Refereed Original Paper

The Effects of Generalized Trust and Group Identification on Social Support Networks and Feelings of Stress in Japan: Comparing Face-to-face and Instant Messaging[1)]

Keywords:
Generalized trust, Group identification, Social support networks, Feelings of stress, Instant messaging

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Abstract

This study focused on international students (ISs) studying in Japan and investigated (a) the effects of their generalized trust and group identification on their social support networks (SSNs) with Japanese people, same-language speakers, and other-language speakers; (b) their SSNs formed through face-to-face (FTF) communication and instant messaging (IM) usage; and (c) whether these relationships differed between Chinese ISs and other ISs, as over 60% of ISs in Japan are Chinese, who more easily form in-groups than other ISs. A self-report questionnaire survey was conducted in 2018, and the following results were observed based on 209 valid responses. (a) ISs with higher levels of generalized trust felt less stress, while ISs with higher levels of group identification felt more stress. (b) ISs with higher levels of generalized trust were able to receive more social support from Japanese people and other-language speakers, but only social support from Japanese people helped decrease their feelings of stress in Japan. (c) ISs with higher levels of group identification tended to form larger SSNs with same-language speakers and received more social support from them, which in turn, led them to feel more stress. (d) The above results were found both in SSNs formed via FTF communication and through IM usage. (e) For non-Chinese ISs, their group identification did not lead them to receive more social support from the same-language speakers. The results suggest that it is necessary to distinguish the effects of generalized trust toward out-group members between Japanese people and other-language speakers when examining ISs' intercultural adaptation.

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1. Introduction

Trust is fundamental to social life. Trust is described as people's belief in the good intentions of others— that is, the intentions of others not to do harm, to respect people's rights, and to carry out their obligations (Yamagishi, 1998). According to Yamagishi (1998) and Yamagishi and Yamagishi (1994), there are two types of trust: generalized trust and particularistic trust. Generalized trust is a general belief in human benevolence, suggesting that trustworthiness is an aspect of human nature and that most people can be trusted, with some exceptions. By contrast, particularistic trust or assurance arises from secure relationships with particular others.

Prior research has pointed out that these two types of trust may play different roles in the formation and maintenance of social networks. Since generalized trust encourages people to approach others to form social relationships, people with a higher level of generalized trust are more likely to cooperate with strangers compared to those with a lower level (Yamagishi, 1986). On the other hand, particularistic trust—assurance marked by emotional connectedness—may help people maintain narrow social relationships. Once relationships are formed, people may require a sense of emotional connection with those others to maintain secure and committed social relationships. Therefore, people may not feel encouraged to seek out new social opportunities by finding and forming new social relationships. This would be more obvious when people encounter out-group members.

International students (ISs) who study in Japan may feel strong assurance toward other ISs, especially those from the same country, as they share more similarities than differences and are therefore considered "in-group" members. Conversely, they may have a lower level of generalized trust toward others, especially local residents (hosts), who are considered "out-group" members owing to cultural differences, language boundaries, and so on. Based on this distinction, Ye (2018) found that ISs with higher levels of generalized trust were able to receive more social support from Japanese people, which led them to experience a greater sense of acceptance in Japan. No similar effects could be detected for those who received more social support from those with the same mother language ("same-language speakers" below). However, the effects of other- language speakers were not studied.

Another important factor that influences people's tolerance level is group identification. According to the social identity theory, the groups to which people belong are an important source of pride and self-esteem (Tajfel & Turner, 1986). Groups give people a sense of social identity— a sense of belonging to the social world (Tajfel & Turner, 1986; Shuter, 2012). To improve their self-image, people enhance the status of the group to which they belong. Therefore, people divide the world into an in-group (us) and an out-group (them). Based on these groupings, it is reasonable to believe that ISs with higher levels of group identification may tend to communicate with a greater number of same-language speakers, which would decrease their opportunities to communicate with Japanese people and other- language speakers. However, because there are also other-language speakers from other countries, it is necessary to clarify these roles as they may be categorized as "in-group" members when the definition is "non-Japanese speakers" but "out-group" members

when the definition is based on the "same mother language" and "same cultural background." Therefore, this study also compared the effects of generalized trust toward Japanese people and other language speakers.

Previous studies (e.g., Tanaka, 2000) have suggested that increased communication with hosts would be an effective way for ISs to better adapt to Japanese society. Forming stable and fruitful relationships with Japanese people is likely to lead to an enhanced ability to cope with stress and improve adaptation. Such beneficial relationships are known as "social support networks" (SSNs), a general psychological term referring to personal relationships expected to provide both tangible and intangible support and promote intercultural adaptation. Therefore, this study proposed the following hypotheses:

H1: ISs with higher levels of generalized trust will be able to form larger SSNs with Japanese people and other-language speakers and receive more social support from them. However, only social support from Japanese people will help them decrease their feelings of stress.

H2: ISs with higher levels of group identification will form larger SSNs with same-language speakers and receive more social support from them, which will, in turn, increase their feelings of stress in Japan.

Furthermore, compared to two decades ago, the spread of mobile devices and social media means that ISs use various kinds of media, especially instant messaging (IM) (e.g., WeChat, LINE), to communicate with same-language speakers, as IM allows ISs to use their mother language, rather than Japanese or English. This had led to a decreasing motivation and necessity for ISs to form "strong ties" with Japanese local people.

