

The employment relationships of foreign workers versus local employees: a field study of organizational justice, job satisfaction, performance, and OCB

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Summary

Foreign workers seek overseas employment without sponsorship from a firm in their home country and hold temporary work visas in the host country. Despite the rising numbers of foreign workers, there is very little research that examines employment relationships and work behaviors of foreign workers. In this study, we draw on social exchange theory and predict differences in work perceptions, attitudes, and behaviors of foreign versus local employees based on differences in their exchange relationships. We then draw on social comparison theories and propose that these differences in perceptions, attitudes, and behaviors will be accentuated for workers in jobs with high task interdependence. We examined these hypotheses in a field study of 466 ethnic Chinese employees (213 foreign workers from the People's Republic of China and 253 local workers in Singapore with ongoing employment status). Results demonstrate lower distributive justice judgments, performance, and organizational citizenship for foreign versus local employees. Furthermore, results demonstrate that differences in distributive and procedural justice, performance, and organizational citizenship were heightened by task interdependence. We discuss findings and the implications of employing foreign workers. Copyright © 2003 John Wiley & Sons, Ltd.

Introduction

Employing foreign workers with temporary work visas is a global business trend, especially in nations that experience shortages of highly skilled workers in their local labor markets (Rogler, 1994). For example, the United States recruits 100 000 skilled foreign workers annually from Europe, Asia, Central and South America (West & Bogumil, 2000). Other parts of the world (notably Australia, Canada, and the Middle East) also experience skilled labor shortages and rely heavily on foreign workers (Sowell, 1996). In Singapore, there are approximately half a million foreign workers, a sizeable 20 per cent of the workforce (Verma, Kochan, & Lansbury, 1995; Yap, 1999).

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Given the increasing prevalence and number of foreign workers, the objective of this research is to examine differences in work perceptions, attitudes, and behaviors of foreign compared to local employees. In this study, we define foreign workers as employees who have no permanent residential status in the host country and who seek overseas employment without sponsorship from any firm in their home nations (Alarcon, 1999; Sowell, 1996; West & Bogumil, 2000). Thus, we do not focus on expatriates (Guzzo, Noonan, & Elron, 1994). Expatriates are similar to foreign workers because they typically have no permanent residential status in the host country. However, expatriates differ from foreign workers because they are sent on overseas assignments with sponsorship from a home country organization (Black, Gregersen, Mendenhall, & Stroh, 1999). In addition, the home country organization typically finds new positions for expatriates at the end of their overseas assignments (Guzzo et al., 1994). Expatriates therefore have ongoing employment relationships both before and after a specific overseas assignment whereas foreign workers seek new employment relationships that are of limited duration with firms, with no expectation of ongoing employment beyond the expiration of their temporary work visas (Alarcon, 1999; Sowell, 1996).

Employing foreign workers, therefore, poses a major challenge to employing organizations in the host country. Since foreign workers have no ongoing employment relationship and hold only temporary work visas, their employment is by definition of limited duration. Although in some exceptional cases organizations may petition to have the visa of a specific foreign worker extended, renewals are not regularly awarded because many countries discourage 'permanent' foreign workers with the goal of reducing dependence on foreign workers (Sowell, 1996). Accordingly, organizations must craft alternative employment relationships with foreign workers compared to local employees.

Foreign workers under employment of limited duration create greater variety of alternative staffing strategies for the employing organization (Kalleberg, 2000) and present an interesting contrast to local workers who hold the same job and perform the same tasks, but who are hired at will and for indefinite or long-term employment relationships (Pfeffer & Baron, 1988). Past research on workers under alternative staffing strategies who do not have ongoing employment relationships (for example, contingent, temporary, contract, on-call, and part-time workers) demonstrates that alternative staffing strategies can have significant social-psychological effects on employee attitudes and behavior (see, for example, Ellingson, Gruys, & Sackett, 1998; Marler, Barringer, & Milkovich, 2002; Pearce, 1993; Van Dyne & Ang, 1998). We therefore expect that foreign work status (temporary work visas with no assurance of ongoing employment relationships) will influence work perceptions, attitudes, and behaviors in the host country.

Our paper is organized as follows. First, we draw on social exchange theory (Blau, 1964; Thibaut & Kelley, 1959) to predict that foreign workers will have lower distributive justice, procedural justice, and job satisfaction. Second, and again based on social exchange theory, we predict that foreign workers will have lower performance and exhibit less organizational citizenship behavior than local employees performing the same work. Third, drawing on social comparison theory (Festinger, 1954), we propose that differences in perceptions, attitudes, and behaviors will be accentuated for workers in jobs with high task interdependence. We then present results of a field study of 466 skilled technical employees (213 foreign workers from the People's Republic of China and 253 local employees in Singapore) that tests these hypotheses and conclude by discussing the theoretical and human resource implications of our findings.

Social Exchange: Foreign Versus Local Workers

Social exchange theory (Blau, 1964) and reciprocity norms (Gouldner, 1960) suggest that foreign workers will have less positive exchange relationships than local employees because foreign workers

receive different inducements such as pay, benefits, access to career development, and opportunities for advancement from the organization (March & Simon, 1958). Local employees with open-ended relationships are eligible for promotion, training and career development, more paid vacation, overtime, medical benefits, contributions to retirement, and can resign voluntarily without financial penalties. In contrast, foreign workers with limited duration employment are not eligible for promotion, not entitled to career development benefits, have less paid vacation, no overtime, no medical benefits, and must pay a penalty in the event of voluntary resignation for non-completion of their employment contract. As a result, the social exchange relationships of foreign workers contain fewer tangible and intangible outcomes because their employment relationships are more bounded.

In this research, we focus on comparisons between local employees and foreign workers. We suggest that the reality and immediacy of the proximal context focuses their attention on local comparisons. At the same time, we acknowledge that foreign workers may also contrast their social exchange relationships with those they had in previous employment relationships in their home country. In the next section, we develop this idea in more detail and predict differences in distributive justice, procedural justice, and job satisfaction when comparing foreign and local employees.

Distributive justice, procedural justice, and job satisfaction

According to Greenberg (1990), distributive justice involves employee assessments of fairness of rewards and inducements received in exchange for contributions at work. Prior research and theory on social exchange and distributive justice suggest that when employees receive inducements that are commensurate with their knowledge, skills, and abilities, they are more likely to think that their outcomes such as pay, benefits, and terms of work are fair and just (Greenberg, 1990). In contrast, if employees feel that outcomes are not congruent with their human capital, they will make lower distributive justice judgments than local employees. In general, foreign workers, especially those that hold professional jobs, often represent employees with outcomes that are not commensurate with their human capital (Alarcon, 1999). In many cases such as in our sample, foreign workers have higher levels of education than local employees in the same jobs. This is because their educational and professional credentials are not fully recognized due to institutional barriers. Accordingly, we expect foreign workers to make lower distributive judgments than local employees.

Hypothesis 1: Distributive justice judgments will be lower for foreign compared to local workers.

