ORGANIZATIONAL CITIZENSHIP BEHAVIOR OF CONTINGENT WORKERS IN SINGAPORE

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This study, conducted in Singapore, where there are ongoing labor shortages, supports social exchange theory predictions that contingent workers engage in less organizational citizenship, expect less of their employers in their psychological contracts, and have lower affective commitment than regular employees. Contrary to expectations, the relationship between two attitudes—commitment and psychological contracts—and organizational citizenship was stronger for contingent workers than for regular employees, indicating that when contingent workers have positive attitudes about their relationship with an organization, they engage in organizational citizenship behavior. We discuss the implications of these unexpected results for theory and practice.

Although organizations have hired an increasing number of contingent workers\(^1\) (Howe, 1986; Nollen & Axel, 1996; Pfeffer & Baron, 1988), relatively little is known about how work status (contingent work versus regular employment) influences attitudes and behavior at work (Beard & Edwards, 1995). Social exchange theory (Blau, 1964) and reciprocity norms (Gouldner, 1960) suggest that contingent workers will have less positive exchange relationships than regular employees because the two receive different inducements from organizations (Rousseau, 1997; Sherer, 1996). Contingent workers are temporary or on-call, and they receive few if any benefits, are not routinely considered for promotions, and cannot expect a steady work schedule or long-term employment (Cappelli, 1995; Chew & Chew, 1996; Mangum, Mayall, & Nelson, 1985).

Despite the strong theoretical rationale for less positive outcomes with contingent work status, past research provides no such evidence. In a study of contingent and regular engineers and technicians in an aerospace firm, Pearce (1993) found no differences in supervisor-rated cooperativeness or affective commitment. In fact, contrary to expectations, she found significantly higher levels of self-reported extra-role behavior in contingent workers than in regular employees. Other recent research has also failed to show differences based on work status. Porter (1995) found no differences in self-reports of organizational commitment, amount of work, quality of communication, and quality of care between contingent and regular employees in nursing departments; Tansky, Gallagher, and Wetzel (1995) reported no differences in the affective commitment of contingent and regular employees in nursing and hospital support staff positions; and Kidder (1995) found no differences in the self-reported extra-role behavior of contingent and regular nurses.

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\(^1\) We define contingent workers as did Polivka and Nardone, as individuals who "[do not have] an explicit or implicit contract for long-term employment or [have] one in which the minimum hours of work can vary in a nonsystematic way" (1989: 11). This definition excludes permanent part-time employees and independent contractors (who set their own hours, are paid by the job, and perform their work off-site). We use the term "regular employees" to denote people in traditional, ongoing, and open-ended employment relationships (Rousseau, 1995).
dress two basic research questions. Under labor market conditions in which the choice of work status (regular employment versus contingent work) tends to be voluntary, (1) Do contingent workers have less positive attitudes and behavior than regular employees? and (2) Does work status interact with attitudes in influencing organizational citizenship behavior? Third, we describe a study conducted in Singapore and discuss implications of our results.

LABOR MARKET CONTEXTS AND THE CONTINGENT WORKFORCE

In their critique of organizational behavior, Cappelli and Sherrer (1991) emphasized the importance of the labor market outside a worker's current situation and argued that workers' "external mobility" and ability to choose alternative employment can significantly influence their attitudes and behavior. Similarly, Smith, Kendall, and Hulin's (1969) model of job satisfaction suggested that perceived job opportunities have a direct effect on attitudes about a current job. When unemployment is low and many jobs are available, the high opportunity costs of staying in the same job lead to lower satisfaction. In contrast, high unemployment and few job alternatives enhance job satisfaction (Hulin, Roznowski, & Hachiya, 1985). In support of this idea, Pfeffer and Lawler (1980) demonstrated that overall unemployment levels and job mobility influenced worker job satisfaction. Similarly, Krausz, Brandwein, and Fox (1995) demonstrated differences in job satisfaction between voluntarily and involuntarily contingent workers.