In fact, Kim (2003) conducted a survey in 2002 and found that ISs used cell phones to make voice calls to same-language speakers only rather than sending text messages to Japanese people. Therefore, she suggested that ISs' use of cell phone voice calls may inhibit their communication with Japanese people and thus hinder their understanding of Japanese culture, their acquisition of the Japanese language, and so on. Additionally, Ye and Murota (2014) conducted a survey in early June 2011 and found a significant relationship between ISs' communication media usage and adaptation situations. Their results indicated that cell phone usage (especially text messages) had a particularly positive effect on ISs' satisfaction improvement, with this positive effect exceeding that of computer usage. However, whether the communication partners were Japanese or same-language speakers was not clarified. Furthermore, Ye (2017) indicated that while face-to-face (FTF) communication could help decrease ISs' levels of maladaptation in Japan, communication through voice calls, IM, or email had no such effect, as these SSNs included a greater number of same-language speakers than Japanese speakers and other-language speakers. Therefore, this study proposed the following hypothesis:

H3: H1 and H2 will be more obvious when ISs communicate through IM than via FTF.

Regarding ISs' social support received from others, Jou (1993) found that this support could be categorized into four areas (research/study, human relationships, emotional, and environmental-cultural) and four types (tangible, mental, directive, and informational). Following on this finding, Ye (2018) indicated that, among the four areas and four types, ISs received most social support in the human relationship, emotional,

and environmental/cultural areas and of the mental and informational types from same-language speakers. They received most social support in the research/study and environmental/cultural areas and of the material, directive and mental types from Japanese people. On this basis, this study investigated the effects of social support from Japanese people, same-language speakers, and other-language speakers.

Additionally, in Japan, over 90% of ISs are from Asia, and over 60% are Chinese ISs (JASSO, 2020), who find it comparatively easy to form in-groups with other Chinese ISs. This is in contrast to others who may find it difficult to form in-groups with same-language speakers and might rely on Japanese people and other- language speakers. Therefore, this study also examined the following hypothesis:

H4: The previous three hypotheses will be obvious for those ISs, such as Chinese ISs, who find it easy to form in-groups, while they will be different for those ISs who do not find it easy to form in-groups.

Based on these findings and discussions, the present study investigated the model shown in Figure 1 and compared the differences and similarities between Chinese ISs and other ISs and their SSNs formed via IM and FTF. In Figure 1, "Demographics" refers to age, length of stay in Japan, length of learning of the Japanese language, Japanese and English language proficiency, and experience of doing a part-time job. The "SSNs with JSs/SLSs" includes ISs number of communication partners, communication frequency, and level of satisfaction with their relationships. For example, ISs with a shorter length of stay in Japan and/or shorter length of learning of the Japanese language and limited Japanese language may have a strong group identification toward SLSs and rely on them to receive more social support, but such support may not help them fully understand the Japanese culture and improve their communication skills with Japanese people. Therefore, they may feel more stressed. This would be more obvious among Chinese ISs, as they easily form relationships with other Chinese ISs. On the other hand, ISs with a longer length of stay in Japan and/or longer length of learning of the Japanese language and higher level of the Japanese/English language proficiency may have a higher level of generalized trust and be able to communicate with more Japanese people to receive more social support. This will help them understand the Japanese culture, etc., and decrease their level of stress. Moreover, this will be more obvious among non-Chinese ISs, especially those who do not easily form in-groups.

2. Research Method

To examine the issues raised above, a self-report survey (pencil-and-paper version and web version) was conducted from June to July 2018.[2] We prepared the survey in Japanese, English, Chinese (Simple and Traditional), and Korean and allowed the ISs to freely select the version they wished to answer. The English version was translated by the author and received English-native speakers' proofing; the Chinese and Korean versions were translated by native speakers of Chinese and Korean, whose Japanese language proficiency was close to that of Japanese native speakers. All versions were confirmed by back translation. The participants were ISs enrolled at several general national universities in the Kanto Region of Japan. They received instructions (in either oral or written form)

