

HOW SATISFIED IS THE TEMPORARY LABOR FORCE?: A STUDY OF JOB
SATISFACTION, JOB CHARACTERISTICS, AND TEMPORARY AGENCY WORKERS IN
AUSTRALIA

by

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(Under the Direction of Jeremy Reynolds)

ABSTRACT

The temporary help agency industry has experienced substantial growth in the past two decades. Although there is much research on the quality of temporary jobs compared to other jobs, most research has emphasized the economic disparities in the outcomes for workers in temporary employment. Research on non-economic outcomes, such as job satisfaction, has been scant. Using a nationally representative sample of Australian workers, I examine the extent to which temporary workers are satisfied with their jobs and whether there are differences in the job satisfaction of temporary agency workers and other workers. I find that temporary agency workers report lower levels of job satisfaction and find that job security, autonomy, control over timing of work, and job stress are important mediating mechanisms. I also find that women are more satisfied with temporary work than men and explore why. I end with implications for organizations and for future research.

INDEX WORDS: Temporary agency work, temporary agencies, temporary worker, non-standard work arrangements, alternative work arrangements, job satisfaction

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DEDICATION

To Mom and Dad

&

Giagia Eleni

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1. INTRODUCTION

The days when employees were granted job security and long-term steady employment in exchange for organizational commitment are a thing of the past. Global competition, technological innovations, and the movement towards leaner, flatter organizations have redirected the focus of employers from long-term, stable, permanent employment to employment flexibility (Wiens-Tuers & Hill, 2002). The swift growth of non-standard work arrangements in the 1990s (Houseman, Kalleberg & Erickcek, 2003) is one way in which employers have achieved employment flexibility. Increasingly, they meet fluctuations in demand and maintain flexibility by hiring non-standard workers, such as temporary agency workers, on-call workers or independent contractors (Cohany, 1996; Kalleberg, 2000).

Temporary agency workers are especially interesting, considering the tremendous growth in the temporary help agency industry during the past two decades (Ono & Zelenev, 2003; Bendapudi et al., 2003; Cohany, 1996; Kalleberg, 2000). The recession of the 1980s saw a large growth in the use of temporary workers, allowing organizations to lower their payroll costs, and increase their productivity and flexibility without offering permanent contracts and security to employees (Golden & Appelbaum, 1992). Although the temporary help agency industry only makes up about 3 percent of total employment in the U.S. (Segal & Sullivan, 1995), research indicates that it experienced substantial employment growth between the 1980s and mid-90s (Segal & Sullivan, 1995). Data from the U.S. Bureau of Labor Statistics shows that the temporary help agency industry grew from 417,000 to 3,489,600 employees between 1982 and 2000, an increase of more than 700 percent (Ono & Zelenev, 2003). Some even argue that the

increase in temporary and part-time workers was greater than the growth rate of the entire U.S. labor force during the 1980s (Belous, 1989). Around the same time, temporary agency employment increased across the EU, Japan (Houseman & Osawa, 2003) and Australia (Australian Bureau of Statistics, 1997; Wooden & Warren, 2004; Campbell, 1996). Given the lack of a standard definition of temporary work across countries, it is often difficult to make international comparisons of the proportion of temporary workers in each country. Nevertheless, findings from the Organization for Economic Cooperation and Development (OECD) comparing the share of all temporary workers, including temporary agency workers and other temps, reveal that the percentage of temporary workers in both Australia and the U.S. was about 6% in 1995. Thus it is worth paying attention to this increasingly significant sector of the labor market.

Competing views on the effects of temporary work arrangements on workers also make temporary agency work particularly intriguing. Some authors claim that temporary help agencies provide a valuable service by offering experience in various jobs, and in some cases, a route to full-time employment (Steinberg, 1995; Segal & Sullivan, 1995; Belous, 1989; Polivka & Nardone, 1989; Kalleberg, Reynolds, & Marsden, 2003). Temporary work arrangements may also provide the flexibility necessary to balance work with other commitments, making them particularly beneficial for mothers and others who do not want long-term jobs (Morris & Vekker, 2001). In addition to these advantages, a number of costs have also been associated with temporary work. Temporary workers are more likely than other workers to have low job security, low wages, and few benefits (Kalleberg, Reskin, & Hudson, 2000; Wiens-Tuers & Hill, 2002).

Furthermore, temporary agency workers are interesting due to debate over whether they are satisfied with their jobs. Research suggests that the majority of temporary agency workers

are dissatisfied with their work arrangements and would prefer traditional employment (Hipple, 1998; Polivka, 1996a; Cohany, 1996). Over half of temporary agency workers mention labor market conditions, and not personal choice, as the primary factor leading them to work for such agencies (Cohany, 1996; Kalleberg & Schmidt, 1996; Golden & Appelbaum, 1992). An important finding of the literature is that the growth of the temporary help agency industry is mainly a result of employers' needs rather than workers' preferences (Kalleberg, 2000; Kalleberg & Schmidt, 1996; Golden & Appelbaum, 1992). Golden (1996) found that supply contributed to the growth of the temporary help agency industry, but its effect was relatively small compared to the effect of demand-side variables. On the other hand, Morris & Vekker (2001) report that the desire for flexibility makes some people, especially women with children, prefer temporary jobs.

In this paper, I examine whether there are differences in the job satisfaction of temporary agency workers and other workers, and *why* these differences exist. I also examine the claim that women are more satisfied than men with temporary work. As noted above, existing research documents many kinds of economic disparities in outcomes for workers in non-standard work arrangements (Nollen, 1996; Kalleberg et al., 2000). However, there has been little focus on the non-economic consequences, such as job satisfaction, of temporary agency work (for one example, see Booth et al., 2002). We do know that many temporary workers would prefer to have standard work arrangements (Hipple, 1998; Polivka, 1996a), but we know little about their global job satisfaction with temporary work or about the factors that are responsible for their levels of satisfaction on the job. These two gaps in the literature are important to examine since job satisfaction is related to stress, absenteeism, turnover and burnout (Davis & Newstrom, 1989; Lawler, 1977) and thus worker well-being.

I organize my discussion into four sections. First, I provide a brief overview of temporary agency work and job satisfaction. Then I identify job, personal, and organizational characteristics that are likely to affect the job satisfaction of temporary agency workers. In section three, I use data from the 2001 Household Income and Labour Dynamics in Australia (HILDA) survey to test my predictions. I conclude by discussing the ramifications of my findings and avenues for further research.

2. LITERATURE REVIEW & HYPOTHESIS DEVELOPMENT

Temporary Agency Work

Non-standard work arrangements imply a deviation from “standard work arrangements,” therefore, it is important to define what standard work entails. It typically involves the provision of labor performed on a fixed schedule, with the expectation of continued employment, in exchange for monetary compensation provided by the organization requesting the labor (Kalleberg et al., 2000). This work is usually performed under the employers’ authority and at the employers’ place of business. Workers in non-standard work arrangements, on the other hand, may lack regular, full-time schedules or permanent employment relationships, and may not be directly employed by the firm for which the work is performed (Wiens-Tuers & Hill, 2002).

Research suggests that an increasing portion (about 33%) of workers have alternative work arrangements with their employers (Belous, 1989; Polivka, 1996a; Cohany, 1996; Krausz, Sagie & Biermann, 2000). Furthermore, according to a 1996 Upjohn Institute for Employment Research survey (Houseman, 2001), 46 percent of establishments use temporary workers.

The focus of this paper will be on temporary agency employment. There are two types of temporary workers, and they differ somewhat in the relationship between the temporary worker and the employer. One type is the direct hire temp, where an employer directly hires a worker to perform a specific job, such as construction, for a fixed period of time. In other words, the direct hire temp is paid by, directed by and works at the organization that hires him for the task

(Kalleberg & Reynolds, 2000). Research suggests that organizations are using fewer direct hire temps today than in the past (Morris & Vekker, 2001).

The second type, on which this paper focuses, is the temporary agency worker, where the worker is hired by an employer through a temporary agency. One example of a temporary agency is Manpower Inc., the largest staffing and employment service agency in the world, with branches in numerous countries. Temporary agencies provide workers to client companies, often on a short-term basis. The beginnings of the temporary industry can be traced back to the 1920s in Chicago, where the increasing service-based economy relied on the provision of temporary clerical workers to meet its needs (Cohany, 1996). Nowadays, temporary agencies supply client companies with a variety of clerical, professional and technical staff (DiNatale, 2001; Cohany, 1996). Temporary agencies do not supervise their employees' work but are responsible for recruiting, checking references, issuing paychecks, withholding payroll taxes, and, at least in the U.S., they make employer contributions for Social Security and unemployment insurance (Carey & Hazelbaker, 1986; Kalleberg, 2000; Cohany, 1996). Since some authors have argued that employers are now relying less on direct-hire temps and more on workers employed by temporary agencies (Morris & Vekker, 2001; Polivka, 1996b), I focus on temporary agency workers.

