The Career Development of Former Chinese International Students in Japan: Influences of Their Developmental Networks

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Abstract: The purpose of this study was to examine the relationships between the developmental networks of skilled Chinese employees in Japan and their career outcomes in relation to career satisfaction, organizational commitment, and turnover intention. The participants included 115 former Chinese international students who completed an online survey. The results revealed that there were multiple developers within and beyond the workplace that were involved in their career development. Furthermore, the content and structure of the skilled Chinese employees' developmental networks were crucial for their career development in the host country and led to various career outcomes. Frequent communication with developers of the networks enhanced their career satisfaction in Japanese companies. Career support provided by developers within the organization played an essential role in their organizational commitment. However, their developmental networks were not associated with their turnover intention. The current study was the first to explore the influences of the developmental networks of former Chinese international students on their career development in Japan. This study contributes to an enhanced understanding of how to improve Chinese skilled migrants' career outcomes in Japan.

Keywords: Former Chinese international students, Japan, developmental networks, human resource management, job satisfaction, organizational commitment, turnover intention

1. Introduction

Japan, one of the most advanced economies in Asia, implemented a strict approach to immigration for a number of decades (Conrad & Meyer-Ohle, 2019). For several decades after the Second World War, unlike other advanced countries, Japanese society realized their labor demand without employing foreign labor (Achenbach, 2016). However, with the significant growth of the economy and social structure changes, this pattern has changed since the late 1980s. Because of the pressures associated with a decline in fertility, a rapidly aging population, and global competition for talent, Japan has been compelled to employ foreign workers (Fuess, 2003). The Japanese government adjusted its immigration policies to open the *side-door* for unskilled and semi-skilled foreign workers by creating a trainee program and accepting Nikkeijin, that is, Japanese descendants from South America (Liu-Farrer, 2009).

However, more skilled foreign workers have also been encouraged to come to Japan. The revision of the Immigration Control and Refugee Recognition Act in 1989 resulted in an increase of working visa categories to 12: professor, journalist, legal/accounting services, research, engineer, artist, investor/business manager, medical services, instructor, specialist in humanities/international services, skilled labor, and intra-company transferee. Since the 2000s, there has been an enhanced understanding of the necessity of highly-skilled workers

in Japanese society. Furthermore, the Point-Based Preferential Immigration Treatment for Highly-Skilled Professionals system was introduced for such foreign workers in 2012. The incentives of this new kind of work visa employed to attract highly-skilled foreign workers include "work permits for spouses, fast family reunification, residency permits for the extended family and maid, and most prominently, expedited track to permanent residency" (Morita, 2017). Currently, these 12 work visa categories are normally utilized to define skilled foreign workers in Japan.

Since the 1980s, the Japanese government has adopted strategies to attract and retain international students who are viewed as prospective skilled workers. The goal of the Plan to Accept 100,000 International Students was realized in the 2000s after being launched in 1984. Furthermore, a new plan that aims to accept 300,000 international students in Japan by 2020 was adopted by the government in 2008. This new plan details how international students are to be encouraged not only to study in Japan, but also work in the country after graduation (Ministry of Education, Culture, Sports, Science and Technology, MEXT, 2008). Moreover, universities and institutions were asked to provide wide-ranging support for international students' career development, which comprises internship assistance, job-hunting, and starting a business. Japanese companies are encouraged to change their employment systems and alter their employment environment so as to accept former international students too.

The Japan Student Services Organization (JASSO, 2020) noted that there were 298,980 international students studying in Japan in 2018. Moreover, 59,640 students graduated from institutions of higher education, of which 35.1% found employment in Japan as highly-skilled labor migrants in that year (JASSO, 2020).

In relation to the origins of international students in Japan, the Chinese constitute the majority in the non-Japanese student population. JASSO (2020) reported that 40% of the total international student population encompass Chinese students. In relation to former international students working in Japan, approximately 42% comprise Chinese employees, the largest international group (Ministry of Justice, 2019). Former Chinese international students constitute the most crucial component of skilled labor migrants in Japanese society. Furthermore, their labor market practices present their essential roles in economic globalization (Dou, Matsushita & Sato, 2019; Dou & Sato, 2017; Liu-Farrer, 2009).