Although we realize that contingent work is not exclusively voluntary or involuntary, the contrast between two diametrically opposed sets of external labor market conditions illustrates their importance. In the first situation, typified by conditions in the United States, many workers have been forced into contingent jobs involuntarily because downsizing and restructuring have eliminated regular jobs (Nollen & Axel, 1996; Rousseau, 1997). Kalleberg and Schmidt (1997) reported that a substantial proportion of contingent workers in the United States are underemployed people who would prefer regular jobs. From an organization's point of view, contingent workers offer flexibility and a chance to vary the size of the workforce without the psychological burden of laying off employees. When occupying a contingent work status is involuntary, however, and the supply of individuals who desire regular employment exceeds the demand, workers possess poor bargaining power vis-à-vis firms (Mangum et al., 1985; Nollen & Axel, 1996). When contingent workers prefer regular jobs, they may be motivated to display positive attitudes as well as high levels of performance and cooperation (despite receiving fewer inducements from their firms) in the hope of obtaining regular employment.

The second type of labor market situation is typified by the conditions in Singapore, where workers enter into contingent work on a more voluntary than involuntary basis. Given its relatively small population, declining birth rates, and rapidly aging population, Singapore has an extremely tight labor market, persistently low unemployment rates of 1.6–2.6 percent, and severe labor shortages in all sectors and at all skill levels (Bian & Ang, 1997; Goh, 1994; Verma, Kochan, & Lansbury, 1995). Those who want to work as regular employees have no difficulty finding employment because the number of jobs exceeds the supply of workers. In response to this shortage, organizations in Singapore emphasize the flexibility of contingent jobs in order to attract additional workers who are not interested in regular employment (Thong, 1996). Contingent work allows individuals to balance personal and nonwork objectives such as educational goals, family and household responsibilities, freedom to travel, and a preference for seasonal hours.

Voluntarily contingent work should be especially attractive to individuals with family responsibilities (frequently and traditionally, women) who require flexible work hours that will allow, for instance, their being home during school holidays or staying home unexpectedly and irregularly to care for a sick child or parent. Contingent work should also be attractive to professionals who are attending school (typically, younger individuals) to improve their skills or to obtain advanced degrees. The key characteristics of conditions promoting voluntarily contingent work status are a shortage of workers, the availability of regular employee jobs, and the consequent ability of workers to choose regular rather than contingent work status. In contrast, the key characteristics of conditions promoting involuntarily contingent work status are a shortage of jobs, the availability of workers, and the preference of many contingent workers to work as regular employees. We note that when individuals are committed to family responsibilities and educational goals, they may not feel a sense of true choice regarding work status. Nevertheless, when regular jobs are available, if their goals or their personal situations change, they can easily find regular employment.

Because of the labor market conditions in Singapore, individuals work in contingent jobs only when they prefer the flexibility of contingent status...
because they are one of the most fundamental aspects of employment relationships (Kouzes, 1997), and they represent workers' views of their relationships with firms. We included affective commitment because it is a key indicator of worker-firm relations and its use provides continuity with past research examining the effects of work status on individual attachment to an organization (cf. Pearce, 1993).

Organizational Citizenship Behavior

Organ (1988) emphasized the discretionary nature of organizational citizenship when he defined it as constructive behavior not included in an employee's formal job description, such as assisting co-workers with their work, helping peers learn a new task, volunteering to do things that benefit their work groups, and orienting new workers. Since these behaviors are not required by the job, there are no formal sanctions for failing to engage in them. Thus, organizational citizenship can be viewed as a behavioral indicator of workers' responses to their employment relationships. When an organization offers contingent workers fewer inducements than regular employees, contingent workers can reciprocate without negative consequences by withholding citizenship behavior. Work by Konovsky and Pugh (1994) and Van Dyne, Graham, and Dienesch (1994) has supported this expectation, demonstrating the positive influence of social exchange relationships on organizational citizenship behavior. When individuals feel they are treated well by their organizations, they reciprocate and exceed the minimum requirements of their jobs by helping others and the organizations. In contrast, when individuals like contingent workers feel that organizations view them as short-term, temporary, or dispensable, they reciprocate by performing only required duties and minimizing citizenship behaviors. Accordingly,

Hypothesis 1. Contingent workers will engage in less organizational citizenship behavior than regular employees.

Psychological Contracts and Affective Commitment

In view of social exchange theory and the norm of reciprocity, we expected contingent workers' attitudes toward their firms (psychological contracts and affective commitment) to be less positive than those of regular employees. Psychological contracts are "individual beliefs, shaped by the organization, regarding terms of an exchange agreement between
individuals and their organizations" (Rousseau, 1995: 9). Work status is a major determinant of this exchange agreement because it influences perceptions of obligations such as pay, benefits, access to training, and opportunities for advancement. For regular employees, employment provides repeated cycles of reciprocal exchange with an organization that expand the scope of their connection to the organization. Consequently, their psychological contracts include a broad range of perceived employer obligations. In contrast, contingent workers do not experience repeated, long-term exchange relationships with an organization. Their interactions are short-term and bounded. Consequently, they expect fewer inducements from the employer in their psychological contracts.

