivate these employees.

H₁ articulates the significance of employees' assimilation into the factory system, particularly factory discipline. Imposing rigorous factory discipline on first-generation factory employees leads to workplace stress, evoking unexpected resistance to the factory system. As extreme events of workplace stress, outbreaks of mass hysteria among female factory employees seized by spirit possession are widely reported in Southeast Asian countries, such as Malaysia (Ong, 1987), Thailand (Pangsapa, 2007), and Cambodia (Eisenbruch, 2017). Factory discipline needs to be enforced in a circumspect manner for first-generation factory employees.

Second, pecuniary incentives often produce negative deviations from outcomes predicted by economic models, in light of the crowding-out effect of pecuniary incentives. This study observed the crowding-in effect of economic incentives and wage satisfaction rather than the crowding-out effect, suggesting that first-generation factory employees have embedded in patron-client ties that persist deeply in Southeast Asian societies. Employees socialised in such a culture are likely to expect patron-client relationships to assure their subsistence. As a result, they may respond positively to the benevolence of their managers. Embracing the culture of patron-client ties in HRM strategies would facilitate employees' pro-organizational behaviours and deter counter-productive ones.

THEORETICAL IMPLICATIONS

This study provides new perspectives on workplace stress and motivation mechanisms at the incipient stages of industrialization. One may assume that human resource management (HRM) practices in industrialised countries have universal effects in developing countries. However, we provided two new insights regarding first-generation factory workers. First, workplace stress in developing countries has been discussed using the framework developed in industrialised societies. However, this study revealed that factory discipline was a predominant stressor. Second, motivation mechanisms with a particular emphasis on patron-client ties are required to manage

first-generation factory employees.

Ohno (2012) demonstrated that HRM strategies change along with industrial advancements from low-skilled industries toward sectors employing skilled workers. In this shift, discretionary tasks supersede simple tasks on production floors. A discretionary task involves high transaction costs for directing necessary assignments in detail and monitoring work effort. Therefore, pay-for-performance systems and supervision often fail to elicit work effort (Frey, 1993). In place of economic incentives, leveraging organisational commitment becomes an effective motivation device to elicit work effort. However, this study revealed that organisational commitment, measured as AC, plays a decisive role in eliciting work effort even for semi-skilled employees in the early stages of industrialization, while economic incentives fail to exercise their full potential. This calls for further analysis of the connotation of organisational commitment in development stages and different cultural settings.

Our findings are subject to three major limitations. First, the current study does not cover either white-collar or skilled employees in the capital-intensive industry. Different motivation mechanisms may govern these employees. Second, our target factories are Myanmar-owned. However, approximately 70% of Myanmar's garment factories are foreign-owned. We planned to cover these targets, but we were obliged to suspend our research due to a military takeover on February 1, 2021. Third, the garment industry in Myanmar was severely hit by the Covid-19 pandemic. Thus, the results of this study may only represent the conditions at a specific point in time.

CONCLUSIONS

This paper empirically examined HRM strategies to foster and motivate factory employees in the early stages of industrialization. The study has two key outcomes. First, first-generation factory employees require patient efforts to come to terms with the factory system, the core of which is factory discipline. Employees' maladaptation to factory discipline leads to workplace stress and fuels counter-productive behaviour. Thus, before providing full-fledged incentives to elicit work effort, the management must adapt employees to the factory system, particularly factory discipline.

Second, the norm of social exchange rooted in indigenous social values governs employees' behaviours. Although social exchange has been widely explored in organisations in developed countries, the norm of social exchange persists more explicitly in developing countries. Additionally, we revealed that indigenous HRM practices based on patron-client ties strengthen the norm of social exchange in organisations. This would contribute to effective HRM at the

incipient stages of industrialization.

Our findings provide important implications for managing first-generation factory employees. HRM practices developed in industrialised societies are likely to fail to function efficiently at the onset of industrialization. Gaining a better understanding of the motivation mechanisms in the early stage of industrialization is imperative for factory managers to structure practical strategies to foster an eligible workforce and elicit work effort from first-generation factory employees.