The new plan actually achieved its goal in 2019 when there were 312,214 international students in Japan (MEXT, 2020a). However, data from MEXT (2020b) has revealed that despite over 60% of international students' hoping to stay and work in Japan after graduation, nearly half of them have been unable to realize their goals. In addition, they tend to resign from their employment in Japanese companies after a few years (Inai, 2012; Shimada & Nakahara, 2016).

2. Literature Review

2.1. Research on Former International Students in Japan

To ensure international students enter the local market with greater ease, the barriers and constraints with which they are confronted during their job-searching process have been examined and suggestions have been given to universities to assist with the provision of support strategies (e.g., Dou & Sato, 2017; Monma, Takahashi & Inomata, 2019). Scholars have also examined former international students' interests, motivations, and career choices in Japan (e.g., Ma, 2016; Matsumoto, 2013; Murakoshi, 2012; Yamada, Hirata & Nishito,

2012).

Furthermore, researchers have examined international students' experiences after they have entered the Japanese labor market. Even though the Japanese government encouraged companies to change their working environment and working styles to accept foreign employees as mentioned above, former international students still experience various difficulties while working in Japanese companies. These problems include language ability in the Japanese language, content of jobs, communication styles, and Japanese business environment and systems while working in Japanese companies (Inai, 2012; Komatsu, Huang & Kagami, 2017; Suzuki, 2015; Tsukasaki, 2008; Yokosuka, 2015).
Studies have also revealed that international students' adjustment to the workplace is affected by both their formal and informal relationships. First, the psychological support and cultural guidance provided by their superiors were demonstrated empirically to be important antecedents that affect former international students' organizational socialization processes (Shimada & Nakahara, 2014; Suzuki, 2015). Second, Miyagi and Nagai (2016) revealed that colleagues' receptive attitudes and support may facilitate former international students' adjustment to Japanese companies. Third, Nabeshima (2016) found that the emotional support from their informal relationships such as those of their parents, local friends, and clients from other companies was associated with international students' adjustment.

These previous studies have extended our understanding of what kind of support former international students received from their interpersonal relationships and its effect on their adjustment to the Japanese workplace. By employing the network approach, studies have found that not only the support but also the structure of individuals' developmental networks was crucial in facilitating their adjustment to the workplace (Dobrow, Chandler, Murphy & Kram, 2012; Higgins, 2000; van Emmerik, 2004). However, as yet, research has not considered the structural characteristics of former international students' developmental networks and their influences.

2.2. Research on Developmental Networks

By integrating theories and methods of social networks with traditional research on mentoring, Higgins and Kram (2001) defined an individual's developmental network as an ego-centric network, a protégé with multiple developers who are interested and take action to enhance his or her personal and professional development. These developers may be found within and beyond the workplace and include supervisors, senior colleagues, peers, family, and community members (Dobrow et al., 2012; Murphy & Kram, 2010). The focal individual's developmental network may be regarded as a subset of the social network in which relationships in particular are associated with career growth (Dobrow et al., 2012). The developmental network has been demonstrated to provide more career benefits than traditional dyadic mentoring relationships (Higgins & Thomas, 2001; van Emmerik, 2004).