Affective commitment describes the strength of an individual’s attachment to an organization (Meyer & Allen, 1984). Attachment typically develops out of frequent and repeated exchanges that make an ongoing relationship possible. A growing body of research demonstrates that affective commitment to organizations is based on workers’ perceptions of the support they receive from their organizations (cf. Settoon, Bennett, & Liden, 1996). By definition, contingent workers receive less from organizations and have no reason to expect continuing, long-term employment. Their worker-firm relationship is short-term and uncertain. Thus, we would expect contingent workers to have weaker feelings of attachment to organizations. In summary,

Hypothesis 2. Contingent workers will have fewer expectations of their employers in their psychological contracts than regular employees.

Hypothesis 3. Contingent workers will have lower affective commitment than regular employees.

Work Status as a Moderator of the Relationship between Attitudes and Behavior

In the preceding section, we discussed differences in organizational citizenship behavior, psychological contracts, and affective commitment. We now propose that work status moderates the relationship between these attitudes and organizational citizenship. First, we discuss the link between the two attitudes (psychological contracts and affective commitment) and organizational citizenship. Then, we discuss the moderating role of work status.

Rousseau (1995) theorized that psychological contracts are a key influence on behavior at work and that they are especially relevant to discretionary behavior. When psychological contracts contain a large number of inducements from an organization, individuals have positive relationships with the organization, and they reciprocate by contributing to it. These contributions include obedience, loyalty, and cooperative behavior. In contrast, when psychological contracts are less positive, workers reciprocate by engaging in less organizational citizenship behavior. Robinson, Kraatz, and Rousseau (1994) provided empirical support for this relationship by demonstrating a link between psychological contracts and self-reported organizational citizenship behavior. Drawing on social exchange theory, Organ (1990) theorized that affective commitment, conceptualized as a sense of psychosocial attachment, is an antecedent of organizational citizenship behavior. Thus, engaging in voluntary behaviors such as organizational citizenship is a behavioral response to the inducements received from an organization. This idea was supported by Shore and Wayne’s (1993) research, which demonstrated a relationship between affective commitment and supervisor ratings of organizational citizenship. In summary, the literature provides theoretical and empirical justification for expecting psychological contracts and commitment to be related to organizational citizenship.

More directly relevant to the main focus of our study, which was the comparison of contingent workers and regular employees, we hypothesized that the above relationships would be moderated by work status. As Figure 1 illustrates, we suggest that regular employee work status will enhance the relationship between attitudes and citizenship behavior and that the relationship between attitudes and behavior will be weaker for contingent workers than for regular employees. We base our hypothesis on the salience and importance of work status in general and more specifically, on the special importance that work status has when labor shortages allow individuals to choose whether to take jobs as regular employees or as contingent workers. Choosing contingent work status indicates a personal preference for less work involvement. This preference could be based on family responsibilities, educational goals, and/or lifestyle choices that emphasize flexibility. In other words, we expected that nonwork interests would be salient to contingent workers and that these other demands would prevent them from engaging in organizational citizenship at work. Other responsibilities consume the energy and attention of contingent workers, leaving fewer attentional and time resources available for organizational citizenship behavior. Lower involvement reduces the salience of attitudes about
work and this, in turn, weakens the link between attitudes and behavior.

In contrast, we would expect a stronger link between attitudes about work and behavior at work to exist for regular employees because they can expect steady work schedules and/or long-term employment. If a regular employee has high organizational commitment or views the psychological contract in positive terms, we would expect high levels of organizational citizenship. If, on the other hand, a regular employee has negative attitudes about an organization, we would expect low levels of organizational citizenship. In summary, since organizational citizenship is optional behavior, we expected that work status would interact with attitudes about an organization to predict organizational citizenship behavior. Accordingly,

Hypothesis 4a. The relationship between psychological contracts and organizational citizenship behavior will be moderated by work status in such a way that the relationship will be stronger for regular employees than for contingent workers.