Past research on temporary workers has focused on their economic outcomes and the negative characteristics associated with temporary work (for one example, see Kalleberg et al., 2000). For instance, temporary workers receive much lower wages than permanent workers in the U.S. as well as in Australia (Burgess 1996; Campbell 1996). In fact, because labor laws do not offer the same protection to temporary workers, some temporary employees work on a permanent basis without receiving the same benefits as permanent employees, (Segal & Sullivan,

1996; Kalleberg, et al., 2000; Campbell, 1996). Furthermore, temporary agency workers tend to lack job security and autonomy, and are concentrated in low-skill jobs (Kalleberg et al., 2000; Wiens-Tuers & Hill, 2002).

Research on non-economic outcomes for temporary workers, however, has been scant. Some research has shown that seasonal-casual workers in Britain, defined as workers whose work is temporary, are less satisfied with their jobs than permanent and fixed-term workers (Booth, Francesconi, & Frank , 2002). In fact, Wooden & Warren (2004) obtained similar results for Australia using the HILDA data. Nevertheless, these studies do not provide a clear examination of temporary workers, who can be either casual or fixed-term employees. Furthermore, these studies do not explain *why* temporary workers are less satisfied with their jobs than other workers.

The Australian Context

Like many other OECD countries, Australia has faced a relative decline in standard employment and a relative increase in non-standard employment. The proportion of full-time, permanent employees has dropped from 0.67 in 1982 to 0.57 in 1995 in all industries, whereas the non-standard workforce has increased from 0.33 to 0.43 (Wailes & Lansbury, 1999). Research on temporary work in Australia often talks about casual employment, defined as employment in which a contract is of such short duration that it barely exists. About one quarter of individuals are thought to be casual employees in Australia (Wailes & Lansbury, 1999). Research suggests that the increase in the use of casual employees reflects employers' efforts to cut costs in the face of recessions and increased competition (Atkinson, 1984).

Job Satisfaction

Job satisfaction is a self-reported positive emotional state resulting from the appraisal of one's job or job experience (Locke, 1976). According to Dawis and Lofquist (1984), job satisfaction is the result of the worker's appraisal of the degree to which individual needs are fulfilled by the work environment. Others have similarly defined job satisfaction as an employee's affective reaction toward the work roles occupied in the workplace (Kalleberg, 1977). Finally, some authors recognize that job satisfaction has both a cognitive as well as an affective component (see Organ & Near, 1985). It is typically viewed as either global satisfaction with one's job or satisfaction with specific aspects of the job, such as pay, autonomy, and control.

More recent literature on job satisfaction distinguishes between job satisfaction as an emotion felt by appraising one's job and job satisfaction as an attitude, or a judgment regarding how favorable one considers his or her job to be (Brief & Weiss, 2002), with different measures for each conceptualization. For example, Weiss (2002) defines job satisfaction as an attitude or "a positive (or negative) evaluative judgment one makes about one's job or job situation" (p.6). According to Eagly and Chaiken (1993), an attitude is "a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor" (p.1). It is important to note that moods and emotions experienced may be both a cause of job attitudes as well as an indicator of them (Brief & Weiss, 2002).

Much research has focused on the predictors of job satisfaction. Several authors have argued that job characteristics best explain job satisfaction (Glisson & Durick, 1988; Kalleberg, 1977; Herzberg, 1957), so I expect that the job characteristics of temporary agency work will have an effect on the job satisfaction of temporary workers. Other researchers have focused on

the relationship between organizational characteristics and job satisfaction (Glisson & Durick, 1988). Finally, some researchers have emphasized how job satisfaction is related to personal characteristics (Herzberg et al., 1957; Hodson, 1989; Poulin, 1994). According to Rousseau (1978), job satisfaction is explained by all three dimensions.

In this paper, I will follow Rousseau's example as well as the example of other researchers and work from a theoretical perspective that acknowledges and incorporates personal, job, and organizational characteristics as predictors of job satisfaction (Rousseau, 1978; Agho et al., 1993). Figure 1 illustrates how the different types of characteristics are related to job satisfaction. I focus primarily on the relationship between temporary agency work and job satisfaction by looking at the job characteristics that are associated with temporary agency work and how those characteristics may lead to higher or lower levels of job satisfaction. Figure 1, however, also conveys the idea that personal and organizational characteristics affect one's job satisfaction. Although there are more arrows that could be added to Figure 1, the existing arrows highlight the relationships examined in this paper.

Job Characteristics

As shown in Figure 1, the model used in this paper acknowledges the idea that job satisfaction is explained in large part by job characteristics. Job characteristics, such as autonomy, control, and pay, have been shown to explain more variance in job satisfaction than do personal and organizational characteristics (Mortimer, 1979; Poulin, 1994; Glisson & Durick, 1996).

I examine whether these job characteristics mediate the relationship between temporary agency employment and job satisfaction. I separate the work characteristics into two groups;

extrinsic rewards, which have been emphasized by other authors (Nollen, 1996; Kalleberg et al., 2000), and intrinsic rewards, which have received less attention. Extrinsic rewards include tangible aspects of a job, such as wages, benefits and job security. Intrinsic rewards, on the other hand, have more to do with a sense of achievement and self-esteem, and include aspects such as autonomy (Herzberg et al., 1959; Spector, 1997). I begin with a discussion of the extrinsic rewards hypothesized to predict job satisfaction.

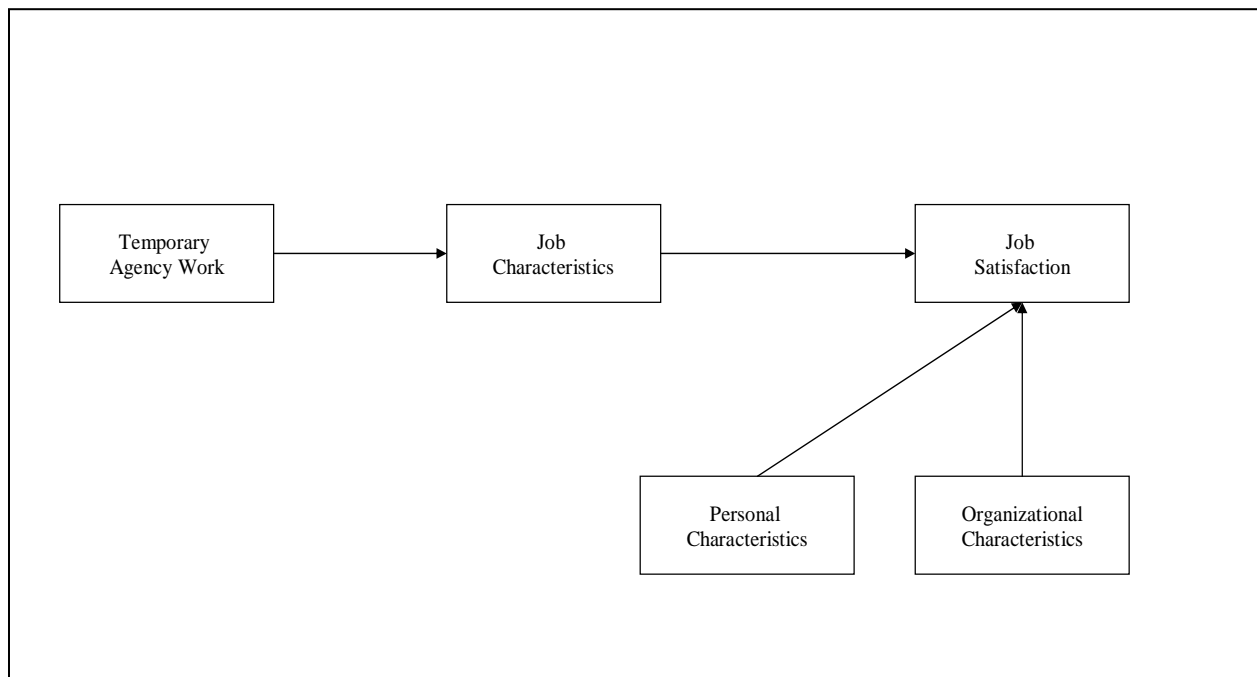


Figure 1. Conceptual Model of Job Satisfaction

Extrinsic Rewards

Wages and Benefits

Several authors have shown that job satisfaction exhibits a strong relationship with job characteristics such as pay and benefits (Glisson & Durick, 1988; Fletcher, 2001; Kalleberg,

1977). Government regulations in the United States, however, do not require temporary help agencies to offer health and pension benefits to temporary agency workers and, as a result, temporary agency workers are at a disadvantage in terms of the benefits they receive. Temporary workers in the U.S. are also likely to earn less than other workers (Kalleberg et al., 2000). In fact, one reason U.S. employers hire temporary agency workers is to reduce labor costs and benefits (Cascio, 1992). In Australia, on the other hand, health insurance, pensions, and other benefits are provided by the government. Therefore, temporary workers and other workers in Australia are less likely to differ in their access to these types of benefits. They are likely, however, to differ in their access to family-friendly benefits, such as parental leave and sick leave (Gray & Tudball, 2002; Watson et al., 2003). Not only are temporary agency workers in Australia more likely to lack family-friendly benefits, they may also be more likely than other workers to receive lower wages (Wooden & Warren, 2004; Burgess, 1996; Australian Bureau of Statistics, 1997). Taking this into account, I hypothesize that in Australia:

Hypothesis 1a: Temporary agency workers will be less satisfied with their jobs than other workers to the extent that they receive lower wages.