Researchers began to examine two structural factors of the development network, namely, the strength of ties and network diversity after Higgins and Kram (2001) first employed the definition of the term in mentoring research. The strength of ties refers to the level of emotional affect, reciprocity, and frequency of communication (Higgins, 2000; Higgins & Kram, 2001). Dobrow et al. (2012) found that relationships with strong ties were characterized by trust, communication, and emotional support and thus, influenced a protégé's career development. Furthermore, strong ties with developers were demonstrated empirically to be positively associated with job satisfaction (Higgins, 2000; van Emmerik,

2004) and salary level (Murphy & Kram, 2010).
Network diversity may be defined as social heterogeneity, that is, the different types of contacts within the network (Higgins & Kram, 2001). The more diverse the network is, the greater the focal person's access to valuable resources and information. Two measures usually employed to examine network diversity include density and range (Dobrow et al., 2012). While density may be described as the degree to which developers know one another, range refers to a variety of different social arenas from which developers originate, for example, school, work, and community (Higgins & Kram, 2001). Dobrow and Higgins (2005) revealed that density was negatively related to the clarity of professional identity. On the contrary, range is positively associated with job offers received, intrinsic career success, career and life satisfaction, job performance, career achievement, and intention to remain (reviewed by Parker et al., 2019).

For a number of decades, researchers have also focused on another characteristic of the developmental network, namely, content or types of support provided by the network (Yip & Kram, 2017). Kram (1985) noted that the developers of such development networks may provide psychosocial support including role-modeling, acceptance and confirmation, counseling and friendship, and career support, which involves sponsorship, exposure and visibility, coaching, protection, and challenging assignments. Research has demonstrated that psychosocial support and career support are both positively associated with intrinsic career success including job and work satisfaction as well as organizational commitment (Allen et al., 2004; Higgins, 2000; Murphy & Kram, 2010; Seibert, Kraimer & Liden, 2001). Furthermore, studies have revealed that only career support was related to extrinsic career success including salary level, promotion, and organizational retention (Allen et al., 2004; Bozionelos, Bozionelos, Kostopoulos & Polychroniou, 2011; Higgins & Thomas, 2001).

2.3. Purposes of the Current Study

Studies on the development network have shown that not only the content but also the structure thereof could affect a protégé's career development. However, as noted previously, prior research on former international students in Japan has not examined the influences of developmental network structure on career advancement adequately. Consequently, the purpose of this study was to examine the influences of former Chinese international students' developmental networks on their career development from two dimensions: the content and structure when developing their careers in Japan. This study was the first to explore the influence of a developmental network structure on former Chinese international students' career development. Practical implications for effective human resource management for retaining Chinese skilled employees are addressed. Furthermore, the majority of research on developmental networks to date has focused on samples of white-collar employees in western countries. However, in this study, we explored former Chinese students who were working in Japan so as to extend our understanding of how different samples and context may shape the relationships between developmental networks and career outcomes.

3. Methodology

3.1. Participants

Snowball sampling through an on-line, self-report survey was employed to collect the data among Chinese residents in Japan. The survey was distributed primarily through Facebook groups and WeChat groups related to businesses and/or hobbies. Of the 133 participants who responded to the survey, 18 were excluded because they did not receive any education in Japan. Thus, 115 Chinese full-time employees who had received their education in Japan and ranged in age from 23 to 48 years (M = 30.03; SD = 4.09) were included in the analysis. Of these, 62 (53.9%) and 53 (46.1%) were female and male, respectively. Furthermore, 79 (68.7%) had obtained a master's degree or higher, 34 (29.6%) a college degree, and 2 (1.7%) a vocational school degree. They spent 4.21 years on average pursuing education in Japan. In addition, 58.3% of the participants were single, 35.7% were married, 4.3% were engaged, and 1.7% were divorced. The results further revealed that 84.3%, 13.1%, 1.7%, and 0.9% of the participants had no children, one child, two children, and three children, respectively.

The participants' work tenure in Japan was 4.02 years on average. The majority (69.6%) were classified as skilled foreign employees on their work visas (Table 1). Furthermore, as presented in Table 2, their job specifications varied.