Procedural justice involves employee assessments of the extent to which decisions are based on fair methods and guidelines (Folger & Greenberg, 1985). In other words, employees evaluate the extent to which they feel processes used to make decisions that influence them are just (Niehoff & Moorman, 1993). Prior research and theory on social exchange and procedural justice suggest that when organizational decision-making is consistent and meets the bias suppression rule (uniform treatment of all), employees have positive assessments of procedural justice (Leventhal, 1980). In contrast, when decision-making processes apply differentially to employees (based, for example, on their demographic or employment status characteristics), procedural justice judgments of those affected are lower. In applying this to foreign workers, we expected that their limited duration employment status would cause them to feel that policies were differentially applied to them compared to local employees. When exchange relationships differ, decision-making will be less uniform (foreign compared to locals) and foreign workers may feel they do not have equal access to appeal mechanisms. Accordingly:

Hypothesis 2: Procedural justice judgments will be lower for foreign compared to local workers.

Job satisfaction refers to an employee's overall sense of well-being at work. It is an internal state based on assessing the job and job-related experiences with some degree of favor or disfavor (Locke, 1976). Based on their employment status, foreign workers receive different inducements from the organization and cannot expect ongoing employment. Since these differences are a function of employment status and are not a function of qualifications or job responsibilities, we propose that foreign workers will have lower satisfaction than local employees. In other words, we suggest that foreign workers will have a lower sense of well-being, based on lower-quality employee–organizational linkages. Thus:

Hypothesis 3: Job satisfaction will be lower for foreign compared to local workers.

Work performance

We now turn our attention to two key work behaviors: work performance and organizational citizenship. Work performance is typically viewed as fundamental or in-role responsibilities that employees are hired to perform in exchange for their compensation packages (Rousseau & McLean Parks, 1993). Since foreign workers receive less from the organization (e.g., temporary employment, no long-term benefits, no access to promotions), it seems reasonable to expect them to contribute less to the organization. Accordingly, we expect them to feel less responsibility to contribute at high performance levels. This is consistent with the logic used by Feldman (1996), who suggested that lower performance is one mechanism workers can use to restore personal feelings of equity regarding the work exchange relationship. Accordingly:

Hypothesis 4: Job performance will be lower for foreign compared to local workers.

Organizational citizenship behavior (OCB)

OCB is constructive behavior, not included in an employee's formal job description (Organ, 1988). Specifically, we focus on helping forms of organizational citizenship, the most commonly researched form of OCB, such as when workers use discretion and decide to assist co-workers with their work or when they volunteer to do things that benefit the workgroup (LePine, Erez, & Johnson, 2002). Consistent with the logic used above for performance, we suggest that since foreign workers receive less from the organization, they will contribute less to the organization. Organizational citizenship can be viewed as a social resource that can be exchanged by individuals who have been the recipient of social rewards (Moorman, 1991; Kaufman, Stamper, & Tesluk, 2001). Thus, when employees feel as though they receive a lot from the organization, their citizenship behavior will be higher. When they feel their exchange relationship is less positive, they can withhold these discretionary behaviors with little fear of negative consequences. This is because organizational citizenship is not required by the job and there are no formal sanctions for failing to contribute these behaviors to the organization. Not engaging in discretionary behavior, therefore, can help foreign workers balance perceived inputs and outcomes. Accordingly:

Hypothesis 5: Organizational citizenship will be lower for foreign compared to local workers.

Social Comparison: The Moderating Role of Task Interdependence

In the preceding sections, we used social exchange theory and the norm of reciprocity to justify our predictions that foreign worker perceptions, attitudes, and behaviors would be less positive than those

of local employees. We now draw on social comparison theories (Festinger, 1954; Kruglanski & Mayseless, 1990) to propose that task interdependence will accentuate differences between foreign and local workers.

Task interdependence, organizational justice, and job satisfaction

When task interdependence requires employees to coordinate their work with others on an ongoing basis, interaction and proximity heighten the vividness of contrasts (Kiggundu, 1983), such as those based on employment status. For example, social cognitive research demonstrates that social comparisons and social judgments are more likely when comparison others are proximate and salient (Nisbett & Ross, 1980). Similarly, research on social information processing and relative deprivation (Crosby, 1984) shows that social comparison occurs automatically when employees interact with each other. In fact, it is difficult for individuals to avoid social comparison, especially when regularly interacting with co-workers.

In other words, the differences in the employment exchange relationships (employment status, benefits, and opportunities) will be more obvious when employees must interact regularly than when interaction is optional and comparison others are less evident. When differences in employment relationships are more obvious due to proximity (such as high task interdependence), differences in perceptions of justice and assessments of satisfaction (local compared to foreign) will be magnified. Accordingly:

Hypothesis 6: The relationship between employment status (foreign versus local) and employee perceptions at work will be moderated by task interdependence, such that the relationship will be stronger for those in jobs with high task interdependence (6a: distributive justice; 6b: procedural justice; 6c: job satisfaction).

Task interdependence and work behaviors

Here we propose that when employees hold jobs with high task interdependence, social comparison processes will accentuate differences in work behaviors (foreign compared to local). First, consistent with the social exchange logic used above for Hypotheses 4 and 5 and the social comparison logic used for Hypothesis 6, we suggest that differences in inducements and contributions will be more salient to employees when they must coordinate their work efforts and must work closely with others. Thus, high task interdependence should make workers more aware of differences in their employment relationships and this should heighten differences in the behavior of local and foreign workers. Second, drawing on social comparison processes, we suggest that supervisor perceptions of worker contributions are also subject to social comparisons. Under conditions of high task interdependence, supervisors will be more aware of contrast effects and will be more likely to perceive differences in the behavior (performance and OCB) of foreign workers compared to local employees. In other words, when employees hold jobs with high task interdependence, observers will also experience automatic social comparison processes and supervisors will be more likely to notice differences and/or rate foreign employee performance and organizational citizenship behavior lower than that of local employees. Thus:

Hypothesis 7: The relationship between employment status (foreign versus local) and employee work behaviors will be moderated by task interdependence, such that the relationship will be stronger for those in jobs with high task interdependence (7a: performance; 7b: organizational citizenship behavior).

Research Context

Despite chronic shortages of skilled labor, Singapore regulates stringently the inflow of foreign workers because readily available foreign labor may discourage employers from investing in developing the skills of the local workforce (Tan, 1996). Singapore has introduced a number of measures to regulate the employment of foreign workers and control the numbers of foreign workers in the local economy. First, Singapore grants work visas very stringently, based on staffing demands and on efforts to manage the mix of local and foreign workers. Second, organizations must pay a monthly levy of SIN \$200–400 for each foreign worker, thereby raising the cost of employing foreign workers. Employers are therefore discouraged from recruiting too many foreign workers because the levy raises their wage costs and ensures that foreign workers do not become an inexpensive source of labor at the expense of local workers.

Third, organizations must ensure that their ratios of local to foreign workers do not exceed 2:1 in the manufacturing sector and 4:1 or 5:1 in the service sector. Fourth, work visas have a maximum of 2 years, although organizations may apply to renew for another term of 2 years. In many cases, no further renewals are awarded because the system discourages ‘permanent’ foreign workers, with the goal of reducing dependence on foreign workers through greater use of technology as a substitute for foreign labor. Further, where there is a change of employer, foreign workers must apply for new work permits. Thus, foreign workers on temporary work permits are repatriated after a maximum of 4 years.

