
Part-Time Work Experience of University Students and Their Career Development*

Tomoki Sekiguchi

Osaka University

This research utilized questionnaire survey data acquired from students at national universities in Japan to establish the relationship between qualitative aspects (job characteristics and behaviors in engaging in work) and quantitative aspects (hours worked) of *arubaito* (part-time work) held by university students, and their career development while at university. As a result of this research, the author demonstrates that students engaged in part-time work that involves a wide range of skills, and students who are proactive in their part-time workplaces, have higher levels of career development. Furthermore, an inverted U-shaped relationship was observed between the number of hours worked per week in part-time work and the level of career development, indicating that consideration of optimum working hours is important in career development. Additionally, students engaged in part-time work that requires a diverse range of skills have high levels of career development even with short working hours, indicating that the optimal working hours are shorter in this case. These results indicate that maintaining appropriate quality and working hours in regard to part-time work activities, which are part of daily life for most students, can play a vital role in both their career development and their school-to-work transition.

I. Introduction

Arubaito, or part-time work, is a common way for Japanese students to gain work experience. According to the 2006 Intelligence survey, 90% of Japanese university students have some experience of part-time work by the time they graduate. The reason most students begin part-time work is to earn money to pay for their leisure activities, but factors indicating an interest in work experience, such as “I wanted to try working” and “I wanted to learn about society” feature highly in responses (Intelligence 2007). Part-time work activities are an effective means by which students, who spend their lives commuting between home and school, can engage on a casual basis with corporate society and the world of employment, and as such they can smooth the school-to-work transition, and provide good opportunities to implement career development through work experience.

Additionally, it has been pointed out by Takeishi (2002) that the restaurants and retailers who make up the majority of employers for students in part-time jobs have for some time been increasing the number of part-time and non-regular employees they use, and that such non-regular employees are becoming the main labor force for such companies, being entrusted with work that is almost equivalent to that of regular employees. In other words,

* I thank Donghao Li for his help with data collection.

in some sectors, students employed for part-time work are becoming a valuable source of labor for companies. If the experience gained in part-time work allows students to develop their abilities and progress with career development, while at the same time raising productivity within their workplace, then the situation is beneficial both for the students and the company in question.

In general, part-time work tends to consist of simple tasks, and offers few opportunities for skills development of the sort offered to regular employees. As a result, some are of the view that part-time work does not facilitate the acquisition of experience and knowledge required to work as a regular employee. For students with little full-time work experience as members of society, however, the work experience provided by part-time work could be considered to provide opportunities to consider one's own suitability for future employment, and acquire the initial abilities and skills required to work as an adult (Sano 2004). Furthermore, within workplaces that increasingly use part-time employees as their main labor force, students may be given tasks that are similar to those required of regular employees, including, in some cases, leadership roles that require them to coordinate other part-time employees. These factors can be seen as contributing to skills development and career development through work experience (Takeishi 2002, Yamaguchi 2005). At the same time, adverse effects have been regularly noted in cases where a student works excessively long hours in part-time work, including a decline in academic results, and/or a negative impact on mental health (Bachman and Schulenberg 1993; Paschall, Ringwalt, and Flewelling 2002; Steinberg and Dornbush 1991).

Given that a large majority of students now have some sort of part-time job, it is no longer sufficient to ask whether merely engaging in part-time work is a positive factor in their career development. Rather, it is important to consider the qualitative aspects of part-time work experience (such as what types of part-time work are effective in the career development of students), and the quantitative aspects of part-time work (such as what are the optimum hours for part-time work). This research focuses on work attributes and behaviors in part-time work as the qualitative aspects of part-time work experience, and hours worked as the quantitative aspects of part-time work experience, in order to understand the relationship between the part-time work experience of university students, and their career development.

II. Literature Review

It is thought that a wide range of factors impact students' career development, and various research projects have been implemented in Japan to examine these. Research shows, for example, that from a developmental psychology perspective, differing levels of development of self-concept and self-efficacy in childhood, as well as values and other individual differences, can influence career development among students (Adachi 2004;

Umemura and Kanai 2006; Kusuoku 2005; Wakabayashi, Goto, and Shikanai 1983). From a perspective of career education and skills development, research has been carried out indicating a relationship between support for career development at school level and students' career development, as well as research showing that students' awareness of career issues rises after they attend lectures or seminars relating to career issues (Kirimura 2005; Moriyama 2007; JILPT 2008). There are also survey results that indicate the importance of regular lessons within universities, and external seminars or learning at preparatory schools geared towards the acquisition of qualifications (Anbo et al. 2008). From the perspectives of social studies and information-seeking, engagement with family, and relationships with friends and seniors at school are shown to have an impact on career development that relates to behavior when considering future paths and engaging in job hunting. If, for example, a student is strongly aware of their parents' expectations toward employment, these expectations will have an impact on behavior in regard to the student's consideration of his or her future career, as suggested in some research (Kawamura 2003; Yazaki 2006). Research suggests that friends and graduates of the university are others who can have a significant impact on decisions relating to future careers (Anbo et al. 2008; Shimomura and Hori 2004). In addition to part-time work, students can gain employment experience from work experience study, internships, volunteer and other activities. Recent research has included studies on the benefits of internships, demonstrating, for example, that students who have taken part in internships have a higher level of awareness for employment than those who have not done so, and that internships that included practical work experience were particularly beneficial (Kusuoku 2006; Matsuyama and Hida 2008).

Part-time work activities engaged in by students are considered alongside internships, etc., as a type of employment experience, but relatively little research has been done scrutinizing the impact of part-time work on a student's career development. Furthermore, there has been little positive agreement in regard to the impact of part-time work on career development. Survey results (Dentsu Ikueikai 2007) indicate that in comparison to volunteer activities, internships and participatory learning or practices, the level to which part-time work contributes to the acquisition of skills useful for career development is insignificant when students with experience of part-time work are compared to those without. Furthermore, it has been pointed out that experience of part-time work, whilst a student may lead to the choice to become a *freeter* (young people who lack full-time employment) after graduation, as an extension of the lifestyle enjoyed by the student, when part-time work activities provided a source of income (Kosugi 2001; Sugiyama 2007).

When considering the impact of part-time work on career development, it is important to consider not only whether or not the student has experience of part-time work, but also to understand the qualitative (details of work performed, and the student's behaviors in their work), and quantitative (hours worked in part-time job) aspects, in order to understand how part-time work experience is used in career development.

III. Hypotheses Development

This research takes the following variables in order to derive its hypotheses, with the purpose of examining the potential impact of type of work and behaviors in work (qualitative aspects: details of work performed, and attitude to engaging in work), and the hours spent in part-time work activities (quantitative aspect: hours worked in part-time job), both independently of one another, and in combination, on career development among university students.

1. Qualitative Aspects of Part-Time Work Experience

This research uses “skill variety” and “job autonomy” as the attributes of part-time work considered to impact the career development of university students. The research also uses “job crafting” as the behaviors of students to part-time work that is considered to impact career development.

(1) Skill Variety and Job Autonomy

Skill variety is an indicator for the extent to which a job requires an individual to use a variety of different skills to complete his/her work. The greater the skill variety, the greater the number of skills required in order to do the job (Hackman and Oldham 1976). In general, student part-time worker typically involves mainly standard, simple tasks, making it difficult for students to gain specialist skills, but it is thought that these include at least some of the basic skills required to work as a member of society (Sano 2004). For example, in addition to the skills required to complete the allocated tasks and knowledge of the industry in which the part-time work is done, students may obtain teamwork or leadership skills when they are placed in a working environment that requires them to work alongside other employees. They will also learn customer interaction skills and how to deal with customer complaints when they are engaged in customer service. Furthermore, in some cases students learn specialist, complex skills from their work, or skills relating to problem finding and problem solving through implementing improvements to their workflow. As a result, part-time work requiring a greater number of skills not only provides a greater number of opportunities to acquire specific knowledge and skills required as a member of society, but also broadens the perspective of the student in regard to the world of business and employment, thereby offering the student a high level of benefit for career development.