Table 1. Participants' Visa Categories

	n	%
Specialist in humanities/international services	59	51.3
Highly-skilled professionals	15	13.0
Investor/business management	3	2.6
Professor	1	0.9
Medical services	1	0.9
Research	1	0.9
Technical intern training	1	0.9
Permanent resident	23	20.0
Spouse or child of Japanese national	2	1.7
Japanese nationals	7	6.1
No answer	2	1.7

Table 2. Participants' Job Specifications

Job specifications	n	%
Technology	34	29.6%
Sales	24	20.9%
International trade	11	9.6%
Consulting	10	8.7%
Management	8	7.0%
Advertising	5	4.3%
Accounting	5	4.3%
Education	3	2.6%
Translation	2	1.7%
Commerce	2	1.7%
Design	2	1.7%
Research	2	1.7%
Medical services	2	1.7%
Other without detail	2	4.3%
Human management	1	0.9%
Tourist guide	1	0.9%
Financial planning and analysis	1	0.9%

4. Measures

Measuring of developmental networks. In accordance with research on developmental networks, the participants were required to list special individuals who at some stage during the previous year had taken an active interest in and concerted action to advance their careers (Higgins, 2001; Higgins & Thomas, 2001). The participants were asked to think of a wide array of individuals including those with whom they had not worked such as friends and family members. They were asked to write the initials of these people, hereafter referred to as developers, who fitted the category, and to answer a set of questions for each of the listed persons. First, the participants were asked to select each developer's relationship with them from 17 categories: 1: direct superior in your department; 2: senior employee in your department; 3: colleague in your department; 4: superior in another department of current company; 5: senior employee in another department of current company; 6: colleague in another department of current company; 7: a friend when you were at school; 8: acquaintance of client company; 9: a friend outside current company; 10: acquaintance outside current company; 11: your father; 12: your mother; 13: your partner; 14: your relative; 15: your supervisor; 16: senior employee when you were a part-time worker in college; and 17: other relationship.

Second, the participants were required to assess the frequency with which they talked to or exchanged information with each developer (1: daily; 2: a few times a week; 3: 3–5 times a month, 4: once or twice a month; 5: less than once a month). Finally, nine items developed by Kotama and Fukada (2005) were employed to examine the career support and psychological support that the participants received from each developer on a 4-point Likert scale, ranging from 1 (strongly disagree) to 4 (strongly agree). An example of an item that examines career support is "He/she is providing advice for me to achieve my career goal" while that for psychological support is "He/she is my role model." The participants were also asked whether the developers they had listed were linked to one another.

The strength of their developmental networks was accessed by the average frequency. Furthermore, the support provided by their developmental networks was measured by both average career support and average psychological support. In addition, the diversity of their developmental networks was accessed by the range and density. The range of their network was computed by the average distance of each participant to each of their contacts with the contact within the department, contact with the company, and contact outside the company (van Emmerik, 2004). Density was examined by $\Sigma j\ T/n(n-1)$, where T is the number of links from developer j and n is the total number developers listed (Morrison, 2002).

Measuring of career outcomes. Career satisfaction, organizational commitment and turnover intention were chosen to measure former Chinese students' career outcomes. First, five items adapted from Greenhaus, Parasuraman, and Wormley (1990) were utilized to measure career satisfaction by employing a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). An example of an item includes "I am satisfied with the success I have achieved in my career." Cronbach's α for the whole scale is 0.86. Second, organizational commitment was computed by using six items developed by Meyer, Allen and Smith (1993) to assess the participants' emotional attachment to the current organization. The participants evaluated the items on a 7-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree). An example of an item is "This organization has a great deal of personal meaning for me." Cronbach's α for the whole scale is 0.67. Finally, turnover intention was accessed by employing three items developed by Konovsky and Cropanzano (1991) on a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). "I will look for a job outside of this organization during the next year" is an example of an item. Cronbach's α for the whole scale in this study is 0.89.

