

## Career Development during the School-to-Work Transition among the Students of Middle-Ranked Universities in Japan

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### ABSTRACT

One in three youth who graduated from university and became employed but quit their jobs within three years in Japan. The students attending middle-ranked universities now constitute the majority of the higher learning students in Japan. The poor job sustaining may be due to several factors. Hence, the aim of this research was to examine the career development during the school-to-work transition among the students of middle-ranked universities in Japan. The research design used in this study was the explanatory sequential design of a mixed method. The study began with a quantitative strand, and then continued with a qualitative research. In terms of sampling, 475 students who attended regular classes were selected randomly from seven middle-ranked universities in Tokyo (N = approximately 55,000). The were two main instruments used in this study – a set of questionnaires and an interview protocol. The questionnaire was developed based on Kato's *Identity Status Scale* and *Loneliness Scale* of Ochiai and then they were administered to the sample. Next, a three-year longitudinal study of eight students from their sophomore to senior year was conducted to examine their career development process which was analyzed by using the Trajectory Equifinality Modeling. In conclusion, the key findings showed that the students in the successful job-hunting activity group displayed high mutual empathy but low consciousness of aloneness. In addition, they possessed good ability of metacognitive self-awareness. This study contributes to the corpus of knowledge in profiling the career development during the school-to-work transition among the students of middle-ranked universities in Japan.

**Keywords:** Career development, middle-ranked university in Japan, identity, individuality, trajectory equifinality modeling (TEM)

### INTRODUCTION

Vocational guidance was first introduced into the schools in Japan in 1927 (Sakamoto, 2008). As the World War II approached, it had become the means of distributing the war time workforce. After the war, in 1948, vocational guidance was given the status as one of the subjects in secondary schools. In 1957, the term of vocational guidance was changed to career guidance because it tended to be

misunderstood as an employment service. In 1969, career guidance was perceived as one of the extracurricular activities conducted in homerooms and not as a subject. However, in reality, it was a guidance for the students to pass the entrance examination to universities. In 1990s, Japan had experienced an economic downturn which accelerated the educational reformation to connect the youth to the real world. Then in 1999, the Central Education Council, which was an advisory committee established from all ministries and agencies with the aim of listening to the will of the people was established. It was the beginning of focusing the necessity of career education in all development stages from elementary schools to higher education. Here, career education was defined as the education through which students acquire a desired occupational attitude, as well as knowledge and skills of the occupation. In the end, students understand their own personalities and obtain capabilities and attitudes to select their occupation independently (Ministry of Education, Culture, Sports, Science and Technology [MEXT], 1999). In 2004, MEXT formally announced the importance of career education, and it was considered the beginning of career education in Japan

Up until 1990s, Japanese university graduates entered the workforce smoothly soon after their graduation. Japanese firms provided them training as members of the organization under the lifelong employment plan. However, during the economic recession and with the decreasing population have made it difficult for Japanese society to maintain this transition system. In 2010, MEXT (2010) modified the Standards for Establishment of Universities, where it stated that it is necessary for a university to guide students to acquire employability for achieving social and occupational self-reliance. In addition, it mentioned that career education should be provided through the regular curriculum as well as through extracurricular subjects (Uenishi, 2014).

In spite of the obligation to provide career education in higher education and the establishment of career education system in each university, the challenges of the career development of university students have remained. Tokoro (2017) pointed out that the present university students are facing more serious problems than those of the 1990s. Before 1990s, entering university was extremely hard because of the competitiveness of the national university entrance examination. Therefore, university graduates in that period were recognized as excellent human resources by firms as well as society. Almost all graduates would transit smoothly between university and workplace. However, recently, as the number of the universities has increased sharply, the status of a university as a higher education institution has become unclear. As a result, companies started to select the new graduates more carefully and strictly to avoid hiring those who lack of required competency. This current situation makes it more difficult for the university students to obtain jobs. In other words, the transition from university to obtaining job might not be easy.

In order to encourage the universities to provide the education for promoting the students' career development, the Ministry of Economy, Trade and Industry [METI] (2006) has set out the description of fundamental competencies for working persons, which consisted of three competencies such as "the ability to step forward and act persistently even if you fall", "the ability to question and think through", and "the ability to collaborate with other people to achieve goals." They have identified these competencies as the goals of career education (Matsushita, 2014) and the programs for students' career development have been considered as important curriculum in higher education. Due to the recent economic situation in Japan, the unemployment rate of new graduates is 2.4% (Ministry of Health, Labor and Welfare [MHLW], 2019a). Nevertheless, the turnover rate of new graduates within the first three years was 31% in 2015 (MHLW, 2019b). Considering the current situation, it seems that the career education has failed. Therefore, it is critical to conduct this study.

In this article, we define career development as the on-going and lifelong process of developing one's career. Lent and Brown (2013: 9) indicated that "career development is a concept designed to capture the dynamic, changing nature of career or work behavior and is sometimes used as incorporating career choice. Career choice may be seen as the process of selecting and entering a particular career path, whereas career development refers to one's experience before, during, and (especially) after career choices." Also, they mentioned that career development can be seen as a process that encompasses much of a person's life.

## **BACKGROUND OF THE STUDY**

In 2030, the population of Japan will reach 120 million, representing a decrease of 5.6% from 2017. Japan's population began falling in 2005. Now, the country is aging faster than most countries worldwide due to low fertility and falling birth rates, together with rising life expectancy (Japan in 2030, 2018, March). This situation suggests that Japan's labor market and employment policies need to be altered drastically because the workforce will continue to age and shrink. The population of 18-year old has already started to decrease since 1992. Approximately 40% of private universities do not fill their student enrollment capacity, even though the rate of enrollment in higher education institutions has climbed to 81.5% (MEXT, 2018). Most students can enter university without intensive preparation for the entrance examinations if they don't aim for the top selective universities.

Traditionally, in Japan, the transition from university to work has three features. First, there is the period of job hunting. In their junior year, students start job hunting and they may have official job offers from the companies before graduating from university. Soon after their graduation in March, they start working at the beginning of April as new employees in companies. Second, Japanese companies do not explicitly specify a position when they employ new graduates. Instead of viewing job searching as an act of seeking employment, in Japan, it is more contextually resonant to view it as membership hunting. Hence, Japanese companies bind their workers to the company rather than to the job (Hamaguchi, 2014). There is no connection between a person's undergraduate major and the content of his/her first job (Koyama, 2014). The Japanese system of hiring new graduates has made it difficult for university students to visualize their future career paths. Third, it is considered that the universities in Japan consist of three layers: the highly selective universities, middle-ranked universities and border-free universities. Large companies have a tendency to filter candidates by academic background (Fukushima, 2018), and they try to select students from the top universities.

In this article, we define the middle-ranked universities as the universities which deviation values are from around 45 to 55. The Japanese university preparatory schools have a tendency to indicate the difficulty to enter the university based on the deviation value, and the universities which deviation values are 45-55 have been considered as middle-ranked universities. Kei-Net (2019) reported that the total number of the students who passed the entrance examination for private universities in Japan in 2019 was 1,250,373. The special issue of *Weekly Diamond* (2019, September 7) reported that the total number of students who passed the highly selective universities in 2019 was 173,271. It is estimated that the acceptance rate of major highly-selective university in Japan is lower than 15%. Hence, 85% of the students of private universities are in the middle rank or less. Among the middle-ranked universities, Nihon University enrolled the largest number of students (68,069) and Toyo University is the 6<sup>th</sup> largest which enrolled 31,019 students (Zenkoku Daigaku, 2019, August). It is remarkable that the students attending middle-ranked universities make up a large majority of students in universities in Japan. The graduates from middle-ranked universities are expected to be hired by small and medium-sized enterprises, which account for 99.7% of all companies in Japan (METI, 2016). Thus, the students attending middle-ranked universities are the largest potential labor force in Japan.