Job autonomy is defined as the extent to which the job provides substantial freedom, independence and discretion to the individual in carrying out his/her work. The higher the level of job autonomy, the more the individual is free to decide his/her own schedule, and method of carrying out the job. According to job design theory, a higher degree of job autonomy gives the worker more responsibility, which can lead to greater motivation and

productivity at work (Hackman and Oldham 1976). For this reason, when a university student engages in part-time work in which there is a high degree of autonomy, their sense of responsibility for their work will be increased, which is likely to raise the possibility that they will acquire the necessary skills and gain awareness relating to employment, such as the need to abide by rules, etc. In addition, since a higher degree of job autonomy provides opportunities for the student to think for themselves about how to do their job and manage their schedule, this autonomy can be expected to provide a range of opportunities to acquire a range of knowledge and experience within a creative process. As a result, engaging in part-time work that has a high degree of job autonomy is thought to contribute significantly to the career development of university students.

(2) Job Crafting

The proactivity of students engaging in part-time work is considered particularly important when thinking about behaviors towards engaging in part-time work. Proactivity is something that is currently particularly desired of young people in the workforce, regardless of whether it applies to part-time or full-time work. Within this research, one type of behavior engaged in proactively by students within part-time work activities is “job crafting.” Job crafting is a concept that was defined by Wrzesniewski and Dutton (2001) as “the physical and cognitive changes individuals make in the task or relational boundaries of their work,” and it is one of the factors for ascertaining how individual employees design their work proactively.

According to Wrzesniewski and her colleagues, job crafting can be categorized broadly into three types of behavior. The first is “task crafting,” which involves “changing the job’s task boundaries (e.g. the number, scope or types of tasks done at work).” The second is “relational crafting,” which involves “changing the relational boundaries of the job (e.g. the quality and/or amount of interaction with others at work).” The third is “cognitive crafting,” which involves “changing the cognitive task boundaries of the job (e.g. the meaning and significance of the job)” (Berg, Dutton, and Wrzesniewski 2008; Berg, Wrzesniewski, and Dutton 2010; Wrzesniewski and Dutton 2001). When applied to part-time work done by university students, the addition of new tasks to the task originally set, and the improvement of efficiency and adding of value to one’s work through consideration of the order in which tasks are done, and care in scheduling, equates to the first behavior; interacting with many other employees and related persons in order to improve work flow, or being considerate of or accommodating people related to the job equates to the second; and working to discover the meaning and significance of work, and investing emotional energy into work, rather than considering part-time work as a mere time transaction, equates to the third.

University students who engage proactively in job crafting in part-time work activities can not only be expected to improve the productivity of their workplace through attempts to implement improvements, they can also be expected to benefit from learning a

range of things that will develop their careers. For example, thinking of ways to improve the workflow of a part-time job increases opportunities to gain problem solving and other new skills. Furthermore, broadening the base of relationships relating to work, and encouraging others to get involved in the way one works provides opportunities to extend one's perspective on business and the world of employment, as well as acquiring interpersonal skills, and negotiation and management abilities. Furthermore, discovering new significance within one's work, and working to improve one's own motivation and sense of worth within the job, may improve the student's affirmative view of future work and employment, and raise confidence. In this way, job crafting within part-time work brings a range of learning benefits that relate to future careers, including diverse work knowledge and skills, a proactive attitude to employment, etc.

2. Quantitative Aspects of Part-Time Work Experience

This research takes the number of hours worked in part-time job per week as the quantitative aspect of part-time work experience that impacts career development. In order for part-time work experience to be beneficial in career development, it may be necessary for a certain amount of time to be spent at work. It may not, however, be expected that these benefits simply increase the longer the hours worked. Since part-time work tends to involve relatively standard, simple work, there is a ceiling to the knowledge and skills that can be acquired, and once a certain amount of skills development has been achieved through working a fixed amount of time in part-time work, it is considered that the student will have learned all he/she is able to. In addition to this, working long hours in part-time work brings with it some potential harmful effects. Obviously a student's career development is not dependent solely on part-time work experience. It also takes place as a result of attendance at class and other aspects of student life. Spending long hours in part-time work reduces opportunities to spend time in other activities, and may lead to students losing other opportunities for career development. The relationship between the number of hours worked in part-time job per week and the career development of a university student, shows that to a certain point, the level of career development rises with longer working hours, but that working longer hours above this point can in fact have a proportionally negative impact on career development, resulting in an inverted U-shaped curve. In other words, it is thought that there is an optimum amount of time to be spent on part-time work in order for it to be useful in career development.

The inverted U-shaped relationship between the time spent in part-time work and career development is impacted by the details of the job done and the behaviors of the student engaging in work. Firstly, the relationship between the level of skill variety in the part-time job and career development is notable when a lower number of hours are worked per week. As has already been discussed, when a wide range of skills is required for the job, even students working only a small number of hours are considered to have the opportunity to learn

specific knowledge and skills, and to broaden their perspective in regard to work, but when the part-time work is not considered to be particularly specialized, the career-related learning benefits associated with skill variety will not simply increase relative to longer working hours. Conversely, career-related learning benefits for students may actually be reduced with longer working hours, or they may cease as a result of the ceiling effect. In other words, when considering the inverted U-shaped relationship between working hours and career development, the higher the level of skill variety, the shorter the optimum working hours at a part-time job will be. On the other hand, since in part-time work with low levels of skill variety, shorter hours spent at work provide few career development benefits, the optimum number of working hours will be longer than in jobs with high skill variety.

At the same time, the relationship between job autonomy or job crafting and career development is more significant in cases where a longer number of hours are worked per week. Students doing highly autonomous work, or who engage proactively in their part-time work, and who implement creative measures or trial-and-error will require a certain amount of time to pass before their actions bear fruit, and they see the learning benefits. Students who are active beyond the boundaries of the tasks allocated to them, through highly autonomous work and/or job crafting, not only learn the skills required to undertake the work required of them, but also face a greater scope of learning opportunities regarding the work being done around them and the frameworks used in the workplace as a whole, as well as building relationships with a broad range of people, and therefore are able to learn more when they work longer hours. For this reason, when assuming an inverted U-shaped curve in the relationship between hours spent in part-time work and career development, it is anticipated that in jobs with a higher degree of autonomy and job crafting, the working hours considered optimum for career development will shift towards being longer.

3. Level of Career Development

This research focuses on the following points in order to consider the level of career development of university students through part-time work and other student activities. Firstly, it focuses on “employment commitment,” as the extent to which students prioritize being hired into professions, or by organizations, of their choice. Commitment to working in a preferred profession, or being hired by a preferred organization is thought to regulate students’ motivation in considering their future and engaging in job-seeking activities (Stumpf, Colarelli, and Hartmen 1983). When a student is able to gain a view of the world of employment through part-time work, and at the same time develop their own perspective of work and employment, their employment commitment is likely to rise. On the other hand, students who consider part-time work as merely a time transaction with the aim of gaining income, and do not think beyond the immediate comfort it brings, will not gain improved employment commitment. This situation may impact their career development for gaining regular employment after graduation.

Next, we focus on “proactive career behavior.” Claes and Ruiz-Quintanilla (1998) categorize behavior that is proactive in regard to career development into the following four types: (i) proactive skill development for one’s future career, (ii) proactive networking among people who may be helpful in one’s future career path, (iii) proactively seeking consultation from friends at university and teaching staff, etc., and (iv) career planning for the future. As has already been discussed, a proactive approach to day-to-day activities, and the autonomous determination to forge one’s own career path, are attributes strongly required of adults in today’s world. Furthermore, there is no room for doubt that the greater the number of opportunities to plan careers and obtain advice, and achieve specific growth in areas such as skills development and networking for future employment, the more advantageous it is for career development.