Hypothesis 1b: Temporary agency workers will be less satisfied with their jobs than other workers to the extent that they receive fewer family-friendly benefits.

Job Security

Job security is another work characteristic that helps predict job satisfaction (Glisson & Durick, 1988). By definition, individuals in temporary work do not have a contract for permanent employment, and are thus more likely than regular workers to be uncertain about the future of their jobs. In fact, Kalleberg (2000) found that 75% of temporary help agency workers in the U.S. reported that their job duration was uncertain. Data also suggest that individuals working in temporary jobs in Australia are more likely to have greater job insecurity than other

workers (Australian Bureau of Statistics, 1997; Wooden & Warren, 2004; Burgess; 1996). I expect these low levels of job security to have an effect on job satisfaction among Australian workers as well.

Hypothesis 2: Temporary agency workers will be less satisfied with their jobs than other workers to the extent that they have lower job security.

Intrinsic Rewards

Skills Utilization

Job satisfaction also exhibits a strong correlation with skills utilization so that when workers are not able to use their skills on the job, they are likely to be dissatisfied with their jobs (Glisson & Durick, 1988; Fletcher, 2001). College graduates, for instance, who can't find suitable employment and take up jobs that require little skill, may feel that their skills and abilities are underutilized, and thus report low levels of job satisfaction.

Given the fact that temporary agency workers are likely to receive lower wages and fewer benefits than other workers, they are also more likely to work in jobs that do not require high-level skills and abilities. There are of course temporary workers who possess higher-level skills. It is plausible for employers to hire workers from temporary help agencies for high complexity jobs, such as the case of temporary doctors, however most temporary jobs involve low-skilled tasks and lower complexity (Kalleberg et al., 2000), and even workers with modest skills are unlikely to feel that they are utilizing all of their skills. For example, in Australia, most temps are concentrated in the retail trade industry, accommodation, cafes and restaurants, and manufacturing (Australian Bureau of Statistics, 1997). Therefore, I hypothesize that:

Hypothesis 3: Temporary agency workers will be less satisfied with their jobs than other workers to the extent that they are unable to utilize many skills and abilities on their job.

Temporal Control & Autonomy

The rest of the hypotheses have to do with temporary agency workers' work schedules and job tasks, and the extent to which they have the ability to control these schedules and tasks. Control over the number of hours of work and the timing of work are important predictors of job satisfaction, perhaps because they permit management of potentially conflicting time demands (Hill, Hawkins, Ferris & Weitzman, 2001; Fenwick & Tausig, 2001). Temporary agency workers, however, are likely to have little control over the duration of their work, because they lack an explicit employment contract. Moreover, by definition, their work is based on employer demand, so they are less likely than other workers to have control over the timing of their work, making it more difficult to coordinate their work schedules with other activities (Belous, 1989; Polivka & Nardone, 1989; Beard & Edwards, 1995). Since temporary agency workers are likely to enjoy less control over the timing and duration of their work, I hypothesize that:

Hypothesis 4a: Temporary agency workers will be less satisfied with their jobs than other workers to the extent that they have less control over the timing of their work.

Hypothesis 4b: Temporary agency workers will be less satisfied with their jobs than other workers to the extent that they have less control over the duration of their work.

Another form of control employees can have in their job is autonomy i.e. control over the tasks they perform at work. Autonomy has been reviewed by several researchers and has been found to be positively related to job satisfaction (Lease, 1998; Jayaratne, Vinokur-Kaplan, & Chess, 1995). Autonomy may also have a more indirect effect on job satisfaction. Just as control over the timing and duration of work gives people more flexibility in managing work and life roles, autonomy may also lead to greater levels of job satisfaction, due to the greater control over the extent to which both work and life activities are integrated or interfere with one another

(Clark, 2000). As discussed above, I expect temporary agency workers to have lower control over their work, as compared to other workers, and therefore I hypothesize that:

Hypothesis 4c: Temporary agency workers will be less satisfied with their jobs than other workers, to the extent that they have lower levels of autonomy.

Non-standard Work Schedules

Non-traditional working days and shifts are also associated with lower levels of job satisfaction (Staines & Pleck, 1984). This may be partly due to difficulties in attempting to satisfy conflicting demands (Fisher & Giterlson, 1983; Jackson & Schuler, 1985; Lambie, 1980; Igarria & Guimaraes, 1993; Burke, 1996). Nevertheless, most problems associated with non-standard work schedules are likely due to the way they prevent employees from following society's established physiological and social rhythms (Jamal & Baba, 1992). For instance, most communities follow a day work schedule, so that business, social, recreational, as well as other activities are scheduled around this timetable. This makes it difficult for a non-day shift worker to establish a lifestyle that is in line with society's day work schedule. Furthermore, individuals whose shift hours are not fixed will face even more problems than other shift workers, since they will not know in advance when to schedule their activities. For example, rotating shifts force individuals to be in a constant changing and adapting mode, making it difficult to establish a routine formation in life (Jamal & Baba, 1992). Studies comparing nurses working on rotating and fixed shifts have shown that those on rotating shifts have lower job satisfaction, higher absenteeism, and lower organizational commitment (Jamal, 2004; Jamal & Baba, 1992; Jamal, 1981; Coffey, Skipper & Jung, 1988). Lacking an implicit or explicit employment contract, and having a job that is contingent on employer demand, temporary agency workers are likely to have work schedules that vary (Kalleberg, Reskin & Hudson, 2000; duRivage, 1986). Since

research suggests that temporary agency workers are more likely than other workers to work non-standard work schedules and shifts, I hypothesize that:

Hypothesis 5: Temporary agency workers will be less satisfied with their jobs than other workers to the extent that they have non-standard work schedules.

Job Stress

Finally, some authors suggest that stress on the job is related to lower levels of job satisfaction (for one example, see Burke, 1996), so I take into account job-related stress of temporary agency workers. Several factors could make a worker feel stress on the job; conflicts with co-workers or bosses, managing numerous employees, being responsible for a big project or presentation are just a few. There is not much research examining the job-related stress of temporary workers. However, we can imagine that the stress they experience on the job is not as great as it is for other workers. Temporary agency workers are rarely the ones solely responsible for a big project. They also have less to worry about in terms of heated conflict with other coworkers, since the people they encounter at work are likely to change on a frequent basis. Finally, unlike other workers who are required to show up to work everyday, temporary agency workers can choose to not accept a job task that is likely to cause them job stress. For all of these reasons, I hypothesize that:

Hypothesis 6: Temporary agency workers will be more satisfied with their jobs than other workers, to the extent that they have lower levels of job stress.

Personal Characteristics

The conceptual model I use also acknowledges that job satisfaction depends on personal characteristics (see Figure 1). Admittedly, composite models of job satisfaction show that

personal characteristics explain only a small portion of variance in job satisfaction (Glisson & Durick, 1988). Furthermore, findings on the effects of personal characteristics have not been conclusive (Poulin, 1994; Mottaz, 1986). For example, previous research on the relationship between educational level and job satisfaction has found mixed results; some have found a significant positive relationship (Godwin, 1969), others have found no relationship (Sinha & Sarma, 1962), while some have found a negative relationship (Sulkin & Pranis, 1967; Vollmer & Kinney, 1955). Nevertheless, personal characteristics cannot be ignored altogether.

One personal characteristic that deserves consideration as a predictor of job satisfaction is age. Herzberg et al. (1957) as well as others have found a U-shaped relationship between age and job satisfaction (Clark, Oswald & Warr, 1996). Herzberg et al. (1957) argued that when initial work expectations are not fulfilled, there is a drop in job satisfaction. However, increasing work experience leads to the adjustment of expectations to a more realistic and attainable level, hence increasing job satisfaction. Also, older workers typically have more work experience and more seniority, suggesting that they have higher wages, benefits, control over their work, and thus greater job satisfaction.

Gender

Another characteristic that merits consideration is gender. Even though the recent growth in temporary work is due to the increasing number of men joining the temporary labor force, and not due to increasing female participation (Morris & Vekker, 2001), researchers on temporary work in both the U.S. and Australia find that, compared to permanent employees, those who work as temps are more likely to be women (Wooden & Warren, 2004, Cohany, 1996; Polivka, 1996a). Many of these women combine their jobs with child caring responsibilities, and the

proportion of women doing so is higher than that for women in other work arrangements (Cohany, 1996; Wooden & Warren, 2004). Furthermore, compared to other forms of non-standard work, the temporary help arrangement has the highest concentration of women (DiNatale, 2001).

Research on gender has shown that, even though women's jobs tend to be inferior and offer fewer rewards, women are often just as satisfied with their jobs as men are (Phelan, 1994; Hodson, 1989; Mueller & Wallace, 1996).¹ In this paper, I acknowledge this paradox by examining whether gender moderates the effect of temporary agency work on job satisfaction. Temporary agency work or certain aspects of temporary agency work may be valued differently by men and women, and may therefore have different effects on their job satisfaction. Booth et al., (2002) report that women find temporary work more satisfying than men do. Morris & Vekker (2001) add that women are more likely to choose temporary work because they desire greater flexibility. Polivka (1996a) found that women doing temporary agency work are less dissatisfied with their work arrangements than are men, and are more likely to mention non-economic reasons, such as flexibility, for being a temporary agency worker.