## **PROBLEM STATEMENT**

Previously, lifetime employment and seniority-related labor practices dominated the Japanese corporate world (Tamura, 1997). The presumption was that most employees would remain in one company until they retired. For that reason, the careers of employees were shaped in just that single organization they joined after graduation (Yamamoto, 2008). Nevertheless, since the mid-1990s, one out of three who has graduated from university and become employed is quitting his/her first job within the first three years (Jou, 2006; MHLW, 2019b). There are two types of young people who quit their jobs early. One type moves between jobs of their own volition, as they look to personally develop their careers through inter-organizational career mobility (Yamamoto, 2008). And, the other type, influenced by the weakening of the seniority wage system and long-term employment security as well as diminishing of organizational capacity of labor unions within companies (Kobayashi, 2016), quit their jobs because they cannot adapt

to the discrepancies between expectations prior to commencing work and the reality once they are at work (Tokoro, 2017).

Japanese psychologists have examined career development issues associated with university students who are transitioning into the future workforce. To measure the extent of career development among university students, they have developed assessment tools such as career exploration (Adachi, 2010), career indecision (Shimoyama, 1986; Wakamatsu, 2001), career self-efficacy (Adachi, 2001; Hanai & Shimizu, 2014; Uragami, 1995), and career maturity. Although the Japanese university students have differences in their academic abilities depending on the types of the universities that they enrolled, research targeting middle-ranked university students is scarce. Thus, the aim of the study was to analyze the characteristics of the career development of the middle-ranked university students as a main source of future workforce in Japan.

## **THEORETICAL AND CONCEPTUAL FRAMEWORKS**

In this study, the theoretical framework is based on several theories such as career development, identity formation, and individuality. The first theory is career development. The concept of career development was first advanced by Ginzberg, Ginsburg, Axelrad and Herma (1951) who proposed that occupational choice is a developmental process that occurs over a number of years. Their original theory, which assumed that the process was completed in early adulthood, was later revised to recognize occupational choice as a lifelong process of decision making (Ginzberg, 1972; 1984). In this study, we only focused on the specific period from school to work, although the career development is a lifelong process. However, the transition to start a working career is an important period. The initial decision-making style may influence her/his career development in the later life. Super (1980; 1990) developed the life-span life-space career development theory and defined the exploration stage (age 14 to 24), where adolescents and young adults sequentially crystallize, specify, and implement their career choices.

The second theory is identity formation. Savickas (2011: 28), as a vocational psychologist, mentioned that “experience provides the means and meaning through which individuals self-construct an identity. So, the self-as-process forms an identity”. Identity, which Erikson (1959) first brought into the social sciences, is the main concept of self-construction. Erikson defined the concept of ego identity as two dominant characteristics: (a) the sense of temporal-spatial continuity of the ego, and (b) the configuration of positive and negative self-concepts that unify individuals’ experiences of themselves during interaction with the social world (Côté & Levine, 1987). Hence, identity formation is defined as the process by which the personality characteristic is formed and continually transformed throughout the life cycle. Erikson (1959) asserted that career decision, which means obtaining a social role, has a significant meaning in identity achievement. Marcia (1966; 1980) elaborated Erikson’s view of the process of identity formation and extended it to the identity status model, which is based on two underlying developmental questions: Has the individual experienced an identity crisis? Has the individual committed to roles, goals, and values to define him/herself? Crisis refers to the individual’s period of engagement in choosing among meaningful alternatives. Commitment, on the other hand, refers to the degree of personal investment the individual exhibits. Marcia (1980) determined the individual’s identity status consisted of two variables, crisis and commitment. In this study, we adapted the notion of Marcia’s identity status paradigm to measure the state of identity formation.

The third theory is individuality. Individuation from one’s family is critically important to the establishment of a mature ego identity during late adolescence in the western theory (Blos, 1967; Bowen, 1978; Erikson, 1968; Fogarty, 1976; Josselson, 1980; Karpel, 1976). Adolescence as well as emerging adult (Arnett, 2000) are periods of conflict between self and society. To adjust to society as a member of a group, students have conflicts not only with the external world but also within their “self” with regard to selecting their own values. As they start to explore to achieve their own identity, their self-consciousness develops, which leads to individuation. However, in Japan, minimal study of individuality has been conducted in the field of career development during the transition from school to work. Another important element of individuality is loneliness. Ochiai (1989) investigated the structure of loneliness by studying Japanese high school and university students and developed the *Loneliness Scale of Ochiai* (LSO). The scale consisted of two variables: (a) awareness of individuality,

and (b) understanding and sympathy with others. Grouping of these two dimensions into four types by crossing them showed the representative types of loneliness. In another study, Masubuchi (2014) indicated that the sense of fulfillment in properly spending time alone may assist an individual to develop his/her identity formation. Literature has shown that identity is closely linked to career development. In addition, individuality is another factor that could influence career development. Figure 1 shows the conceptual framework. Identity formation (independent variable) is assumed to affect the career development (dependent variable). In addition, individuality (moderator variable) might also influence the identity-career development relationship.

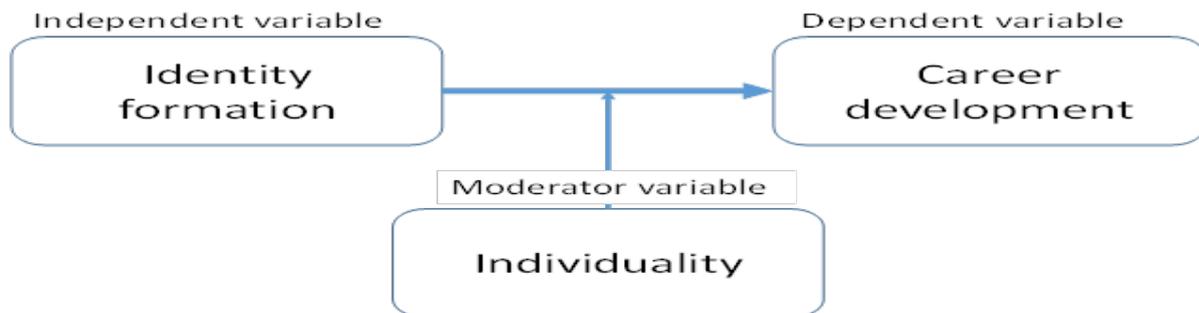


Figure1: Conceptual Framework

## **PURPOSE AND OBJECTIVES OF THE STUDY**

The purpose of this study was to investigate the career development during the school-to-work transition among the students of middle-ranked universities in Japan. Specifically, the objectives of this study were to:

1. Determine the features on identity formation of students attending middle-ranked universities in Japan.
2. Identify the features of individuality of the students.
3. Investigate their development on identity formation and individuality during the transition from school to work.
4. Determine the differences in career development processes of both groups and investigate the important factors.

## **METHODOLOGY**

We used an exploratory sequential design of the mixed method (Creswell, 2015). The intention of this design was to begin with a quantitative method in large number of participants (Study 1), to then divide them into some groups and to select some participants from each group to examine their transition for three years (Study 2). Finally, a qualitative study was conducted by interviewing the participants (Study 3). This process enabled us to see the detailed process of their career development and to determine the important variables affecting their decisions.

We also implemented a longitudinal design with 3 measurements and 2 interviews. The first measurement was in July 2015, which was almost the end of the 1st semester <Time 1>. The questionnaires were administered during regular class time to randomly selected students in seven middle-ranked universities in Tokyo. A total of 475 students took 10-20 minutes to complete the questionnaires. After Time 1, 18 students from the participants were selected from the different modes of identity statuses, according to Kato's classification which will be explained in the procedure. In July and August 2016, the same questionnaire used as the first measurement at Time 1 was administered to them <Time 2>. The third measurement was conducted from November 2017 to January 2018, which was almost the end of the 2nd semester <Time 3>. To confirm the transition of the interviewees, the data from the questionnaires at Time 1, Time 2 (18 students) and Time 3 (16 students because 2 students

refused to answer the questionnaires) were all combined and examined as the data of 512 students. All the statistical analyses were conducted using SPSS version 23. Among the 18 students, we adopted 8 sophomore students (6 males and 2 females) from different modes of identity status according to Kato's classification (2 in Diffusion-Moratorium Middle, 4 in Diffusion, 2 in Achievement-Foreclosure Middle). We depicted their career development trajectories based on the interview data taken during their sophomore year to senior year until they concluded job hunting activities. Each interview session lasted 60-90 minutes.