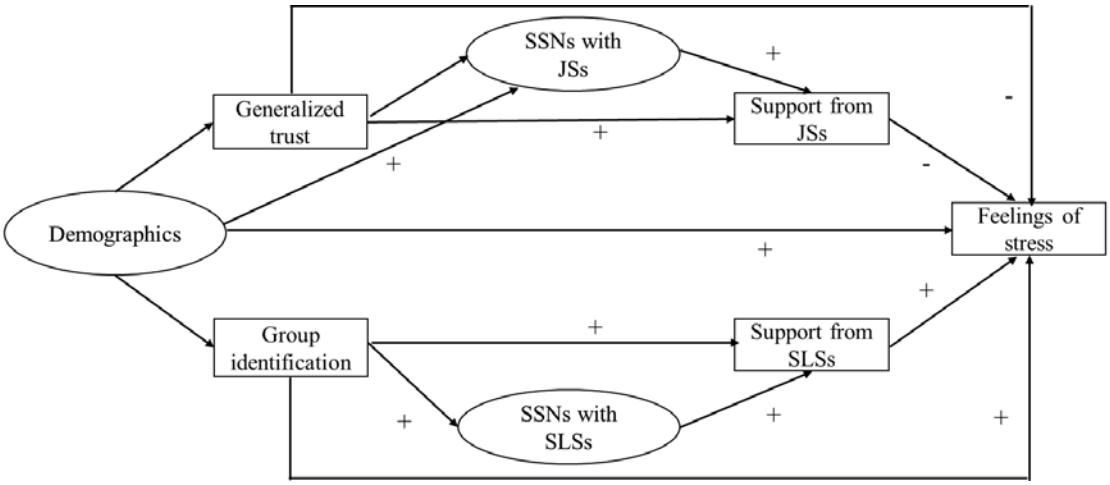

Figure 1. The model analyzed in this study

before answering concerning the storage of their data, free and informed consent, freedom to cooperate and withdraw without penalty in the case of not agreeing to cooperate, privacy and protection of personal information, and so on. A total of 213 ISs submitted their responses. Four incomplete responses were eliminated, and the remaining 209 responses were analyzed. When compared with the sample size in Ye (2017) and Ye (2018) of 99 and 206, respectively, the sample size in this study was considered to be sufficient. The questionnaire survey included three parts: Part A, Part B, and Part C. The content in each part was as follows:

Part A gathered personal information, which included demographic data (e.g., gender, age, nationality, and academic standing), total length of stay in Japan, Japanese language learning history, level of Japanese language ability (score and level from the Japanese Language Proficiency Test (JLPT), and self-evaluation of Japanese language proficiency in reading, listening, speaking, and writing as compared to an adult native Japanese speaker, reported as a percentage),[3] English language ability (score on TOEFL-iBT, TOEIC, and self- evaluation of English language proficiency in reading, listening, speaking, and writing as compared to an adult native English speaker, reported as a percentage),[4] living situation, experience with/ frequency of doing part-time jobs, and so on (see Table 1 for details).

Additionally, 13 items were chosen from Yamagishi and Yamagishi (1994) to measure the participants' level of generalized trust. A further 12 items were chosen from Karasawa (1991) to measure group identification. In this study, in addition to other scales, the respondents were asked to use a five-point scale ("5. Strongly agree"; "3. Neither"; "1. Strongly disagree") to rate each of the items.

Part B measured the ISs' use of media, including regular smartphones, computers, daily time spent accessing the Internet via these devices ("8. Over 6 hours"; "1. Don't use"),[5] and the most frequently used social media. This part of the study gathered information about participants' SSNs through FTF and IM communications. Following Tanaka's (2000) definition, "SSNs" were defined as "*important*

relationships in their daily lives," and the ISs were asked to list UP TO 10 people they had met in person or sent instant messages to over the previous three months for important conversations. For each SSN, the ISs were asked to provide their contact person's gender, age, nationality, relationship, frequency of contact (from "5. Almost every day" to "1. Seldom meet"), and place of residence (Japan; Home country; Other country/region) and to rate their satisfaction with that person ("5. Very satisfied"; "3. No preference either way"; "1. Not satisfied at all"). Additionally, the ISs were asked whether the person(s) listed in the SSNs via IM was/were also listed in those via FTF, and so on (Table 2).

Part C addressed the ISs' feelings of stress using 11 items ("5. Very much" to "1. Not at all") chosen from Tanaka (2000). The 14 items for social support were chosen from Okunishi and Tanaka (2008), and the respondents were asked whether they received social support from each of three specific groups: Japanese people, same-language speakers, and other-language speakerss[6] (Table 3).

3. Results

3.1 Descriptive results

Table 1 reports the details of the respondents included in the study: 94.3% of the analyzed ISs were regular course students. The top five nationalities were Chinese (including ISs from Hong Kong), South Korean, Indonesian, Thai, and Vietnamese, which shows a similar distribution to national survey results (JASSO, 2020). Over one third of the ISs had passed the JLPT Level 1, and over 80% had taken at least one of the English tests. This study conducted a *t*-test (independent example) to examine gender differences among these variables.[7] The results indicated no significant differences among these variables except for the length of learning of the Japanese language ($t(192.8)=11.43$, $p<.05$, male vs. female: 34.76 vs. 46.18).

As Table 1 shows, more than 40% had received scholarships, over half of which were from MEXT, but only one third had a daily part-time job, which meant that 2/3 did not have many opportunities to communicate with Japanese people off the campus. Furthermore, over half of them used computers to access the Internet for over four hours, which was longer than smartphone use.

3.2 Configurations of SSNs and social support

Prior to examining the relationship shown in Figure 1, this study investigated the configuration of each SSN. As indicated in Table 2, which shows the average number of people interacting via IM and FTF and their relationships, the largest number was in the category of SLSs via IM usage, followed by SLSs via FTF, and Japanese people via FTF. The results show that over half of the communication partners met in person were also contacted by IM. And these had no relationship with gender.