Method

Context

We collected data from highly skilled technical employees at a large property management and development organization in Singapore. Singapore is a good setting to compare skilled local and foreign workers because Singapore’s high economic growth creates chronic labor shortages and Singapore has a history of employing foreign workers as skilled employees (Verma, et al., 1995). Foreign workers account for a sizeable 20 per cent of the existing workforce in Singapore (Yap, 1999). Unemployment has been about 1.8 per cent, and the annual job vacancy rate at 18–25 per cent (Ang, Tan, & Ng, 2000; Bian & Ang, 1997). Singapore stringently regulates the inflow of foreign workers because readily available foreign labor may discourage employers from developing the skills of the local workforce and from investing in technology as a substitute for labor (Tan, 1996).

Each year, the organization in our study recruits from large cities in China. Prospective candidates are tested on their technical skills and selected based on their technical competencies. Once hired and on the job, foreign workers and local employees receive equal training to perform current job duties.

Foreign workers in this organization receive less favorable terms of employment than their local counterparts. Local employees have open-ended, ongoing employment relationships and are eligible for promotion and are entitled to 14 days annual career development in management and leadership. Local employees receive 12 paid vacation days annually, overtime pay, medical benefits, and at least

20 per cent contributions to retirement. In the event of voluntary resignation, local employees can give 1 month's notice and leave without a pay penalty. In contrast, foreign workers are not eligible for promotion, overtime, medical, career development, or retirement benefits. Foreign workers receive 9 paid vacation days during their fixed-term, 2-year contracts. In the event of voluntary resignation, foreign workers must pay a heavy financial penalty for non-completion of their contract.

Procedure

Prior to data collection, we conducted structured interviews with six local and five foreign workers to obtain information on work perceptions, attitudes, and behaviors and to make sure the questions in our survey had face validity and were interpreted as intended. Individuals participated in the study voluntarily and all participants were assured their individual responses would remain confidential. A bilingual Chinese person translated the English version of the questionnaire into Mandarin and a second bilingual Chinese person then back-translated to English to assure comparable meaning (Brislin, 1980). Finally, two additional individuals (a Human Resources representative and a native-born Chinese person) reviewed the final questionnaire for clarity and comparability.

Local employees and foreign workers provided data on their demographic characteristics, cultural values, perceptions, and attitudes. Supervisors provided data on employee job performance, organizational citizenship, and the percentage of foreign workers in the work unit. A total of 556 ethnic Chinese employees were asked to complete questionnaires during normal work hours. We obtained useable data from 466 employees and their supervisors. The response rate was 87 per cent for local employees (Singaporeans) and 80 per cent for foreign workers (People's Republic of China).

Respondents

All participants (both local and foreign) were ethnic Chinese. Local employees ($n = 253$) were 54 per cent of the sample, 72 per cent male, and 75 per cent had at least 2 years of community college experience. On average, local employees were 31 years old, had 8.33 years of organization tenure, and 10 years of work experience. Foreign workers ($n = 213$) were 46 per cent of the sample, 86 per cent male, and all held at least a Bachelor's degree from universities in the People's Republic of China. On average, foreign workers were 29 years old, had 1.9 years of organization tenure, and 7 years of work experience. We note that some of the foreign workers in our sample had 3 years of tenure because, owing to the labor shortage, their work visas had been renewed. These renewals, however, are not guaranteed and no renewal notice is given until about 3 months before contract expiration, thus creating perceptions of 'limited duration' employment. Contracts are not renewed more than once.

Nature of jobs

Local employees and foreign workers performed the same highly skilled technical jobs, all in the same job classification level. These employees held technical jobs related to architecture, construction, and inspection. Specific duties included drafting architectural drawings and building plans, revising blueprints, inspecting work for quality assurance, testing materials against standards, and ensuring compliance with safety procedures. Overall, 37 per cent of the sample had jobs of high task interdependence (61 per cent of locals and 39 per cent of foreign) and 63 per cent had jobs of low task interdependence (50 per cent of locals and 50 per cent of foreign). Jobs with high task interdependence

were organized using reciprocal interdependence. Individuals in these jobs needed to coordinate their actions with co-workers in order to accomplish their work. Their primary contacts were with other technicians. In contrast, jobs with low task interdependence were organized based on pooled interdependence. Employees in these jobs did not need to coordinate their efforts with other co-workers. Instead, their primary contacts were one-on-one interactions with suppliers and vendors outside of the organization.

Measures

We obtained information on *employment status* from organizational records (0 = foreign worker; i.e., Mainland Chinese; 1 = local; i.e., Singaporean Chinese).

We assessed *distributive justice* (1 = very unfair; 7 = very fair) with eight items (Niehoff & Moorman, 1993; Price & Mueller, 1986). Respondents indicated the extent to which they believed specific aspects of their work (work schedule, pay level, workload, rewards, job responsibilities, job assignment, use of skills, and effort expected) were fair or unfair (Cronbach's $\alpha = 0.92$). We assessed *procedural justice* (1 = never; 7 = always) with six items (Niehoff & Moorman, 1993). Respondents were asked to indicate how often the listed procedures were observed at work. The procedures included the following: job decisions are made in an unbiased manner; all employees' concerns are heard before job decisions are made; to make job decisions, accurate and complete information is collected; when requested by employees, decisions are clarified and additional information is provided; all job decisions are applied consistently across all affected employees; and employees are allowed to challenge or appeal job decisions (Cronbach's $\alpha = 0.83$). We assessed overall employee *job satisfaction* (1 = strongly disagree; 7 = strongly agree) with three items from the short form of the Job Diagnostic Survey (Hackman & Oldham, 1980). Items were as follows: generally speaking I am very satisfied with this job, I am generally satisfied with the kind of work I do in this job, and most people in this job are very satisfied with the job (Cronbach's $\alpha = 0.82$).

Supervisors assessed work performance and organizational citizenship (1 = strongly disagree; 7 = strongly agree). For *work performance*, we used four items from Ashford, Lee, and Bobko (1989). Items were as follows: the performance level of this employee is satisfactory, this employee is effective in his or her job, this employee performs better than many other employees who perform the same job, and this employee produces high-quality work (Cronbach's $\alpha = 0.90$). We used four items from Van Dyne and LePine's (1998) helping measure for *organizational citizenship behavior*. Items included 'helps orient new employees and helps others who have heavy workloads' (Cronbach's $\alpha = 0.83$).

To avoid common method bias, we asked two pairs of senior executives to rate level of task interdependence for the jobs in the study. Items included (1 = strongly disagree; 7 = strongly agree): employees work in groups; individuals work in a group rather than work alone. The average correlation between ratings of each pair of senior executives was 0.94 (0.87 and 1.0), with significant differences ($t = 8.49$, d.f. = 2, $p < 0.05$) for jobs with low task interdependence (mean of 3.34) and high interdependence (mean of 6.50). We coded jobs 0 for low task interdependence and 1 for high interdependence.