Control variables. In accordance with research on career success and developmental network, age in years, tenure at the current workplace in years, gender (1 = male; 0 = female), organization size (1 = over 300 employees; 0 = under 300 employees), and ethnicity were included in this study as control variables (Greenhaus et al., 1990; Higgins, Dobrow & Chandler, 2008; Judge, Cable, Boudreau & Bretz, 1995; Murphy & Kram, 2010). Six items developed by Phinney and Ong (2007) were used to access ethnic identity on a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Cronbach's α for the whole scale is 0.88. Furthermore, they evaluated their Japanese language ability (1: I can hardly speak any Japanese; 2: Beginner level; 3: Intermediate level; 4: Advanced level; 5: I can speak Japanese the same as a native speaker). They also evaluated their level of difficulty in their current job (1: I experience my current job as difficult; 0: I do not experience difficulties in my current job).

5. Results

The developmental network data employed for this analysis included 230 relationships, which 92 participants reported. The other 23 participants stated that they had no developers. The proportion of the developers with whom the participants had relationships is depicted in Figure 1. Direct superiors (23.5%) were listed most in the developmental network and thus, were defined as the primary developers. While senior employees (15.2%) in the same department were listed as the secondary developers, family members including partners (10.0%) and mothers (8.7%) were selected as tertiary and quaternary.

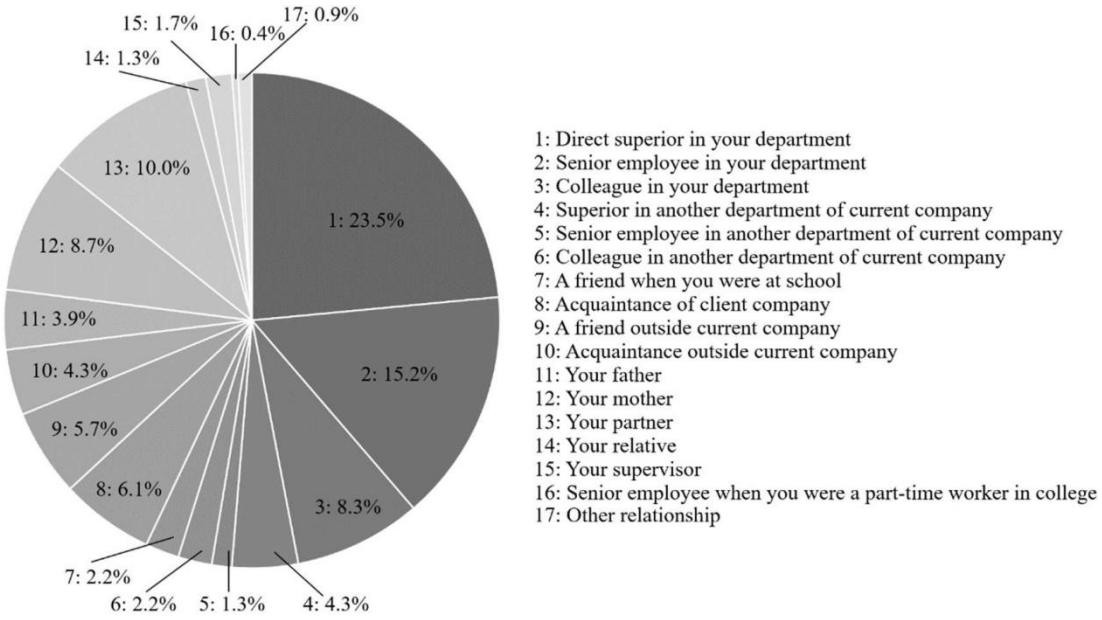

Figure 1. Developers in Participants' Developmental Networks

The means, standard deviations, and correlation coefficients of the sample's variables are displayed in Table 3. The results revealed that age was highly correlated with tenure at the current workplace (r = 0.75). Furthermore, psychological support was highly correlated with career support (r = 0.87) and range (r = 0.71). Frequency was also relatively highly correlated with career support (r = 0.75), psychological support (r = 0.80), and range (r = 0.57). While these high correlations may signal a potential multicollinearity issue for regression analysis, no collinearity problem was found among the variables. This was confirmed by employing a tolerance score greater than 0.1(0.52-0.90) and VIF score less than 10 (1.11-2.53).