Table 3 shows the social support that ISs received from Japanese people, same-language speakers, and other-language speakers. The results show that ISs received the most social support from same-language speakers in the human relationship and emotional areas and the material and informational types. They received the most social support from Japanese people in the research/study area and type of mental, area of environment/culture and types of directive and informational. This study further considered whether such support might vary based on

Table 1. Analyzed ISs' information

Gender ratio	Males: 46.9% Females: 52.6% Other: 0.5%
Age (in years)	24.5 years (SD: 4.4)
Academic standing	Undergraduate: 39.2% Master's: 34.0% Doctoral: 21.1% Research/Special research students: 4.8% Others: 1.0%
Nationalities (Top 5)	Chinese: 49.4% Korean: 7.7% Indonesian: 7.2% Thai: 4.3% Vietnamese: 3.3%
History of stay in Japan	31.1 months (*SD*: 21.4)
History of learning Japanese	41.1 months (*SD*: 38.9) (JLPT-N1/L1 holders: 34.9%)
English language abilities[2)]	TOEIC: 37.8% TOEFL: 29.2% IELTS: 17.2% Other: 1.9%
Living place	University dormitory: 24.9% Dormitory for ISs only: 12.4% Private rental housing: 60.3% Rental/house share for foreigners: 1.0% Other: 1.4%
Living with someone	Alone: 52.5% With other ISs: 32.3% With family/relatives: 9.1% With Japanese students: 2.0% Other: 4.0%
Scholarship	Yes: 44.5% (MEXT: 60.3% Private: 21.6% Other: 18.1%) No: 55.5%
Daily part-time job	Yes: 33.0% No: 67.0%
Internet time (Computers)	Don't use: 1.0% -1h: 7.2% 1-2h: 12.0% 2-3h:14.8% 3-4h: 12.4% 4-5h: 14.4% 5-6h: 10.0% Over 6h: 28.2%
Internet time (iPhone/Android)	Don't use: 0.0% -1h: 3.8% 1-2h: 17.2% 2-3h: 18.2% 3-4h: 22.5% 4-5h: 13.4% 5-6h: 5.7% Over 6h: 19.1%
Internet time (iPad etc.)	Don't use: 63.6% -1h: 15.8% 1-2h: 10.0% 2-3h: 3.3% 3-4h: 2.9% 4-5h: 1.4% 5-6h: 0.5% Over 6h: 2.4%

Table 2: ISs' SSNs formed through IM and FTF

	Total (same gender vs. cross-gender)	Japanese	SLSs	OLSs
IM				
Number of contacts	6.11 (3.73 vs. 2.47)	1.12	4.16	.84
Contact frequency		3.89	10.53	2.86
Satisfaction with partners		4.91	18.87	3.45
FTF				
Number of contacts	4.15 (2.51 vs. 1.63)	1.35	2.03	.77
Contact frequency		4.93	6.89	2.85
Satisfaction with partners		5.80	8.81	3.28
Same person between IM & FTF		.60	1.38	.40

Table 3: ISs' social support received from others

Received social support	Nationality		
	JSs	SLSs	OLSs
1. Explained the Japanese to me when I did not understand it, even after reading or listening to it	90.4%	73.7%	51.7%
2. Corrected my mistakes in Japanese when writing or speaking	75.1%	56.0%	38.8%
3. Explained Japanese culture and customs to me	38.8%	68.4%	46.9%
4. Became interested in my country's culture and customs and tried to understand them	82.8%	59.8%	65.1%
5. Helped me finish my homework and pass examinations	45.0%	47.8%	39.2%
6. Helped me conduct my research	58.4%	44.5%	38.8%
7. Could be consulted when I experienced personal problems	47.4%	84.2%	45.9%
8. Encouraged me when I did not do well	57.4%	83.3%	54.5%
9. Invited me for dinner at home or had dinner on/off-campus	67.9%	86.6%	58.9%
10. Went out for leisure and to have fun together	58.9%	85.6%	60.3%
11. Gave me necessary/useful items	60.8%	83.3%	56.0%
12. Lent me money when I needed it	26.8%	63.2%	27.8%
13. Provided useful information for my life in the local area	81.3%	81.3%	57.4%
14. Told me how to conduct necessary procedures and provided information about important notices at the university	72.2%	74.2%	50.7%

Table 4: ISs' feelings of stress in Japan

Items	*Mean*
1. Understanding the real meaning of vague and unclear Japanese expressions	3.12
2. Completing necessary daily life tasks, for example, throwing away garbage, preparing meals, or washing	2.49
3. Maintaining good relationships with Japanese people with whom I am in contact in my daily life	2.84
4. Knowing that once I leave my room, I enter a Japanese language world	2.17
5. Being in a situation in which Japanese people are laughing cheerfully, but I do not find it funny	2.74
6. Experiencing difficulty obtaining necessary daily living information	2.59
7. Wanting to study the Japanese language but not having an opportunity to practice it	2.60
8. Experiencing difficulty having intimate relationships with Japanese students	3.17
9. Getting special treatment because I am a foreigner	2.56
10. Feeling anxious about being in an emergency situation such as having a serious illness, being injured, and so on	2.89
11. Being ignored when asking a Japanese person something or trying to join their conversations	2.44

gender, and the results indicated that females received more social support from same-language speakers than males ($t(185.24) = 1.403$, $p<.01$, males vs. females: 9.22 vs. 10.63).

3.3 Internal reliability for each scale

This study confirmed each scale's internal reliability by calculating its Cronbach's α : .86 for generalized trust, .88 for group identification and .81 for feelings of stress. These scales all showed very high internal reliability. Therefore, this study used the total scores for each scale in the following analysis. This study also conducted an independent *t*-test to confirm whether there were any differences due to gender. The results indicated no differences among these scales.