I re-examine this issue and build on previous research by examining how different aspects of temporary agency work affect how satisfied men and women are with their jobs. I expect gender to be related to job satisfaction, perhaps because it affects how job characteristics are related to job satisfaction.

Hypothesis 7: Temporary agency work reduces job satisfaction among women less than it does among men.

¹ Phelan (1994) used objective measures of organizational justice to explain this paradox. Other researchers (Mueller & Wallace, 1996) have found that perceptual rather than objective measures of justice explain women's surprisingly high levels of satisfaction. Nonetheless, the HILDA data do not have measures of organizational justice, so I focus on other characteristics that may help account for the paradox.

Organizational Characteristics

Finally, organizational characteristics are taken into account as predictors of job satisfaction in Figure 1. For example, some research suggests that job satisfaction is affected by organizational size so that workers in smaller organizations are generally more satisfied than workers in large organizations (Hodson, 2002). Others have found that bureaucratic organizations tend to produce less satisfied workers (Finlay, Martin, Roman & Blum, 1995). Organizational support for non-work activities is another important factor to take into account as a predictor of job satisfaction. Working in an environment that supports family and non-work life encourages workers to cater to needs outside of their workplace and can make it easier to balance work and life commitments, thus increasing job satisfaction.

3. DATA

The data I draw upon come from the Household, Income and Labour Dynamics in Australia (HILDA) survey, a nationally representative household-based panel survey that is similar to studies conducted in Germany (the German Socio-Economic Panel) and the UK (the British Household Panel Study (see Wooden, Freidin, & Watson, 2002)). It contains data in three main areas: family, labor market dynamics, and the well-being of individuals. The study currently has two waves, one conducted in 2001 and the second in 2002, and HILDA is currently funded for eight waves. I use the first wave, which has data on 13,969 individuals and a response rate of about 92%, to test the hypotheses described above. This response rate compares favorably with those of similar household panel surveys in other countries (Wooden, Freidin, & Watson, 2002). These data are appropriate for the study of temporary agency work and worker outcomes since they provide information on working conditions, job and organizational characteristics, and other mechanisms that may help explain the job satisfaction of temporary agency workers.

The level of analysis in the study is the individual, and I focus on the subset of individuals in the HILDA data ($N = 8,525$) who are currently working. After accounting for missing data, I have a final sample of 5,492 employed respondents.

Dependent Variable

I measure job satisfaction using a question that asks respondents to assess the extent of their overall job satisfaction. The range of the measure is 0 (completely dissatisfied) to 10

(completely satisfied). I chose to use a single-item variable rather than an index of items that measure satisfaction with different aspects of the job (e.g. job security satisfaction, hours worked satisfaction etc.) because an overall measure captures factors that may not be addressed by the specific job facets asked in the questionnaire. In other words, the single item measure should have greater content validity. (More detailed information about this variable and all other variables is provided in Table 1).

Explanatory Variables

The explanatory variables measure the mechanisms by which temporary agency employment affects job satisfaction. Respondents who work through a temporary help agency are identified with a question that asks “Are you employed through a labor-hire firm or a temporary employment agency? That is, the agency pays your wage?” There were a total of 189 respondents who answered yes to this question, or 3% of my sample.

Respondents’ wages are measured in tens of thousands of Australian dollars, with a question that asks respondents about current wages from their main job for the financial year. Benefits are measured with several questions asking respondents whether they are able to use the following family-friendly benefits in their current job: paid maternity leave, unpaid maternity leave, parental leave, special leave for caring for family members, permanent part-time work, home-based work, paid holiday leave, and paid sick leave. Access to benefits is measured by averaging these 8 benefits. The range is 0-8 with a value of 8 meaning that the respondent has access to all of the benefits listed above.

Job security is measured with a question in HILDA that asks “I have a secure future in my job”, with values ranging from 1=strongly disagree to 7=strongly agree.

I measure the extent to which workers underutilize their skills with a statement that says “I do not use many of my skills and abilities in my current job”. This uses a seven-point Likert scale that measures how strongly respondents agree with the statement (1=strongly disagree to 7=strongly agree). I treat this variable as a job characteristic rather than a personal attribute because the item measures the extent to which the respondent’s skills (which he or she already possesses) are being used on the specific job, and not whether the respondent has a certain level of skills.

The HILDA survey does not have a measure that directly assesses the control workers have over the duration of their work. However, assuming that respondents whose preferred hours differ from their actual hours lack control over the duration of their work (i.e. the number of hours they work), I use these mismatches in work hours as a proxy for control over the duration of work (Reynolds & Renzulli, forthcoming).

Control over the timing of work is measured with an item that states “I have a lot of freedom to decide when I do my job”, and is coded 1= strongly disagree to 7=strongly agree.

Another explanatory variable used in the model is autonomy. I measure this with an item that states “I have a lot of freedom to decide how I do my job”. The range of values it can take is 1 to 7, with lower values indicating lower levels of autonomy.

Respondents whose work shifts are non-standard are identified with a question that asks respondents to pick their type of work schedule. The available options are regular daytime schedule, regular evening shift, regular night shift, rotating shift, split shift, on-call, and irregular schedule. For the purpose of this paper, interest is placed on those individuals who have “irregular schedules”, “on call” schedules, or “rotating shifts”. Respondents who have any of the aforementioned are coded 1, while the rest are coded 0 for non-standard work schedules.

Job stress is measured with the statement “I fear the amount of stress in my job will make me physically ill”, with values ranging from 1=strongly disagree to 7=strongly agree.

Finally, gender is measured with an indicator that is coded 1 for women and 0 for men.

Control Variables

Since my goal is to estimate the effect of job characteristics on job satisfaction I also control for other factors that may affect the job satisfaction of temporary agency workers. I control for age, education, the presence of a partner and his or her employment status, and whether respondents have a child who is not yet at school. I also take into account whether respondents are currently in school since Morris & Vekker (2001) suggest that students may be more likely to be in temporary work, perhaps because it offers flexibility to balance school with other obligations. All of these personal characteristics have been shown to affect one’s job satisfaction, independent of work and organizational characteristics (Herzberg et al. 1957; Hodson, 1989; Poulin, 1994). I also control for part-time work status. Even though this could be considered a work characteristic, it is not included as a mechanism because part-time is not a characteristic of temporary agency work in the same way as low job security or lack of benefits. In other words, temporary work is not necessarily associated with a specific amount of work and does not really cause people to have full-time or part-time schedules. Furthermore, the explanatory variables included in the analysis deal with individuals’ experience while working (e.g. level of autonomy) rather than the amount of work they do.

Age is divided into four ten-year age groups (under 30, 30-39, 40-49, 50 and over). Those respondents who are under 30 years of age are the reference category. Education is measured as a dummy variable where those who have a B.A. degree or higher are assigned a

value of 1. Respondents are also asked whether they are currently in school. I control for resident partner/spouse, and the employment status of the partner. Also, individuals who have a child not yet at school are assigned a value of 1. Finally, I identify those respondents who work part-time with a question that asks how many hours they work on average, each week. The recent issue of the Australian Labour Market Statistics (2005) classifies individuals who work fewer than 35 hours as part-time. This classification is comparable to that of other countries, including the United States. Respondents who enter a number lower than 35 are, therefore, coded 1 for part-time and those who enter 35 or more hours are coded 0.

Organizational characteristics are also thought to directly influence one's job satisfaction (Glisson & Durick, 1988). I take this into account by controlling for organizational support for non-work activities. Since all of the explanatory variables deal with aspects of jobs, rather than with the organizations respondents work for, organizational support for non-work activities is not included as a mechanism. The current research is primarily interested in the job characteristics that temporary agency workers and other workers are exposed to, and not the organizational aspects of their employment. Organizational support for family and non-work life is measured by averaging the items below:

1. Where I work, male employees who take leave for family reasons are seen as less committed to their jobs than other male workers.
2. Where I work, employees who take leave for family reasons are less likely to get ahead in their jobs and careers.
3. Where I work, employees who work part-time are seen as less committed to their jobs than other workers.

The alpha for organizational support index is 0.81, and the range of values it takes is 1 to 7, with lower values indicating lower levels of support.

Analytic Strategy

In order to test my hypotheses, I conduct several multivariate analyses. First, I conduct a univariate analysis that examines the levels of job satisfaction reported by temporary and other workers, and focus on each group's wages, job security, autonomy, and control, as well as differences each group has in terms of other work, organizational, and personal characteristics. I also examine the correlations between the variables to assess support for the hypotheses that the work characteristics mentioned above will have a significant effect on job satisfaction.

Next I conduct a series of nested ordinary least squares regressions. These are estimated to identify the factors that mediate the relationship between temporary agency employment and job satisfaction. Specifically, I examine how the relationship between temporary agency work and job satisfaction changes as I control for the mechanisms that should account for the effects of temporary employment. These factors emphasize job characteristics, as well as organizational and personal characteristics. Finally I conduct additional analyses by gender to examine whether women are more satisfied with temporary work than men.