The results of the hierarchical regression analyses, which were performed for career satisfaction, turnover intention, and salary level with four models, are presented in Table 4. In step 1, the control variables, specifically, age, gender, difficulties in the current job, Japanese language level, ethnic identity, tenure at the current workplace, and organization size were entered. In step 2, two types of support, namely, career support and psychological support received from the developmental networks were entered. The

dimensions of development network diversity, that is, density and range were entered in step 3 and the development network strength in terms of frequency were entered in step 4.

The analysis of career satisfaction demonstrated that ethnicity was positively associated with career satisfaction for all the models at the level of $p < 0.01$(model 1: β = 0.35; model 2: β = 0.34; model 3: β = 0.34). Model 3 revealed that frequency was positively associated with career satisfaction ($\beta = -0.34$, $p < 0.05$). Steps 1 and 4 showed a significant ΔR^2 (step 1: $\Delta R^2 = 0.18$, $p < 0.01$; step 4: $\Delta R^2 = 0.04$, $p < 0.05$).

The analysis of organizational commitment revealed that ethnicity was positively associated with organizational commitment for all the models (model 1: $\beta = 0.23$, $p < 0.05$; model 2: $\beta = 0.20$, $p < 0.05$; model 3: $\beta = 0.19$, $p < 0.05$). In model 2, career support was found to be positively associated with organizational commitment ($\beta = 0.36$, $p < 0.10$). Steps 1 and 2 showed a significant ΔR^2 (step 1: $\Delta R^2 = 0.17$, $p < 0.01$; step 2: $\Delta R^2 = 0.05$, $p < 0.05$). While Steps 3 and 4 did not reveal a significant ΔR^2, model 3 demonstrated that network density was positively associated with organizational commitment ($\beta = 0.17$, $p < 0.10$).

Finally, the analysis of turnover intention found that gender was negatively associated with turnover intention for all models at the level of $p < 0.05$ (model 1: $\beta = -0.19$; model 2: $\beta = -0.23$; model 3: $\beta = -0.22$). Furthermore, difficulty in the current work was also positively related with turnover intention for all the models (model 1: β = 0.22, p < 0.05; model 2: $\beta = 0.25$, $p < 0.05$; model 3: $\beta = 0.25$, p < 0.01). Only step 1 showed a significant ΔR^2($\Delta R^2 = 0.13$, p < 0.05).

Table 3. Means, standard deviation, and correlations

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Age	30.03	4.09	1														
2. Gender	0.46	0.50	0.08	1													
3. Difficulties in my current work	0.73	0.45	-0.15	0.01	1												
4. Japanese language level	0.90	0.30	0.19*	-0.17	-0.20*	1											
5. Ethnic identity	3.71	0.67	-0.13	0.08	-0.08	-0.13	1										
6. Tenure at the current workplace	2.82	3.39	0.75**	0.13	-0.06	0.08	-0.09	1									
7. Organizational size	0.67	0.47	0.11	-0.02	0.20*	0.09	-0.14	.237*	1								
8. Career support	1.90	1.11	-0.18*	-0.11	0.09	-.29**	0.23*	-0.19*	-0.32**	1							
9. Psychological support	2.35	1.26	-0.13	-0.10	0.09	-.19*	0.23*	-0.20*	-0.21*	0.87**	1						
10. Range	1.67	1.11	-0.06	-0.12	0.05	-0.02	0.15	-.25**	-0.15	0.49**	0.71**	1					
11. Density	0.11	0.17	-0.07	-0.14	-0.02	-0.05	0.14	-0.03	-0.06	0.29**	0.34**	0.08	1				
12. Frequency	2.99	1.81	-0.11	-0.16	0.13	-.21*	0.18	-0.13	-0.11	0.75**	0.80**	0.58**	.22*	1			
13. Career satisfaction	3.39	0.71	0.03	0.17	-0.06	-0.11	0.37**	0.00	-0.17	0.12	0.12	0.03	0.09	0.18	1		
14. Organizational commitment	3.83	0.98	0.27**	0.14	-0.09	-0.05	0.22*	0.28**	-0.06	0.20*	0.15	0.00	0.20*	0.17	.330**	1	
15. turnover intension	3.01	1.06	-0.16	-0.20*	0.26**	-0.03	-0.09	-0.08	0.10	-0.16	-0.13	-0.04	0.03	-0.09	-.215*	-.473**	1