3.4 The relationships between generalized trust /group identification, SSNs, social support, and feelings of stress

This study conducted SEM analysis to test the relationships as Figure 1 shows, comparing IM and FTF (Figures 2–5). Additionally, this study conducted multi-group SEM to detect whether the relationships would differ between Chinese ISs and non-Chinese ISs. As a result, the goodness of fit of the model for Chinese ISs was not high enough to adopt; therefore, only the relationships for non-Chinese ISs comparing FTF and IM between Japanese people and same-language speakers could be detected (Figure 6). All the indexes, parameter estimates, and goodness of fit are shown in Figures 2–6.

The following commonalities could be found: (a) Generalized trust had a direct effect on decreasing feelings of stress, while group identification had a direct effect on increasing feelings of stress. (b) Group identification had a direct positive effect on receiving more social support from same-language people, which, in turn, increased feelings of stress when including both Chinese ISs and non-Chinese ISs. (c) Generalized trust had no effect on SSNs with Japanese people or other-language speakers, while group identification had a positive effect on SSNs with same-language speakers.

Meanwhile, the results indicated that (a) generalized trust had a positive effect on receiving more social support from Japanese people and other-language speakers, but only social support from Japanese people helped decrease feelings of stress. (b) In the case of IM usage, there were slightly significant effects of demographic factors on SSNs with Japanese people, but no similar effects could be found in terms of FTF; moreover, demographic factors had significant effects on SSNs with other-language speakers among non-Chinese ISs when communicating via IM. (c) Group identification showed a positive direct effect on social support from same-language speakers when including both Chinese ISs and non-Chinese ISs, but no similar effects could be found among non-Chinese ISs.

4. Discussion

The present study investigated the effects of ISs' generalized trust and group identification on their social networks with Japanese people, same-language speakers, and other-language speakers formed through IM usage and FTF communication. Additionally, this study examined whether these relationships would differ between Chinese ISs and non-Chinese ISs, as the former more easily form in-groups with other Chinese ISs.

The results indicated that, when including

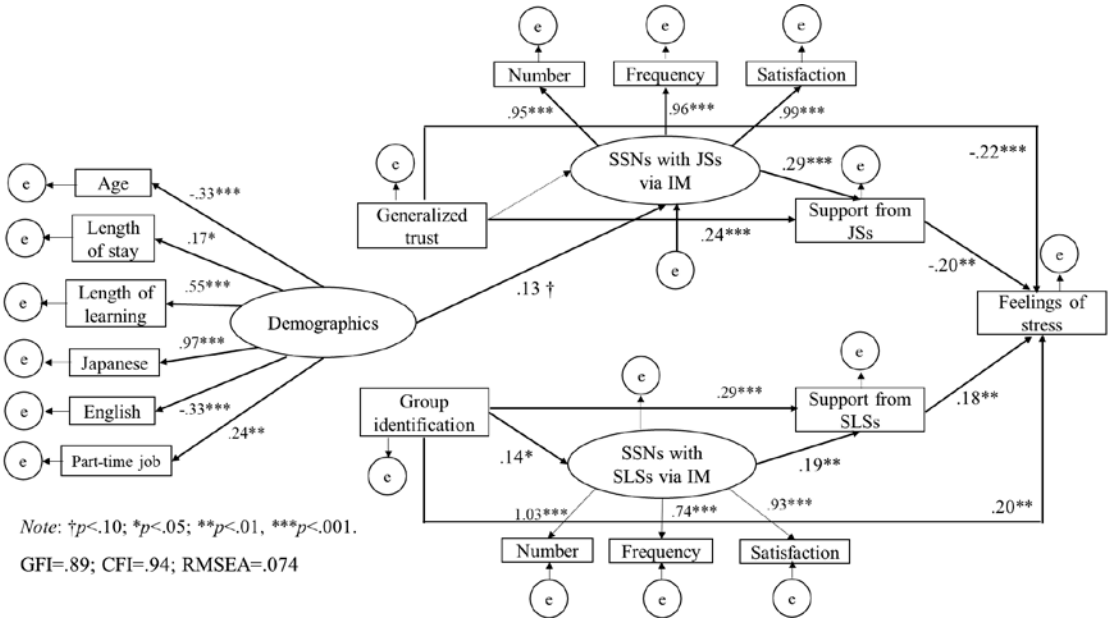

Figure 2. Results for IM usage (Entire: Japanese vs. Same-language speakers)