Control variables

Past research has demonstrated that gender, education, and work experience can influence Chinese employee work perceptions and attitudes (Hui & Tan, 1996), and so we included these as controls in our analysis: *gender* (0 = female, 1 = male), *education* (six ordered categories), and *work experience* (years). We also included *English proficiency* as a control to account for possible differences in

language skills. English proficiency is important in Singapore because English is the language of business and common first language of everyday living. Respondents rated their English proficiency with three items (1 = none at all; 7 = excellent): Understanding English, Speaking English, and Writing English (Cronbach's alpha = 0.95). Finally, past research has also demonstrated that group composition can influence perceptions, attitudes, and behaviors of workers in alternative staffing strategies (Pearce, 1993). Accordingly, we controlled for the *percentage of foreign workers* in the work unit.

We designed our research to hold ethnicity constant among local and foreign employees (i.e., ethnic Chinese regardless of employment status). However, we expected differences in cultural values even though all participants were ethnic Chinese (see Bond, 1996; Lam, Hui, & Law, 1999) and explicitly controlled for collectivism, uncertainty avoidance, and power distance (1 = strongly disagree; 7 = strongly agree).

We assessed *collectivism* with two items (Wagner, 1995): I prefer to work with others in a group rather than working alone and working with a group is better than working alone (Cronbach's alpha = 0.81). We assessed *power distance* with three items based on Dorfman and Howell (1988). Items were as follows: it is better not to disagree with management decisions; when my boss makes a decision with which I disagree, I prefer to accept it rather than question it; and I believe that it is not right to disagree with my boss (Cronbach's alpha = 0.66). Although our Cronbach alpha of 0.66 is slightly higher than Dorfman and Howell's (1988) earlier findings (0.63), we note that it is still low. A mitigating factor is our use of power distance as a statistical control and not as a substantive construct. We measured *uncertainty avoidance* based on Hofstede (1984) with five items developed specifically for this study (Cronbach's alpha = 0.77). Since these are new items, we list them in the Appendix and assessed their discriminant validity relative to other constructs in the study.

We analyzed the factor structure of the 30 self-report items, using principal components analysis with varimax rotation (see Table 1). Results produced the expected seven-factor structure (eigenvalues > 1.0), explained 66.3 per cent of the variance, and supported the discriminant validity of constructs representing distributive justice, procedural justice, job satisfaction, collectivism, power distance, uncertainty avoidance, and English proficiency. All items loaded on expected factors (range of primary loadings = 0.59–0.94) with no problematic loadings (maximum cross loading = 0.33). We also factor analyzed the supervisor-rated items (see Table 2). Principal components analysis, with varimax rotation, of the eight items produced the expected two-factor structure, explained 71.8 per cent of the variance, and supported the discriminant validity of performance and organizational citizenship. All items loaded on expected factors (range of primary loadings = 0.60–0.85). Other than one OCB item (helps others who have heavy workloads) that had a cross-loading on performance of 0.46, all items had cross-loadings of 0.40 and below.

Psychometric equivalence of measures between Mainland China and Singapore samples

We examined the psychometric equivalence of the measures across the two samples (mainland Chinese and Singaporean Chinese) using the procedures recommended by Byrne (1998). First we tested the extent to which the items comprising each construct were factorially equivalent. We examined the equivalence of factor structures (i.e., number of factors) across the two samples, relying on the comparative fit index (CFI) and the incremental fit index (IFI) in the CFA models. We also report root mean square error (RMSEA; Byrne, 1998; Joreskog & Sorbom, 1993) as a reference for overall model fit. The fit of the simultaneous test for factor structure across the two samples was acceptable. The test of number of factors yielded a $\chi^2 = 1622.19$, d.f. = 1126, both CFI and IFI = 0.91 and RMSEA = 0.048.

Table 1. Factor loadings for self-report items

Item	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
Distributive Justice 1	0.87	0.08	0.03	0.04	0.11	0.03	0.04
Distributive Justice 2	0.85	0.17	0.04	0.05	0.04	0.14	0.06
Distributive Justice 3	0.80	0.21	0.10	0.02	0.03	0.19	0.09
Distributive Justice 4	0.76	0.15	0.09	0.05	0.29	0.12	0.03
Distributive Justice 5	0.74	0.16	0.14	0.06	0.12	0.06	0.10
Distributive Justice 6	0.72	0.12	0.25	0.11	0.12	0.07	0.05
Distributive Justice 7	0.71	0.17	0.09	0.11	0.33	0.05	0.05
Distributive Justice 8	0.66	0.30	0.03	0.06	0.06	0.06	0.10
Procedural Justice 1	0.26	0.78	0.03	0.14	0.07	0.03	0.06
Procedural Justice 2	0.22	0.77	0.04	0.15	0.13	0.04	0.09
Procedural Justice 3	0.20	0.74	0.02	0.11	0.08	0.15	0.13
Procedural Justice 4	0.13	0.70	0.06	0.05	0.08	0.01	0.09
Procedural Justice 5	0.25	0.66	0.02	0.03	0.16	0.08	0.10
Procedural Justice 6	0.06	0.63	0.04	0.08	0.18	0.14	-0.19
English Proficiency 1	0.04	0.03	0.94	0.03	0.06	0.04	0.03
English Proficiency 2	0.02	0.04	0.92	0.01	0.01	0.06	0.06
English Proficiency 3	0.02	0.03	0.90	0.02	0.01	0.08	0.05
Uncertainty Avoid. 1	0.09	0.04	0.13	0.77	0.10	0.05	0.15
Uncertainty Avoid. 2	0.10	0.05	0.06	0.75	0.04	0.08	0.02
Uncertainty Avoid. 3	0.03	0.06	0.08	0.72	0.01	0.13	0.19
Uncertainty Avoid. 4	0.08	0.15	0.13	0.66	0.14	0.17	0.06
Uncertainty Avoid. 5	0.04	0.21	-0.20	0.64	0.13	0.03	0.03
Job Satisfaction 1	0.21	0.22	0.08	0.16	0.82	0.06	0.06
Job Satisfaction 2	0.30	0.27	0.01	0.20	0.76	0.05	0.07
Job Satisfaction 3	0.13	0.16	0.05	0.02	0.63	0.21	0.12
Power Distance 1	0.09	0.01	0.03	0.06	0.06	0.82	0.06
Power Distance 2	0.11	0.04	-0.11	0.05	0.20	0.72	0.06
Power Distance 3	0.04	0.15	0.03	0.05	0.06	0.59	0.05
Collectivism 1	0.13	0.09	0.01	0.20	0.13	0.06	0.88
Collectivism 2	0.11	0.06	0.03	0.22	0.11	0.01	0.87

Table 2. Factor loadings for supervisor-report items

Item	Factor 1	Factor 2
Performance 1	0.85	0.33
Performance 2	0.83	0.38
Performance 3	0.78	0.24
Performance 4	0.60	0.39
Helping 1	0.33	0.78
Helping 2	0.20	0.74
Helping 3	0.35	0.74
Helping 4	0.46	0.67

Second, we examined the extent to which content of each item of each construct was interpreted equivalently across groups (Byrne, 1998) by testing for factor loadings invariance. We estimated a model where we constrained the chi-square parameters to be equal between the two samples. We then compared this with the model in the first procedure, where only the number of factors was held invariant. Results provide strong support for invariance in factor loadings ($\chi^2 = 1657.88$, d.f. = 1154) with no significant difference in chi-square between the first and second models ($\Delta\chi^2 = 35.69$, Δ d.f. = 28, $p > 0.05$).