The HILDA data are clustered: they contain information about multiple people in a household. Clustering produces correlated observations and, as a result, it violates the OLS assumption that the cases are independent of each other. This causes the standard errors to be biased downward i.e. they are underestimated. I correct for this by estimating my regression models with robust standard errors, which do not assume a homoskedastic distribution of the error terms, and adjust the standard errors to correct for correlations between people within the same household.

4. RESULTS

Table 1: Means and Proportions by Employment Status

The statistics and comparisons in Table 1 provide descriptive information about temporary and non-temporary workers and are consistent with the expected findings regarding temporary agency workers and job satisfaction. As shown in the table, the differences between the levels of job satisfaction of temporary agency workers and non-temporary workers are significant and in the expected direction, i.e. the mean job satisfaction for temporary agency workers is lower than that of other workers. The reference category includes all other types of workers, including other non-standard workers. Therefore, the gap in job satisfaction between temporary agency workers and other workers is not as large as it is between temporary agency workers and regular full-time workers. It is also evident that temporary agency workers are more likely than other workers to be younger and living alone, and they have less education. Temporary agency workers are also less likely to work in an environment that supports family and non-work activities.

Moreover, as expected, temporary agency workers differ from other workers in several job characteristics. As far as extrinsic rewards are concerned, temporary agency workers earn less money, have less access to family-friendly benefits, and lower job security. They also differ in terms of intrinsic rewards as they are more likely to underutilize their skills, have less control over the timing of their work, and less autonomy than other workers. On the other hand, temporary agency workers are also less likely than other workers to report job-related stress.

Table 2: Correlations for Job Satisfaction and Mechanisms

Table 2 serves several functions. First, it examines the relationship between job satisfaction and temporary agency work. As expected, the correlation is negative and significant at the .001 level, showing that temporary agency work is associated with lower levels of job satisfaction. The table of correlations also shows the relationships between job satisfaction and the mechanisms that are expected to mediate the relationship between temporary agency work and job satisfaction. More specifically, job satisfaction is associated with access to family-friendly benefits, job security, control over the duration and timing of work, and autonomy. Also, respondents who are able to utilize their skills report higher levels of job satisfaction. Finally, having a non-standard work schedule and job-related stress are associated with lower job satisfaction. Surprisingly, wages, which are commonly identified as increasing job satisfaction, are not related to job satisfaction.

Table 2 also reveals the relationship between temporary agency work and the mechanisms discussed above, and provides some additional support for the results in Table 1 regarding the nature of temporary agency work. The correlations indicate that working through a temporary agency is significantly related with several negative characteristics. For instance, temporary workers have fewer extrinsic rewards: lower annual wages, less access to family-friendly benefits, and less job security. They also have fewer intrinsic rewards: less skill utilization, less control over the timing of work, and less autonomy. On the other hand, working as a temporary agency worker can also have its benefits as it is associated with less job-related stress. These results justify continuing with the multivariate models and testing for the mechanisms that have an effect on job satisfaction.

Finally, Table 2 provides an overview of relationship among the mechanisms. The correlations indicate that the mechanisms are significantly correlated among themselves, suggesting that jobs with one of these characteristics often have some of the others as well (e.g. workers who have autonomy also tend to have job security). However, none of the correlations seem to raise issues of multicollinearity. The highest correlation, among autonomy and control over the timing of work, is .51, which is lower than the .70 cutoff that is usually seen as a warning that multicollinearity issues may arise. Furthermore, the VIF (variance inflation factor) of each variable is lower than the cutoff of 4, with a mean VIF of 1.33.

Table 3: OLS Regression of Job Satisfaction on Job, Personal, and Organizational Characteristics

Model 1

Table 3 provides a multivariate analysis of the relationship between job satisfaction and temporary work. Model 1, a baseline model with just temporary agency work, reveals that respondents working through a temporary agency report lower levels of job satisfaction than other workers. The table also examines how this relationship changes as controls and mechanisms are added to help explain how temporary agency work affects job satisfaction.

Model 2

Model 2 adds controls for personal and organizational characteristics and provides some evidence that these characteristics affect levels of job satisfaction. Furthermore, the coefficient for temporary agency work becomes smaller and drops in significance from the .001 level to the .05 level. This suggests that the controls help explain part of the reason temporary workers are

less satisfied with their jobs than other workers. For instance, the coefficients for the two older age groups (40-49 years old and 50+ years old) are positive and significant at the .01 and .001 level respectively, suggesting that older workers tend to be more satisfied with their jobs than younger workers. Based on the finding that temporary agency workers tend to be younger (see Table 1), the significant age coefficient suggests that part of the reason temporary agency workers are less satisfied than other workers is that they are younger than other workers. Hypothesis 7 is supported as the coefficient for female is also highly significant and positive, meaning that women are more satisfied with their jobs than men are. This is consistent with prior research on gender and job satisfaction (Phelan, 1994; Hodson, 1989; Mueller & Wallace, 1996). Other factors that are significant and positive include having a resident partner, having a child who is not yet at school, and working in an environment that supports family and non-work activities. Once again, these findings suggest that part of the reason temporary agency workers are less satisfied with their jobs than other workers is that they are less likely to have a resident partner and are less likely to work in an environment that supports non-work activities. Finally, education is significant and negative, a finding consistent with several researchers (Sulkin & Pranis, 1967; Vollmer & Kinney, 1955).

Model 3

In Model 3, I add the job characteristics that should mediate the effects of temporary agency employment on job satisfaction, and I find that the effect of temporary work disappears completely. The findings in Model 3 are thus consistent with the argument that temporary agency workers will differ from other workers in their levels of job satisfaction because they differ in several job characteristics.

Hypothesis 2 states that temporary agency workers will have lower job satisfaction because they have less job security than other workers. The nested models in Table 3 are consistent with this hypothesis because they show that job security is positively associated with job satisfaction and that the introduction of this control may have helped explain the effect of temporary agency employment observed in the baseline model.

Hypotheses 3, 4a-c, and 6 are about intrinsic rewards, and they are also consistent with the results in Table 3. The results indicate that skill underutilization, control over duration and timing of work, autonomy, and job stress, are all related to job satisfaction. Furthermore, since the effect of temporary agency employment disappeared when these variables were added to the model, it appears that they may be mechanisms through which temporary agency employment affects the levels of job satisfaction.

Other hypotheses are not supported. The coefficients for wages, access to family-friendly benefits, and non-standard work schedules are not significant. Hypotheses 1a and 1b, respectively, stated that wages and access to family-friendly benefits would increase job satisfaction. Hypothesis 5 stated that non-standard work schedules would decrease job satisfaction. None of these hypotheses are supported by the data.

Finally, the R^2 statistic increases by a significant amount from Model 1 to Model 3, with Model 3 explaining 25% of the variance in job satisfaction. This statistic is relatively small, indicating that several other factors are important in predicting job satisfaction. Nevertheless, the models support the hypotheses that temporary agency workers are less satisfied than other workers and that the job characteristics listed in Table 3 may mediate the effect of temporary agency employment on job satisfaction.

Table 4: Tests of Mediating Effects of Suspected Mechanisms

Although it is evident that the job characteristics added to Model 3 make the effect of temporary employment disappear, it is not clear if all of the statistically significant variables are mediators. Several researchers have argued that mediation occurs when 1) the independent variable is significantly correlated with the dependent variable, 2) the independent variable is correlated with the mediator 3) the mediator has a significant effect on the dependent variable, and 4) introducing the mediator weakens or eliminates the relationship between the independent and dependent variable (Baron & Kenny, 1986; Judd & Kenny, 1981). Conditions 1, 3, and 4 have already been addressed and confirmed by the models in Table 3. To evaluate condition 2, I estimated nine additional models in which each possible mediator is the dependent variable, and temporary agency work and controls are the independent variables (see Table 4).

The numbers in Model 1 represent the coefficients for temporary agency work when each possible mediator is the dependent variable. The coefficient for annual wages, for example, is the effect that temporary agency work has on wages while accounting for the control variables used in my analysis. The numbers in Model 2 represent the effect of each possible mediator in the full model, with job satisfaction as the dependent variable. For example, the coefficient for job security represents the effect job security has on job satisfaction while controlling for all other variables in the model. Finally, I conduct an Aroian test to determine which mediating effects from Table 3 are significant. In other words, in order to establish the indirect effect of temporary agency work on job satisfaction through each mechanism, an Aroian test is carried out using the following equation (see Baron & Kenny, 1986; Preacher & Leonardelli, 2003):

Aroian test equation

$$z = \frac{a * b}{\sqrt{(b^2 * s_a^2 + a^2 * s_b^2 + s_a^2 * s_b^2)}}$$

The findings in Table 4 illustrate which mechanisms are truly mediating the relationship between temporary agency work and job satisfaction. We see that the “true” mediators are job security, control over the timing of work, autonomy, and job stress. Therefore, I can conclude that the above mechanisms are the ones through which temporary agency employment affects the job satisfaction of individuals. Wages, family-friendly benefits, and non-standard work schedules are not significant here, but they were also non-significant in Table 3, so I don’t expect them to be mediators. On the other hand, underutilization of skills and control over the duration of work are significant in Table 3, suggesting that they are related to job satisfaction, but they are not significant mediators of the relationship between temporary agency work and job satisfaction.