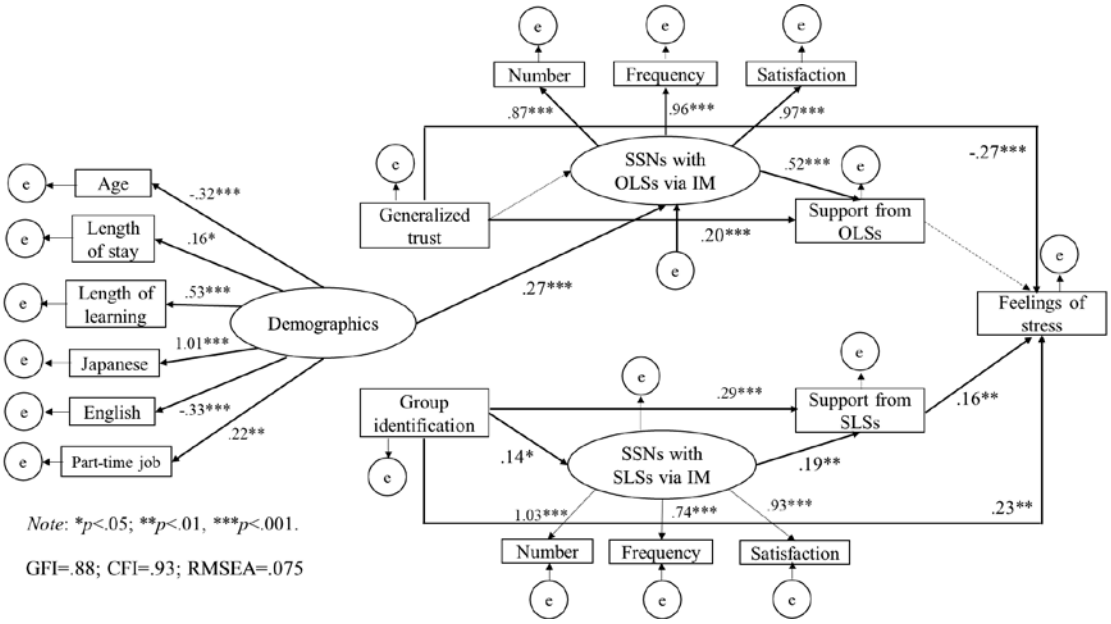

Figure 3. Results for IM usage (Entire: Other-language speakers vs. Same-language speakers)

both Chinese ISs and non-Chinese ISs, those with higher levels of generalized trust were able to receive more social support from Japanese people and other-language speakers. However, only social support from Japanese people helped decrease their feelings of stress (H1). One of the main reasons for this might be the type of social support received. As Table 3 shows, ISs received

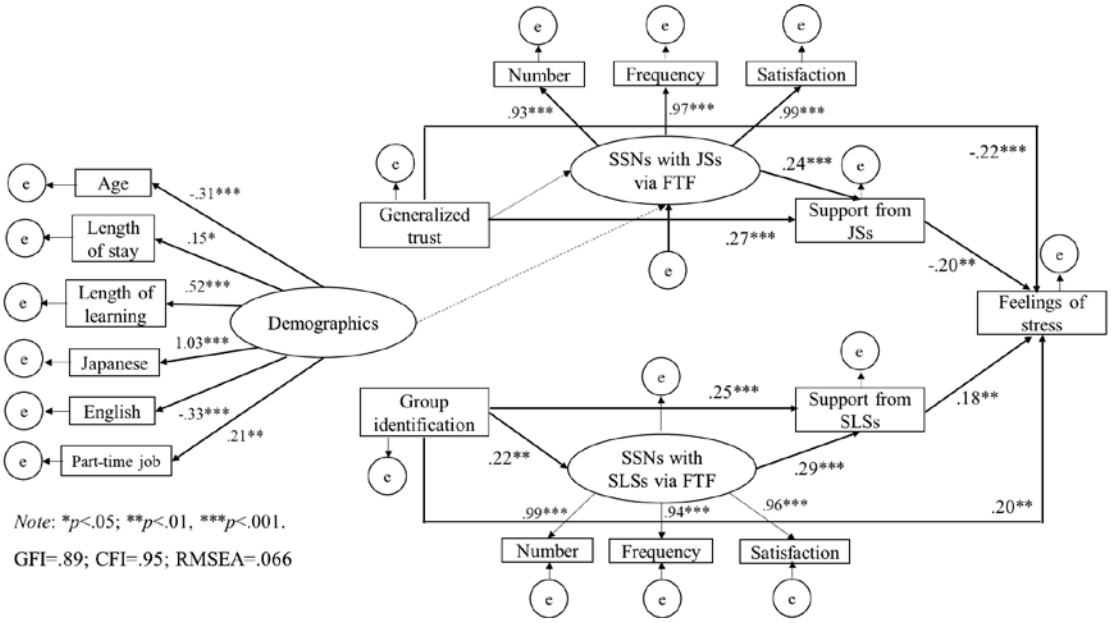

Figure 4. Results for FTF communication (Japanese vs. Same-language speakers)