## RESEARCH PROCEDURES

### Study 1

#### *Measure 1: Identity Status Scale*

In order to investigate the identity formation, we used *Kato's Identity Status Scale*. Earlier, Marcia (1966) used semi-structured interview to analyze the identity status, Kato (1983) developed the Japanese version of the identity status scale for Japanese university students based on Marcia's notion. This scale consisted of four items related to *commitment in the present*, such as "I am trying hard to achieve my goals", four items related to *crises in the past*, such as "I have deliberated over what kind of person I was and what I wanted to do in my life", and four items related to *the desire for future commitment*, such as "I am eager to find something I can deeply commit myself to". All 12 items were rated on a 6-point Likert scale ranging from 1 (completely disagree) to 6 (completely agree). Kato suggested to classify the identity status into six modes: achievement, foreclosure, achievement – foreclosure middle (AF middle), moratorium, diffusion, and diffusion-moratorium middle (DM middle).

#### *Measure 2: Loneliness Scale*

In order to examine individuality, we used the *Loneliness Scale* by Ochiai (1983). The scale comprised two valuables: (a) comprehension and sympathy with others, and (b) awareness of individuality. Ochiai (1983) noted that it is important for late adolescents to develop enough to score high in both variables because he defined doing so as matured aloneness, where students admit that people are destined to be alone because of their individuality and, at the same time, students can encounter others. This measure consisted of 16 items rated on a 5-point Likert scale ranging from 1 (agree) to 5 (disagree). The scale contained nine items related to "whether or not the student realizes that people can understand and sympathize with each other" and 7 items related to "whether or not the student realizes that each person has individuality".

### Study 2

After Time 1, we defined the participants' identity status according to Kato's (1983) criteria and selected candidates from each mode. Then, we selected 18 students – three students from achievement, three students from foreclosure, three students from achievement-foreclosure middle, one student from moratorium, five students from diffusion and three students from diffusion-moratorium middle. They informed us of their student number. We asked them if they could participate for two more years. The participants – consisting of one freshman, nine sophomores, two juniors and four seniors from three universities – agreed to participate. Of these students, 10 were males and eight were females. The second measurement was administered to these 18 participants <Time 2>. However, at the third measurement, two females refused to take part in <Time 3>. Among the 18 participants, eight students (six males and two females), who were sophomores at Time 1, took part in our research until they were senior, which enables us to collect the data of the transition on their career development between school and work (see Table 5).

### Study 3

#### *Interview protocol*

In this study, we examined the narrative of these eight students when they were juniors <Time 2> and at the end of their senior year <Time 3> with an in-depth whole-life interview. The career development process was investigated using the interview data of the eight students. A semi structured interview

protocol was constructed and validated. Before the interview, each interviewee was asked to fill out a *career and identity worksheet* (Banda, 2015) (see Figure 2). This worksheet is a tool for encouraging interviewees to remember and describe important events for them or key persons by which their identity could be characterized. Questions such as the following were asked: “Think of important events that affected your career choice and how you live. What and when were these events? What thoughts and feelings did you have during those events? What goals or purposes emerged from these events? What actions did you take toward your goal? What new values emerged from these events?”

Career & Identity Work Sheet		Name _____	Date _____
Think of important events that affected your career choice and how you live. When and what were from these events? What thoughts and feelings did you have during that events? What goals or purposes emerged from these events? What actions did you take toward this goal? You can start at any event. List these events and their details in chronological order.			
Age or Grade	Irreversible time →		Future
What new values emerged from this event?			The 3rd layer Value Transformation
The details of the events (or person) of your turning points			The 2nd layer Bifurcation points
Your feeling and actions			The 1st layer Action and feeling
The environment and situation			Social Direction Social Guidance

Figure 2: Career and identity sheet (Banda, 2015)

This protocol was developed using the three-layer model of genesis (TLMG) (Valsiner, 2007). The TLMG is a framework for understanding the transactional nature of signs (Vygotsky & Luria, 1930; 1994) as organized into a system with three layers. The first layer is the level of micro genesis, where humans experience their daily life moment by moment by noticing signs around them. Hence, in the category of feeling and action on the sheet, the emotions and behaviors before the event or transformed emotions and behaviors after the event might be written. The second layer is the level of meso-genesis where meanings emerge. The third layer is the onto-genetic level, where some selected experiences become relatively stable meaning structures that guide the person within his/her life course – constituting a kind of value system for the person. Thus, in the new values category, the interviewee’s transformed sense of values might be written. The career and identity worksheet contains the three layers about which each interviewee wrote his/her experiences. At this stage, the interviewee’s writing might be vague. Then, the interviewer should focus on what is written on the sheet and dig into it and deepen it in the interview. Sometimes, what is written extends to another event. The interviews were usually conducted for approximately 60 to 90 minutes. All interviews were recorded and transcribed.

## DATA ANALYSIS

First, the career and identity worksheet was filled out again by the researchers to add what were mentioned during the interview, and the interviewee’s state of mind was analyzed by interpreting the level of statements and environmental influence. Then, the data on the career and identity worksheet were confirmed by the interviewee. If the interviewee felt the information was incorrect, the statement would be modified according to the interviewee’s suggestion. Finally, the interviewees perceptions of their career and identity were closely examined and analyzed through trajectory equifinality modeling (TEM) (Sato, Mori & Valsiner, 2016; Yasuda & Sato, 2012).

### ***Qualitative research methodology***

TEM is a methodology for detecting the real existence of a human's psychological transition. Equifinality means that the same state may be reached from different initial conditions and in different ways within irreversible time. The notion of equifinality implies multicourse for the same equifinality point (EFP). Equifinality entails arrival at the same developmental end state through various possible pathways. In TEM research, people who have the same experience as EFP are listed and used for sampling. Hence, in this study, the interviewees have the same common denominator. We examined the common points of the bifurcation points (BFPs) and obligatory passage points (OPPs) that most of the interviewees pass through. A bifurcation point (BFP) is a point where alternative options emerge, and a BFP is located on trajectories to the new directions based on environmental support or prevention from other people or occasions. An obligatory passage point (OPP) is a phase or event that persons inevitably experience.

## **RESULTS**

### **Study 1**

#### ***Measure 1: Identity Status Scale***

##### *Exploratory Factor Analysis (EFA)*

Items with communality values of less than 0.2 were excluded beforehand. We conducted EFA on 10 items using the principal factor method with Promax rotation (Table 1). As the eigenvalues varied, we confirmed a three-factor structure. The cumulative proportion of variance explained was 60.50%. The first factor was named exploration and commitment because it contained 6 items that represented the situation in which an individual is exploring autonomously and carrying out some actions to achieve their goal which is supposed to be connected to the future career. The second factor was named experience of crisis because the items indicated experiences in which the individual has ever seriously confronted him/herself in terms of who he/she is and what he/she wants to be. The third factor was named inexperience of critical decision because the items indicated the situation in which the individuals had never made an important critical decision before.

The Cronbach Alpha of factor 1 was 0.79. Factors 2 and 3 have slightly low values of 0.59 and 0.45, respectively. The low values may be due to the factors contained only two items each, which was supposed to make the Cronbach Alphas lower (Table 1). Correlation analyses were conducted between factors. Although Factor 1 and Factor 2 were positively correlated with each other, they were negatively correlated with Factor 3.