Hypothesis 4b. The relationship between affective commitment and organizational citizenship behavior will be moderated by work status in such a way that the relationship will be stronger for regular employees than for contingent workers.

METHODS
Setting, Jobs, and Respondents

We tested our hypotheses on a convenience sample of 155 professional workers from two large service organizations, a bank and a hospital, in Singapore. We chose to survey professional workers in service firms because the relationship between individual and organization is especially important and salient for professionals in service firms (Mowday, Porter, & Steers, 1982). Their jobs typically involve large amounts of customer contact, and the relationship between worker and organization can have a direct effect on customer satisfaction. Both of the organizations in our study had a long history of using contingent workers in professional jobs because of ongoing labor shortages that prevented them from hiring adequate numbers of professionals as regular employees.

We collected self-report and peer-report questionnaire data from 45 contingent workers (29 percent of the sample) and 110 regular employees from 41 work groups (42 groups had been asked to participate) evenly divided between the two organizations. The average group size was four members, and the range was three to six. These numbers represented a 93 percent individual response rate. All respondents were ethnically Chinese, and all were Singaporeans. Our questionnaires were in English for three reasons. First, English is the language of business and the common language of daily parlance in Singapore. Second, the professional training of bankers and nurses in Singapore is conducted in English. Third, organizations in Singapore frequently conduct attitude surveys, and these are always in English and are typically instruments developed in Western contexts (cf. Cheng, 1989). Furthermore, we conducted focus groups and a pilot study in each organization to make sure that individuals understood the words used in our instruments, that the questions had face validity, and that they were interpreted in a manner consistent with their intended meaning. We made minor changes in the spelling of specific words (for instance, changing “behavior” to “behaviour”) to match local usage.

All surveys were completed during normal working hours and were returned to us by mail, and all respondents were assured confidentiality and told they could withdraw from the study at any time. Seventy-six percent of the contingent workers were women; their average age was 27 years, their average educational level was college, and they had an average 1.5 years of organizational tenure and 4 years of total work experience. Comparable information for the regular employees was 59 percent women, 31 years old, college educated, 5 years organizational tenure, and 8 years total work experience. Overall, compared to the regular employees, a larger percentage of the contingent workers were women, young, and less experienced. This distribution was consistent with our assumptions that contingent work would be especially attractive to those (typically, women) with family responsibilities and those (typically, young people with little work experience) with educational commitments.
Contingent workers received higher hourly pay and significantly fewer benefits than regular employees in both organizations. These demographic and compensation differences are typical of the contrast between contingent and regular employees (Kalleberg & Schmidt, 1997; Nollen & Axel, 1996).

Regular employees and contingent workers in both organizations routinely filled the same professional jobs and worked side-by-side in the same work groups. In the bank, these jobs included bank officer and credit analyst. In the hospital, the jobs included staff nurse and senior staff nurse. Data indicated the comparability of the jobs held by contingent and regular individuals: 38 percent of the regular employees and 32 percent of the contingent workers held jobs with group leader responsibilities, and a series of t-tests demonstrated no differences based on work status in (1) job level (staff versus group leader, $t_{153} = 0.60, p > .05$, (2) a 4-item self-report measure of job autonomy ($\alpha = .86$) based on Kalleberg and Reve (1992; $t_{153} = 1.40, p > .05$), or Pearce and Gregersen’s (1991) 5-item measure ($\alpha = .84$) of task interdependence ($t_{153} = 1.08, p > .05$). Furthermore, as we expected in view of our assumption that contingent work tends to be voluntary in Singapore, t-tests demonstrated no differences based on work status in Kunin’s (1995) 11-item ($\alpha = .91$) measure of “facet” job satisfaction ($t_{152} = 0.69, p > .05$).