Third, we tested simultaneously for invariance between the two samples in structural relations among the factors (i.e., factor covariances). We estimated a model where all factor covariances were constrained to be equal and then compared this with the model in the second procedure where the factor loadings were held invariant across the two samples. Results of this third test indicate strong support for the invariance of factor covariances across the two samples. The test of the factor covariances yielded a $\chi^2 = 1696.09$, d.f. = 190. The difference in chi-square between the second and third models was not significant ($\Delta\chi^2 = 38.21$, Δ d.f. = 36, $p > 0.05$), suggesting that the structural relations among the factors were the same for both samples. In sum, the three psychometric equivalence procedures suggest that the factor structures, factor loadings, and structural relations among the factors and factor covariances are equivalent between the mainland and Singaporean Chinese samples.

Analyses

We tested our hypotheses with hierarchical regression, entering demographic controls (gender, education, work experience, English proficiency, and percentage of foreign workers in the work unit) in step 1, cultural values (collectivism, power distance, and uncertainty avoidance) in step 2, employment status (foreign or local) in step 3, task interdependence in step 4, and interactions in step 5. We interpreted results with ΔF statistics and interpreted interactions using Aiken and West (1991).

Results

Table 3 includes descriptive statistics and intercorrelations for the full sample, and Table 4 reports this information for each subsample. Table 5 presents results from five hierarchical regressions that predict distributive justice, procedural justice, job satisfaction, job performance, and organizational citizenship. These regression equations explain between 16 and 22 per cent of the variance in perceptions, attitudes, and behaviors at work. Results support Hypothesis 1, indicating that foreign workers rated distributive justice lower than local employees. After accounting for gender, education, work experience, English proficiency, and percentage of foreign workers in step 1, and collectivism, power distance, and uncertainty avoidance in step 2, the addition of employment status in step 3 was significant ($\Delta F = 9.50$, $p < 0.01$, $\beta = 0.25$, $p < 0.01$; mean for foreign = 3.48, mean for local = 4.07) and increased R^2 by 0.03. In contrast, results failed to support Hypothesis 2 ($\beta = 0.04$, $p > 0.05$) or Hypothesis 3 ($\beta = -0.05$, $p > 0.05$), indicating no differences in procedural justice or job satisfaction based on employment status.

Results support Hypotheses 4 and 5. After accounting for the control variables, employment status was significant for work performance ($\Delta F = 14.13$, $p < 0.001$, $\beta = 0.31$, $p < 0.001$) and increased R^2 by 0.04. Results for organizational citizenship ($\Delta F = 18.17$, $p < 0.001$, $\beta = 0.35$, $p < 0.001$) were also significant and increased R^2 by 0.05. Supervisors rated foreign workers lower in work performance (mean for foreign = 4.97, mean for local = 5.68) and citizenship behavior (mean for foreign = 4.89, mean for local = 5.55) compared to locals.

For Hypotheses 6 and 7, we predicted task interdependence would moderate the relation between employment status and each of the outcomes. Table 5 shows significant interactions for distributive justice ($\Delta F = 4.46$, $p < 0.05$, $\beta = 0.20$, $p < 0.05$), procedural justice ($\Delta F = 3.98$, $p < 0.05$, $\beta = 0.19$, $p < 0.05$), work performance ($\Delta F = 5.85$, $p < 0.05$, $\beta = 0.22$, $p < 0.01$), and organizational citizenship behavior ($\Delta F = 4.16$, $p < 0.05$, $\beta = 0.19$, $p < 0.05$), but failed to reach significance for job

Table 3. Descriptive statistics and correlations

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Dist justice	3.80	1.28														
2. Proc justice	4.38	1.17	0.49***													
3. Job sat	4.43	1.27	0.47***	0.45***												
4. Perf	5.34	1.16	0.13**	0.10	0.05											
5. OCB	5.24	0.96	0.12*	0.04	0.02	0.73***										
6. Collective	5.27	1.36	0.24***	0.19***	0.28***	0.07	0.04									
7. Power dist	4.01	1.26	0.19***	0.20***	0.27***	0.03	-0.01	0.12**								
8. Unc avoid	5.49	0.98	0.21***	0.32***	0.32***	0.31***	0.12*	0.38***	0.20***							
9. Gender ^a	0.78	0.41	0.03	0.20***	0.12**	-0.03	-0.09	0.06	0.09*	0.07						
10. Education	3.12	0.96	-0.18***	-0.07	-0.09	-0.18***	-0.23***	-0.18***	0.07	-0.16***	0.12**					
11. English	4.57	1.06	0.09	-0.03	0.04	0.20***	0.20***	0.01	-0.14**	0.01	-0.02	-0.30***				
12. Work exp	8.73	8.73	7.07	0.10*	0.02	0.15**	0.14*	0.17***	0.13**	0.11*	0.17***	0.11*	-0.28***	0.09		
13. %foreign	0.43	0.17	-0.03	-0.03	0.02	-0.07	-0.04	0.01	0.06	0.01	0.03	-0.05	0.02	0.03		
14. Interdep	0.37	0.48	-0.14**	-0.14**	-0.09*	-0.15**	-0.10*	-0.15***	-0.07	-0.17***	-0.47***	-0.08	0.05	-0.07	-0.12*	

^a0, female; 1, male.
* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Table 4. Subsample descriptive statistics and correlations^a

	Local		Foreign		1	2	3	4	5	6	7	8	9	10	11	12	13	14
	M	SD	M	SD														
	1. Dist justice	4.07	1.17	3.48														
2. Proc justice	4.39	1.17	4.38	1.18	0.49***	0.45***	0.45***	0.08	-0.02	0.14*	0.25***	0.30***	0.19**	-0.12	0.06	0.03	-0.10	-0.18*
3. Job sat	4.47	1.23	4.38	1.31	0.45***	0.45***	0.07	0.07	0.03	0.26***	0.25***	0.28***	0.01	-0.19*	0.08	0.12	-0.04	-0.05
4. Perf	5.68	1.03	4.97	1.20	0.08	0.13	0.01	0.72***	0.68***	-0.03	0.03	-0.03	0.10*	-0.10	0.12	0.14	-0.05	-0.31**
5. OCB	5.55	0.82	4.89	0.99	0.05	0.10	-0.03	0.06	0.06	-0.09	0.02	-0.01	-0.03	-0.15*	0.05	0.09	-0.01	-0.28***
6. Collective	5.49	1.26	5.02	1.44	0.20***	0.24**	0.30***	0.06	0.06	0.23***	0.08	0.24***	0.01	-0.09	-0.09	0.00	0.03	-0.06
7. Pow dist	3.84	1.24	4.21	1.25	0.19**	0.17**	0.30***	0.14	0.09	0.48***	0.25***	0.19**	0.12	0.09	0.02	0.05	0.14	0.00
8. Unc avoid	5.60	0.98	5.36	0.96	0.23***	0.33***	0.34***	0.09	0.17*	0.15*	0.04	0.09	0.12	-0.10	-0.00	0.02	0.04	-0.16*
9. Gender ^b	0.72	0.45	0.86	0.35	0.06*	0.22***	0.22***	-0.01	-0.02	-0.11	0.04	0.09	0.12	-0.02	0.06	0.04	0.05	-0.50***
10. Education	2.55	0.92	3.80	0.43	-0.04	-0.07	-0.06	0.10	0.07	-0.11	-0.09	-0.11	0.01	-0.10	0.09	-0.31***	0.12	0.08
11. English	5.10	0.99	3.96	0.77	-0.05	-0.11	-0.02	-0.04	-0.02	-0.12	-0.16*	-0.12	0.10	0.08	0.09	0.09	-0.11	-0.04
12. Work exp	10.42	8.93	8.81	3.03	0.06	0.02	0.18***	0.04	0.11	0.14*	0.20**	0.20**	0.21**	-0.13	-0.09	0.03	0.03	0.01
13. %foreign	0.43	0.18	0.44	0.16	-0.08	-0.05	-0.00	-0.07	-0.04	0.01	-0.02	0.05	0.00	-0.10	0.05	0.09	-0.13	-0.13
14. Interdep	0.42	0.50	0.31	0.47	0.10	-0.11	-0.15*	-0.10	-0.06	-0.28***	-0.11	-0.20**	-0.44***	0.05	0.01	-0.14	-0.11	-0.13

