The Nature and Consequences of Part-Time Work: A Test of Hypotheses

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Abstract

This study investigated hypotheses developed by Feldman (1990) regarding the impact of different types of part-time working arrangements on various attitudes, behaviors, and chosen frames of reference. Using data collected from 240 part-time workers employed by a supermarket chain, significant differences across the types of part-time work arrangements were found. For example, permanent as opposed to temporary part-time employees were more satisfied with and committed to their organizations. Further, students are more likely to consider themselves temporary and voluntary part-time employees than are non-students. Additional findings are discussed and needs for future research are noted.

Introduction

Part-time workers are sometimes overlooked as a part of the workforce. However, in February of 1994, as in the prior two years, they made up 18% of the workforce as defined by the U.S. Government (employees who work fewer than 35 hours a week) ("Selected employment indicators...", 1994). Several writers have recognized the importance of this large segment of the labor force and have called for research that focuses on the attitudes and behaviors of part-time employees (Feldman, 1990; Pierce, Newstrom, Dunham, & Barber, 1989; Rotchford & Roberts, 1982).

Rotchford and Roberts (1982) referred to part-time workers as "missing persons" in organizational research. They reported that, "references in the economic and popular literature to part-time worker attitudes and behavior consist almost exclusively of unsupported, subjective, managerial reports that address part-time workers solely on the basis of hours of work, employee characteristics, or employment opportunities" (p. 230). They called for research that compared the attitudes and behaviors of part- and full-time employees.

Pierce, et al. (1989) identified both positive and negative outcomes that have been attributed to the employment of part-time workers. The proposed organizational benefits of part-time employment included higher job satisfaction, organizational participation, and productivity for part-timers relative to full-timers. The disadvantages of part-time employment for organizations include increased administrative and training costs, greater spans of control, and potential union opposition. Lack of benefits, limited work activities, decreased advancement opportunities, and lower compensation are disadvantages faced by part-time workers (Pierce, et al., 1989). The research evidence for these propositions has been equivocal (e.g., Eberhardt & Shani, 1984; Jackofsky & Peters, 1987; Logan, O'Reilly, & Roberts, 1973; Miller & Terborg, 1979; Wakefield, Curry, Mueller, & Price, 1987). Pierce, et al. (1989) concluded their review by stating that most of the support either for or against the utilization of part-time employees is based on anecdotal evidence at best. They noted a need for additional empirical research.

Feldman (1990) also called for a focus on the part-time worker. He argued that research on part-time labor has become more critical for at least two reasons. First, entire industries rely on part-time labor as a major labor supply (Feldman, 1990; Nardone, 1986). For example, the service and trade industries rely heavily on part-time employees. The overall workforce was projected to grow 14% in the period 1984-1995 (Johnston & Packer, 1987). As the workforce grows, an increasing percentage of the population will work during the traditional 8 a.m. to 5 p.m. period. Therefore, service organizations have found and will continue to find it necessary to extend their hours to accommodate customer needs. Part-time workers have been a source of labor that has been used to fill these extended hours. Second, three demographic segments of our society have come to see part-time work as an
important employment opportunity. These three segments include younger workers (ages 16 to 24), older workers (65 and over), and female workers (Nardone, 1986).

Feldman's (1990) reconceptualization of the research on part-time work involved several distinct changes from previous research on the topic. First, rather than emphasizing differences between part-time and full-time workers, Feldman suggested that research focus on the differences among various types of part-time work arrangements (e.g., temporary part-time versus permanent part-time, voluntary versus nonvoluntary, etc.). He argued that there are vital differences among these types of work arrangements and that the various arrangements attract different groups of workers and have an impact on the motivation and satisfaction of part-time employees. Second, he noted that although previous research had investigated differences between demographic groups in their reaction to part-time work, none had provided a theoretical basis for differences among the part-time workers. Third, while previous research had assumed that attitudes and behaviors of part-time workers were a result of the job (i.e. Hom, 1979), Feldman proposed some reciprocal causality may be involved.