In addition to this, the research looks at “focus of career exploration,” as the extent to which a student narrows down the type of work they would like to do or the target organization by which they would like to be employed. Part-time work and other activities engaged in by students allow them to understand their own attributes, and to learn about the world of work, which allows them to form a view of employment based on what sort of profession and organization they might be suited to. In other words, they are able to focus their career exploration by themselves. Achieving a focus of career exploration facilitates students in deciding on their future direction, and clarifying the specialist knowledge and skills they need to acquire. Students who have focused on a career are reported to receive job offers at an earlier stage, and it is said that this sort of employee is sought after by companies (Ukai 2007; Taniuchi 2005).

Finally, the research focuses on self-efficacy in careers. Self-efficacy is a central concept in Bandura’s (1977) social cognitive theory, and indicates an individual’s ability and confidence to calculate and engage in appropriate behavior under specific circumstances. According to social cognitive theory, people with higher levels of self-efficacy are more persistent, work harder, and are able to cope with a certain amount of difficulty. They can also utilize their own abilities to work even harder. This research analyzes self-efficacy in relation to university students’ careers firstly through “self-efficacy in group-member proficiency” (whether or not the subject has the confidence to cooperate with others in the workplace once he/she becomes a working member of society) and secondly through “job search self-efficacy” (the confidence required to engage effectively with immediate job-seeking activities). As students acquire employment skills through part-time work and other student activities, their understanding of the “workplace” deepens, and providing they can thereby develop a high level of self-efficacy with regard to the work they would like to do in their future workplace, and immediate job-seeking activities, they will maintain motivation in considering future plans and job-seeking activities, and will not be easily discouraged despite a certain amount of difficulty or loss, but will rather be tenacious enough to continue to work through such things (Ohta, Tabata, and Okumura 2006). In fact, there is a significant quantity of research that shows self-efficacy in relation to selecting a career path and

job-seeking activities can be linked to job-seeking behavior, job-seeking efforts, and success in finding employment (Eden and Aviram 1993; Kanfer and Hulin 1985; Saks and Ashforth 1999, 2000).

Based on discussions this far, a questionnaire survey was conducted to examine the relationship between the qualitative and quantitative aspects of part-time work engaged in by university students, and the indicators for level of career development. Specifically, the following hypotheses were tested.

Hypothesis 1: University students engaging in part-time work with higher levels of skill variety will demonstrate a higher level of career development.

Hypothesis 2: University students engaging in part-time work with higher levels of job autonomy will demonstrate a higher level of career development.

Hypothesis 3: University students engaging in higher levels of job crafting within their part-time jobs will demonstrate a higher level of career development.

Hypothesis 4: The relationship between hours worked in part-time job by university students and career development will show an inverted U-shaped curve.

Hypothesis 5: The relationship between the level of skill variety in a part-time job and the level of career development will be more significant the shorter the number of hours worked per week.

Hypothesis 6: The relationship between the level of job autonomy in the part-time work, and job crafting, to the level of career development, will be more significant the longer the number of hours worked per week.

IV. Methods

1. Procedure

In order to test our hypotheses, a questionnaire-based survey was conducted of university students attending lectures in the economics departments of two national universities in the west of Japan. The questionnaire did not feature any questions relating to personal information about the students, and respondents' anonymity was maintained. Of the 210 applicable students in two universities, 190 returned questionnaires, giving a 90% response rate. Of these, fourth year students who were already engaged in or had completed job-seeking activities were excluded from analysis because the analysis includes variables assuming a state before job-seeking activities began, and because it was anticipated that in cases where future employment was already settled, this would have a significant impact on the contents of the responses. As a result of this, data from 123 people's responses was used as the sample for analysis. Of the sample, 97.2% were third year university students, of whom 67.0% were male and 33.0% female. The average age of respondents was 21.1 years (standard deviation = 2.2). 94.3% of students had an cumulative experience of 1 month or

more in part-time work, with the average length of experience being 20.3 months (standard deviation = 14.6), and at or immediately around the date of the survey, students were engaged in an average of 12.5 hours (standard deviation = 8.6) per week of part-time work. The main types of work engaged in were restaurant work (34.1%), specialist (preparatory school teachers, etc.) (13.8%), retail (15.4%), customer service (7.3%), light work/logistics (2.4%), administration (1.6%), medical/welfare (0.8%) and “other” (24.6%).

2. Measures

The following types of independent variables, dependent variables and control variables were measured in the questionnaire. All items comprised of independent and dependent variables were responded to using the seven-point Likert scale (1: Strongly disagree to 7: Strongly agree). Other than the job crafting scale, which was created newly for this research, all scales used were Japanese translations of English scales used in previous research.

(1) Independent Variables

Skill variety in part-time work was measured with four items used by Morgeson and Humphrey (2006). A sample item was “The job requires me to utilize a variety of different skills in order to complete the work.” Chronbach’s alpha was 0.89. The level of job autonomy was measured with three items originally developed by Hackman and Oldham (1980), and later modified by Idasak and Drasgow (1987). A sample item was “The job allows me to make a lot of decisions on my own.” Chronbach’s alpha was 0.82.

The scale for job crafting was created specially for this project. Based on the three-dimensional definition of job crafting by Wrzesniewski and Dutton (2001) (changing the job’s task boundaries, changing the relational boundaries, and changing the cognitive task boundaries), the author created two items for task crafting (“Add new tasks in order for my job to be conducted smoothly” and “Change the content and/or procedure of my job to make it more desirable”), three items for relational crafting (“Actively interact with people through my job,” “Increase the number of people with whom I interact through my job” and “Understand the situations of people who interact with me through my job, and take them into consideration when performing the job”), and three items for cognitive crafting (“Reframe my job as a significant and meaningful one,” “View my job as an integrated whole rather than as a set of discrete tasks” and “Reframe the purpose of my job as socially significant”), to give a total of eight items. Chronbach’s alpha for each of these dimensions was 0.67, 0.75 and 0.80, respectively.

(2) Dependent Variables

Employment commitment was measured with three items from the Importance of Obtaining Preferred Position Scale, in the Career Exploration Survey (CES) developed by Stumpf, Colarelli, and Hartman (1983). A sample item was “It is important to me to work in

the occupation I prefer.” Chronbach’s alpha was 0.85.

Proactive career behavior was measured with nine items adopted from Claes and Ruiz-Quintanilla (1998). This scale includes four types of proactive behavior—skills development, network formation, consultation regarding future career, and career planning. Sample items were “I have developed skills which may be needed in future positions” and “I have built a network of contacts or friendship with classmates or other people to provide me with help or advice that will further my work chances.” Chronbach’s alpha was 0.89.

Focus of career exploration was measured with two items taken from Stumpf, Colarelli, and Hartman (1983)’s CES Focus Scale. A sample item was “I am sure that I know the type of job that is best for me.” Chronbach’s alpha was 0.79.

Self-efficacy in team-member proficiency was measured with three items developed to measure group-member proficiency by Griffin, Neal, and Parker (2007). These items were used to enquire about the level of the respondent’s confidence about their ability to do their job successfully as a member of their workplace after graduation. A sample item was “Coordinate my work with co-workers.” Chronbach’s alpha was 0.79.

Job search self-efficacy was measured with five items developed by Vinokure, Price and Caplan (1991) in order to enquire into the level of confidence regarding future job-seeking activities. A sample item was “I feel confident about making the best impression in interviews.” Chronbach’s alpha was 0.89.

