

Factors Influencing the Mental Health of International Students, as Observed in a Longitudinal Study on Former Japanese Government Scholarship Students

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Background: More than 30 years have passed since the Japanese government announced its International Student 100,000 Plan in 1983. Today, the number of international students in the country exceeds 300,000. This study examines the relationship between factors affecting the mental health of international students and their satisfaction with having studied abroad in Japan.

Methods: An online-questionnaire was given to 82 former Japanese government scholarship students who studied in Japan in the 1980s. The survey consisted of items related to the basic personal attributes of the participants, their lives in Japan during their period of study (20 items), their satisfaction level at having studied in Japan (10 items), and their current happiness level (4 items).

Results: A significant relationship was observed between the level of satisfaction at having studied in Japan and a number of the statements relating to respondents' lives in Japan as students, including: "I felt that the differences between Japan and my home country were interesting, and enjoyed these differences," and "Whenever I encountered a difficult situation, I attempted to find different approaches to deal with the problem." A similar relationship was also observed between these statements and subjective happiness.

Conclusions: International students who were able to accept the differences and difficulties they confronted positively and respond to situations flexibly tended to report higher levels of satisfaction with their studies in Japan and higher levels of happiness, suggesting that individual psychological factors, such as situation perception and associated coping behaviors, have a defining impact on mental health. (J Nippon Med Sch 2021; 88: 475-484)

Key words: Japanese government scholarship students, mental health, longitudinal study, support for international students

Introduction

Since the Japanese government launched its "International Student 100,000 Plan" in 1983, with the aim of accepting 100,000 international students by the beginning of the twenty-first century, the number of international students in Japan has grown steadily¹. Today, more than 30 years after the launch of the plan, the number of international students exceeds 300,000. It is well known that leaving one's home country and moving to a foreign country where everything from the climate to the cus-

toms of daily life are unfamiliar, can cause mental illness. In the context of these sudden changes of environment, people are vulnerable to temporary instability, emotional upheaval, and depression. Some may display symptoms of maladjustment, as has been shown by previous research both in Japan and other countries²⁻⁴. Support for the mental health of international students is therefore an important part of helping them to maintain their mental and physical health and ensuring that they achieve their intended purpose in traveling overseas to pursue their

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studies.

Research on the mental health of international students in Japan has previously been carried out in fields like international student education and intercultural education, but there has been very little research that takes a psychiatric approach. Additionally, most of the few studies that have been done from a psychological approach tend to focus on students who suffered from maladjustment⁵⁻⁷.

In terms of factors affecting the mental and physical health of international students, many studies have focused on language and behavioral aspects, looking at attributes such as length of stay, Japanese language proficiency, and the problems with human relationships that can arise from communication difficulties⁸⁻¹¹. Although some studies have discussed the relationship between psychological factors (including appetite for study and other motivations, self-esteem, and self-awareness) and physical and mental health, such studies are not numerous^{12,13}.

From the 1980s to 2013, I worked at several foreign students dormitories in Tokyo, where I provided counseling and support to international students, mostly government-supported students on Japanese government scholarships. My experiences deepened my suspicion that the most important factors affecting the mental health of international students might be not the student's cultural background and personality traits (and similar attributes) or the frictions experienced by students arising from cultural differences and academic difficulties themselves, but rather the way in which each student perceives, feels, and thinks about those experiences and events.

Adaptation is a struggle with one's internal environment: a process of self-challenge and self-transformation. The degree to which adaptation is successful therefore varies considerably depending on the individual's views, feelings, and attitudes toward the unfamiliar foreign culture, based on self-reflection and self-analysis. In addition to external considerations such as individual attributes and environmental factors, it is necessary to consider psychological factors that determine thinking and behavior, such as perception of the alien culture and coping strategies, as important considerations that influence mental health.

In addition, much previous research has taken the form of one-off, cross-sectional studies, focusing on international students who were enrolled in Japanese educational institutions at the time of the study. Given that psychological processes change while living in a different

culture, longitudinal studies are called for, but at present the difficulties involved in carrying out follow-up studies mean that there is a lack of such research¹⁴.

Taking these issues into account, the present study carried out an online questionnaire-based survey of former Japanese government scholarship students who studied in Japan in the 1980s, asking them to recall their experiences of studying in Japan more than 30 years ago and examining the relationship between their satisfaction with their experience of studying in Japan, their current subjective sense of well-being, and important factors affecting the mental health of international students. The study also considered the role of psychological support in the context of providing counseling to international students.

Methods

Participants and Procedures

Eighty-two former Japanese government scholarship students who studied in Japan in the 1980s. (50 male and 32 female) The survey was carried out primarily by requesting participation from 78 international students who received pre-university training at the Japanese Language School affiliated with the Tokyo University of Foreign Studies between 1980 and 1991. These students took part in Minnesota Multiphasic Personality Inventory (MMPI) surveys conducted between 1986 and 1988. In addition to completing the survey themselves, some students forwarded the online questionnaire to other former students, as a result of which I was able to trace 99 students. However, complete responses were received from only 82.

The countries and regions represented by the students were as follows, with the number of survey respondents from each country provided in parentheses. Thailand (19), Singapore (13), Malaysia (11), Indonesia (9), Mongolia (7), Hong Kong (3), New Zealand (3), Laos (2), Philippines (2), Mexico (1), Brazil (1), Papua New Guinea (1), Canada (1), Australia (1), USA (1), Japan (2), multiple nationalities (5).