^aCorrelations below diagonal are for local employees; correlations above diagonal are for foreign employees.

^b0, female; 1, male.

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Table 5 Hierarchical regression results^a

Step	Variable	Distributive justice (by step)	DJ (final step)	Procedural justice (by step)	PJ (final step)	Job satisfaction (by step)	JS (final step)	Job performance (by step)	Perf (final step)	Organizational citizenship (by step)	OCB (final step)
1	Gender ^b	0.04	0.08	0.19**	0.15*	0.14*	0.05	-0.04	-0.13*	-0.13*	-0.18**
	Education	-0.18**	-0.01	-0.12	-0.05	-0.03	0.00	-0.13*	0.06	-0.16**	0.03
	English	-0.02	-0.08	-0.10	-0.08	-0.00	0.07	0.13*	0.03	0.10	-0.01
	Proficiency	0.09	0.01	-0.01	-0.08	0.16**	0.11	0.13*	0.14*	0.17**	0.16**
	Work experience	-0.05	-0.03	-0.04	-0.04	-0.02	-0.04	-0.05	-0.06	-0.02	-0.02
2	Percent foreign	0.05	0.05	0.05	0.05	0.05	0.11	0.08	0.08	0.11	0.11
	<i>F</i>	2.96*	0.09	3.06**	0.02	3.31**	0.17*	4.80***	0.02	7.40***	0.09
	Collectivism	0.14*	0.14*	0.02	0.02	0.17*	0.17*	0.02	-0.03	-0.05	-0.09
	Power distance	0.22***	0.25***	0.16**	0.16**	0.28***	0.25***	0.04	0.09	-0.01	0.04
	Uncertainty avoidance	0.08	0.09	0.26***	0.25***	0.17***	0.27***	-0.02	-0.06	0.07	0.02
3	ΔR^2	0.09	0.09	0.10	0.10	0.16	0.16	0.00	0.00	0.00	0.00
	ΔF	9.77***	9.77***	11.70***	11.70***	19.16***	19.16***	0.22	0.50	0.50	0.50
	<i>R</i> ²	0.13	0.13	0.15	0.15	0.21	0.21	0.08	0.11	0.11	0.11
	Employment status (ES) ^c	0.25**	0.18*	0.04	-0.02	-0.05	-0.04	0.31***	0.26**	0.35***	0.30***
	ΔR^2	0.03	0.03	0.00	0.00	0.00	0.00	0.04	0.05	0.05	0.05
4	ΔF	9.50**	9.50**	0.27	0.27	0.32	0.32	14.13***	18.17***	18.17***	18.17***
	ΔR^2	0.16	0.16	0.15	0.15	0.21	0.21	0.12	0.17	0.17	0.17
	Interdependence (INTD)	0.13*	-0.01	0.00	-0.13	-0.02	-0.01	-0.29***	-0.44***	-0.24***	-0.37***
	ΔR^2	0.01	0.01	0.00	0.00	0.00	0.00	0.06	0.04	0.04	0.04
	ΔF	4.60*	4.60*	0.00	0.00	0.15	0.15	21.52***	15.66***	15.66***	15.66***
5	ΔR^2	0.17	0.17	0.15	0.15	0.21	0.21	0.18	0.21	0.21	0.21
	ES × INTD	0.20*	0.20*	0.19*	0.19*	-0.02	-0.02	0.22**	0.22**	0.19*	0.19*
	ΔR^2	0.01	0.01	0.01	0.01	0.00	0.00	0.02	0.01	0.01	0.01
	ΔF	4.46*	4.46*	3.98*	3.98*	0.03	0.03	5.85*	4.16*	4.16*	4.16*
	<i>R</i> ²	0.19	0.19	0.16	0.16	0.21	0.21	0.20	0.22	0.22	0.22
6	Adj. <i>R</i> ²	0.15	0.15	0.13	0.13	0.18	0.18	0.17	0.19	0.19	0.19
	<i>F</i>	6.06***	6.06***	5.13***	5.13***	6.99***	6.99***	6.45***	7.48***	7.48***	7.48***

^aStandardized beta values.
^b0, female; 1, male.
^c0, foreign; 1, local.
 p* < 0.05; *p* < 0.01; ****p* < 0.001.

satisfaction. The interactions accounted for an additional 1–2 per cent variance explained, over and above controls and main effects. Figure 1 illustrates the form of these interactions, showing stronger relations (steeper slope) for those in jobs with high task interdependence and supporting Hypotheses 6a, 6b, 7a, and 7b.

Discussion

This study responds to the increasing use of foreign workers by organizations that have shortages of qualified technical and professional workers. The objective in this paper was to examine differences in work perceptions, attitudes, and behaviors of foreign workers compared to local employees. In making this comparison, we emphasized differences in employee–organization relationships based on the limited duration of employment for foreign workers who hold temporary work visas compared to local employees who can expect ongoing employment. Results provided general support for our predictions based on social exchange and social comparison theories. Foreign workers had less positive work perceptions, as well as lower performance and lower organizational citizenship behavior compared to local employees who held the same jobs and performed the same tasks. In addition, results demonstrated that differences in distributive justice, procedural justice, performance, and citizenship were accentuated for those in jobs with high task interdependence.