Measures and Analyses

We assessed organizational citizenship behavior as the average peer response to the Van Dyne and LePine (1998) seven-item “helping” organizational citizenship scale. Items included these: “This particular co-worker volunteers to do things for this work group,” “This particular co-worker assists others in this group with their work for the benefit of the group,” and “This particular co-worker helps others in this group with their work responsibilities.” We used peer ratings of organizational citizenship because peers have a large amount of daily contact with each other and are able to observe a wide range of behaviors under varying circumstances. Peer ratings therefore should be better representations of actual behavior than self-ratings, which may be subject to self-presentation bias, or supervisor ratings, which may be influenced by impression management behavior. Peers assessed the organizational citizenship behavior of contingent workers and regular employees who were members of their work groups. We prepared peer rating forms in advance and randomly selected up to four peers for each group member to rate using a confidential identification code. We then attached a Post-it to each peer-rating questionnaire to cross-reference the code with the name of the peer. After respondents had completed their ratings of organizational citizenship behavior, they removed the Post-its to protect the confidentiality of their ratings. Group size ranged from three to six, and peers were rated by two to four co-workers. Overall, we obtained 420 peer ratings; 24 percent were completed by contingent workers and 76 percent were completed by regular employees, and 27 percent rated contingent workers and 73 percent, regular employees. The results of t-tests revealed no significant differences in ratings of organizational citizenship based on the source of the rating ($t_{413} = 0.87, p > .05$). Thus, we concluded that the ratings provided by contingent workers and regular employees were not systematically biased upward or downward. Intrarater agreement ($r_{wco}$) averaged .84 (range = .75–.90).

We used the seven obligations Robinson and colleagues (1994) identified to assess workers’ perceptions of what their employer was obligated to provide them as part of their psychological contracts. Items included the following: “To what extent do you believe your employer is obligated to provide you with the following items: rapid advancement, high pay, training, and career development.” Responses were on a Likert scale (1 = not at all, 7 = very high). We measured commitment with six items from Meyer and Allen’s (1984) affective commitment scale. A sample item is “I would be very happy to spend the rest of my career with this organization.” Responses were also on a Likert scale (1 = strongly disagree, 7 = strongly agree). Finally, we obtained work status from organizational records ($0 =$ contingent worker; $1 =$ regular employee).

Past research has demonstrated that attitudes and behavior at work can be influenced by demographic and situational characteristics (Mowday et al., 1982) and by aspects of group composition such as the percentage of contingent workers in a work group (Pearce, 1993). Accordingly, we included five control variables in our statistical analyses to reduce the possibility of spurious relationships based on unmeasured variables: sex ($0 = $ female, $1 = $ male), tenure (number of months), education ($1 =$ high school, $2 =$ two years technical school, $3 =$ college, $4 =$ master’s), percentage of contingent workers in work group (computed from records); and organization ($0 =$ bank, $1 =$ hospital).

We tested our hypotheses with hierarchical regression analysis, entering controls in step 1, work status (contingent or regular) in step 2 and, since we were interested in the effect of work status over and above the effects of the controls, interactions in
step 3. We assessed the change in \( F(\Delta F) \) and interpreted the significance of individual parameters using \( t \)-values.

**RESULTS**

Descriptive statistics and correlations for contingent workers and regular employees are summarized in Table 1. The variables’ Cronbach’s alphas were acceptable (.81–.95).

Hypotheses 1–3 were supported by hierarchical regression results that are summarized in Table 2. After sex, tenure, education, percentage of contingent workers in a work group, and organization were controlled, the addition of work status at step 2 of the regression for organizational citizenship behavior demonstrated significance (\( \Delta F = 20.42, p < .001 \)). Contingent workers exhibited less organizational citizenship than regular employees.

Supporting Hypothesis 2, work status significantly increased explained variance in psychological contract expectations (\( \Delta F = 18.47, p < .001 \)), demonstrating that contingent workers expected less from their employers. Hypothesis 3 was also supported (\( \Delta F = 6.74, p < .001 \)). Contingent workers had lower affective commitment than regular employees. Results explained 33 percent of the variance in organizational citizenship, 21 percent of the variance in psychological contracts, and 15 percent of the variance in affective commitment.

Hypothesis 4 predicted that work status and attitudes would interact in influencing organizational citizenship. Table 3 summarizes these results and shows significant interactions for both psychological contracts and affective commitment. The control variables explained 23 percent of the variance in peer-rated organizational citizenship behavior. In model 2, the main effects produced a 15 percent increase in \( R^2 \) for psychological contracts and an 11 percent increase for affective commitment. Finally, and consistent with our hypotheses, the interactions in model 3 were significant (\( \Delta F = 3.37, p < .05 \) for psychological contracts and \( \Delta F = 2.74, p < .05 \) for affective commitment). Overall, these equations explain 39 and 36 percent of the variance in organizational citizenship behavior. The plots of the interactions, however, which are illustrated in Figure 2, indicate that the form of the interactions is different from what we had predicted. We had hypothesized that the attitude-behavior link would be stronger for regular employees than for contingent workers. The results, however, demonstrate no relationship for regular employees and a positive relationship for contingent workers.