Table1: Factor loading from exploratory factor analysis with promax rotation of the identity status scale

Item	The Cronbach's alpha	f1	f2	f3	M	SD
		$\alpha = .79$	$\alpha = .59$	$\alpha = .45$		
	M	3.8	3.72	2.8		
	SD	1.01	1.38	0.67		
1	I'm trying hard to achieve my goals.	<b>.753</b>	.055	.097	3.50	1.39
3	I know what kind of person I am, what I hope and what I try to do.	<b>.729</b>	-.101	.057	3.35	1.38
2	I don't have anything special to put my heart into.(R)	<b>.694</b>	-.162	-.042	4.25	1.49
11	I am thinking seriously about what kind of person I am and what I am trying to do, comparing some possible options.	<b>.679</b>	.257	.030	3.61	1.43
12	I am not sure that I will be able to do anything meaningful in my life.(R)	<b>.642</b>	-.130	-.172	4.47	1.47
9	I am eager to find something I can deeply commit myself to.	<b>.575</b>	.334	.084	3.68	1.54
8	I had a time when I had lost my confidence in my way of life before.	-.236	<b>.937</b>	-.072	3.55	1.58
6	I've deliberated over what kind of person I was and what I wanted to do in my life.	.411	<b>.608</b>	-.054	3.91	1.70
7	I've never had doubts of spending my life to meet expectation of my parants or other people.	.163	-.183	<b>.940</b>	2.85	1.35
5	I've never made cirritical decisions about my own life independently.	-.418	.193	<b>.541</b>	1.35	1.48
Correlation between factors		f1	—	-.32		
		f2	—	.02		
		f3	—	—		

**Cluster analysis**

An analysis of variance (ANOVA) was used to examine group differences (Table 2). Clustering of the variables was carried out using the hierarchical average linkage within the group cluster analysis. The groups emerged in three clusters. The chi-square test showed that there was a significant deviation in the ratio of students between groups ( $\chi^2=270.24$ ,  $df=3$ ,  $p<.001$ ).

Table 2: Analysis of variance between the clusters of the identity status

(range 1-6)	Cluster groups				$F(3,481)$	$p$
	1. Nonactivation	2. Nonactivation with experience of crisis	3. Activation	4. Achievement		
		n = 62 (12%)	n = 23 (5%)	n = 260 (54%)	n = 140 (29%)	
Exploration and commitment	$M(SD)$	2.31 (0.57)	2.67 (0.58)	3.69 (0.63)	4.86 (0.54)	307.17 .000
Experince of crisis	$M(SD)$	2.11 (0.88)	4.07 (0.90)	3.36 (1.15)	4.78 (0.95)	124.31 .000
Inexperience of critical decision	$M(SD)$	4.07 (0.90)	3.98 (1.22)	2.72 (0.89)	2.21 (1.09)	64.83 .000

Note: Means with separate letters differ significantly at the  $p. <.05$  level (with Bonferroni correction).

Group 1 showed nonactivation because of its low exploration and commitment and experience of crisis scores and high inexperience of critical decision score. This group comprised 62 (12%) students. Group 2 was titled nonactivation with experience of crisis because of its high score in experience of crisis, its slightly high inexperience of critical decision score and its low exploration and commitment score. This group consisted of 23 (5%) students. Group 3 was titled activation because its exploration and commitment, experience of crisis and inexperience of critical decision scores were medium. This group included 250 (54%) students. Group 4 was titled achievement because of its high,

high, and low scores in exploration and commitment, experience of crisis and inexperience of critical decision, respectively. This group comprised 140 (29%) students.

To answer Objective 1, the data showed the development stage of identity formation. A hypothesis emerged that students might develop their identity in the following order: (a) Group 1: nonactivation, (b) Group 2: nonactivation with experience of crises, (c) Group 3: activation, and (d) Group 4: achievement.

**Measure 2: Loneliness Scale (EFA)**

Five items with communality values of less than 0.2 were excluded after factor analysis. Then, two items that lowered the reliability of scale was excluded. We conducted EFA on 9 items using the principal factor method with Promax rotation (see Table 3). As the eigenvalues varied, i.e., 3.86, 1.22, 0.82, we confirmed a two-factor structure. The cumulative proportion of variance explained was 56.45%. We named the first factor, containing 5 items, destined aloneness because it represented the sense of feeling that individuals are fundamentally alone and that others might not understand. We named the second factor, containing 4 items, mutual empathy because it indicated the belief that individuals could understand and sympathize with each other. The Cronbach Alpha for the first and second factors were 0.83 and 0.68, respectively. The relationship between factors showed that Factor 1 and Factor 2 were negatively correlated.

Table 3: Factor loadings from exploratory factor analysis with promax rotation of the LSO

Items	Cronbach's alpha	f1	f2	M	SD
		$\alpha=.83$	$\alpha=.69$		
	M	2.25	4.02		
	SD	0.1	0.74		
11	I think people are ultimately destined to live alone.	<b>.853</b>	.120	2.19	1.27
9	I find people lonely by nature.	<b>.782</b>	.037	2.52	1.45
5	I think I am nothing but a loner in the end.	<b>.672</b>	-.011	2.72	1.48
10	I think no one understands my way of life.	<b>.539</b>	-.164	4.12	1.11
14	I feel nobody understands me.	<b>.537</b>	-.215	4.12	1.1
3	I feel other people understand me.	.004	<b>.658</b>	3.66	1.14
4	I believe someone understands my way of life.	-.030	<b>.644</b>	3.97	1.04
2	I believe people can share joys and worries with others	.059	<b>.585</b>	4.44	0.9
15	I believe people can understand each other's feelings.	-.070	<b>.454</b>	4.02	1.01
Correlation between factors		f1	f2		
	f1	—	— .62		
	f2		—		

**Cluster analysis**

Clustering of the variables was carried out using the hierarchical average linkage within the group cluster analysis. The groups emerged in the three clusters. An ANOVA test was conducted to examine the group differences (Table 4). In addition, the chi-square test showed that there was a significant difference. Group 1 was found to be independent because of its slightly high scores in destined aloneness and mutual empathy. Group 2 was in harmonization without aloneness because of its slightly low score in destined aloneness and its slightly high score in mutual empathy. Group 3 showed strong empathy without aloneness because of its low score in destined aloneness and its high score in mutual empathy. Group 4 was found to be in isolation because of its high score in destined aloneness and its low score in mutual empathy. Significant deviation in the ratio of students between groups ( $\chi^2=135.27$ ,  $df=3$ ,  $p < .001$ ).

Table 4: Analysis of variance between the clusters of the LSO (range 1-5)

	<i>M(SD)</i>	Cluster groups				<i>F</i> (3,471)	<i>p</i>
		1. Independence	2. Harmonization	3. Strong empathy	4. Isolation		
		<i>n</i> = 114 (24%)	without aloneness <i>n</i> = 136(29%)	without aloneness <i>n</i> = 201 (42%)	without aloneness <i>n</i> = 24(5%)		
Destined aloneness		3.21 (0.54)	2.33 (0.47)	1.37 (0.38)	4.19 (0.45)	569.48	.000
Mutual empathy		3.54 (0.59)	3.95 (0.57)	4.49 (0.44)	2.43 (0.64)	156.81	.000

Note: Means with separate letters differ significantly at the *p* < .05 level (with Bonferroni correction).

To answer Objective 2, the data showed that *Independence* group comprised 114 (24%) students; *Isolation* group 24 (5%); and other groups 337 (71%). The data illustrated that students who have *high mutual empathy*, but *without aloneness*, were the majority in the middle-ranked universities.