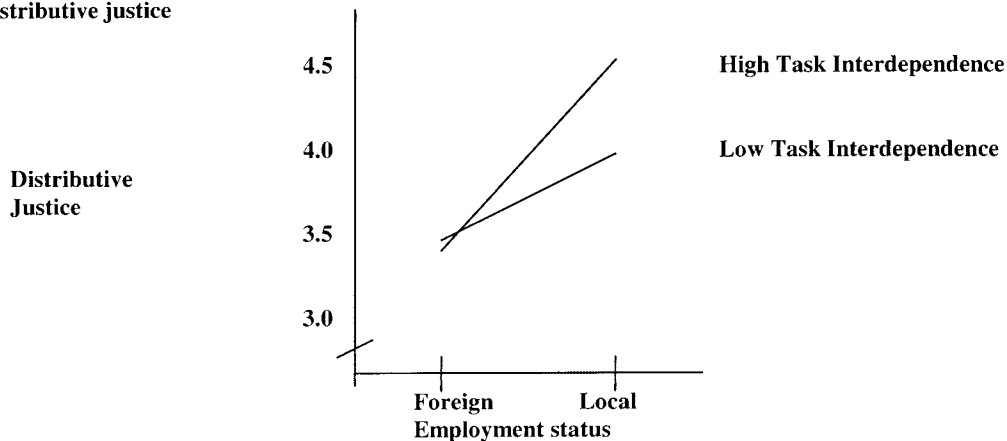
Social exchange and differences in work perceptions, attitudes, and behaviors

Results demonstrated that foreign workers had lower perceptions of distributive justice compared to local employees. When foreign employees have limited duration employment, they receive different inducements from the organization as a function of their employment status. In contrast, foreign and local employees had similar perceptions of procedural justice. To further understand this unexpected finding, we conducted post-survey interviews with supervisors at the organization. These discussions indicated that severe labor shortages had increased the organization's dependence on foreign workers and that accordingly the organization strictly designed procedures to apply similarly to both local and foreign workers in performance feedback, socialization processes, work unit meetings, and work-related social gatherings. The contrasting findings for distributive and procedural justice reinforce the benefits of including both types of justice in research, because they can be differentially related to substantive constructs.

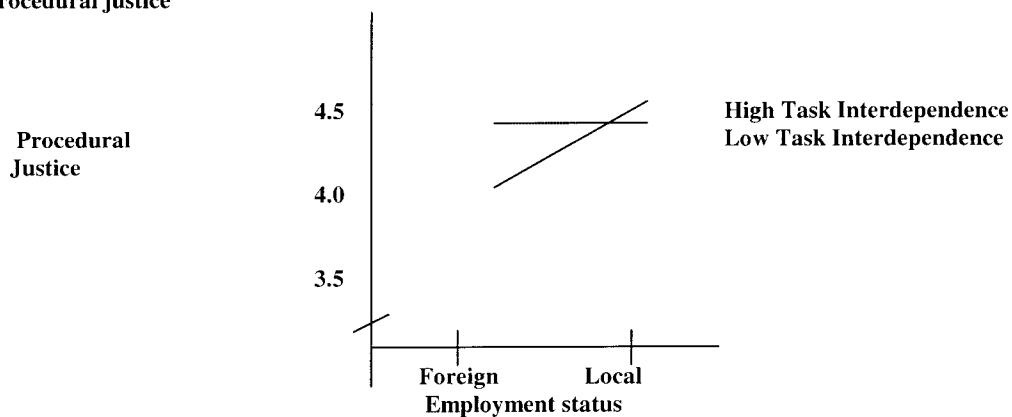
Results showed no significant differences in job satisfaction of foreign and local workers. Post-survey interviews indicated that, contrary to our expectations, foreign workers assessed their job satisfaction based on improvement over their previous work situations in their country of origin. Foreign workers emphasized the opportunity to work with different technical processes and equipment, rather than comparisons with local employees.

Results also demonstrated lower foreign employee work performance and organizational citizenship compared to local employees. Based on their limited duration employment, foreign workers received fewer inducements from the organization (e.g., temporary employment, no long-term benefits, no access to promotions). Consequently it is not surprising that they did not reciprocate with the same level of performance or organizational citizenship behavior as local workers. Instead, withholding positive behaviors such as performance and citizenship may increase personal feelings of equity for foreign workers (Feldman, 1996). Another possible explanation could be the effect of relational

1a: Distributive justice



1b: Procedural justice



1c: Performance and Organizational Citizenship Behavior

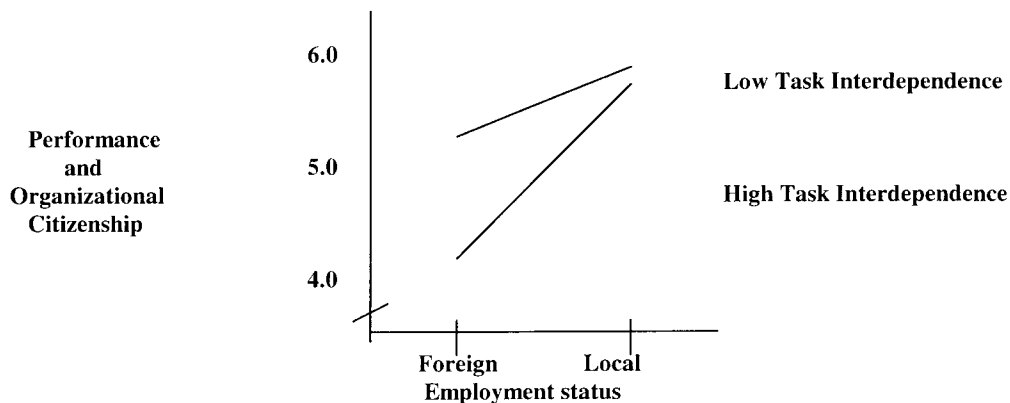


Figure 1. The interactions between employment status and task interdependence

similarity or the 'similar-to-me' effect (see Tsui & Gutek, 1999). This occurs when supervisors rate similar others (e.g., national origin) higher than those who are different. We recommend future research on the effects of relational similarity on ratings of behavior.

Social comparison and the moderating role of task interdependence

Finally, our most interesting finding showed that four of the five outcomes demonstrated heightened contrasts between local and foreign workers under conditions of high task interdependence. This is important, given the emphasis on horizontal management and groups as strategic elements of work design (Mohrman, Cohen, & Mohrman, 1995). Figure 1 illustrates these interactions, showing steeper slopes in the relationships for high task interdependence compared to low task interdependence for distributive justice, procedural justice, performance, and organizational citizenship.

We note that even though the four interactions support our predictions that the proximity of high task interdependence accentuates social comparisons, the focus of the interactions differs based on the outcome of interest. Figure 1(a) shows that task interdependence made a difference in perceptions of distributive justice of locals but not foreign workers. Foreign workers perceived low distributive justice regardless of the task interdependence of the job. Local employees seemed more likely to notice and value their ongoing employment relationships with the firm and their additional perks and benefits when comparisons with foreign workers (who get less) were salient. In contrast, Figure 1(b) shows that task interdependence made a difference in the perceptions of procedural justice for both local and foreign workers, such that the effects of high task interdependence enhanced perceptions of procedural justice for local employees and detracted from those of foreign workers. We speculate that the social comparison processes triggered under conditions of high interdependence drive these differential perceptions of procedural justice among foreign workers. For example, even if procedures are designed similarly for both local and foreign workers, these procedures may be applied *differentially* (based on employment status) when employees work side-by-side under conditions of high task interdependence. Perceptions of procedural justice may be more positive for local employees (and more negative for foreign employees) when high task interdependence heightens contrast effects. Another interpretation is that foreign workers may feel they are subject to discrimination because contrast effects cause them to believe that policies and procedures are applied differentially based on employment status.