**DISCUSSION**

As we hypothesized, applying social exchange theory to a context in which labor shortages al-

**TABLE 1**

**Means, Standard Deviations, and Correlations**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Contingent</th>
<th>Regular</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>s.d.</td>
<td>Mean</td>
</tr>
<tr>
<td>1. Organizational citizenship</td>
<td>4.43</td>
<td>1.15</td>
</tr>
<tr>
<td>2. Psychological contract</td>
<td>3.93</td>
<td>1.39</td>
</tr>
<tr>
<td>3. Affective commitment</td>
<td>4.17</td>
<td>1.42</td>
</tr>
<tr>
<td>4. Sex(^{b})</td>
<td>0.24</td>
<td>0.43</td>
</tr>
<tr>
<td>5. Tenure</td>
<td>21.20</td>
<td>11.60</td>
</tr>
<tr>
<td>6. Education</td>
<td>24.42</td>
<td>0.92</td>
</tr>
<tr>
<td>7. Percentage of</td>
<td>0.47</td>
<td>0.16</td>
</tr>
<tr>
<td>contingent workers in group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Organization(^{c})</td>
<td>0.53</td>
<td>0.50</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

\(^{a}\) Correlations above the diagonal are for contingent workers, and correlations below the diagonal are for regular employees. Alpha coefficients are in parentheses.

\(^{b}\) Coding: 0 = female, 1 = male.

\(^{c}\) Coding: 0 = bank, 1 = hospital.

\(* p < .05\)

\(\ast \ast p < .01\)

\(\ast \ast \ast p < .001\)
### TABLE 2
Results of Hierarchical Regression Analysis for Effects of Work Status

<table>
<thead>
<tr>
<th>Variable</th>
<th>Organizational Citizenship</th>
<th>Psychological Contract</th>
<th>Affective Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
<td>Model 1</td>
</tr>
<tr>
<td>Sexb</td>
<td>.14*</td>
<td>.06</td>
<td>.33***</td>
</tr>
<tr>
<td>Tenure</td>
<td>-.08</td>
<td>-.17*</td>
<td>.08</td>
</tr>
<tr>
<td>Education</td>
<td>.12</td>
<td>.07</td>
<td>.16*</td>
</tr>
<tr>
<td>Percentage of contingent workers in group</td>
<td>-.07</td>
<td>.1U</td>
<td>-.04</td>
</tr>
<tr>
<td>Organizationc</td>
<td>.59***</td>
<td>.52***</td>
<td>.20*</td>
</tr>
<tr>
<td>Work statusd</td>
<td>.39***</td>
<td>.39***</td>
<td>.39***</td>
</tr>
<tr>
<td>F</td>
<td>8.52***</td>
<td>11.59***</td>
<td>3.70***</td>
</tr>
<tr>
<td>ΔF</td>
<td>8.52***</td>
<td>20.42***</td>
<td>3.70***</td>
</tr>
<tr>
<td>R²</td>
<td>.23</td>
<td>.33</td>
<td>.11</td>
</tr>
<tr>
<td>ΔR²</td>
<td>.10</td>
<td>.10</td>
<td>.08</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>.21</td>
<td>.30</td>
<td>.08</td>
</tr>
</tbody>
</table>

* Model statistics are betas.
  b Coding: 0 = female, 1 = male.
  C Coding: 0 = bank, 1 = hospital.
  d Coding: 0 = contingent workers, 1 = regular employee.
  + p < .10
  * p < .05
  ** p < .01
  *** p < .001
  All one-tailed tests.