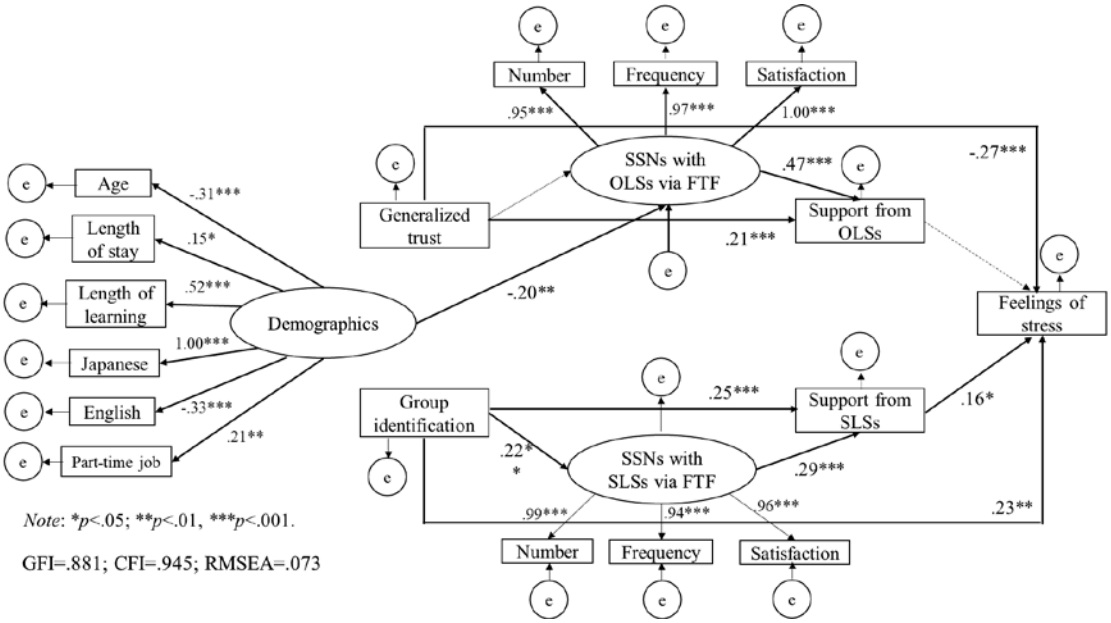

Figure 5. Results for FTF communication (Other-language speakers vs. Same-language speakers)

most social support from Japanese people in the area of environmental-cultural and the type of informational, etc., which helped them adapt better. By contrast, ISs received the least social support from other-language speakers overall compared to same-language speakers and Japanese people. These results indicate the necessity of distinguishing ISs' generalized trust

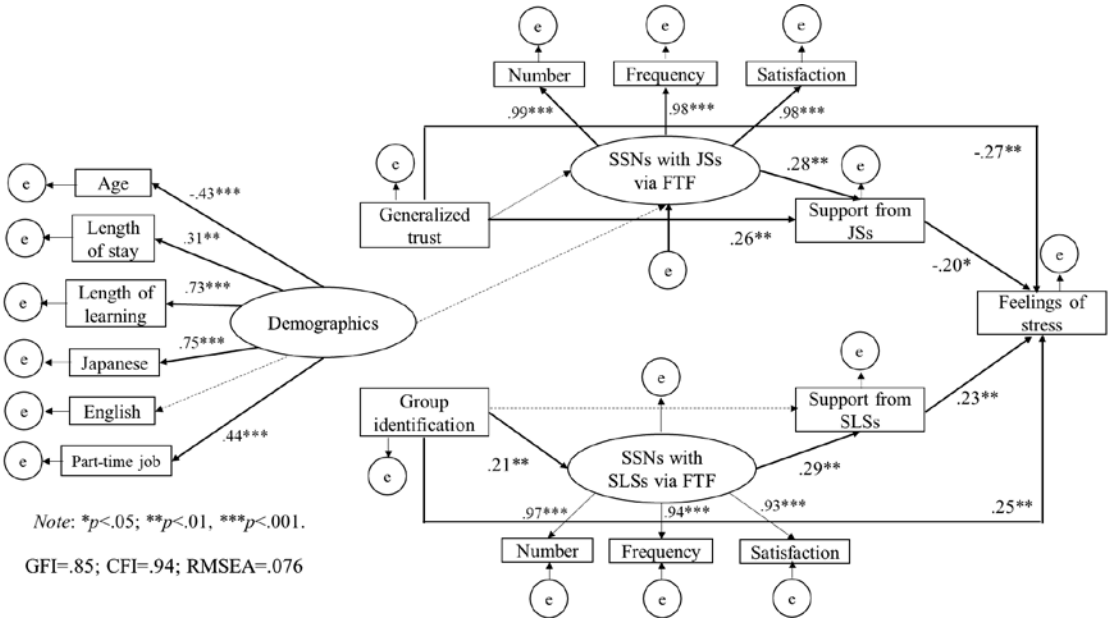

Figure 6. Results for FTF communication (Non-Chinese: Japanese vs. Same-language speakers)

Table 5. The average number of ISs' SSNs in different period

Different studies	FTF: Total			IM: Total			Contact persons via IM in Japan / Home country / Other		
	JSs	SLs	OLSs	JSs	SLs	OLSs			
Tanaka (2000)	4.14	7.76 2.56	1.06						
Ye (2017) *		8.66 & 8.90 3.77 & 3.78			7.74 & 7.99 5.09 & 5.20		T1: 4.46 T2: 5.43	3.28 2.56	
This study	1.35	4.15 2.03	.77	1.12	6.11 4.16	.84	3.26	2.29	.41

* *Note*: Ye (2017) conducted a panel survey that measured the ISs' SSNs in July 2014 and December 2014.

toward Japanese people from other-language speakers, as they were all treated as "out-group" members traditionally.