Based on these assertions Feldman (1990) developed a series of 13 hypotheses concerning the nature and consequences of part-time work. The hypotheses focused on the job attitudes and behaviors of part-time workers, the role of demographic variables, and the frames of reference used by part-time workers.

Very little additional part-time employee research has been done since the publication of Feldman's 1990 work. In fact, the most prominent pieces are two by Feldman and Doerpinghaus (1992a&b). In these papers, the authors have tested some of the hypotheses proposed in the 1990 article. However, they did not test all hypotheses and, although they used a large sample, these studies have provided only a single test of the hypotheses.

The Present Study

The present study attempted to test a subset of the hypotheses proposed by Feldman (1990). It was not possible to test all hypotheses because not all part-time employment distinctions (i.e. seasonal vs. year-round) were available in the sample selected for this work. The tested hypotheses fall in the following areas and include:

*Job Attitudes and Behaviors*

Part-time workers may vary in job satisfaction, commitment, job involvement, and tendency to turnover based on the type of work arrangements they have made. Each of these possible variations will be addressed separately. First, evidence supports the idea that part-time workers hold lower paying, less interesting jobs (Howe, 1986; Nardone, 1986; Owen, 1978). Therefore, an individual who has chosen to work part-time may be more satisfied when compared to someone being forced into that arrangement because full-time work is unavailable or because of cutbacks in hours.

Hypothesis 1: Part-time workers will be more satisfied with their jobs when their employment arrangement is voluntary than if the employment arrangement is involuntary.

A second variation in part-time work arrangements has to do with the permanence of the employment. If the work arrangement is part-time and temporary, it is likely that the job itself will be low-paying and routine without fringe benefits (Howe, 1986; Owen, 1978). If a part-time worker is hired for limited periods of time, he/she is likely to be less satisfied with pay and the work itself than those who have made more permanent arrangements.

Hypothesis 2: Part-time workers will be more dissatisfied with their work and pay when their employment arrangement is temporary than if they are considered permanent employees.

In addition to being less satisfied with employment, temporary employees may also feel less involved in their jobs and committed to their organizations (Logan, O'Reilly, & Roberts, 1973). They may tend to feel a split loyalty between these temporary employers and some other organization such as school or one's main employer (Feldman, 1990).

Hypothesis 3: Part-time workers will be less involved in their jobs and committed to their organizations when their employment arrangement is temporary than if they are considered permanent employees.

Finally, voluntary part-time workers may differ in another way when compared to involuntary part-timers. Part-time employees have already been shown to exhibit higher levels of turnover than full-time employees (Gannon & Nothen, 1971; Jackofsky, Salter & Peters, 1986; Owen, 1978). Because involuntary part-time workers are likely to be either looking elsewhere for full-time employment or wishing that they did not have to work at all, they are more likely to quit than those who have voluntarily chosen part-time employment.

Hypothesis 4: Part-time workers are more likely to turn over when their employment arrangement is involuntary than if the employment arrangement is voluntary.
Demographic Variables

Research has already shown a relationship between certain demographic variables and the satisfaction of part-time workers. For example, older part-time employees are more satisfied than younger workers (Bosworth & Holden, 1983; Soumerai & Avorn, 1983) and female part-timers are more satisfied than males (Haring, Okun, & Stock, 1984; Rothberg & Cook, 1985). Feldman (1990) proposed two reasons for these demographic differences. First, different demographic groups may choose different work arrangements which, in turn, differ in desirability. Second, demographic groups may weigh facets of part-time employment differently, resulting in varying acceptance of the same conditions (Feldman, 1990).

One demographic consideration is student vs. non-student. The majority of student employees who work part-time are doing so to earn extra income (Greenberger & Steinberg, 1986). They do not intend to turn their part-time jobs into full-time employment. Students may also choose to work part-time voluntarily to leave time for studying.

Hypothesis 5: Part-time workers who are students are more likely to graviate to work arrangements that are temporary and voluntary than to work arrangements that are permanent and involuntary.