References

- Akerlof, G. A. (1982). Labor contracts as partial gift exchange. *Quarterly Journal of Economics*, 97(4), 543–569.
- Allen, D. G., & Shanock, L. R. (2013). Perceived organizational support and embeddedness as key mechanisms connecting socialization tactics to commitment and turnover among new employees. *Journal of Organizational Behavior*, 34(3), 350–369.
- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance, and normative commitment to the organization. *Journal of Occupational Psychology*, 63(1), 1–18.
- Anderson, P. & Pulich, M. (2001). Managing workplace stress in a dynamic environment. *Health Care Manager*, 19(3), 1–10.
- Beehr, T. A., Jex, S. M., Stacy, B. A., & Murray, M. A. (2000). Work stressors and coworker support as predictors of individual strain and job performance. *Journal of Organizational Behavior*, 21(4), 391–405.
- Bernhardt, T., De, S. K., & Thida, M. W. (2017). *Myanmar labour issues from the perspective of enterprises: Findings from a survey of food processing and garment manufacturing enterprises*. Yangon, Myanmar: International Labour Organization, Myanmar Center for Economic and Social Development.
- Blau, P. M. (1964). *Exchange and power in social life*. Wiley.
- Clark, G. (1994). Factory discipline. *Journal of Economic History*, 54(1), 128–163.
- Clawson, D. (1980). *Bureaucracy and the labor process: The transformation of US industry, 1860–1920*. Monthly Review Press.
- Coyle-Shapiro, J. A-M., Shore, L. W., Taylor, M. S. & Tetrick, L. (Eds.) (2004). *The employment relationship: Examining psychological and contextual perspectives*. Oxford University Press.
- Di Fabio, A., Svicher, A., & Gori, A. (2021). Occupational fatigue: Relationship with personality traits and decent work. *Frontiers in Psychology*, 12(742809). <https://doi.org/10.3389/fpsyg.2021.742809>
- Dung, L. T., Ho, D. P., Hiep, N. T. K., Hoi, P. T., & Hanh, D. T. P. (2019). Job satisfaction, leadership styles, demographic variables and organisational commitment among pharmacists in Vietnam. *The South East Asian Journal of Management*, 13(1), 37–52.
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, 71(1), 500–507.
- Eisenbruch, M. (2017). Mass fainting in garment factories in Cambodia. *Transcultural Psychiatry*, 54(2), 155–178.
- Enlightened Myanmar Research Foundation and Andaman Research & Advisory (2017). *The young women from rural villages powering an urban industry: A baseline survey of Yangon's garment sector workforce*. <http://www.candafoundation.org/impact/news/yangon-rmg-workforce/>.
- Fehr, E. & Kirchsteiger, G. (1998). Gift exchange and reciprocity in competitive experimental

- markets. *European Economic Review*, 42(1), 1–34.
- Fischer, R., & Smith, P. B. (2003). Reward allocation and culture: A meta-analysis. *Journal of Cross-Cultural Psychology*, 34(3), 251–268.
- Frey, B. S. (1993). Does monitoring increase work effort? The rivalry with trust and loyalty. *Economic Inquiry*, 31(4), 663–670.
- Frey, B. S. (1997). *Not just for the money: An economic theory of personal motivation*. , Cheltenham: Edward Elgar.
- Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review*, 25(2), 161–178.
- Guiso, L., Sapienza, P., & Zingales, L. (2006). Does culture affect economic outcomes? *Journal of Economic Perspectives*, 20(2), 23–48.
- Harris, C.W. (1967). On factors and factor scores. *Psychometrika*, 32(4), 363–379.
- Harwika, W. (2013). The influence of servant leadership on organization culture, organizational commitment, organizational citizenship behavior, and employees' performance (Study of outstanding cooperatives in East Java Province, Indonesia). *Journal of Economics and Behavioral Studies*, 5(12), 876–885.
- Hofstede, G. (1991). *Cultures and organizations: Software of the mind*. McGraw-Hill.
- Kerr, C., Harbison, F. H., Dunlop, J. T., & Myers C. A. (1960). *Industrialism and industrial man: The problems of labor and management in economic growth*. Harvard University Press.
- Kube, S., Maréchal, M. A., & Puppe, C. (2012). The currency of reciprocity: Gift exchange in the workplace. *American Economic Review*, 102(4), 1644–1662.
- Kurtessis, J. N., Eisenberger, R., Ford, M. T., Buffardi, L. C., Stewart, K. A., & Adis, C. S. (2017). Perceived organizational support: A meta-analytic evaluation of organizational support theory. *Journal of Management*, 43(6), 1854–1884.
- Kuvaas, B., Shore, L. M., Buch, R., & Dysvik, A. (2020). Social and economic exchange relationships and performance contingency: Differential effects of variable pay and base pay. *International Journal of Human Resource Management*, 31(3), 408–431.
- Landes, D. S. (1969). *The unbound Prometheus: Technological change and industrial development in Western Europe from 1750 to the present*. Cambridge University Press.
- Lin, M. Z. N., Tanaka, M., Minni, V., Nguen, H., Thet, K. S., & Macchiavello, R. (2019). *Industrial relations and workplace communication in Myanmar garment sector*. (International Growth Center Working Paper F-53407-MYA-1).
- Mackey, J. D., Perrewe, P. L., & McAllister C. P. (2017). Do I fit in? Perceptions of organizational fit as a resource in the workplace stress process. *Group & Organization Management*, 42(4), 455–486.
- Malinowski, B. (2014). *Argonauts of the western Pacific: An account of native enterprise and adventure in the archipelagoes of Melanesian New Guinea*. Routledge.
- Marglin, S. A. (1974). What do bosses do? *Review of Radical Political Economics*, 6(2), 60–112.
- Mauss, M. (1990). *The gift: The forms and reason for exchange in archaic societies* (W. D. Halls, Trans.) Routledge.
- Michael, G. (2019). Networks of reciprocity: Precarity and community social organisations in Rural Myanmar. *Journal of Contemporary Asia*, 49(4), 602–625.
- Milgrom, P., & Roberts, J. (1992). *Economics, organization, and management*. Prentice-Hall.
- Molina, T., & Tanaka, M. (in press). Globalization and female empowerment: Evidence from Myanmar. *Economic Development and Cultural Change*.
- Ohno, A. (2012). Structuring incentives to elicit work effort during the process of industrialization: Evidence from Vietnamese businesses. *International Journal of Human Resource Management*, 23(18), 3742–3757.
- O'Malley, M. (1990). *Keeping watch: A history of American time*. Viking.
- Ong, A. (1987). *Spirits of resistance and capitalist discipline: Factory women in Malaysia*. State University of New York Press.
- Pangsapa, P. (2007). *Textures of struggle: The emergence of resistance among garment employees*