Figure 1(c) shows, as predicted, that the relationships between work status and behavior (both performance and citizenship) were stronger under high task interdependence. Interestingly, the form of this interaction (see Figure 1(c)) differed from those for distributive and procedural justice. For work behaviors, task interdependence made more of a difference for foreign workers than for local employees. In interpreting this difference, we suggest that the communication and coordination required in jobs with high task interdependence most likely present more of a challenge to foreign workers than to locals. For example, foreign workers may have more difficulty communicating given language differences. They may also find organizational routines difficult to understand. Both of these factors could detract from their performance and organizational citizenship under conditions of high task interdependence. Another possible interpretation is that biased supervisor ratings were more likely when task interdependence heightened comparisons based on similarity. When there is high task interdependence, the similarity between the local workers and supervisors may become more salient than when there is low task interdependence. As above, we recommend that future research probe deeper into the effects of relational similarity and potential supervisor bias in rating work behaviors.

We also comment on the lack of any significant moderated relationship for job satisfaction based on employment status and task interdependence. Foreign worker ratings of job satisfaction did not differ

from those of local employees overall and also did not differ under conditions of high task interdependence. Our follow-up interviews suggested that foreign workers in our sample assessed their overall job satisfaction and well-being based on comparisons with previous employment in their home nation rather than current contrasts. It would be interesting for future research to ascertain when foreign workers make comparisons with local employees and when they make comparisons with former work situations.

We provide one final observation regarding the role of task interdependence in our sample. Chi-square analysis of employment status and task interdependence ($\chi^2 = 5.77, p < 0.05$) demonstrated that there were proportionately more locals than foreign workers in jobs with high task interdependence and proportionately more foreign workers than locals in jobs with low task interdependence. Follow-up discussions with human resource specialists indicated that this was not a deliberate staffing decision made by management. Instead, the proportion reflects the labor supply of local employees for these jobs. Nevertheless, we encourage future research that examines potential staffing differences based on employment status and potential influences on employee perceptions, attitudes, and behaviors.

Implications for Future Research

This study has a number of strengths. First, to the best of our knowledge, it is the first study that focuses specifically on the growing global trend of employing skilled foreign workers. It also is the first comparison of work perceptions, attitudes, and behaviors of foreign and local employees performing the same jobs. Second, our predictions are based on theory where we juxtaposed social exchange and social comparison theories to predict differences in foreign and local employee perceptions, attitudes, and behaviors. Our third strength is methodological. In our design, we used valid and reliable measures; chose a site with foreign and local workers of the same ethnicity (Chinese); collected matched self-supervisor data to avoid common method bias; and tested for psychometric equivalence of measures between mainland China and the Singapore samples.

This study has a number of boundary conditions that suggest future research opportunities. We consider the three broad topics of generalizability, theory building and extensions to our model, and research designs that could be included in future research.

Generalizability

We restricted our study to foreign workers who seek overseas employment voluntarily without sponsorship from any firm in the host country. Our sample comprised foreign workers who cannot expect repatriation or transfer to another location at the end of their assignments. Accordingly, the theoretical arguments that foreign workers typically receive fewer inducements from the organizations because of limited duration employment do not apply to expatriates and we do not expect our findings to generalize to expatriates.

As with all research, ours was conducted in a particular organization, in a specific setting. Given the current global shortages of skilled workers in many locations (e.g., the United States, Canada, Australia, and the Middle East), it would be useful to examine work perceptions, attitudes, and behaviors of foreign workers compared to locals in other settings to see if relationships are comparable to those we found in our sample. For example, in Singapore, the likelihood of conversion to permanent

status for foreign workers is extremely remote. There would be benefits to future research that examines this issue in contexts where conversion opportunities are more realistic. We also note that both local and foreign workers in our sample were from cultures that are historically collectivistic. Although we controlled for possible effects of individual cultural values, we recommend future research that contrasts local and foreign workers from cultures that are historically less similar. For example, it would be interesting to examine these relationships in settings where the host nation is more individualistic (e.g., the United States) and foreign workers are recruited from more collectivistic societies (e.g., China, or Mexico).

Comparison of local and foreign workers

We recommend future research that contrasts foreign workers such as those in this study with other types of foreign workers such as expatriates who typically have ongoing employment with the organization, albeit at another location. Also, as one reviewer pointed out, foreign workers may have different motives in seeking employment opportunities outside their home country. For example, some foreign workers cannot get comparable pay or benefits in their home country and others may simply wish to 'explore the world'. In formulating the hypotheses of this study, we assumed that local employees would be the primary referents when the foreign workers evaluated their treatment and inducements from the local organization. Results indicate the benefits of future research that includes comparisons with the current situation and with previous work situations.

Theory building and extensions to our model

Based on social comparison theories, we focused on task interdependence as a key contextual variable that changed the relationship between work status and employee outcomes. Future research should also consider other aspects of context such as type of job, specialization, accountability, work pressure, norms, and organizational culture that could potentially interact with employment status to influence perceptions, attitudes, and behaviors. Alternatively, it might be worthwhile to focus more specifically on under-employment (Alarcon, 1999). In many cases, such as in our sample, foreign workers have higher levels of education than local employees in the same jobs. Future research might explicitly theorize that underemployment of foreign workers may be a causal mechanism that links employment status with work outcomes (Feldman, 1996; Johnson, Morrow, & Johnson, 2002). Finally, future research might also include objective aspects of performance such as attendance and punctuality as well as other types of citizenship such as voice (speaking up and making constructive suggestions for changes that would benefit the organization).

Research designs

Future research could focus on other research designs with an emphasis on longitudinal relationships. If foreign workers consistently perform at lower levels than locals, a self-reinforcing downward spiral could result (Lindsley, Brass, & Thomas, 1995) where supervisors overload local employees with special assignments, critical projects, and difficult tasks. This could negatively affect justice judgments, performance, and organizational citizenship of local employees, leading to increased turnover and an increased need to hire foreign workers. This speculative scenario reinforces the benefits of future

research that enhances our understanding of how the experiences of local and foreign workers differ and how they evolve over time. Another idea related to longitudinal research is the possibility that foreign workers sometimes become regular workers with on-going employment. This can occur when employing organizations sponsor specific individuals who apply for permanent residence. Thus, it would be interesting to assess the effects of changes from foreign to local status on the worker perceptions, attitudes, and behavior.

Conclusion

Results of this study highlight the importance of focusing on work status and employment relationships of foreign workers. Results demonstrated that even after controlling for cultural and demographic differences, foreign workers had lower perceptions of distributive justice than local employees and that supervisors rated performance and organizational citizenship behavior of foreign workers lower than those of local employees. More importantly, high task interdependence accentuated differences in distributive justice, procedural justice, performance, and citizenship behavior for local versus foreign workers. This work represents the first study to examine differences in perceptions, attitudes, and behaviors of foreign workers and local employees, based on differences in their employment relationships. As organizations continue to expand their use of foreign workers, future research should further enhance our knowledge of the effects of non-traditional employment relationships.

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Appendix: Original Questionnaire Items for Uncertainty Avoidance

Uncertainty avoidance items	Factor loadings
(1) I prefer work that has detailed standard operating procedures spelled out.	0.77
(2) It is better to have job requirements and instructions spelled out in detail so that employees always know what they are expected to do.	0.75
(3) I prefer work that is highly structured.	0.72
(4) I prefer to work for supervisors who expect employees to closely follow instructions and procedures.	0.66
(5) Rules and regulations are important because they inform employees what the organization expects of them.	0.64