### Study 2

Table 5 displayed the change of the cluster group as the eight interviewees' year in university increased from the beginning of their sophomore year to the end of their senior year when their job-hunting activities had almost finished. From the viewpoint of their transformation, we divided them into two groups. Group A consisted of the students who could end their job-hunting activities with full satisfaction accompanied by a great deal of experiences inside and outside of universities. Group B consisted of students whose job-hunting activities were not active and whose career choices were passive.

Table 5: The yearly transformation of the interviewees' cluster group

Student number	Kato's identity status at Time 1	Gender	Cluster group (Identity Status)			Cluster group (LSO)			The result of job hunting	
			Time 1	Time 2	Time 3	Time 1	Time 2	Time 3		
			sophomore	junior	senior	sophomore	junior	senior		
Group A	1	DM middle	F	2	3	4	3	1	3	} autonomous satisfied well activate
	2	Diffusion	M	2	3	4	2	3	3	
	3	Diffusion	M	2	4	4	—	3	2	
	4	Diffusion	F	2	3	3	1	1	1	
Group B	5	AF middle	M	4	4	3	1	1	2	} indecisive dependant unsuccessful not activated
	6	AF middle	M	4	1	1	2	4	1	
	7	Diffusion	M	3	4	1	3	—	1	
	8	DM middle	M	3	3	3	2	2	1	

To answer Objective 3, the data showed that Group A supported the hypothesis on the identity formation which developed in the following order: (1) nonactivation, (2) nonactivation with experience of crises, (3) activation, and (4) achievement, whereas Group B did not support it. The identity status cluster of Group A was nonactivation (1 or 2) when those in this group were sophomores. However, their cluster group changed to activate or achievement after they concluded their job-hunting activities and received official job offers from desirable companies. In contrast, the identity status of Group B did not support the hypothesis because their cluster groups were in achievement or activation in their sophomore year and changed to nonactivation or activation at the end of their senior year. Their development seemed to take the reverse direction. The interviewees revealed that their job-hunting activities were not enough to find jobs or companies by themselves. Two students depended on recruiting agents who found jobs for the students. One student could not obtain any job offer from companies. The other student delayed the timing of finding a job because he went abroad, although he had no plans for what he wanted to do in the foreign country. In addition, to answer Objective 3, the data showed that, at Time 3, three out of four students in Group A were in the high empathy without

aloneness groups and only one student is in independent group. However, three out of four students in Group B were in independent group.

### **Study 3**

#### ***Group A: Their job-hunting activities were adequate but they have successful job offers from desirable companies***

Focused on the common cognitive experiences related to their career development – which were narrated by the students of Group A – we analyzed their narratives using TEM methodology by placing equifinality point (EFP)1 as enrollment in a middle-ranked university and equifinality point (EFP) 2 as a satisfactory job-hunting result (see Figure 3). Table 6 showed the substances of each point.

To answer Objective 4, the data showed that the students of Group A had experiences of crises and exploration before entering universities, whereas their awareness on identity formation when they entered universities was put back where they started, in which the cluster group of identity prompted nonactivation. Their job-hunting activities were adequate with deep exploration and commitment as well as awareness of identity achievement at the end of job hunting (see Figure 3). Following were the analyses on each extracted point.

#### ***Obligatory passage point (OPP) 1: Relationship with parent(s)***

From childhood to adolescence, two groups were found. One is a group where the students felt comfortable with their parents. The other was a group where they felt annoyed in their relationship with their parents and had frustrations at home. Regarding their relationship with their parents, Student 1 and 2 were relaxed with their parents. Student 1 used to be self-assertive, as a result of which she was bullied by her classmates. Her parents made her move to a private school to provide her a better educational environment. Student 2 was born in a large family in the countryside, and his elder brother was his role model who showed him his bright future. Both of them were raised in homes where their desired were not suppressed. On the other hand, Student 3 was dissatisfied with his parents because his father could not work due to depression and his mother was overprotected him. He protested against his parents and was arrogant at home, but he was obedient at school. Student 4 was forced to study hard by her parents, who was devoted to her education. Although she could pass the entrance examination for a high-ranked high school, she felt that she sacrificed herself and did not have any free time as a child. She began to refuse to study. Both of them have had a hard time with regard to not being what they really were.

Table 6: The substances on TEM analysis of Group A

Point	Theme	Content	Period
Obligatory Paggage Point (OPP) 1	Relationship with the parent(s)	Positive relation <ul style="list-style-type: none"> <li>• Self-assertive</li> <li>• Protected</li> <li>• Confident</li> <li>• Having a role model</li> </ul> Negative relation <ul style="list-style-type: none"> <li>• Annoyed</li> <li>• Frustrated</li> <li>• Feeling self-sacrificed</li> </ul>	Childhood Adolescence
Bifurcation Point (BFP) 1	Independent career choice to break through the past crises	Self-growth desire <ul style="list-style-type: none"> <li>• Autonomus choice of the academic speciality</li> <li>• Growth need from the present situation</li> </ul> Independent choice of new environment <ul style="list-style-type: none"> <li>• Active escape from parents and unpreferable environment to find a new value</li> </ul>	Late adolescence
Equifinality Point (EFP) 1	Entering the middle-ranked university	Entered the university as she/he wished Entered the middle-ranked university because she/he failed the entrance exams to selective universities	
Bifurcation Point (BFP) 2	Autonomous activity with metacognitive self-understanding	Increasing the amout of activities (exploration and commitment) <ul style="list-style-type: none"> <li>• Aware of the intentionality to be professional</li> <li>• Aware of the preference to be a generalist</li> <li>• Aware of her/his ability to turn inferiority into improvement</li> <li>• Aware of the discrepancy between actual-self and ideal-self</li> </ul>	Emerging adult 〈Time 1〉
Obligatory Paggage Point (OPP) 2	Visualizing the future direction	Clarification of her/his speciality <ul style="list-style-type: none"> <li>• Clarification of her/his future occupation</li> <li>• Embodiment of the strategy on working in an organization ( as a leader or a follower)</li> <li>• Acceleration of the preperation for achieving the goal</li> </ul>	〈Time 2〉
Equifinality Point (EFP) 2	Satisfied with her/his career choice	Successful result on job-hunting activity	〈Time 3〉
Futer perspective	Working value	<ul style="list-style-type: none"> <li>• Being a good parent rather than working outside from home</li> <li>• Working in the same company until retirement</li> <li>• Preference for inter-organizational career mobility</li> </ul>	