Table 5: OLS Regression with Interaction of Female X Temporary Agency Work

As mentioned in the literature review, Booth et al. (2002) report that there are certain types of people, particularly women, who are more likely to find temporary work acceptable and satisfying. I examine this argument regarding women in Table 5.

In Table 5, I interact temporary agency work with female to test the implication that women will be more satisfied than men with temporary agency work. Including an interaction in the regression analysis changes the meaning of the coefficients for the main effects, so it is important to understand how to interpret the results correctly. When a variable is not interacted with another variable, its coefficient indicates the general effect it has on the dependent variable.

When an interaction is included, however, the coefficient of the main effect indicates the effect of that variable when the other variable in the interaction is set to zero. In Model 1, for instance, the coefficient for temporary agency work indicates the effect this variable has when female is set to zero i.e. the effect for men.² In Model 1, where only the controls are included, I find that the coefficient for temporary agency work is significant and negative, indicating that on average, men in temporary agency work are less satisfied with their jobs than men who are not employed by a temporary agency. This finding changes, however, as the mechanisms are added in Model 2: the coefficient for temporary agency work is no longer significant. This implies that after accounting for the mechanisms, there are no significant differences in the levels of job satisfaction reported among men who are temporary agency workers and men who are not.

The coefficient for female shows the effect that being a woman has, when not in temporary agency work. It is significant and positive in Model 1 indicating that on average, among individuals who are not temporary agency workers, women enjoy greater levels of job satisfaction than men.

Finally, the coefficient for the interaction indicates how the effect of temporary agency work changes for women. Even after accounting for the controls and mechanisms, this coefficient is positive and significant at the .05 level in both models, showing that the effect of being a temporary agency worker is significantly different for men and women. The net effect of temporary agency work for women is calculated by adding together the coefficients from the main effect and the interaction effect. In Model 2, this is $(-.33 + .6 = .27)$. To determine

² Interactions can always be interpreted in two ways. One is the effect of X_1 as X_2 changes or the effect of X_2 as X_1 changes. In my analysis, for instance, the interaction term can either indicate how the effect of temporary work on job satisfaction is different for females, or how the effect of gender is different for those in temporary work. In this case, it makes more sense to use the first interpretation.

whether the net effect is significantly different from zero, I use the following equation (see Kaufman).

$$t = \frac{\beta_1 + \beta_3 * X_2}{\sqrt{s.e.\beta_1^2 + s.e.\beta_3^2 * (X_2)^2 + 2 * Cov(\beta_1, \beta_3) * (X_2)}}$$

I find, however, that the resulting t value is not significant in either Model 1 (t = 1.25) or Model 2 (t = .10), showing that the net effect of temporary agency work on women is not significant. In other words, although temporary work lowers job satisfaction among men, it does not lower job satisfaction among women.

Table 6: OLS Regression by Gender

Because previous work (Booth et al., 2002) as well as my findings indicate that the effect of temporary employment varies by gender, I estimate several more models to identify *why* women are in fact more satisfied doing temporary work than men are. I examine this issue by estimating two separate models for men and women (see Table 6). Analytically, Table 6 is similar to Table 3.³ In Table 3, I showed why temporary agency workers are less satisfied with their jobs by identifying the mechanisms that mediate the effect of being a temporary agency worker. In Table 5, I explain why women are more satisfied with temporary agency work than men by identifying differences in the way these same mechanisms affect men and women.

³ Statistically, though, the tables are not identical and comparing the coefficients for the two tables would not be possible. Table 6 splits the data into two groups, one for men and one for women. Therefore, the coefficients in Table 6 would be identical to the coefficients we would obtain by interacting the variable for gender with all of the other variables in Table 3.

Model 1

Model 1, which only includes the controls, shows that the coefficient for temporary agency work among men is significant and negative. This reveals that men have lower levels of job satisfaction when they are employed through a temporary agency than when they are not, confirming the results in Table 5. The coefficient for temporary agency work for women, however, is positive but not significant, suggesting that after accounting for personal and organizational characteristics, women engaged in temporary agency work are just as satisfied with their work as other women, once again supporting the findings in Table 5. Other results show that for both men and women, age, education, and supportive organizational culture are significant. Interestingly enough, the coefficient for student, which was not significant in any of the previous models, is significant and negative at the .05 level for women. In other words, for women, being in school is associated with lower levels of job satisfaction. I also find that women who have a resident partner are more satisfied than those who are not, but the relationship is not significant among men.

Model 2

Model 2 for men and Model 2 for women are the ones that are of primary interest since they examine the effect of the mechanisms on job satisfaction. It is worthwhile to note that the model as a whole does a slightly better job of explaining the variance in job satisfaction among women (28%) than among men (23%). I find that the coefficient for temporary agency work for both men and women is not significant once the mechanisms are accounted for. Interestingly enough, the mechanisms appear to affect both men and women in similar ways. Both models report significant effects for job security, skill underutilization, control over duration and timing

of work, autonomy, and job stress. The only obvious difference is that for women, wages are negatively related with job satisfaction.

Although it may seem unlikely that people are less satisfied with jobs that pay more, this finding is echoed in other studies as well. For example, Clark & Oswald (1996) find a negative relationship between job satisfaction and wages. Groot & Maassen van den Brink (1999a) find a positive effect for men, but not for women, using a sample of British workers, but find no relationship with a sample of workers in the Netherlands (2000). In another study they attribute the lack of a wage effect on job satisfaction to preference drift (1999b). This suggests that initially, higher wages increase workers' satisfaction, but as individuals adapt to these earnings, their preferences and aspirations change, and thus earnings cease to affect job satisfaction. Researchers have also suggested that job satisfaction is more strongly correlated with relative, rather than absolute, earnings (Clark & Oswald, 1996; Rees, 1993). In other words, one's job satisfaction is likely to increase if their wage increases relative to the wage of others.

It could also be that the measure for wages is a proxy for something else that is not accounted for in the models. In other words, there could be something about jobs that pay higher wages that women do not like. For example, jobs that pay higher wages may also have more bureaucracy, more peer-competition, or larger work loads. Brown & McIntosh's (2003) provide empirical evidence and a discussion of such omitted variable bias. They suggest that when working conditions are not fully controlled, the coefficient for wages, which may be negatively correlated with bad working conditions, will be biased downward and may even be negative. They find, however, that the omission of work conditions has little effect on the coefficients of other variables that are related to job satisfaction. In other words, even though the coefficient for wages may be biased downward, the results of most explanatory

variables are not affected. All of these are clearly ad-hoc explanations for the negative wage coefficient, and I cannot evaluate them using the HILDA data. Nonetheless, the wage finding could be an interesting topic for future research.

In order to examine differences in the mechanisms of job satisfaction between men and women more rigorously, I calculate z-scores using the equation below (see Paternoster et al. 1998).

$$z = \frac{\beta_1 - \beta_2}{\sqrt{s.e.\beta_1^2 + s.e.\beta_2^2}}$$

The results show few significant differences between the two groups. In fact the only gender differences in the way the mechanisms are related to job satisfaction are found among wages and job stress. The first difference suggests that although there is a negative relationship between wages and job satisfaction, the effect is stronger for women than it is for men. Likewise, the negative relationship between job stress and job satisfaction has a stronger effect for women than it does for men. In other words, reductions in wages and in job stress are likely to boost job satisfaction among women more than they will among men. These results provide some insight into why women are more satisfied with temporary agency work than men, but it is highly likely that there are several other reasons,. This topic could be of interest to other researchers of temporary work.

5. CONCLUSION

The temporary help agency industry has experienced substantial growth in the past two decades, both in the United States and in Australia, as well as in several other Western nations (Ono & Zeleney, 2003; Cohany, 1996; Kalleberg, 2000; Wooden et al., 2002). Although there is a growing body of literature on the quality of temporary jobs compared to other jobs, most research has emphasized the economic disparities in the outcomes for workers in temporary employment (Kalleberg et al., 2000). For example, studies have shown that temporary workers receive much lower wages and benefits than other workers (Kalleberg et al., 2000; Wiens-Tuers & Hill, 2002). Nevertheless, few authors have examined non-economic outcomes of temporary work, such as job satisfaction (for exceptions see Booth et al., 2002; Wooden & Warren, 2004), which can be just as important. Furthermore, when research has focused on the job satisfaction of temporary workers, it has not made an attempt to understand the mechanisms responsible for the levels of job satisfaction reported by temporary workers. In this paper, I used a nationally representative sample of Australian workers to examine how and why temporary agency workers differ from other workers in terms of job satisfaction. I also examined the mechanisms that explain why temporary agency work leads to lower levels of job satisfaction. Drawing on the literature on job satisfaction, I emphasized job characteristics as mediators of this relationship and controlled for personal and organizational characteristics.

First, I found that temporary agency work is associated with several undesirable characteristics, a finding consistent with prior research. Temporary agency workers earn lower wages, have lower job security, less control over the timing of their work, and less autonomy than

other workers. They are also less likely to utilize their skills and have less access to family-friendly benefits. Data on temporary workers in both the U.S. and Australia support these findings (Kalleberg et al., 2000; Wooden & Warren, 2004; Wiens-Tuers & Hill, 2002). At the same time, this work arrangement can have its benefits as temporary agency workers report less job-related stress.