Frames of Reference

Rotchford and Roberts (1982) and Miller and Terborg (1979) pointed out that there is a need to know the frame of reference used by part-time workers in evaluating their work experiences. All part-time workers are not likely to choose the same co-workers as points of reference. If part-time workers are permanent in an organization, they are likely to use the full-time employees in that organization as comparison others because of their contact with these employees and the knowledge they will have about the relative rewards given to both groups (Feldman, 1990).

Hypothesis 6: Permanent part-time workers are more likely to choose full-time workers in the same organization as the frame of reference than other part-time workers in their organization.

The frames of reference for part-time workers who are students may differ from the permanent part-timers mentioned above. Part-time workers who are students are less likely to be aware of all aspects of full-time employees' pay and benefits and also may not see themselves as comparable (Feldman, 1990). They are more likely to choose other students as points of reference. These students may not even work at the same organization (Feldman, 1990).

Hypothesis 7: Part-time workers who are students are more likely to use part-time workers at other organizations who are students as comparison others than full-time employees at their present organization.

Further justification for these hypotheses is provided by Feldman (1990).

Methods

Sample and Procedures

A group of approximately 400 part-time workers working at various positions at all six locations of a supermarket chain was contacted. The president of the chain granted permission to distribute questionnaires to these part-time employees as part of a larger study. Each employee was given a cover letter describing the project and a questionnaire and asked to return the survey in a blank envelope to a central store location. The questionnaires were distributed to the employees by the store managers at the time employees picked up their paychecks. The employees were guaranteed confidentiality in this process. A numbering system was used to identify respondents so that their responses could be related to subsequent turnover behavior. Questionnaires were collected from each store location after approximately three weeks to ensure adequate time for completion.

There were a total of 240 respondents yielding a response rate of 60%. This sample was deemed sufficient for the types of statistical analyses that were utilized. This is particularly true given that all the various cells (e.g., voluntary, involuntary; permanent, temporary; etc.) were well represented. Of these respondents, there were 85 males and 152 females (any discrepancy in count is due to missing data). This group included part-time workers of various types including student (70%) vs. non-student (30%), permanent (33%) vs. temporary (67%), and voluntary (70%) vs. involuntary (30%). The average age was 24.5 years with an average tenure of 2.3 years.

Approximately nine months after the surveys were collected, the stores were contacted to obtain information to determine which employees no longer worked for the firm. This information was matched to the surveys that had been completed earlier.

Measures

Job Satisfaction: Overall job satisfaction was measured with the General Satisfaction Scale from the Survey of
Organizations questionnaire (Taylor & Bowers, 1972). Responses were made on a 5-point scale, and the average of the seven items was calculated. The Cronbach's alpha for the scale in this study was .81. Satisfaction with pay, coworkers, and supervisors was also assessed. Pay satisfaction was assessed by Lawler's 4-item measure (1981) on a 7-point scale. Satisfaction with co-workers and with supervisors were both measured by items taken from the Facet-Specific Job Satisfaction Scale (Quinn & Staines, 1979). Co-worker satisfaction was measured by a 3-item measure with a 4-point scale. Supervisor satisfaction was measured by a 4-item measure with a 7-point scale. In each case, the average of the items was used. Reliability, as measured by Cronbach's alpha, was .93 for pay satisfaction, .65 for co-worker satisfaction, and .85 for supervisor satisfaction.

Organizational Commitment: Commitment was measured by a 15-item measure (Porter, Steers, Mowday, & Boulian, 1974) on a 7-point scale. The average of the 15 items was used as the commitment score. The Cronbach's alpha was .86.

Job Involvement: Job involvement was measured by the average of a 6 item measure (Lodahl & Kejner, 1965) on a 4-point scale. Reliability was assessed at .77.

Other Information: Respondents were asked to identify the type of individual they use for a point of comparison when they determine how fairly they are being treated. They were also asked to assess their desire for full-time versus part-time work. All respondents were asked to make an assessment of the desirability of their work experience. Finally, employment status during the 9-month period after the survey (whether they had quit or were still employed) was added to the dataset.