(3) Control Variables

The control variables used in analysis were gender (dummy variable), age, experience of part-time work (number of months), hours worked in part-time job per week (also used as an independent variable in interaction analysis), difference in university (dummy variable), school marks, rate of attendance at lectures, and type of part-time job. School marks and rate of attendance at lectures were assessed through self-reporting of the student’s average score to date at university (out of 100), and their rate of attendance. The type of part-time work utilized a dummy variable for each part-time work category shown on the questionnaire.

V. Results

1. Factor Analysis

The three types of independent variable (15 categories) and the four types of dependent variable (21 categories) used in this research were factor analyzed through the principal axis factoring with varimax rotation.

Five factors with eigenvalues of 1.0 or above were extracted from the items for independent variables explaining 75.01% of the total variance. The first factor was skill variety,

the second was job autonomy, and the third to fifth factors were the lower-order dimensions of job crafting (task crafting, relational crafting and cognitive crafting), making possible an interpretation as expected. As a result, mean scores of items were used for skill variety and job autonomy, while the mean score of all items including the three lower-order dimensions were used for job crafting.

Four factors with eigenvalues of 1.0 or above were extracted from the items for dependent variables, which explained 70.11% of the total variance. The first factor was proactive career behavior, the second was job search self-efficacy, the third was self-efficacy in team-member proficiency, the fourth was employment commitment and the fifth was the focus of career exploration, which made possible interpretation almost entirely as expected. Proactive career behavior was considered to have four dimensions, but this was interpreted as one-dimensional in factor analysis. As a result, the mean scores of items were used for job search self-efficacy, self-efficacy in team-member proficiency, employment commitment and the focus of career exploration, while the mean score of all items including the four lower-order dimensions were used for proactive career behavior.

2. Hypotheses Testing

Table 1 shows the averages, standard deviations and correlations for variables used in analysis. When looked at from the perspective of elements that are not directly related to the impact on dependent variables, a significant correlation can be seen between part-time work experience (number of months) and job autonomy and/or job crafting, indicating that students with greater work experience tend to take part-time jobs with a higher level of autonomy, and are more likely to engage frequently in job crafting. The number of hours worked per week also showed a significant correlation to job crafting, indicating that students who work longer hours in part-time work have a higher frequency of job crafting.

Next, in order to test hypotheses 1-3, hierarchical multiple regression analysis was carried out on each of the dependent variables relating to career development. The results are shown in Table 2.

In the first step of the hierarchical multiple regression analysis, only control variables were entered (models 1, 3, 5, 7, 9), while skill variety, job autonomy and job crafting were entered in the second step (models 2, 4, 6, 8 and 10).

Although it does not directly relate to this research, it is worth noting that in step 1, school marks have a significant positive impact ($p < .05$) on the focus of career exploration and self-efficacy in team-member proficiency, and a marginally significant positive impact ($p < .10$) on proactive career behavior, indicating that a serious attitude to participation in university studies is useful in career formation. In addition to this, age demonstrated a significant positive impact on both focus of career exploration and job search self-efficacy, and part-time work experience (number of months) also demonstrated a significant impact on focus of career exploration. Since age and part-time work experience demonstrate a high

Table 1. Means, Standard Deviations, Correlations for Variables Used in Analysis

	Average	Standard deviation	1	2	3	4	5	6
1. Skill variety	4.118	1.271						
2. Job autonomy	4.412	1.298	.103					
3. Job crafting	4.475	0.858	.503 **	.336 **				
4. Employment commitment	5.059	0.890	.020	.018	.232 *			
5. Proactive career behavior	4.110	1.088	.354 **	.029	.423 **	.234 *		
6. Focus of career exploration	4.208	1.163	.325 **	-.050	.200 *	.230 *	.416 **	
7. Self-efficacy in team-member proficiency	5.059	0.890	.127	-.028	.261 **	.289 **	.292 **	.452 **
8. Job search self-efficacy	3.981	1.165	.370 **	-.020	.387 **	.214 *	.619 **	.534 **
9. Gender (Male=1, Female=0)	0.675	0.470	-.046	-.035	-.102	-.060	-.085	-.021
10. Age	21.050	2.166	-.016	-.039	.113	.045	-.100	.342 **
11. Part-time work experience (months)	20.287	14.580	.125	.305 **	.227 *	.037	.058	.082
12. Hours worked in part-time job (per week)	12.458	8.632	.119	.193	.279 **	.016	.134	-.032
13. University (1, 0)	0.577	0.496	-.082	.147	-.077	-.001	-.233 **	-.040
14. School marks	69.966	12.460	.176 +	.114	.188 +	.098	.226 *	.160
15. Rate of attendance at class	73.161	19.883	.166 +	.068	.079	-.017	.094	.007
	7	8	9	10	11	12	13	14
1. Skill variety								
2. Job autonomy								
3. Job crafting								
4. Employment commitment								
5. Proactive career behavior								
6. Focus of career exploration								
7. Self-efficacy in team-member proficiency								
8. Job search self-efficacy	.497 **							
9. Gender (Male=1, Female=0)	.054	.137						
10. Age	.037	.271 **	.017					
11. Part-time work experience (months)	-.002	.156	-.013	.631 **				
12. Hours worked in part-time job (per week)	.031	.112	-.054	.210 *	.385 **			
13. University (1, 0)	.035	-.184 +	.038	.060	-.105	-.218 *		
14. School marks	.113	.257 **	-.015	.048	.010	-.015	-.018	
15. Rate of attendance at class	-.101	.191 *	-.092	.065	-.028	-.119	-.123	.634 **

Note: ** p < .01, * p < .05, † p < .10.

Table 2. Results of Hierarchical Multiple Regression Analysis (Main Effects of Independent Variables)

	Employment commitment		Proactive career behavior		Focus of career exploration		Self-efficacy in team-member proficiency		Job search self-efficacy	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
	(β)	(β)	(β)	(β)	(β)	(β)	(β)	(β)	(β)	(β)
Gender dummy	-0.057	-0.039	-0.047	-0.017	-0.039	-0.026	-0.007	0.021	0.167 +	0.194 *
Age	-0.049	-0.069	-0.196	-0.219	0.483 **	0.626 **	-0.024	-0.044	0.336 *	0.361 *
Part-time work experience (months)	0.080	0.063	0.165	0.146	-0.180	-0.360 *	0.046	0.011	-0.115	-0.184
Hours worked in part-time job (per week)	-0.078	-0.100	-0.016	-0.062	-0.083	-0.149	0.088	0.051	0.059	0.003
University dummy	0.126	0.126	-0.153	-0.122	-0.119	-0.169 +	0.004	0.003	-0.201 +	-0.193 +
School marks	0.157	0.132	0.254 +	0.187	0.334 **	0.288 *	0.392 **	0.350 **	0.202	0.137
Rate of attendance at class	-0.163	-0.133	-0.110	-0.105	-0.221 +	-0.287 *	-0.221	-0.186	0.036	0.023
Type of employment dummy										
Restaurant	0.061	0.025	0.139	0.052	0.142	0.116	0.064	0.008	0.167	0.092
Retail	0.033	0.049	0.117	0.136	0.176	0.239 *	0.039	0.065	0.057	0.092
Customer service	-0.066	-0.069	0.115	0.092	0.149	0.148	0.080	0.074	0.028	0.011
Light work/logistics	0.054	0.120	-0.058	-0.050	0.221 +	0.251 *	0.369 **	0.458 **	0.004	0.023
Administration	0.093	0.076	0.042	0.007	-0.063	-0.073	-0.064	-0.091	-0.150	-0.180 *
Specialist	-0.161	-0.148	-0.080	-0.099	0.084	0.073	0.078	0.093	0.118	0.101
Medical/welfare	-0.028	-0.016	0.027	0.031	0.048	0.066	-0.193	-0.175 +	0.027	0.036
Skill variety		-0.083		0.169		0.361 **		-0.07		0.229 *
Job autonomy		-0.011		-0.134		0.187 +		-0.016		-0.045
Job crafting		0.279 *		0.331 **		0.048		0.398 **		0.278 *
R2	0.072	0.119	0.182	0.335	0.284	0.443	0.209	0.312	0.247	0.403
Δ R2		0.047		0.153		0.159		0.104		0.156
F for model change		1.482		6.368 **		7.895 **		4.168 **		7.208 **

Note: ** $p < .01$, * $p < .05$, + $p < .10$.

level of correlation, it can be assumed that maturity factors from increasing age, and factors relating to the accumulation of experience in part-time work, both have an impact on the progress of career development. Gender appears to have a significant impact on job search self-efficacy, with males demonstrating a higher level of self-efficacy in job-seeking activities than females.