In terms of my main research question, I found that workers employed through a temporary agency do report lower levels of satisfaction with their jobs than other workers. My predictions regarding the mediating effects of job characteristics were also largely supported. Specifically, I found that job security, control over the timing of work, autonomy, and job stress mediate the relationship between temporary agency employment and job satisfaction. These results are consistent with prior literature on job characteristics and satisfaction. For instance, Glisson & Durick (1988) found that job security helps predict job satisfaction, while other researchers have found significant effects for control over timing of work (Fenwick & Tausig, 2001) and autonomy (Lease, 1998).

On the other hand, even though skill underutilization and control over the duration of work are significant predictors of job satisfaction, a finding consistent with other research (for example, see Fletcher, 2001 and Fenwick & Tausig, 2001), I did not find support for their mediating effects. Furthermore, I expected wages, family-friendly benefits, and non-standard work schedules to have a significant effect on job satisfaction, but the data did not support these hypotheses.

Drawing on prior research on gender and temporary work, I also examined whether gender has a significant effect on one's satisfaction with temporary agency work, and found that women report higher levels of job satisfaction than men. This finding is supported by other

researchers as well (Brown & McIntosh, 2003; Booth et al., 2002). In addition, I attempted to explain why this is the case by identifying differences in the way the characteristics of temporary jobs affect men and women. My analysis showed that most characteristics affect men and women in similar ways and that there were few significant differences between the two groups. Ultimately, I found that reductions in wages and job stress will boost job satisfaction among women more than among men, and suggested that the wage measure may be a proxy for something else, such as larger work loads or more peer-competition. Since the HILDA data do not offer measures of these other job characteristics, I proposed that the wage finding could be of interest to other researchers.

Limitations

Given the limitations of my analysis, more research is needed to confirm my results. It is possible, for instance, that these findings are specific to Australia. Both Australia and the United States have seen rapid growth in the number of temporary workers over the past twenty years, and the job characteristics of temporary workers are similar in both countries, so I expect that research using data from the United States will yield similar results. However, there are certainly differences in the economic structure that should be taken into account. For example, health insurance and pension benefits, which are typically provided by U.S. employers, are provided by the government in Australia, so research attempting to look at the disparities between temporary workers and other workers in the U.S. will need additional measures for benefits, and may find more pronounced differences. However, I expect many of the same job characteristics to mediate the relationship between temporary work and job satisfaction. Cross-

national studies on the job satisfaction of temporary workers are needed to confirm these predictions.

Given the fact that temporary agency workers are paid by the agency but perform their work elsewhere, complications may arise when answering questions regarding one's job. For instance, one cannot be certain whether temporary agency workers are responding to the questions regarding their job characteristics based on their most recent assignment or a general impression they have on the jobs they perform overall. Furthermore, the complex nature of the employer-employee relationship might make it hard to ensure that temporary workers refer to the temporary agency when answering questions and not the organization in which they perform their work.

It is also important to note that my analysis does not examine job satisfaction among direct hire temps. Researchers argue that the use of direct hire temps has decreased over the years and that the growth of temporary work is due to an increase in temporary agency workers (see Polivka, 1996b for one example), but it would still be useful to examine their experiences as well. Furthermore, it is important to take careful note of the reference category used in this analysis. I examined whether, given the range of possibilities, temporary agency workers have lower levels of job satisfaction than other workers. The reference category, therefore, contains all other types of workers, including direct hire temps, on-call workers, and contract workers. This means that the comparisons I am making are probably conservative. The findings are therefore more impressive since they show that temporary agency workers are less satisfied than all other types of workers, including other non-standard workers who are also faced with negative job characteristics. The gap in job satisfaction between temps and regular full-time workers is probably larger than the one observed here.

Implications

My results have several implications. First, on average, workers employed through temporary agencies are less satisfied with their jobs than other workers. However, since these lower levels of satisfaction are due to aspects of the job such as control over the timing of work, and autonomy, there may be ways to improve job satisfaction among temporary agency workers. By definition, temporary jobs lack the job security associated with other types of work arrangements, so it is hard to improve this characteristic for temporary jobs. On the other hand, other characteristics that are associated with lower levels of job satisfaction in temporary jobs could be improved. For instance, when organizations provide temporary agency workers with more autonomy or more control over their schedules, their workers are likely to be more satisfied.

My findings also have implications for future research in the literature on gender and temporary employment. More research is needed to explain *why* women are more satisfied with temporary work than men. Longitudinal studies that examine how the job satisfaction of temporary agency workers changes over time are also needed. These studies could show whether individuals become more or less satisfied with temporary agency work over time. Research has already suggested that the large increase in temporary work is mostly due to employer's needs rather than workers' preferences (Kalleberg, 2000; Kalleberg & Schmidt, 1996; Golden & Appelbaum, 1992). It is unclear, however, whether some workers learn to like temporary work or whether they become increasingly dissatisfied as time goes on. Finally, although I chose to focus on temporary agency workers because research suggests that, in contrast to direct-hire temps, there has been a large growth of these types of temporary workers,

future research could do a comparative analysis of the job satisfaction of both types of temporary workers, and what the benefits and trade-offs are for each work arrangement.

Considering that the majority of individuals spend a large portion of their lives in paid work, it is important to examine how changes in the nature of work, such as the increasing use of temporary workers in the U.S., Australia, and other countries, affect the job satisfaction of workers. The analysis in this paper provides insight into temporary agency workers' job satisfaction and the reasons for their lower levels of job satisfaction. The rapid growth of the temporary agency industry as well as of other forms of non-standard work may be changing how satisfied workers are with their jobs. Temporary workers represent a relatively small part of the labor force and switch workplaces on a regular basis, so many organizations may not be concerned about how satisfied they are. However, research shows that about a third of all employees have non-standard work arrangements and many of them are faced with similar job characteristics as temporary agency workers, such as low pay, job security and few benefits (Kalleberg et al., 2000; Belous, 1989; Polivka, 1996a). This suggests that workers in other non-standard arrangements may have also have low levels of job satisfaction, and so organizations may not be able to rely on them as heavily as they would like. Temporary agencies may also need to concern themselves with their workers' job satisfaction in order to offer a desirable product to other organizations.

Ultimately, however, job satisfaction is important to examine because it has ramifications for worker well-being as it is related to stress, absenteeism, turnover and burnout (Davis & Newstrom, 1989; Lawler, 1977). Temporary workers and other workers in non-standard arrangements are already at a disadvantage due to undesirable employment conditions, such as lower pay and fewer benefits. To the extent that job satisfaction is related to these job

characteristics as well as several others, temporary workers are adversely affected in other ways as well.

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Table 1: Means and Proportions by Employment Status^a

Variable	Description	Non-temps		Temps		
			s.d		s.d	
Job satisfaction	overall job satisfaction 0=totally dissatisfied 10=completely satisfied	7.62	(1.90)	7.11	(2.35)	*
Controls						
Age	continuous variable	37.28	(11.89)	33.80	(11.46)	*
< 30 years old	1=yes 0=no	0.29	(0.45)	0.40	(0.49)	*
30-39 years old	1=yes 0=no	0.27	(0.45)	0.30	(0.46)	
40-49 years old	1=yes 0=no	0.26	(0.44)	0.21	(0.41)	
50 + years old	1=yes 0=no	0.17	(0.38)	0.09	(0.29)	*
Female	1=female 0=male	0.49	(0.50)	0.44	(0.50)	
Education (B.A. or higher)	1=yes 0=no	0.26	(0.44)	0.15	(0.36)	*
Student	1=yes 0=no	0.15	(0.36)	0.20	(0.40)	
Lives with partner/spouse	1=yes 0=no	0.65	(0.48)	0.53	(0.50)	*
Dual-earner couple	member of a dual-earner couple 1=yes 0=no	0.22	(0.41)	0.19	(0.39)	
Has a child not yet at school	1=yes 0=no	0.11	(0.32)	0.11	(0.32)	
Part-time work	1=yes 0=no	0.29	(0.46)	0.36	(0.48)	
Family-friendly org. culture	avg. of 3 items 1=not family-friendly 7=very family-friendly	5.25	(1.57)	4.94	(1.63)	*
Mechanisms						
<i>Extrinsic Rewards</i>						
Annual Wages	continuous variable in tens of thousands of Australian dollars	3.72	(2.60)	3.32	(2.78)	*
Formal family-friendly benefits	avg. of 8 items 0=no benefits 8=all benefits	3.93	(2.07)	2.25	(1.88)	*
Job security	I have a secure future in my job 1=strongly disagree 7=strongly agree	4.95	(1.75)	3.54	(2.10)	*
<i>Intrinsic Rewards</i>						
Underutilization of skills	avg. of 3 items 0=low complexity 7=high complexity	4.77	(1.39)	4.53	(1.32)	*
Gap between actual & preferred hours	Absolute value (actual hours - preferred hours)	5.21	(7.70)	5.99	(8.41)	
Control over timing of work	I have a lot of freedom to decide when I do my job 1=strongly disagree 7=strongly agree	3.21	(1.92)	2.81	(1.88)	*
Autonomy	I have a lot of freedom to decide how I do my job 1=strongly disagree 7=strongly agree	4.70	(1.80)	4.04	(1.83)	*
Non-standard work schedule	1=yes 0=no	0.09	(0.29)	0.13	(0.33)	
Job stress	I fear amount of stress in my job will make me physically ill 1=strongly disagree 7=strongly agree	2.65	(1.68)	2.40	(1.53)	*
		N=5303		N=189		

^aNote: * = differences between temporary agency workers and non-temporary workers are statistically significant at the .05 level.