### TABLE 3
Results of Hierarchical Regression Analysis for Interaction Effects Predicting Organizational Citizenship

<table>
<thead>
<tr>
<th>Variable</th>
<th>Psychological Contract and Work Status</th>
<th>Affective Commitment and Work Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
</tr>
<tr>
<td>Sexb</td>
<td>.14*</td>
<td>.00</td>
</tr>
<tr>
<td>Tenure</td>
<td>-.08</td>
<td>-.17*</td>
</tr>
<tr>
<td>Education</td>
<td>.12</td>
<td>.05</td>
</tr>
<tr>
<td>Percentage of contingent workers in group</td>
<td>-.07</td>
<td>.06</td>
</tr>
<tr>
<td>Organizationc</td>
<td>.59***</td>
<td>.48***</td>
</tr>
<tr>
<td>Work statusd</td>
<td>.30***</td>
<td>.73***</td>
</tr>
<tr>
<td>Psychological contract</td>
<td>.24***</td>
<td>.44***</td>
</tr>
<tr>
<td>Affective commitment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work status × psychological contract</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work status × affective commitment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>8.52***</td>
<td>11.87***</td>
</tr>
<tr>
<td>ΔF</td>
<td>8.52***</td>
<td>15.71***</td>
</tr>
<tr>
<td>R²</td>
<td>.23</td>
<td>.38</td>
</tr>
<tr>
<td>ΔR²</td>
<td>.15</td>
<td>.01</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>.21</td>
<td>.35</td>
</tr>
</tbody>
</table>

* Model statistics are betas.
  b Coding: 0 = female, 1 = male.
  C Coding: 0 = bank, 1 = hospital.
  d Coding: 0 = contingent worker, 1 = regular employee.
  + p < .10
  * p < .05
  ** p < .01
  *** p < .001
  All one-tailed tests.
allowed individuals to choose their work status, contingent workers exhibited less organizational citizenship behavior, perceived fewer employer obligations to be part of their psychological contracts, and had lower affective commitment. We speculate that the voluntariness of contingent worker status may be one key reason for the contrast between our results, which support the hypothesized differences in attitudes and behavior, and the results of prior research conducted in the United States, where downsizing has forced many to convert involuntarily from regular to contingent work status. Under conditions of severe labor shortages, contingent workers in a given company have external mobility and can choose alternative employment. When people voluntarily select contingent work status, it seems reasonable that they will be less involved in their jobs than regular employees and will exhibit less positive attitudes and behavior at work.

Our results also demonstrated significant interactive effects of work status and attitudes (perceptions of the psychological contract and affective commitment) explaining variance in peer-rated organizational citizenship behavior. However, the nature of the interaction was different from what we expected. Our prediction described work status as an “enhancer” interaction (Podsakoff, MacKenzie, & Fetter, 1993) that would strengthen the relationship between attitudes and behavior for regular employees (see Figure 1). We made this prediction because we assumed regular employees would place more emphasis on work than contingent workers, who would emphasize nonwork aspects of life (such as family and studies) and would be more likely to vary their organizational citizenship behavior as their attitudes about their relationships with their organizations varied.

Contrary to expectations, Figure 2 shows a substitute rather than an enhancer type of interaction. As a substitute, work status weakens the effect of attitudes on behavior while replacing that effect with a direct effect of its own. More specifically, the interaction demonstrates three key points: First, regular employees engaged in more organizational citizenship behavior than contingent workers. Second, there was no relationship between attitudes and behavior for regular employees. Third, the relationship between workplace attitudes and organizational citizenship behaviors was positive for contingent workers. We find these results intriguing. One possible explanation is that regular employees in professional jobs perform organizational citizenship behaviors out of professionalism rather than on the basis of attitudes. Contingent workers, in contrast, withhold organizational citizenship behaviors if they do not feel committed or if they do not have positive views of their psychological contracts. When contingent workers view their relationships with organizations positively, they go beyond what is required of them. Thus, the behavior of contingent workers is contingent on their attitudes, but the behavior of regular employees is independent of their attitudes. An alternative explanation focuses on equity theory. The affective commitment of contingent workers is lower than that of regular employees. Perhaps their lower commitment is based on feelings of inequity because their employers do not invest in them and do not provide them with training, benefits, or job security. Alternatively, work may be a less central life interest to those who choose contingent work. We recommend that future research on contingent workers include measures of job involvement and professional identification so that these interactions can be examined in more detail.

Overall, our findings have important theoretical implications because they debunk the sweeping assumption that all contingent workers are committed and view their work relationships negatively just because they have other, nonwork interests. Some contingent workers, in some organizations, have positive social exchange relationships with the organizations. They have positive views of their psychological contracts and high levels of affective commitment, and they engage in high levels of organizational citizenship. These workers may view the flexibility of contingent work and their consequent ability to balance a professional career and other life interests as an important inducement provided by their organizations. In addition, as discussed above, we suspect that some professional contingent workers identify strongly with their professions and do not perceive themselves as peripheral, but rather, as core workers working side-by-side with regular professional employees (cf. Hall, 1999). Future research should examine organizational culture, type of contingent
worker job, group norms, and individual personality characteristics as possible predictors of these positive outcomes.