In terms of the main effects of independent variables in step 2, skill variety was shown to have a significant positive impact on both focus of career exploration and job search self-efficacy ($p < .01$ and $p < .05$, respectively). Other than focus of career exploration, all dependent variables had a significant positive impact of either $p < .01$ or $p < .05$ level on job crafting. This lends support for hypothesis 1, and strongly supports hypothesis 3. In contrast to this, job autonomy did not demonstrate a significant impact on any dependent variable, and so hypothesis 2 was not supported.

Next, hierarchical multiple regression analysis was performed to test hypotheses 4-6. The results are shown in Table 3.

In step 1 of the hierarchical multiple regression analysis, only control variables were entered, making it the same as the step 1 of testing hypotheses 1-3 (shown in Table 3). In step 2, the squared term of the time spent in part-time work was entered into the regression in order to test whether or not time creates a curvilinear impact. In step 3, skill variety, job crafting, and job autonomy, and their interactions with the time spent in part-time work were added to the regression.

Firstly, in terms of the curvilinear relationship between the time spent in part-time work and career development, when proactive career behavior and self-efficacy in team-member proficiency are used as dependent variables, a significant negative effect of squared term was found ($p < .05$), and when focus of career exploration was used as the dependent variable, a marginally significant negative effect of squared term was detected ($p < .10$). Figure 1 shows the estimated relationship between the time spent in part-time work and these dependent variables. As can be seen from Figure 1, the relationship between working hours and these dependent variables shows an inverted U-shaped curve, indicating that working between 12 and 18 hours in part-time work per week maximizes the levels of dependent variables. This supports hypothesis 4. Next, a significant negative interaction between working hours and skill variety was found for employment commitment ($p < .05$), proactive career behavior ($p < .01$), and job search self-efficacy ($p < .01$), and the interaction was marginally significant for self-efficacy in team-member proficiency ($p < .10$). Figure 2¹ shows the estimated curvilinear relationships (inverted U-shaped curves) between the time spent in part-time work and proactive career behavior as an example at high and low levels of skill variety, demonstrating a significant interaction between working hours and skill variety. From Figure 2, it can be seen that the increased proactive career behavior in students

¹ Based on the methods devised by Aiken and West (1991), estimated values for dependent variables at one standard deviation above and below the mean of job characteristics are shown on the graph.

Table 3. Results of Hierarchical Multiple Regression Analysis (Curvilinear Effects and Interactions)

	Employment commitment				Proactive career behavior			
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
	(β)	(β)	(β)	(β)	(β)	(β)	(β)	(β)
Gender dummy	-0.056	-0.074	-0.064	-0.052	-0.033	-0.059	-0.033	-0.018
Age	-0.050	-0.114	-0.003	-0.088	-0.212	-0.275 *	-0.250	-0.226 +
Part-time work experience (months)	0.070	0.093	0.014	-0.001	0.067	0.069	0.108	0.025
Hours worked in part-time job (per week)	-0.003	1.334	-0.877	-1.699 *	0.759 *	2.873 **	0.717	-0.244
University dummy	0.128	0.229	0.096	0.167	-0.129	0.035	-0.104	-0.120
School marks	0.163	0.094	0.196	0.179	0.312 *	0.163	0.316 *	0.278 *
Rate of attendance at class	-0.169	-0.131	-0.217	-0.168	-0.176	-0.136	-0.176	-0.146
Type of employment dummy								
Restaurant	0.054	0.043	0.085	-0.002	0.066	0.032	0.053	0.023
Retail	0.027	0.005	0.042	0.001	0.051	0.038	0.032	0.074
Customer service	-0.073	-0.145	-0.021	-0.020	0.050	-0.072	0.044	0.086
Light work/logistics	0.058	0.093	-0.055	-0.018	-0.012	0.016	-0.056	-0.011
Administration	0.088	0.084	0.103	0.055	-0.003	-0.013	-0.008	-0.024
Specialist	-0.162	-0.188	-0.085	-0.154	-0.082	-0.144	-0.084	-0.072
Medical/welfare	-0.029	-0.036	-0.019	-0.010	0.017	0.007	0.009	0.039
Square of hours worked in part-time job (per week)	-0.073	-0.248	-0.059	0.049	-0.755 *	-0.958 **	-0.795 **	-0.517 +
Skill variety		0.640 *				1.282 **		
Hours worked in part-time job \times skill variety		-1.382 *				-2.304 **		
Job autonomy			-0.273				-0.135	
Hours worked in part-time job \times job autonomy			0.955				0.102	
Job crafting				-0.274				0.093
Hours worked in part-time job \times job crafting				1.787 +				0.833
R2	0.072	0.126	0.092	0.152	0.244	0.462	0.251	0.333
Δ R2	0.001	0.054	0.020	0.080	0.063	0.218	0.006	0.088
F for model change	0.053	2.582 +	0.919	3.962 *	7.036 *	16.807 **	0.352	5.548 **

	Focus of career exploration				Self-efficacy in team-member proficiency			
	Model 9	Model 10	Model 11	Model 12	Model 13	Model 14	Model 15	Model 16
	(β)	(β)	(β)	(β)	(β)	(β)	(β)	(β)
Gender dummy	-0.031	-0.032	-0.044	-0.020	0.005	-0.007	-0.004	0.018
Age	0.474 **	0.515 **	0.586 **	0.462 *	-0.037	-0.075	0.011	-0.055
Part-time work experience (months)	-0.241	-0.290 *	-0.372 *	-0.273 +	-0.039	-0.031	-0.099	-0.085
Hours worked in part-time job (per week)	0.402	0.807	-0.991	-0.349	0.766 *	1.734 **	-0.355	-0.315
University dummy	-0.105	-0.066	-0.181 +	-0.097	0.024	0.098	-0.010	0.038
School marks	0.370 **	0.284 *	0.422 **	0.347 *	0.443 **	0.384 **	0.487 **	0.418 **
Rate of attendance at class	-0.262 *	-0.285 *	-0.340 **	-0.242 +	-0.278 *	-0.255 +	-0.339 *	-0.254
Type of employment dummy								
Restaurant	0.096	0.065	0.159	0.064	0.000	-0.011	0.036	-0.043
Retail	0.135	0.165	0.178	0.151	-0.018	-0.029	-0.005	-0.004

Customer service	0.108	0.075	0.198 +	0.135	0.023	-0.031	0.086	0.061
Light work/logistics	0.250 *	0.216 *	0.105	0.249 *	0.409 **	0.428 **	0.252 +	0.398 **
Administration	-0.092	-0.098	-0.063	-0.107	-0.104	-0.108	-0.087	-0.126
Specialist	0.083	0.042	0.211 +	0.090	0.077	0.053	0.174	0.086
Medical/welfare	0.042	0.040	0.066	0.058	-0.201 *	-0.206 *	-0.191 +	-0.180 +
Square of hours worked in part-time job (per week)	-0.473 +	-0.406	-0.413	-0.302	-0.661 *	-0.771 *	-0.655 *	-0.450
Skill variety		0.637 **				0.525 *		
Hours worked in part-time job × skill variety		-0.616				-1.028 +		
Job autonomy			-0.321				-0.386	
Hours worked in part-time job × job autonomy			1.469 *				1.242 +	
Job crafting				0.058				0.031
Hours worked in part-time job × job crafting				0.634				0.960
R2	0.309	0.438	0.373	0.356	0.257	0.292	0.289	0.336
ΔR2	0.025	0.129	0.064	0.047	0.048	0.035	0.032	0.079
F for model change	3.024 +	9.570 **	4.206 *	3.047 +	5.487 *	2.046	1.862	5.009 **