- in Thailand*. Cornell University Press.
- Pingping, C., & Huang, Y. J. (2019). A study of association among distributed leadership, organizational commitment and organizational citizenship behavior of private colleges in China. *International Journal of Organizational Innovation*, 12(2), 105-114.
- Platteau, J. (1995). A framework for the analysis of evolving patron-client ties in agrarian economies. *World Development*, 23(5), 767–786.
- Pollard, S. (1963). Factory discipline in the industrial revolution. *Economic History Review*, 54(1), 254–271.
- Reichers, A.E. (1985). A review and reconceptualization of organizational commitment. *Academy of Management Review*, 10(3), 465–476.
- Rhoades, L., Eisenberger, R., & Armeli, S. (2001). Affective commitment to the organization: The contribution of perceived support. *Journal of Applied Psychology*, 86(5), 825–836.
- Rights, A. L. (2016). *Under pressure: A study of labour conditions in garment factories in Myanmar which are wholly Korean owned or in a joint venture with Korean companies*. Action Labor Rights. <https://www.business-humanrights.org/en/latest-news/under-pressure-a-report-on-labour-conditions-in-korean-factories-in-myanmar-by-action-labor-rights/>.
- Sahlins, M. (1972). *Stone age economics*. Aldine-Atherton.
- Scott, J. C. (1972). Patron-client politics and political change in southeast Asia. *American Political Science Review*, 66(1), 91–113.
- Scott, J. C. (1976). *The moral economy of the peasant: Rebellion and subsistence in Southeast Asia*. Yale University Press.
- Shore, L. M., Tetrick, L. E., Lynch, P., & Barksdale, K. (2006). Social and economic exchange: Construct development and validation. *Journal of Applied Social Psychology*, 36(4), 837–867.
- Sittisom, W. (2020). The impact of human resource practices on organizational commitment of the pharmacy employees in Thailand. *Systematic Review Pharmacy*, 11(3), 97-105.
- Smith, T. C. (1988). *Native sources of Japanese industrialization, 1750–1920*. University of California Press.
- Tanaka, M. (2020). Exporting sweatshops? Evidence from Myanmar. *Review of Economics and Statistics*, 102(3), 442–456.
- Thompson, E. P. (1967). Time, work discipline, and industrial capitalism. *Past and Present*, 38(1), 56–97.
- Thompson, P., & McHugh, D. (2002). *Work organization* (3rd ed.). Palgrave.
- Triandis, H. C. (1995) *Individualism and collectivism*. Westview Press.