Results

All means, standard deviations, and intercorrelations are displayed in Table 1. Due to sample size (which varied from 206 to 238 throughout the table), many of the measures are shown to be correlated. Statistically, the number of respondents provide more than adequate power to identify relationships between variables when they present. These correlations are consistent with the directions expected. The satisfaction, commitment, and job involvement measures are positively intercorrelated. All of these measures are also negatively correlated with quitting. Significant correlations are shown with general satisfaction, commitment, and job involvement. Age is positively related to most satisfaction measures as well as commitment and job involvement. In addition, many of the point biserial correlations between the "permanent/temporary" and "attend school" variables revealed significant results.
The hypotheses tested in this study required two different statistical tests. The first four hypotheses were assessed through ANOVA. The last three required chi-square assessment as the variables in question were all dichotomies. The results for each hypothesis will be reported separately.

**Job Attitudes and Behavior**

Hypothesis 1 stated that part-time workers will be more satisfied with their employment when their employment arrangement is voluntary. This hypothesis was analyzed using a simple ANOVA. There was no significant difference (F(1,213)=.29, p>.05) between voluntary and involuntary part-time workers.

Hypothesis 2 stated that part-time workers will be more dissatisfied with various facets of their jobs when the employment arrangement is temporary. As this hypothesis is aimed at various satisfaction components, all four measures of satisfaction were used to test this hypothesis. This was assessed using a series of ANOVAs (Table 2). First, there was a significant difference in general satisfaction. The means indicated that the temporary employees were less satisfied. There were also significant differences in pay satisfaction and supervisor satisfaction (Table 2). Again, in each case, the means indicated that the temporary employees were less satisfied. There was, however, no significant difference in co-worker satisfaction (Table 2).

**Table 2**

<table>
<thead>
<tr>
<th></th>
<th>Permanent Mean</th>
<th>Permanent S.D.</th>
<th>Temporary Mean</th>
<th>Temporary S.D.</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Satisfaction</td>
<td>3.59</td>
<td>.71</td>
<td>3.35</td>
<td>.76</td>
<td>5.09*</td>
</tr>
<tr>
<td>Pay Satisfaction</td>
<td>4.23</td>
<td>1.48</td>
<td>3.76</td>
<td>1.66</td>
<td>4.36*</td>
</tr>
<tr>
<td>Co-worker Satisfaction</td>
<td>3.28</td>
<td>.55</td>
<td>3.30</td>
<td>.54</td>
<td>.06</td>
</tr>
<tr>
<td>Supervisor Satisfaction</td>
<td>5.28</td>
<td>1.14</td>
<td>4.89</td>
<td>1.24</td>
<td>5.03*</td>
</tr>
<tr>
<td>Job Involvement</td>
<td>2.38</td>
<td>.45</td>
<td>2.08</td>
<td>.46</td>
<td>19.82**</td>
</tr>
<tr>
<td>Commitment</td>
<td>4.85</td>
<td>.86</td>
<td>4.32</td>
<td>.80</td>
<td>18.12**</td>
</tr>
</tbody>
</table>

* p < .05; ** p < .01

Hypothesis 3 stated that temporary part-time workers will be less involved in their jobs and less committed to the organization than permanent part-time workers. This was also assessed using ANOVA. Both tests revealed significant results (Table 2). The temporary part-time workers had lower job involvement and a lower level of commitment.

Hypothesis 4 stated that when part-time workers are involuntarily part-time, they will be more likely to turn over than those that are voluntarily part-time. This was assessed using a simple ANOVA which indicated that there was no significant difference (F(1,227)=.05, p>.05).