	Job search self-efficacy			
	Model 17 (β)	Model 18 (β)	Model 19 (β)	Model 20 (β)
Gender dummy	0.175 +	0.166 +	0.167 +	0.196 *
Ag	0.327 *	0.337 *	0.355 *	0.331 *
Part-time work experience (months)	-0.172	-0.205	-0.208	-0.19
Hours worked in part-time job (per week)	0.510	1.418 *	-0.412	0.089
University dummy	-0.188 +	-0.112	-0.207 +	-0.199 +
School marks	0.236 +	0.132	0.272 *	0.168
Rate of attendance at class	-0.002	-0.005	-0.051	0.045
Type of employment dummy				
Restaurant	0.124	0.093	0.149	0.094
Retail	0.019	0.036	0.024	0.075
Customer service	-0.009	-0.069	0.04	0.012
Light work/logistics	0.031	0.016	-0.109	0.088
Administration	-0.176 +	-0.183 +	-0.164	-0.186 +
Specialist	0.117	0.07	0.194	0.127
Medical/welfare	0.021	0.017	0.027	0.043
Square of hours worked in part-time job (per week)	-0.439	-0.453 +	-0.447	-0.138
Skill variety		0.820 **		
Hours worked in part-time job × skill variety		-1.11 *		
Job autonomy			-0.354	
Hours worked in part-time job × job autonomy			1.038	
Job crafting				0.350
Hours worked in part-time job × job crafting				0.077
R2	0.268	0.403	0.290	0.367
ΔR2	0.021	0.135	0.022	0.098
F for model change	2.462	9.362 **	1.262	6.531 **

Note: ** $p < .01$, * $p < .05$, † $p < .10$.

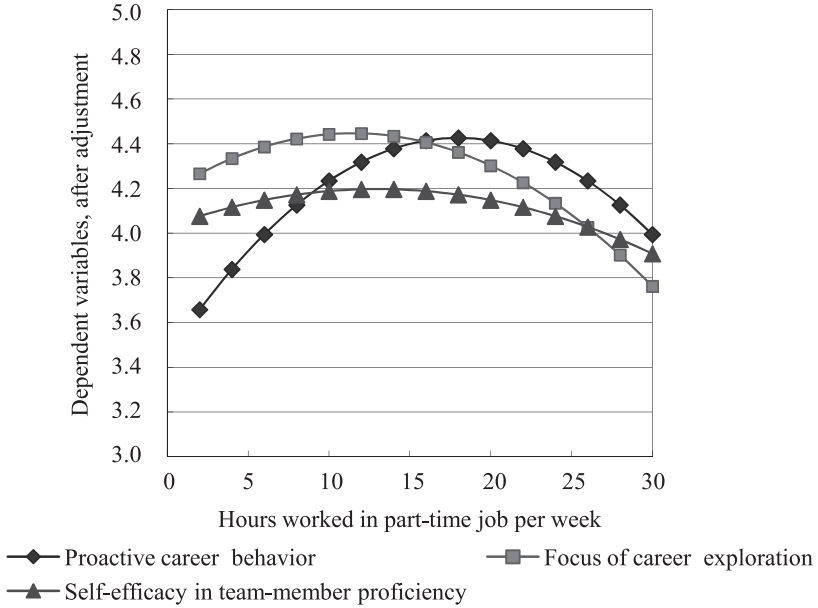


Figure 1. Curvilinear Relationship between the Time Spent in Part-Time Work and Career Development

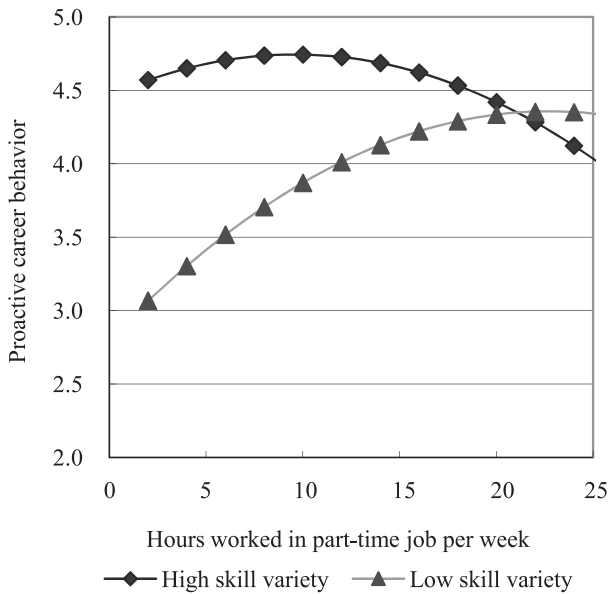


Figure 2. Interaction between the Time Spent in Part-Time Work and Skill Variety

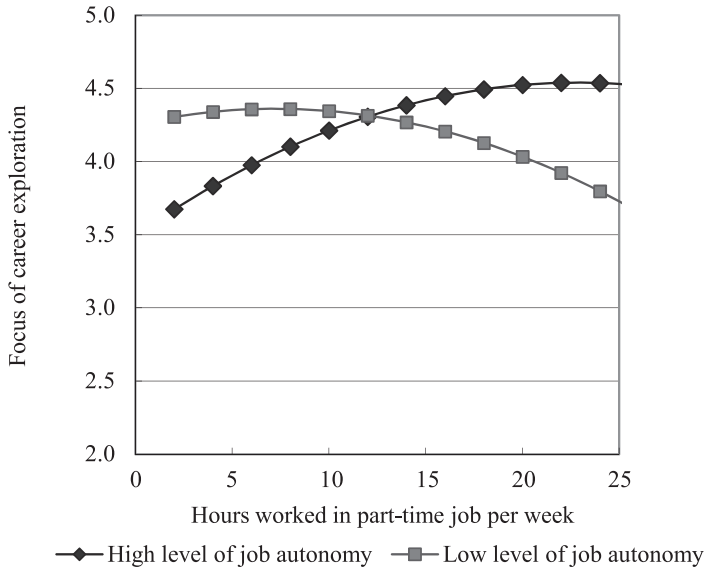


Figure 3. Interaction between the Time Spent in Part-Time Work and Job Autonomy

engaging in part-time work with high levels of skill variety is particularly significant in students with shorter working hours. When students are engaging in part-time work with high levels of skill variety, benefits in career development are seen within a relatively short time and the optimum working hours are also relatively short, but for students engaging in part-time work with low levels of skill variety, there may be few benefits in terms of career development in working short hours, indicating that the optimum working hours for such students are longer. Similar patterns are seen in other significant interactions.² This supports hypothesis 5.

A marginally significant positive interaction between the time spent in part-time work and job crafting was found only in the case of employment commitment ($p < .10$), and not for other variables. A significant or marginally significant positive interaction between working hours and job autonomy was found with focus of career exploration ($p < .05$) and self-efficacy in team-member proficiency ($p < .10$). Figure 3 shows estimated curves at high and low levels of job autonomy for focus of career exploration. From Figure 3, it can be seen that students working long hours in jobs with high levels of autonomy tend to demonstrate higher levels of focus of career exploration. In jobs with high levels of job autonomy, slightly longer working hours are effective in career development, and therefore the optimum time spent on part-time work is relatively long, but in jobs with low levels of job autonomy, there are few benefits in career development even with longer working hours, in-

² Since the inverted U-shape was not significant for employment commitment, the discussion of optimum working hours does not apply in the case of employment commitment.

dicating that optimum working hours are shorter. Similar patterns were seen in relation to self-efficacy in team-member proficiency. These results appear to support hypothesis 6. However, if the number of significant interactions is taken into consideration, it must be said that hypothesis 6 has not been strongly supported.