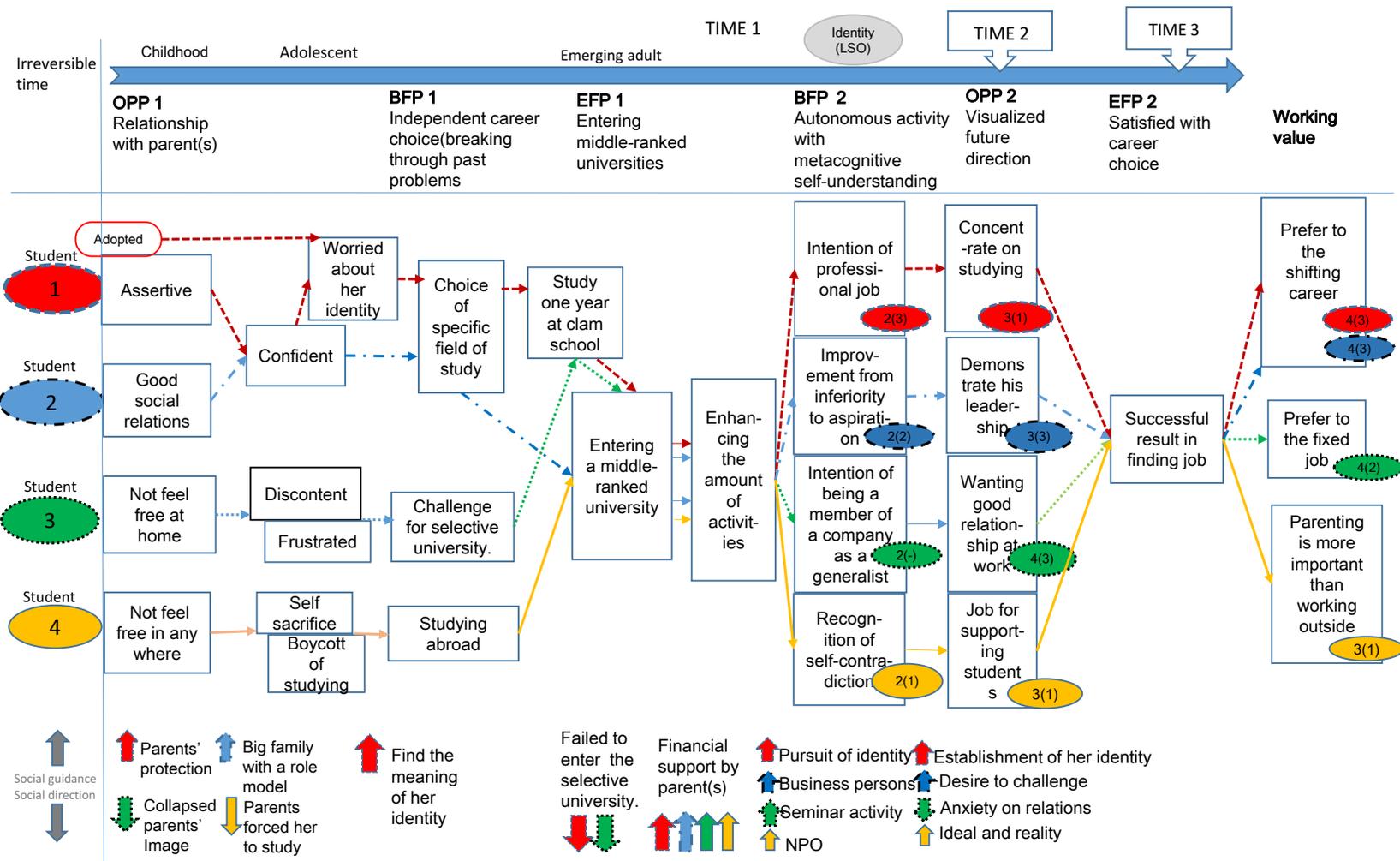


Figure 3: Time line

***Bifurcation point (BFP) 1: Independent career choice to break through the past crises***

The BFP as *independent career choice to solve the past problems (crises)* was analyzed through the narratives of all the students of group A, when they were at the end of their high school. Student 1 realized her talent inherited from her biological mother. She decided on the academic specialty to study and challenged herself to enter a high-ranked university. Student 2 wanted to leave the environment where most students started working after graduation from high school and preferred to be an active business person in a secure world. He chose to go to Tokyo from the countryside to study at university without regard for the university's academic rank. Student 3 had been excluded by the members of a club activity that he had put his strength into. Then, he abandoned his deep attachment to the club activity and switched his focus to entering a high-ranked university. Student 4 looked for different values from her parents. She applied for the support of a local foundation and as a result she could go abroad to study away from her parents. She learned the democratic way of living in foreign country. After returning to Japan, she chose an unselective university to cultivate herself.

***Equifinality point (EFP) 1: Entering the middle-ranked university***

Both Students 1 and 3, who aimed to enter high-ranked universities, failed to enter the universities they desired to go and spent another year studying for the entrance examination. However, they both failed again to enter their preferred universities and they decided to enter middle-ranked universities – feeling chagrined and disappointed. However, they could interpret the meaning of studying at universities positively because they made utmost efforts to achieve their goals and it was not difficult for them to accept the reality. They soon started enjoying collage life. Students 2 and 4 focused not on the name value of the university but on the field of study of the university. They entered a middle-ranked university without any indirect route.

***Bifurcation point (BFP) 2: Autonomous activity with metacognitive self-understanding***

Most students started carrying out some activities autonomously within or outside of the universities as soon as they entered them. They attempted to understand themselves. Student 1 identified herself with her biological mother more deeply and found herself having the same preference of a profession as her mother. She deepened her exploration to be closer to her mother's profession. Student 2 felt inferior whenever he met excellent students and businesspersons through his activities. However, this sense of inferiority motivated him to develop himself, and it established a good self-improvement system within him. Student 3 found himself as an important member of an organization and felt significant meaning of working as one of the member of the organization. Student 4 found herself to be inconsistent because she exhibited leadership to others but realized that her actual ability did not reach her ideal level.

***Obligatory passage point (OPP) 2: Visualizing the future direction***

Student 1 focused on studying wholeheartedly to pass the examination for a profession that is the same as her biological mother's. Student 2 aimed to enter a company where he could be a change agent and exhibit leadership. Student 3 understood that he lived in a protected environment in the university and felt dismayed by the interpersonal relation in the business world. He decided to carefully choose a company that provided a good working environment and social welfare. Student 4 integrated her self-contradiction and understood what she really was. She decided to support people who wished to pursue their dream instead of being a leader herself to pursue her dream.

***Equifinality point (EFP) 2: Satisfied with her/his career choice***

After their deep introspection and autonomous job-hunting activities, all of these students were able to receive official job offers from desirable companies. They concluded their job hunting with satisfaction.

***Working values for the future***

Student 4 did not have a future vision to continue to work in a company, although the other three students had positive working perspectives for the future. Student 4 said that she would like to be a good parent rather than working outside. She had protested against her parents and explored herself to

find new values different from those of her parents. However, as a result, she found that she had the same values as her parents because she chose a stable job, which was what her parents suggested her to do. She said she would like to put an emphasis on raising her future child so that her child could grow up to be what she/he really was. Students 1 and 2 had flexible working values, as they thought that they were able to change their career according to their condition and family situation. Student 1 mentioned that she would like to keep working and would not stay in the same situation but develop her profession into an applied business according to her lifestyle. Student 2 was confident enough to say that he would be able to manage his life regardless of whatever happened. In contrast, Student 3 was not so confident in his ability to compete with others, saying that he would like to continue working in the same company until retirement. Dominant parental influences in childhood were still reflected in their working perspectives for the future.

***Group B: Their job-hunting activities were passive and not active***

We paid attention to the common phenomena that were narrated by the students of Group B. Using TEM methodology, we placed entering the middle-ranked university as equifinality point (EFP) 1 and “unsatisfactory or acceptable result in finding job” as equifinality point (EFP) 2. We failed to extract any bifurcation points (BFP) because no determination with regard to choosing their own way had been narrated among the students in this group. Instead of bifurcation points, we could find obligatory points where most of the students of this group went through (Figure 4). Table 7 showed the substances of each point. To answer Objective 4, the data showed that the students of Group B have some troubles in awareness of grasping reality, because we found several gaps between their thoughts and actions by analyzing their narratives. Following were the analyses on each extracted point.