It was also expected that ISs with higher levels of generalized trust would be able to form larger SSNs with Japanese people and other- language speakers and receive more social support from them. Although ISs with higher levels of generalized trust did receive more social support from Japanese people and other-language speakers, no effects could be found on their forming SSNs with them. One of the main reasons might be the small size of their SSNs. Table 2 indicates that the average number of same-language speakers was four times that of Japanese people and other-language speakers in SSNs formed via IM. Even for SSNs formed via FTF communication, the average number of same-language speakers was larger than that of Japanese people and more than twice that of

other-language speakers. In fact, the number of ISs' SSNs (both FTF and IM) was smaller compared to previous studies (Table 5). In particular, the percentage of same-language speakers in both FTF and IM was higher compared to previous studies, which was higher in IM (68.1%) than FTF (48.9%). In addition, the ratio of contact person in home countries was higher than in Ye' study (2017). This was consistent with the possibility that IM usage promote ISs' selective interpersonal relationships, as they can type messages and talk in their mother language by using IM in this "mobile X social" period that Ye (2017) described. In this sense, H1 was partly supported and H3 was almost supported.

Additionally, ISs with higher levels of group identification formed larger SSNs with same-language speakers and received more social support from them, which increased their feelings of stress in Japan (H2). As Table 3 shows, ISs received the most social support from same-language speakers in the areas of human relationships (e.g., personal problem solving) and emotional, and the type of tangible (e.g., money lending), yet these support did not help them fully understand the Japanese culture or learn the Japanese language. Therefore, as they remained unable to understand the Japanese communication style and behaviors, their stress did not decrease.

Furthermore, when dividing the ISs into Chinese and non-Chinese, the results showed that the group identification for non-Chinese ISs had no direct effect on the social support received from same-language speakers through FTF communication (H4). As previously mentioned, over 60% of the ISs in Japan were Chinese, meaning there were fewer opportunities for non-Chinese ISs to form in- groups with their same-language speakers and receive social support from them. These results suggest that group identification has different effects on receiving social support from same-language speakers between Chinese ISs and non-Chinese ISs.

One reason that no model with high goodness of fit can be found for Chinses ISs would be the difficulty in defining "same-language speakers." According to previous studies, "same nationality" means "same-language speakers." Based on this, this study included ISs from Hong Kong as Chinese ISs, who may have different perceptions compared to those from mainland China. This suggests that it is necessary to divide them up more concretely.

5. Implications and future work

5.1 Implications

The results indicated that raising ISs' generalized trust of Japanese people would be helpful for receiving more social support from Japanese people, which could help decrease their feelings of stress in Japan. For ISs with a higher level of group identification, receiving more social support from same-language speakers does not help decrease their feelings of stress in Japan. As ISs prefer to use IM to communicate more with same-language speakers than with Japanese people, it is necessary to aware that such usage could inhibit their communication with Japanese people from the perspective of better understanding of the Japanese culture and learning of the Japanese language.

5.2 Future work

To date, the definition of "same-language speakers" has been based on "nationality," which does not necessarily apply to some ISs. For

example, some non-Chinese ISs used the Chinese version to answer the survey, although English is one of their official languages. Based on existing theory, this study categorized them as "non-Chinese ISs." However, it is possible that these ISs might have different perceptions and consider Chinese ISs as "same-language speakers." It is necessary to reconsider the definition of it in the future.

It is necessary to note the generality of the findings in this study, as over 95% of the analyzed targets were regular course students in general national universities in the Kanto Region. The present study did not provide any findings for ISs enrolled in private universities, vocational schools, or junior colleges. Furthermore, this study did not investigate how ISs' motivation relates to their adaptation, as previous studies indicated that different factors influence ISs' academic and social/cultural adaptation. In the future, it would be necessary to examine how ISs' motivation relates to the two kinds of adaptation and to consider interactions with the sociolinguistic environment.

Notes

1) Parts of the results have been reported in the 13th Biennial Conference of the Asian Association of Social Psychology (AASP) (2019) and SIETAR Japan 34h Annual Conference (2019).
2) The survey was conducted with the approval of the Research Ethics Review Board at Faculty of Library, Information and Media Science, University of Tsukuba.
3) Japanese Language Proficiency was calculated as follows: (a) For ISs who had passed JLPT-L1/N1, it was calculated as L1 score/400 or N1 score/180. (The total score of L1 is 400 while N1 is 180.); (b) For ISs who had passed JLPT-L2/N2, it was calculated as L2 score/400 x .08 or N2 score/ 180 x .08. (L2/N2's level is approximately 80% of L1/N1's.); (c) For ISs who did not take the JLPT, it was calculated as: (self-evaluation percentage of "listening" + "speaking" + "reading" + "writing")/400.
4) As TOEFL and TOEIC have different standards, English ability was calculated as follows: (a) For a TOEIC score over 950, TOEIC score/10 + 8; for a TOEIC score of 901–950, TOEIC score/10+4; for a TOEIC score of 851–900, TOEIC score/10 + 3, and so on; (b) For those who did not take any test, proficiency was calculated as (self-evaluation percentage of listening + speaking + reading + writing)/400.
5) Following Ye et al. (2017), the frequency of Internet use was converted as monthly; namely, "6" was counted as "30," "5" was counted as "25," "1" was counted as "0."
6) This study calculated the score of each item for social support as "1" when it was chosen and "0" when it was not chosen and added up.
7) Since "gender" is a nominal scale, this study coded male as "0," female as "1" and other as "2" when conducting analysis.

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