**Role of Demographic Variables**

Hypothesis 5 stated that part-time workers who are students are likely to gravitate to work arrangements that are temporary and voluntary. This hypothesis was assessed using chi-square analyses. Each Pearson chi-square figure indicated a significant difference from the null expected pattern (Table 3). In the first test of the hypothesis, the table indicates that 81.4% of the students were temporary while only 32.8% of the non-students were temporary. In the second hypothesis test, 86.55% of students were voluntarily part-time while only 63.4% of the non-students were voluntarily part-time.

**Frames of Reference**

Hypothesis 6 stated that part-time workers who are permanent are more likely to take full-time workers as their frame of reference than are temporary part-time workers. This hypothesis was also tested through a Pearson chi-square assessment which revealed a significant pattern (Table 4). The results indicated that 46.4% of the permanent part-time workers took full-time employees as their frame of reference compared to only 16.2% of the temporary part-time workers who took full-time employees as their frame of reference.

Hypothesis 7 stated that part-time workers who are students are more likely to compare themselves with part-time student workers at other organizations than to compare themselves with workers at their present organization. This hypothesis was assessed through a series of Pearson chi-square analyses (Table 4). The first assessment focused on the choice of comparison others in the present organization versus other organizations by student and non-student respondents. This test did not yield a significant finding. However, two
other tests were done to further investigate parts of the hypothesis. First, an assessment was done looking at the choice between full-time and part-time individuals at the same organization as comparison others for student and non-student workers. In this case, there was a significant association with 83.5% of the student group choosing part-time individuals as a point of comparison versus only 50.9% of the non-students choosing part-timers as comparison persons. The final test focused on the choice of students or non-students as comparison others for student versus non-student workers. Again, this association was significant with 80.6% of the students choosing students as comparison others versus 31.7% of the non-students choosing students.

### Table 3
The Association of Student Status with Type of Working Arrangements as Assessed by Pearson Chi-square

<table>
<thead>
<tr>
<th>Attend School</th>
<th>Permanent</th>
<th>Temporary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>29</td>
<td>127</td>
</tr>
<tr>
<td>No</td>
<td>45</td>
<td>22</td>
</tr>
<tr>
<td>$\chi^2=49.88$, $p&lt;.01$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attend School</td>
<td>Voluntary</td>
<td>Involuntary</td>
</tr>
<tr>
<td>Yes</td>
<td>117</td>
<td>37</td>
</tr>
<tr>
<td>No</td>
<td>37</td>
<td>32</td>
</tr>
<tr>
<td>$\chi^2=11.14$, $p&lt;.05$</td>
<td></td>
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### Discussion
Feldman (1990) called for a reconceptualization of the research concerned with the nature and consequences of part-time work. He developed a series of hypotheses which focused on various part-time work arrangements (e.g., temporary versus permanent, voluntary versus involuntary, etc.) and their relationships to part-time workers' job attitudes and behaviors, demographic characteristics, and frames of reference. The present study was designed to empirically test a subset of Feldman's hypotheses. The results of the study lend partial support to the notion that part-time employees should not be considered a homogeneous group.

An important distinction among the various part-time work arrangements was between those employees who consider themselves permanent employees and those who view themselves as only temporary employees. Permanent part-time employees expressed more general job satisfaction and more satisfaction with pay and supervision. In addition, they indicated more job involvement and organizational commitment. These findings are consistent with Feldman and Doeringhaus (1992a&b). One possible explanation for this finding is that part-time workers who consider themselves permanent employees develop more positive work attitudes to

### Table 4
The Association of Student Status and Type of Working Arrangements with Comparison Others as Assessed by Pearson Chi-square