***Obligatory passage point (OPP) 1: Difficulties in organizational behavior***

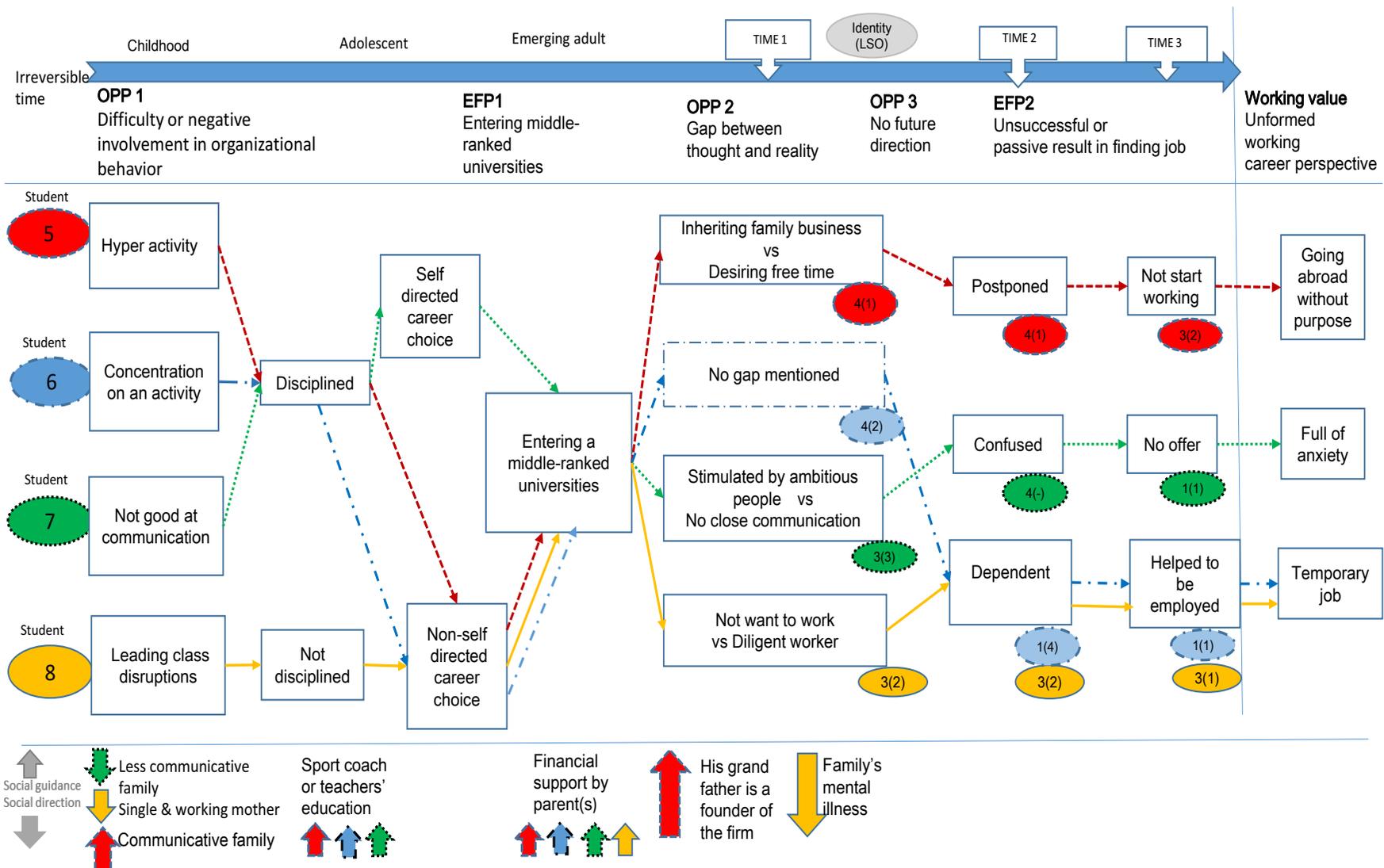
The common behavioral tendency in their childhood narrated by Students 5, 6 and 7 was the difficulties in working in groups because of their lack of communication skills. Each of these students realized that they had a tendency toward attention-deficit/hyperactivity disorder (ADHD) or were obsessed with a certain thing. Fortunately, all of them were trained to be socialized by strict teachers or coaches in club activities in high school and learned how to cooperate with each other in a team and contribute to society in a positive manner. All of them acknowledged that high school life provided good experiences for improving their communication skills to some extent. On the other hand, Student 8 had no problem to work in groups. However, he showed negative behaviors in handling class disruptions at the end of elementary school. He said that his teacher revealed the fact that his mother was divorced, which made all his classmates sympathize with him and protest against the teacher. He was always attached to his excellent elder brother and stayed with the brother’s friends because by doing so he could behave like a spoiled child. Thus, his communication strategy was not to build a balanced relationship with others but, rather, to be an attention seeker. Hence, he also seemed to have difficulties in organizational behavior.

***Obligatory passage point (OPP) 2: Gap between thought and reality***

In the narrative of Students 5, 6 and 7, we could find a gap between what they thought and what they did in the reality. However, they did not suffer from self-contradiction. Instead, they did not seem to notice that they were self-contradictory. Since Student 7 could not find value in studying at his university although he entered the faculty he was interested in, he participated in self-enlightenment seminars which were held by motivated students aiming to be entrepreneurs. He was stimulated by such ambitious students and desired to establish his own business. However, in his narrative, there was no real communication with these motivated people or commitment to the business. Student 5 said that he might inherit his grandfather’s large company after harsh training. However, he said that he prioritized having unrestrained free time. Student 8 described himself as a diligent worker because he was never late or absent from part time job and school. He said he always had satisfactory results in his grades. In addition, he felt angry at those who did not fulfill their duties. Nevertheless, he confessed that he had negative image of working and did not want to start working. This negative working image was due to his family situation. His mother had been overworking to support the family budget as a single mother, and his elder brother had quit his job because he suffered from depression, despite being an excellent student during his time in school.

Table 7: The substances on TEM analysis of Group B

Point	Theme	Content	Period
Obligatory Passage Point (OPP) 1	Difficulties in organizational behavior	<ul style="list-style-type: none"> <li>•Handling class disruption</li> <li>•Lack of communication skill</li> <li>•Strong preference for one thing</li> <li>•Tendency toward ADHD</li> </ul>	Childhood
Equifinality Point (EFP) 1	Entering the middle-ranked university	<ul style="list-style-type: none"> <li>•Dependent career choice allowing the guidance from others</li> <li>•Independent career choice</li> </ul>	Late adolescence
Obligatory Passage Point (OPP) 2	Gap between thought and reality	<ul style="list-style-type: none"> <li>•No image of working in the future vs Earnest and diligent at school and part-time work</li> <li>•Pursuing free time vs Succession of family business</li> <li>•Aspiration to contact with an ambitious person vs No real communication with such people</li> </ul>	Emerging adult {Time 1}
Obligatory Passage Point (OPP) 3	No future direction	<ul style="list-style-type: none"> <li>•Postponed the career decision making</li> <li>•Dependent on the job placement company</li> <li>•Confused</li> </ul>	{Time 2}
Equifinality Point (EFP) 2	Unsatisfactory or passive result in finding a job	<ul style="list-style-type: none"> <li>•Postponed and escaped</li> <li>•Acceptable</li> <li>•Haven't received job offers</li> </ul>	{Time 3}
Future perspective	Working value	<ul style="list-style-type: none"> <li>Unformed working career perspective</li> <li>•Consider the job as temporary</li> <li>•Anxious</li> </ul>	



***Obligatory passage point (OPP) 3: No future direction***

None of the students of this group visualized their future career and goals during their job-hunting activities. Student 7 believed only in the information on the website and considered how to catch up with the global trend. However, he did not take pragmatic action to cultivate himself. In addition, he refused to visit the career center at university to obtain the job-hunting information and to get support of career counselors. Students 6 and 8 did not perform independent job hunting. Instead, they used a placement service. Student 5 postponed his career decision making on the grounds that he would inherit his family business in the future.

***Equifinality passage point (EFP) 2: Unsatisfactory or passive result in finding a job***

Student 7 did not receive any official job offer from a company at the end of his senior year. Students 6 and 8 were dependent on recruiting agencies and left their career choice to the career counselors. Student 5 decided not to start working after graduation from university because he spent one year abroad to study English.

***Unformed working career perspective***

None of these four students talked about their future career vision, and none of them seemed to have created a career perspective. Student 7 mentioned that he was going to pursue the social trend, but he felt deep anxious about his future because no company accepted him. He was confused by the differences from his self-concept to his estimated social self. Student 6 was relieved to find a job even though it was not a suitable job for a new graduate. Student 8 said that he aimed to work in his company at least three years. Both Students 6 and 8 had a temporary working vision, and it was not connected to a possible future. Student 5 acknowledged that he would soon become bored with life in abroad. Studying abroad did not seem to be his own choice.