Notes: **p<0.01, *p<0.05

Table 4. Results of regression analyses for career satisfaction, organizational commitment, and turnover intention (Standardized regression coefficients)

	Career satisfaction			Organizational commitment			Turnover intention		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Step 1 Control variables									
1. Age	0.12	0.11	0.14	0.17	0.19	0.23	-0.17	-0.18	-0.19
2. Gender	0.12	0.12	0.15	0.08	0.12	0.15	-0.19*	-0.23*	-0.22*
3. Difficulties in my current work	-0.01	-0.01	-0.01	-0.03	-0.05	-0.05	0.22*	0.25*	0.25**
4. Japanese language level	-0.06	-0.06	-0.04	-0.05	0.02	0.03	0.00	-0.06	-0.07
5. Ethnic identity	0.35***	0.34***	0.34***	0.23*	0.20*	0.19*	-0.07	-0.03	-0.04
6. Tenure at the current workplace	-0.04	-0.03	-0.08	0.18	0.17	0.12	0.06	0.06	0.07
7. Organization size	-0.11	-0.12	-0.15	-0.08	0.00	-0.01	0.05	-0.02	-0.02
Step 2 Support received from developmental network									
8. Career support		-0.06	-0.22		0.36†	0.30		-0.29	-0.22
9. Psychological support		0.08	0.04		-0.13	-0.22		0.05	-0.10
Step 3 Developmental network diversity									
10. Range			-0.16			0.06			0.11
11. Density			0.04			0.17†			0.09
Step 4 Developmental network strength									
12. Frequency			0.34*			0.16			-0.01
Adjusted R^2	0.12**	0.11	0.13*	0.11**	0.15*	0.16	0.07*	0.10	0.09
F value	3.27**	2.53*	2.46**	3.06**	3.19**	2.82**	2.22*	2.43*	1.89*

Notes: Variance explained for career satisfaction step 1 ΔR^2 =0.18**, step 2 ΔR^2 =0.00 (ns), step 3 ΔR^2 =0.01 (ns), and step 4 ΔR^2 =0.04*; for organizational commitment step 1 ΔR^2 =0.17**, step 2 ΔR^2 =0.05*, step 3 ΔR^2 =0.03(ns), and step 4 ΔR^2 =0.01(ns); for turnover intention step 1 ΔR^2 =0.13*, step 2 ΔR^2 =0.05(ns), step 3 ΔR^2 =0.01(ns), and step 4 ΔR^2 =0.00(ns). $^{***}p<0.001$, $^{**}p<0.01$, $^{*}p<0.05$; $^{\dagger}<0.1$.

6. Discussion

In this study, the influences of former Chinese international students' developmental networks on their career development when they were working in Japan were examined. The results revealed that there were a variety of relationships involved in their developmental networks. Over half of these contacts were in the company, particularly in the same department and included direct superiors, senior employees, and colleagues. These developers played an important role in former Chinese international students' career development in Japanese companies. Furthermore, they perceived family members including their partners and mothers as significant individuals for their career. These results are in accordance with those of studies on former international students in Japan (Miyagi & Nagai, 2016; Nabeshima, 2016; Shimada & Nakahara, 2014; Suzuki, 2015).