<table>
<thead>
<tr>
<th>Comparison Other</th>
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<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Full-time</td>
</tr>
<tr>
<td>Permanent</td>
</tr>
<tr>
<td>Temporary</td>
</tr>
<tr>
<td>$\chi^2=18.99$, $p&lt;.01$</td>
</tr>
<tr>
<td>Present Company</td>
</tr>
<tr>
<td>Student</td>
</tr>
<tr>
<td>Non-student</td>
</tr>
<tr>
<td>$\chi^2=.99$, $p&gt;.05$</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>Comparison Other</th>
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<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Full-time</td>
</tr>
<tr>
<td>Student</td>
</tr>
<tr>
<td>Non-student</td>
</tr>
<tr>
<td>$\chi^2=20.93$, $p&lt;.01$</td>
</tr>
<tr>
<td>Student</td>
</tr>
<tr>
<td>Non-student</td>
</tr>
<tr>
<td>$\chi^2=35.17$, $p&lt;.01$</td>
</tr>
</tbody>
</table>
alleviate or avoid dissonance when assessing their present permanent employment (Festinger, 1957). Temporary part-time workers, on the other hand, have a weaker need to develop positive attitudes to avoid dissonance because they view their employment as only temporary and may be in the process of seeking other employment.

One must exercise caution in interpreting this finding. Respondents were categorized as either permanent or temporary based on self-reports rather than on an analysis of their work schedules. Feldman (1990) made the distinction between the two groups based on the regularity of their work schedules. However, it can be argued that the employees' perceptions of their work status may have a greater impact on their work attitudes than does their actual work schedule. Although many of the student part-time workers indicated that they had regular or semi-regular work hours, the majority of them reported that they were in temporary work arrangements. This illustrates the importance of employee perception of work status.

An interesting finding was the lack of significant differences between voluntary and involuntary part-time workers. This distinction had not been tested previously by Feldman and Doeringhaus (1992a&b). It had been hypothesized that voluntary part-timers would be more satisfied and less likely to quit as compared to their involuntary counterparts. The lack of differences may be explained by the local job market. Full-time job opportunities and other part-time positions are not abundant in the local market. Therefore, although the involuntary part-time workers may not desire to work part-time, they may have become resigned to employment with their present employer. Once again, to avoid dissonance they may have developed more positive attitudes.

The significant findings on differences in frames of reference across the various groups of part-time workers are also interesting. The fact that permanent part-time workers are more likely to choose full-time workers as comparison others than are temporary workers has practical implications for organizations in their treatment of part-time workers. Traditional disparities in pay and benefits between full-time and part-time workers may be more likely to cause dissatisfaction for permanent part-time employees than the temporary part-timers.

Finally, the finding that many students view themselves as temporary workers is consistent with Feldman and Doeringhaus (1992a&b). Given that temporary part-time employees express less favorable job attitudes, this finding may draw into question the practice of hiring student workers. Temporary workers' responses revealed lower job involvement and less organizational commitment. Although students may find that this employment fits their needs for income (Greenberger & Steinberg, 1986), these student/employees may not fit the needs of the organization. Students may not be desirable candidates for jobs where turnover is critical. The nature of the students' work in the present study is such that the organization can replace them with little effort and/or cost.

Several limitations of the present study should be noted. First, all of the data are self-report in nature. This could lead to the problem of common method bias. Future research looking at the actual productivity of part-time workers would be beneficial. Second, employees from only one organization were sampled. The range of jobs held by these employees was also somewhat limited. Care must be taken in generalizing the results of the present study.

These limitations are offset by several strengths. First, although only one organization was studied, there were multiple locations in different cities and towns. Also, the total sample size and the size of the various groups of part-time employees were large enough to lend confidence to the results. In addition, actual turnover data instead of merely intentions were obtained to test the turnover hypothesis.

Suggestions for Future Research

The present study provided partial support for the predictions offered by Feldman (1990). In addition, the need to consider part-time workers as a non-homogeneous group has been further established. This study has provided evidence for the variation of part-time workers' attitudes and behaviors based on the distinctions of voluntary/involuntary, permanent/temporary, and student/non-student. However, additional research is needed. First of all, not all hypotheses were tested with this sample. In addition, this is only a single test of the hypotheses mentioned earlier. The present results need to be replicated in other organizations with a wider range of part-time jobs. Also, the other types of part-time work arrangements identified by Feldman (1990) (seasonal versus year round, main job versus moonlighting, etc.) should also be investigated.

A previous version of this paper was presented at the national meeting of the Association of Management.

*** References ***