## DISCUSSIONS OF THE RESULTS

Based on the results of the cluster analysis of identity status, we formed a hypothesis that a normal identity development process might be a transition consisting of (a) *nonactivational*, (b) *nonactivational with experience of crises*, (c) *activation*, and (d) *achievement* which involves a high level of *commitment and exploration*, a high level of *experience of crises* and a low level of *inexperience of critical decision*. Due to the transition of clusters in the four selected students whose job-hunting activities were successful (Group A) – the hypothesis was confirmed.

The students in Group A made autonomous career choices during their time in high school to solve their personal problems (bifurcation point 1). The students who had a good relationship with their parents were confident in their ability and chose the faculty of the university to think about the possibility of their future career according to their preference. On the other hand, the students who had discord with their parents considered their home to be an uncomfortable place. They engaged in exploration to escape from given values by parent(s) and to find new values. In all cases, the students in Group A had deep exploration and commitment.

Despite their deep exploration and commitment of the students in Group A before entering university, their identity status cluster at Time 1 (at the beginning of their sophomore year) was *nonactivation*, which means that they felt that they had not yet explored and committed to their career. Some students aimed to enter selective universities but failed. Some students were confident in their ability but realized it was only in a limited area. Hence, one question arises, “why did the gap between their narrated reality and self-evaluation emerge?” We considered that they might interpret their past efforts as inadequate and re-evaluate their performances in relative to the whole society. It seems that their metacognitive abilities to see themselves in bird-eye view could develop.

There was another finding on the students of Group A. One out of four students belonged to the *independent* group. However, the majority cluster groups of the LSO on Group A was *harmonization without aloneness* and *strong empathy without aloneness*. Also, as a total, groups with a low *destined aloneness* score and a relatively high *mutual empathy* score accounted for 71%. Based on the data, the students at middle-ranked universities might have a tendency toward high mutual empathy but lack a consciousness of aloneness.

On the other hand, the students in Group B did not support the hypothesis of regular identity development. Although they did not talk about experiences of exploration, their identity status cluster groups at Time 1 were *achievement* or *activation*. Hence, among these students the cognitive gap might have occurred. To that end, we found three bases: (a) All of them talked about episodes in which they had difficulties in working in groups such as miscommunication with friends and negative behavior with respect to cooperation during their time in elementary school. (b) There were discrepancies between their thoughts and their practical activities in their narratives when they were juniors. However, frustrations or conflicts were not mentioned. (c) At Time 3 (almost the end of their senior year), their identity status cluster groups shifted from *achievement* to *activation* or from *activation* to *nonactivational*. They might have realized that their exploration and commitment were less active than those of other students around them just before graduating from university. It seems that they had a delayed recognition of their environmental situation.

Another finding regarding Group B was that three students out of four were in the *independence* cluster group of the LSO at Time 3. Theoretically, we named the *independence* group because both factors, *destined aloneness* and *mutual empathy*, were high. These students of *independence* might think that people were destined to be alone but people can empathize with each other. By facing the reality of difficulties in having jobs, they might have recognized that they were alone. At the same time, they might have considered that they needed connectedness with someone who truly understood them.

## **IMPLICATIONS AND CONCLUSION**

The purpose of the study was to investigate career development during the school-to-work transition among the students of middle-ranked universities in Japan. This research targeted students attending middle-ranked universities in Japan, which confirmed the career development processes between school and work from the perspective of the identity formation. While attending university, students shifted from never having experienced psychological crises and/or the making of critical decisions to situations where they increasingly experienced and/or explored the need to make critical decisions via the experience of psychological crises. And, by having to experience psychological crises, deep explorative activities and the making of critical decisions that undermine one's sense of value to get through the task of finding a job. Hence, it was clear that students achieve identity development. However, our research showed that students who did not achieve transition smoothly between school and work had problems with identity formation. These students in lower years of university had self-evaluated themselves highly as having already experienced extensive psychological crises and having fully judged and explored issues for important decision-making; yet, uncertainty crept into these evaluations as they advanced through university. Thus, by the time of graduation, they were unable to acknowledge the discrepancies between subjective-self and objective-self. Hence, students of middle-ranked universities who evaluated themselves highly in their sophomore year showed risky career development after their sophomore year. The following illustrated the three findings.

First, students of middle-ranked universities whose career development was steady and who had achieved identity formation were seen to have a good meta-cognitive strategy. In the interview, the students spoke deeply of directly experiencing personal crises before entering university and how explorative activities and problem solving were used to overcome the crises. However, the questionnaire results showed that they have not yet completed for any of the issues of psychological crises including making of critical decisions and explorative activities when they were sophomore years. As time passed in university life, the students entered into trial-and-error processes by deciding their own goals, succeeding in growth through copious activities and study, acquiring satisfying job hunting results and fulfilling identity development. Ridley (1991) termed one's own meta-cognitive awareness as reflective self-awareness, observing that the higher levels of reflective self-awareness are the functions of seeing and understanding one's control over thinking and learning process. The self-regulation that follows self-seeing and self-understanding can be discovered within the students' stories. For example, after Student 4 realized the contradiction in ideal self and real self (BFP 2), she considered her own real capability and chose a work type that she should pursue (OPP 2), which was a way of adjusting her strategy so a high level of reflective self-awareness can be presumed. Conversely, in the narratives of students in Group B, where they depended on the employment assistance companies or

they failed in job hunting, the capacity to self-monitor was seen to be weak (OPP 2). This was because there were some discrepancies between subjective-self and objective-self that could hinder career development.

Second, among the students attending middle-ranked universities, the cluster analyses of LSO showed that 24% of them were in the *independent* group (Table 4). However, among them, those who had a western type of independence might be a minority. In Group A, Student 4 was the only person in the *independence* group. In her narrative she said that she had learned how important it was to make her own decisions, because most of her Japanese friends just followed the trend. The experience of studying abroad in the western country seemed to change her value system, where she realized that an individual totally differed from others even though they were close to each other and she could strongly sympathize with others with a view to admit the individuality. She was considered to be a western-type *independent* person. Meanwhile, Students 6, 7, and 8 in Group B were analyzed to be *independent* at Time 3. When Student 6 could not obtain any job offer from the firms, he said he was anxious about his future. So he was trying to start something new to catch up with the trend. He might have been looking for what he did not have. Students 7 and 8 gave up finding jobs by themselves and relied on the recruiting agency to search for jobs. They narrated that they were currently relieved to get hired but seemed that they did not have sustainable visions on the occupations. In this situation, they thought people were destined to be alone, but they still believed that people could empathize with each other even though they actually did not have strong bonding. This type of *independence* might be a new type among Japanese. However, considering that the *independence* group includes such students as in Group B, a western-type *independent* person may be a minority in the middle-ranked universities.

Third, among the students attending middle-ranked universities, the cluster analyses of LSO showed that 71% of them did not experience *aloneness*, which could extract a distinct feature. Students 1, 2 and 3 of Group A put an emphasis on the relations with others and less consciousness of destined aloneness. Especially, Student 1 was in a foster home when she was a baby because her mother had passed away after divorcing her father. In the process of searching for her identity, she finally chose the same occupation as her mother. The sense of connectedness with her identity might have strengthened her determination to choose her career. Also, in the narratives of Students 2 and 3, they seemed to need something, such as family and a group of friends, which might represent their identities.

In conclusion, the successful groups, those who have high mutual understanding without aloneness are considered to be the majority. In the Japanese working society which put an emphasis on the harmony, these characteristics may be highly adaptive. However, these features of students graduated from middle-ranked universities raised a question if they can be the promising future workers in the current highly competitive and globalized society. To answer the question, future studies need to look at the relationship between reflective self-awareness ability and career development of students of middle-ranked universities.

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