While previous research on former international students in Japan only focused on the influences of the support received from their network (Miyagi & Nagai, 2016; Nabeshima, 2016; Shimada & Nakahara, 2014; Suzuki, 2015), the findings in this study found that both the support and structure of their developmental network had an effect on their career development. In addition, the content and structure of the former Chinese international students' network were associated with different dimensions of their career outcomes. First, the results demonstrated that the more frequently former Chinese international students communicated with developers of their developmental networks, the more satisfied they were with their careers in Japan. In particular, an examination of the frequency of participants' contacts with each developer revealed that the individuals that they communicated with most frequently were from the work domain including members from the same department and individuals in the company as well as the non-work domain such as family members. In accordance with previous research on developmental networks, strong ties with developers, characterized by frequent

communication, could lead to more information and more support, thus enhancing protégés' career satisfaction (Dobrow et al., 2012; van Emmerik, 2004).

Second, career support was found to be positively associated with former Chinese international students' organizational commitment. It is noteworthy that by computing the career support received from each developer, we found the most career support was provided by developers in the same company. These developers in the same department were able to provide the former Chinese international students with work-related support including coaching, protection, and challenging assignments as well as assist them in resolving conflicts in the work domain and realizing career progress. According to Baugh and Scandura (1999), this may enhance their emotional belonging to the organization. As noted previously, although steps 3 and 4 were not significant, network density was positively associated with organizational commitment in model 3 of organizational commitment. This implies that those participants who were involved in higher density developmental networks may have had a stronger emotional attachment with the organization.

Although the results did not reveal the impact former Chinese international students' developmental networks had on their turnover intention, those who had difficulties with their current job had a higher intention to turnover. Furthermore, gender was found to be negatively associated with their turnover intention. In other words, in comparison to Chinese male employees, Chinese female employees had a higher intention to resign from their current jobs. One may imply that Chinese female employees not only had to confront their cultural barriers like male employees but also gender barriers while working in Japan (Suzuki, 2017; Ye-Yuzawa & Nebashi-Nakahara, 2018).

In addition, the ethnic identity of the former Chinese international students was positively associated with their career satisfaction and organizational commitment. This finding suggested that the stronger they felt about their ethnic identity, the greater the satisfaction they enjoyed with their career and the more they were committed to their current workplace. Research has revealed that ethnic identity is linked to career outcomes including career self-efficacy, career decision-making, and vocational maturity (e.g., Gushue, Scanlan, Pantzer & Clarke, 2006; Perron et al, 1998). A stronger sense of ethnic identity could lead to self-efficacy in career development (Lewis, Raque-Bogdan, Lee & Rao, 2018). Therefore, one may deduce that former Chinese international students who successfully negotiate the tasks involved in achieving an ethnic identity may also acquire confidence in their ability to negotiate career-related tasks and know how to obtain more support for their career development from their developmental networks. Consequently, this may lead to greater satisfaction with their career and stronger organizational commitment.

7. Implications

The purpose of this study was to examine the effect of the developmental network of former Chinese international students on their career outcomes while they were pursuing their careers in Japan. The findings revealed that there were multiple developers within and beyond the workplace that were involved in their career development. Furthermore, the content and structure of Chinese skilled employees' network were imperative for their career development in the host country and led to different career outcomes. Frequent communication with developers enhanced their career satisfaction in Japanese companies. Therefore, it is recommended that skilled Chinese employees

pay more attention to creating and utilizing interpersonal relationships while working in Japan.

On the contrary, career support provided by developers within the organization played an essential role in the organizational commitment of former Chinese international students. Thus, it is recommended that Japanese companies should be concerned with what barriers former Chinese international students are confronted and create a more cooperative work environment to assist them in resolving their problems and enhancing their emotional belonging in the organization. Moreover, because female employees exhibited a higher intention to leave their jobs, it is of the utmost importance to address problems that only female employees experience.

Previous research has found that skilled Chinese employees were expected to assimilate into Japanese companies and work as their Japanese coworkers (Suzuki, 2015, 2017; Ye-Yuzawa & Nebashi-Nakahara, 2018). However, this study may deduce that those who feel strongly about their ethnic identity experience higher career satisfaction and higher organizational commitment. Therefore, in order to foster and retain former Chinese international students' career satisfaction and emotional belonging to the workplace, it is imperative that Japanese companies build a diverse environment.

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