Table 2: Correlations for Job Satisfaction and Mechanisms

	1	2	3	4	5	6	7	8	9	10	11
1 Job satisfaction	1.00										
2 Temporary Work	-0.05 ***	1.00									
3 Annual Wages	-0.02	-0.03 **	1.00								
4 Formal Family-friendly benefits	0.07 ***	-0.15 ***	0.29 ***	1.00							
5 Job security	0.31 ***	-0.14 ***	0.10 ***	0.29 ***	1.00						
6 Underutilization of skills	-0.25 ***	0.03 *	-0.20 ***	-0.20 ***	-0.24 ***	1.00					
7 Gap between actual & preferred hours	-0.14 ***	0.02	0.09 ***	0.00	-0.06 ***	-0.03 *	1.00				
8 Control over timing of work	0.18 ***	-0.04 **	0.11 ***	0.10 ***	0.13 ***	-0.11 ***	-0.01	1.00			
9 Autonomy	0.24 ***	-0.07 ***	0.19 ***	0.17 ***	0.21 ***	-0.33 ***	-0.01	0.51 ***	1.00		
10 Non-standard work schedule	-0.04 ***	0.01	-0.05 ***	-0.08 ***	-0.03 *	0.01	0.03 *	-0.06 ***	-0.12 ***	1.00	
11 Job Stress	-0.27 ***	-0.03 *	0.17 ***	0.12 ***	-0.10 ***	-0.05 ***	0.14 ***	-0.03 *	-0.08 ***	0.00	1.00

N = 5492

*** = p < 0.001; ** = p < 0.01; * = p < 0.05

Table 3: OLS Regression of Job Satisfaction on Job, Personal & Organizational Characteristics^a

	Model 1	Model 2	Model 3	
Employed through a temporary agency	-0.51 **	-0.37 *	-0.07	
Controls				
<i>Age</i>				
30-39 years old		0.01	0.01	
40-49 years old		0.21 **	0.23 **	
50 + years old		0.46 ***	0.38 ***	
Female		0.16 **	0.13 *	
Education (B.A. or higher)		-0.25 ***	-0.27 ***	
Student		-0.10	-0.10	
Lives with partner/spouse		0.17 **	0.04	
Dual-earner couple		0.05	0.04	
Has a child not yet at school		0.18 *	0.09	
Part-time work		0.01	0.13 *	
Family-friendly org. culture		0.28 ***	0.13 ***	
Mechanisms				
<i>Extrinsic Rewards</i>				
Annual Wages			-0.01	
Formal family-friendly benefits			-0.02	
Job security			0.22 ***	
<i>Intrinsic Rewards</i>				
Underutilization of skills			-0.21 ***	
Gap between actual & preferred hours			-0.02 ***	
Control over timing of work			0.09 ***	
Autonomy			0.08 ***	
Non-standard work schedule			-0.11	
Job stress			-0.23 ***	
	R²	0.002	0.073	0.248
	R² Change		0.070 *	0.176 ***
	N	5492	5492	5492

Table 4: Tests of Mediating Effects of Suspected Mechanisms

Panel A: Effect of Independent Variable

Total Effect (from constrained model i.e. Model 2, Table 3)	-0.37
Direct Effect (from unconstrained model i.e. Model 3, Table 3)	-0.07
Net Indirect Effect (difference between coefficients from constrained and unconstrained models)	-0.30

Panel B: Examination and Test of Each Indirect Effect

Mechanisms	Model 1: 1st Half of Indirect Effect: Temporary work-->Mechanisms		Model 2: 2nd Half of Indirect Effect: Mechanisms-->Job Satisfaction		Indirect Effect of Temporary work on Job Satisfaction through Each Mechanism	Z Tests of Statistical Significance	
	B	s.e.	B	s.e.		Aroian	Sobel
<i>Extrinsic Rewards</i>							
Annual Wages	0.04	(0.18)	-0.01	(0.01)	0.00	-0.15	-0.20
Family-friendly benefits	-1.32 ***	(0.14)	-0.02	(0.01)	0.02	1.22	1.23
Job security	-1.26 ***	(0.16)	0.22 ***	(0.02)	-0.27	-6.83 *	-6.85 *
<i>Intrinsic Rewards</i>							
Underutilization of skills	0.06	(0.12)	-0.21 ***	(0.02)	-0.01	-0.45	-0.46
Gap between actual & preferred hours	0.91	(0.62)	-0.02 ***	(0.00)	-0.02	-1.42	-1.43
Control over timing of work	-0.32 *	(0.14)	0.09 ***	(0.01)	-0.03	-2.19 *	-2.21 *
Autonomy	-0.48 **	(0.14)	0.08 ***	(0.02)	-0.04	-2.78 *	-2.81 *
Non-standard work schedule	0.00	(0.03)	-0.11	(0.06)	0.00	-0.10	-0.12
Job stress	-0.23 *	(0.11)	-0.23 ***	(0.02)	0.05	1.99 *	2.00 *
Sum of Indirect Effects through Each Mediator:					-0.30		

N=5492

Table 5: OLS Regression of Job Satisfaction on Job, Personal & Organizational Characteristics^a (with female * temp interaction)

	Model 1	Model 2
Employed through a temporary agency	-0.69 **	-0.33
Controls		
Age		
30-39 years old	0.01	0.01
40-49 years old	0.21 **	0.23 **
50 + years old	0.46 ***	0.38 ***
Female	0.13 *	0.11 *
Education (B.A. or higher)	-0.25 ***	-0.27 ***
Student	-0.10	-0.10
Lives with partner/spouse	0.17 **	0.04
Dual-earner couple	0.05	0.04
Has a child not yet at school	0.17 *	0.08
Part-time work	0.01	0.13 *
Family-friendly org. culture	0.28 ***	0.13 ***
Female * Temporary Worker	0.72 *	0.60 *
Mechanisms		
<i>Extrinsic Rewards</i>		
Annual Wages		-0.01
Formal family-friendly benefits		-0.02
Job security		0.22 ***
<i>Intrinsic Rewards</i>		
Underutilization of skills		-0.21 ***
Gap between actual & preferred hours		-0.02 ***
Control over timing of work		0.09 ***
Autonomy		0.08 ***
Non-standard work schedule		-0.12
Job stress		-0.23 ***
	R²	0.074
	R² Change	0.249
	N	5492
		0.175 ***
		5492

Table 6: OLS Regression of Job Satisfaction on Job, Personal & Organizational Characteristics by Gender^a

	Men		Women		Z-statistic: Model 2 Men vs. Women
	Model 1	Model 2	Model 1	Model 2	
Employed through a temporary agency	-0.69 **	-0.29	0.04	0.27	1.85
Controls					
<i>Age</i>					
30-39 years old	-0.01	-0.01	0.03	0.06	0.50
40-49 years old	0.17	0.24 *	0.23 *	0.24 *	0.03
50 + years old	0.54 ***	0.47 ***	0.40 **	0.34 **	0.83
Education (B.A. or higher)	-0.17 *	-0.24 **	-0.30 ***	-0.24 **	0.01
Student	0.02	-0.02	-0.21 *	-0.15	1.02
Lives with partner/spouse	0.04	-0.06	0.25 **	0.10	1.39
Dual-earner couple	0.04	0.00	0.07	0.07	0.61
Has a child not yet at school	0.10	0.08	0.23	0.07	0.08
Part-time work	-0.20	0.17	0.06	0.00	1.15
Family-friendly org. culture	0.25 ***	0.11 ***	0.31 ***	0.16 ***	1.31
Mechanisms					
<i>Extrinsic Rewards</i>					
Annual Wages		0.00		-0.07 *	2.41 *
Formal family-friendly benefits		0.00		-0.01	0.39
Job security		0.24 ***		0.19 ***	1.47
<i>Intrinsic Rewards</i>					
Underutilization of skills		-0.22 ***		-0.21 ***	0.27
Gap between actual & preferred hours		-0.02 ***		-0.02 ***	0.00
Control over timing of work		0.07 ***		0.10 ***	1.18
Autonomy		0.07 **		0.10 ***	0.66
Non-standard work schedule		-0.06		-0.15	0.75
Job stress		-0.19 ***		-0.27 ***	2.25 *
	R²	0.061	0.227	0.084	0.274
	R² Change		0.166 ***		0.191 ***
	N	2786	2786	2706	2706

^aThe numbers in the table are unstandardized coefficients.

*** = p<.001; ** = p<.01; * = p<.05

*= significant difference between men and women