VI. Discussion

1. Summary of Results

Results of the analysis demonstrated that (i) a direct relationship can be seen between skill variety and job crafting of the part-time jobs engaged in by university students, and their level of career development, (ii) there is an inverted U-shaped relationship between the number of hours worked per week and career development, and (iii) the shape of the curved relationship between the number of hours worked per week and career development, and optimum working hours, vary depending on differences in the levels of skill variety and job autonomy in the part-time job.

From this, it can be inferred that both qualitative and quantitative aspects of part-time work have an impact on students' career development, whether independently or in combination. Specifically, engaging in part-time work with high levels of skill variety, and being proactive in engaging with part-time work, are thought to be important elements in both career learning and career development. The results of this analysis indicate, however, that merely engaging in part-time work with a high level of job autonomy may not be a factor in promoting career development. Next, in terms of the relationship between students' working hours and career development, there is no simple relationship between increasing or decreasing working hours. Career development benefits increase with working hours to an extent, but in fact decrease beyond a certain point. This demonstrates that there is an optimum number of working hours for students engaging in part-time work. This does not, however, mean that there is a single optimum amount of time that students should spend in part-time work, regardless of the contents of the job they are doing. As can also be seen from interaction analysis results, depending on the details of their work, optimum working hours are shorter for students in jobs where learning effects are apparent within a short period, but there are also cases in which no career benefits can be expected unless working hours are comparatively longer.

2. Implications

This research has demonstrated that part-time work, which is so common among university students, can offer valuable opportunities for career development, depending on the type of work selected and the level of student's proactivity in their work. The results of this research do not, of course, suggest that part-time work experience will unconditionally assist career development. In order for part-time work experience to be useful in this way, it is

important to consider the contents of the work being done, the proactivity with which the student approaches his/her work, and the optimum number of hours to be worked. When students engage in part-time work, they should be aware that it offers them valuable opportunities for career development. They need to engage positively with these opportunities and utilize them for their own growth and learning, and to be proactive at work within their optimum working hours.

The results of this research indicate a need to reconfirm the ideas that students' experience of part-time work can provide them with opportunities for skills development and career formation, and can play a bridging role between university life and the world of employment. Career education for young people cannot be completed only through curricular career education programs in schools. It is thought that organically linking curricular career education to extra-curricular activities could bring significant benefits in this area (Sato 2007). This is one reason why part-time work experience is considered to play such an important role as part of a student's extra-curricular activities. In order to achieve these benefits, whilst the attitude of the individual student is of course vital, considerations need to be given to the manner in which employers provide part-time jobs and motivate students they employ. Schools, who promote career education and support for selecting a career path, should also consider part-time work as an opportunity for career development, and offer guidance to students regarding a proactive attitude to work, and the optimum number of working hours.

3. Limitations and Future Research

One of the limitations of this research is the fact that, since data used was from a cross-sectional questionnaire, it was not possible to conclusively demonstrate causal relationships between the measurement variables. The relationship between part-time work experience attributes and career development was clarified, but this does not necessarily demonstrate that attributes are causal factors in career development. In the future, in order to consider the observations attained from this research more deeply, longitudinal studies would be useful in order to allow more accurate analysis of the causal relationships between students' part-time work experience and their subsequent job-seeking activities, and career development subsequent to graduation.

Another limitation is the fact that the students who were surveyed all attended national universities, and so the results may not be generalizable to all university students nationwide. This survey was conducted in two universities, one in a city and one in a regional setting, but the differences between the two universities, which were used as dummy variables for analysis, showed almost no significant impact in any area, and so it is thought that the results were not significantly distorted by using specific universities. Nonetheless, to gain a more accurate picture of students working in part-time jobs, or to extend the theories and hypotheses in order to give an effective, deeper understanding of the relationship be-

tween part-time work activities and career development, future research could conduct a survey on university students different to this sample, or alternatively, on a sample taken not only from university students but also from high school students.

References

- Adachi, Tomoko. 2004. Daigakusei no kyaria sentaku: Sono shinriteki haikai to shien [Career decision of Japanese university students: Psychological determinants and intervention]. *The Japanese Journal of Labour Studies* 46, no. 12: 27–37.
- Aiken, Leona S., and Stephen G. West. 1991. *Multiple regression: Testing and interpreting interactions*. Thousand Oaks: Sage.
- Anbo, Hideo, Kenichiro Ishizu, Takekatsu Kikuchi, Masanori Chiba, and Toshiyuki Inomata. 2008. Tohoku daigaku ni okeru gakubusei no kyaria ishiki (1): Kibo shinro ni kakawaru youin to sono junbi katsudo [Attitudes of Tohoku University students toward career (1): Factors related career options and preparation for occupation]. *The Annual Report of the Graduate School of Education, Tohoku University* 56, no. 2: 201–17.
- Bachman, Jerald G., and John Schulenberg. 1993. How part-time work intensity relates to drug use, problem behavior, time use, and satisfaction among high school seniors: Are these consequences or merely correlates? *Developmental Psychology* 29, no. 2:220–35.
- Bandura, Albert. 1977. Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review* 84 (2):191–215.
- Berg, Justin M., Amy Wrzesniewski, and Jane E. Dutton. 2010. Perceiving and responding to challenges in job crafting at different ranks: When proactivity requires adaptivity. *Journal of Organizational Behavior* 31, no. 2-3:158–86.
- Berg, Justin M., Jane E. Dutton, and Amy Wrzesniewski. 2008. *What is job crafting and why does it matter?* Working Paper, Ross School of business, University of Michigan.
- Claes, Rita, and S. Antonio Ruiz-Quintanilla. 1998. Influences of early career experiences, occupational group, and national culture on proactive career behavior. *Journal of Vocational Behavior* 52, no. 3:357–78.
- Dentsu Ikueikai. 2007. Kyoto daigaku/Dentsu Ikueikai kyoudo, Daigakusei no kyaria ishiki chosa 2007 [Kyoto university/Dentsu Ikueikai survey into career awareness among university students 2007]. <http://www.dentsu-ikueikai.or.jp/research/top.html>.
- Eden, Dov, and Arie Aviram. 1993. Self-efficacy training to speed reemployment: Helping people to help themselves. *Journal of Applied Psychology* 78, no. 3:352–60.
- Griffin, Mark A., Andrew Neal, and Sharon K. Parker. 2007. A new model of work role performance: Positive behavior in uncertain and interdependent contexts. *Academy of Management Journal* 50, no. 2:327–47.
- Hackman, J. Richard, and Greg R. Oldham. 1976. Motivation through the design of work:

- Test of a theory. *Organizational Behavior and Human Performance* 16 (2):250–79.
- . 1980. *Work redesign*. Reading, MA: Addison-Wesley.
- Idasak, Jacqueline R., and W. Fritz Drasgow. 1987. A revision of the job diagnostic survey: Elimination of measurement artifacts. *Journal of Applied Psychology* 72 (1):69–74.
- Intelligence. 2006. Arubaito jittai chosa 2006 [Survey into the state of part-time Work, 2006]. Intelligence Ltd. http://www.inte.co.jp/corporate/library/survey/data/GEHR_report_200612.pdf.
- . 2007. Hajimete no arubaito jittai chosa [Survey into first experience of part-time work]. Intelligence Ltd. http://www.inte.co.jp/corporate/library/survey/data/GEHR_report_200702.pdf
- Japan Institute for Labour Policy and Training (JILPT). 2008. Gakko dankai no wakamono no kyaria keisei shien to kyaria hattatsu [Youth career development support at school and career Development: For cooperation between career education and labor administration]. JILPT Research Report no. 104, the Japan Institute for Labour Policy and Training, Tokyo.
- Kanfer, Ruth, and Charles L. Hulin. 1985. Individual differences in successful job searches following lay off. *Personnel Psychology* 38, no. 4:835–47.
- Kawamura, Terumi. 2003. Oya kara no kitai to seinen no kanzen shugi keiko to no kanren [The Relation between expectation from the parents and perfectionism tendency of the youth]. *Kyushu University Psychological Research* 4:101–10.
- Kirimura, Shinji. 2005. Daigaku ni okeru kyaria kyoiku no igi to hoho [The significance and methods of careers education in Universities]. *International Business and Management Forum* 16:41–62.
- Kosugi, Reiko. 2001. Zoka suru jakunen hiseiki koyosha no jittai to sono mondaiten [The problem of the increasing number of young non-regular employees]. *The Japanese Journal of Labour Studies* 43, no. 5:44–57.
- Kusuoku, Shigenori. 2005. Daigakusei no shinro sentaku ni okeru jiko koryoku no sogai yoin ni kansuru ichikosatsu [A Consideration of a prevention factor concerning the career decision-making self-efficacy of undergraduates: A focus on identity]. *The Ritsumeikan Business Review* 44, no. 2:106–23.
- . 2006. Jiko koryokuron kara mita daigakusei no intanshippu no koka ni kansuru jissyo kenkyu: Benchakei kigyo he no intanshippu wo taisho ni shita chosha [A study of effects of internship on college students with a focus on self-efficacy theory: A survey for internship students for new business ventures]. *The Ritsumeikan Business Review* 44, no. 5:169–85.
- Matsuyama, Kazuki, and Kohei Tobita. 2008. Daigakusei no shokugyo ishiki to intanshippu no kankei [The relationship between the vocational maturity of university students and internship programs]. *Journal of Business Studies* 55, no. 2:427–42.
- Morgeson, Frederick P., and Stephen E. Humphrey. 2006. The Work Design Questionnaire (WDQ): Developing and validating a comprehensive measure for assessing job design

- and the nature of work. *Journal of Applied Psychology* 91, no. 6: 1321–39.
- Moriyama, Hiromi. 2007. Daigaku ni okeru kyaria kyoiku: Sono hitsuyousei to koka hantei no shiza kara [Career education in a university: Consideration on its necessity and effect measurement]. *International Buddhist University bulletin* 44:309–19.
- Ota, Satsuki, Tomoaki Tabata, and Kazunari Okamura. 2006. Daigakusei no shushoku katsudo ni taisuru jiko koryokukan [Self-efficacy in regard to job-seeking activities among university students]. In *Nihon shakai shinri gakkai dai 47 kai happyo ronbunshu* [Japanese Society of Social Psychology, 47th Collection of Presented Papers], 532–33. Tokyo: The Japanese Society of Social Psychology.
- Paschall, Mallie J., Christopher L. Ringwalt, and Robert L. Flewelling. 2002. Explaining higher levels of alcohol use among working adolescents: An analysis of potential explanatory variables. *Journal of Studies on Alcohol* 63 (2):169–78.
- Saks, Alan M., and Blake E. Ashforth. 1999. Effects of individual differences and job search behaviors on the employment status of recent university graduates. *Journal of Vocational Behavior* 54 (2):335–49.
- . 2000. Change in job search behaviors and employment outcomes. *Journal of Vocational Behavior* 56 (2):277–87.
- Sano, Yoshihide. 2004. Hitenkei koyo : Tayoka suru hatarakikata [Atypical employem: Diversifying work styles]. In *Shigoto no shakaigaku: Henbo suru hatarakikata* [The sociology of work: Changing work styles], ed. Hiroki Sato and Atsushi Sato, 141–56, ch.9. Tokyo: Yuhikaku.
- Sato, Ryuko. 2007. Gakusei no jihatsusei wo unagasu kyaria kyoiku to seikagai katsudo [Careers education and extra-curricular activities to encourage student autonomy]. *Kyoto University Researches in Higher Education*, no. 13:24–35.
- Shimomura, Hideo, and Hiromoto Hori. 2004. Daigakusei no shushoku katsudo ni okeru joho tansaku katsudo: Joho baitai no kino ni kansuru kento [Information seeking behavior during college student job hunting: Focusing on the impact of various information sources] *Japanese Journal of Social Psychology* 20, no. 2:93–105.
- Steinberg, Laurence, and Stanford M. Dornbush. 1991. Negative correlates of part-time employment during adolescence: Replication and elaboration. *Developmental Psychology* 27, no. 2:304–13.
- Stumpf, Stephen A., Stephen M. Colarelli, and Kare Hartman. 1983. Development of the career exploration survey (CES). *Journal of Vocational Behavior* 22 (2):191–226.
- Sugiyama, Shigeru. 2007. Arubaito keiken ha kyaria ishiki no keisei ni donoyona eikyo wo ataerunoka [Effects of the part-time working on career consciousness among Japanese university students]. *The Review of Liberal Arts* 113:87–98.
- Takeishi, Emiko. 2002. Hiseiki rodosha no kikan rodoryokuka to koyo kanri no henka [The mainstreaming of non-standard workers into the labor force, and changes in employment management]. *Nissei Kiso Kenken Shoho* 26:1–36.
- Ukai, Yoichiro. 2007. Kigyo ga aoru “Yaritaikoto”: Shushoku katsudo ni okeru jiko bunseki

no kento kara [The orientation towards “YARITAIKOTO” (what one hopes to do) required by personnel departments: thorough analysis of “self-analysis” in job hunting]. *Annals of Human Sciences*, no. 28:79–98.

- Umemura, Yuko, and Atsuko Kanai. 2006. Shushoku katsudo ni okeru riso to genjitsu no togo katei ni kansuru tansakuteki kenkyu [The process of integration of the ideal-self and reality in career decision-making: From the viewpoint of the relationship among idealized self-concept, actual self-concept and social context] *Japanese Journal of Administrative Science* 19, no. 2:151–62.
- Vinokur, Amiram D., Richard H. Price, and Robert B. Caplan. 1991. From filed experiments to program implementation: assessing the potential outcomes of an experimental intervention program for unemployed persons. *American Journal of Community Psychology* 19, no. 4:543–652.
- Wakabayashi, Mitsuru, Motomichi Goto, and Keiko Shikanai. 1983. Shokugyo redinesu to shokugyo sentaku no kozo: Hoikukei, kangokei, jinbunkei joshi tandaisei ni okeru jiko gainen to shokugyo ishiki to no kanren [Occupational readiness and occupational choice structure: On the relationships between self concept and occupational attitudes among female junior college students]. *Bulletin of the Faculty of Education* 30:63–98.
- Wrzesniewski, Amy, and Dutton, Jane E. 2001. Crafting a job: Revisioning employees as active crafters of their work. *Academy of Management Review* 26, no. 2:179–201.
- Yachi, Atsuhiko. 2005. *Daigakusei no shushoku ishiki to kyaria kyoiku* [Employment awareness among university students and careers education]. Tokyo: Keiso Shobo.
- Yamaguchi, Kenji. 2005. Kyaria kyoiku to jakunensha koyo mondai [Career education and youth employment problems]. *Journal of Nijijima Gakuen Junior College*, no. 25:17–31.
- Yazaki, Yumiko. 2006. Daigakusei no shinro tansaku kodo wo yosoku suru yoin no kento [Consideration of factors that predict behavior among university students considering their future careers]. In *Nippon seinen shinri gakkai taikai happyo ronbunshu* [Conference presentation papers, Japan Society of Youth and Adolescent Psychology], no. 14, 60–61. Shiga: The Japan Society of Youth and Adolescent Psychology.