Our results also have practical implications. When organizations treat contingent workers with respect and do not view them as peripheral, some contingent workers will have high commitment to the organizations and positive views of their psychological contracts, and they will engage in organizational citizenship—just like regular employees. Thus, organizations that are especially concerned about organizational citizenship behavior should pay particular attention to the attitudes of contingent workers. Alternatively, they may want to screen the attitudes of contingent workers and restrict those with less positive attitudes to areas and jobs in which discretionary behavior such as organizational citizenship is less critical for customer satisfaction. When we turn our attention to regular employees, they appear less likely to withhold organizational citizenship behaviors even when they do not possess high levels of commitment or positive psychological contracts. This too is an interesting finding, and it is, in fact, consistent with the previous empirical research of Williams and Anderson (1991), which showed no relationship between commitment and organizational citizenship in a sample of professional workers. For regular employees in professional jobs, the willingness to contribute to an organization beyond what is required may be determined by professional and organizational norms rather than by personal attitudes. This may be especially true for those who are concerned about their professional reputations (Freidson, 1984).

We believe that our selection of Singapore, with its severe labor shortages, as a context for studying the differences between contingent workers and regular employees provides unique insights that have potential relevance to other contexts where shortages of professional workers are becoming more acute (Larkin, 1991; McLaughlin, 1988). Severe labor market conditions create an environment in which workers have other job options and enter into contingent work arrangements more voluntarily than involuntarily. With greater bargaining power, contingent workers may contribute or withhold discretionary behaviors at work, depending on their attitudes toward the organization. In contrast, we do not expect workers who enter contingent work arrangements involuntarily, because of downsizing, to experience the same level of discretion regarding their attitudes and behavior at work. In fact, we speculate that involuntarily contingent workers will exhibit positive attitudes and organizational citizenship with the hope that the employing organization may offer them regular employment because of their exemplary behavior at work.

Although our study demonstrated differences in the attitudes and behavior of contingent workers and regular employees and explained a relatively high amount of the variance in organizational citizenship (23–39 percent), it is important to note the boundary conditions of the study. First, results are based on a sample from Singapore. Second, the sample focused specifically on individuals in professional jobs. Third, we inferred voluntariness from contextual factors and thus could not verify our assumption that taking contingent work was voluntary for our respondents. We recommend that future research measure labor market conditions and actual job alternatives, perceived job opportunities, perceptions of the extent to which contingent work status is voluntary, and perceptions of the extent to which voluntary work status is a forced choice based on nonwork commitments such as family and school. Whether the findings of our study apply to workers in other settings or to other types of workers, such as managers, paraprofessionals, and support or production staff members, must be examined by future research.

Although contingent work in the United States initially focused on nonprofessional jobs that were often filled by individuals who couldn't obtain regular employment, there is a growing shortage of professionals in the United States, and an increasing number of professionals are voluntarily choosing contingent work because of other commitments, such as family, education, or travel, and/or because of a preference for seasonal work or overall quality-of-life concerns (Mirvis & Hall, 1994; Nollen & Axel, 1996). Thus, reduced supply and increased demand may create labor shortages in the United States, with a larger number of professionals choosing contingent work because of their personal preferences. When workers' contingent status is voluntary, we would expect their attitudes and behavior to be less positive overall than those of regular employees. At the same time, in view of our data, we would also expect some contingent workers to view the flexibility of contingent work status as an inducement and expect that these contingent professionals would reciprocate by performing organizational citizenship behaviors. We suggest that future research should assess when (under what conditions and for what types of workers) attitudes are related to organizational citizenship and when there is no relationship.

In conclusion, the current results demonstrate that, where severe labor shortages allow individuals to choose regular or contingent work status voluntarily, contingent workers engaged in less orga-
izational citizenship behavior, expected less of
their employers in their psychological contracts,
and had lower affective commitment. More im-
portant, results also demonstrated the significant effect
that attitudes have on the behavior of contingent
workers. When contingent workers have high com-
mmitment to their organizations and when they have
positive attitudes about their psychological con-
tracts with the organizations, they exhibit high
levels of organizational citizenship. This observation
suggests that when professional contingent workers
feel they are treated well by an organization, they
are good citizens and reciprocate by contributing
organizational citizenship behaviors to it.

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