The survey took the form of a questionnaire completed online over the course of a month from April 22, 2020. The questionnaire was written in both English and Japanese.

The purpose and content of the survey were explained to the former students in writing at the time of the initial approach, and the online survey was carried out having obtained the understanding and consent of the participants.

Ethical Approval

The Ethics Committee of A University (A-2019-008) approved this study. The study procedures were conducted in accordance with the ethical standards of the Declaration of Helsinki.

Instruments

The questionnaire was initially completed in Japanese, then translated into English by a person fluent in both languages, and then back-translated by another person fluent in both languages to check for accuracy and consistency between the two versions. The content of the survey questionnaire used in the analysis was as follows.

The questionnaire consisted of 20 items related to students' lives in Japan during their studies, 10 items related to levels of satisfaction with having studied in Japan, and 4 related to current levels of happiness.

At the end of the survey, respondents were invited to write any further comments they might have about their experiences in their own words.

The specific contents of the questionnaire were as follows.

1. Basic background information

Age, gender, nationality, current occupation, details of study in Japan: period of affiliation with university or other institution, length of stay in Japan, marital status (spouse or other partner), financial situation, Japanese language proficiency (at beginning and conclusion of study in Japan).

2. Items relating to life as a student in Japan: 20 yes/no style statements (respondents choose all applicable statements)

(1) Items relating to sense of fulfillment with academic life, research, and general life in Japan as a student

There were people at my university who supported me in my studies and/or research/It was extremely difficult to study and/or pursue my research

(2) Items relating to appetite for study abroad in Japan

At the beginning of my studies in Japan, I was filled with high hopes/As much as possible, I tried to behave in accordance with Japanese customs, and to act in ways similar to Japanese people/I often spent time with my Japanese friends

(3) Items relating to perceptions of Japanese culture

I felt it was difficult to understand the feelings or "ways of thinking" of Japanese people/I possessed adequate information about the culture, social systems, etc. of Japan/I understood the etiquette and various other rules expected by society in Japan/It was difficult to behave in the same way as Japanese people did/The differ-

ences between Japan and my home country, in terms of living environment and customs, were a source of stress

(4) Items on coping with cultural differences

I felt that the differences between Japan and my home country were interesting, and enjoyed these differences/Even though I was aware of differences in customs, etc., I tried not to dwell on or think too deeply about them/Whenever I encountered a difficult situation, I attempted to find different approaches to deal with the problem/I actively sought to learn more about subjects such as Japanese culture and custom

(5) Items relating to national or ethnic identity

I often thought of my home country/Even after coming to Japan to study, I continued to eat certain foods and practiced specific behaviors to maintain the customs of my home country

(6) Items relating to mental and physical health

Small, relatively-inconsequential things would often make me irritable or anxious/I often found it difficult to fall asleep/I often found myself feeling blue, or listless (losing the energy to actively do things)/I often caught colds or otherwise felt unwell

3. Level of satisfaction with having studied in Japan

10 yes/no statements (respondents checked all applicable statements)

I am satisfied with having studied in Japan/Studying in Japan was a significant experience in my life/I often think back to the time when I was studying in Japan/I have good memories of studying in Japan/I still have connections to Japan and/or the Japanese language/I would like to live in Japan again/After studying in Japan, my image of the country changed/I did experience many hardships/difficult moments/I learned various ways to overcome difficulties/I made Japanese friends

4. Items relating to present level of happiness

The current levels of happiness and well-being was measured by taking the average score of following four items from the Subjective Happiness Scale (SHS)¹⁵.

I generally think of myself as being 1 (extremely unhappy) to 7 (extremely happy)/Compared to my contemporaries (people of similar age), I believe I am 1 (much more unhappy) to 7 (much more happy)/In the world, there are some extremely happy people. Regardless of the situation they find themselves in, these people have the ability to find a way to view things in the most positive way, and to therefore enjoy life. I possess 1 (almost no) to 7 (many) similar abilities. /In the world, there are some extremely unhappy people. Although they do not suffer from depression, they seem to be much more un-

happy than their situation would warrant. I have 1 (almost no) to 7 (many) similar tendencies (to feel unhappy)

Respondents refer to a seven-point scale and choose the number that corresponds most closely to how they feel. The original wordings of the number on the scale were modified in this study.

5. Open-ended comments

At the end of the questionnaire, respondents were invited to write any further comments they might have concerning their time studying in Japan in their own words.

Statistical Analysis

The results of the survey were analyzed as follows:

1. The relationship between life as a student in Japan and satisfaction with study in Japan was analyzed by using Fisher's exact test.

2. The relationship between life as a student in Japan and current subjective well-being was analyzed by using Welch's t-test.

3. The relationship between personal attributes and satisfaction with study in Japan was analyzed by using Fisher's exact test.

4. The relationship between personal attributes and current subjective well-being was tested by using one-way analysis of variance.

Results

Relationship Between Life as a Student in Japan and Satisfaction with Study in Japan (Table 1)

Fisher's exact test was used to determine whether there was any association between responses to the 20 yes/no statements on life as a student in Japan (where respondents selected all applicable statements), and the 10 statements on satisfaction with study in Japan, to which the former students responded in the same way.

The study observed a significant association between the items relating to life as a student in Japan and those relating to satisfaction with study in Japan.

A significant association was observed between the statement "I felt that the differences between Japan and my home country were interesting, and enjoyed these differences" and six items: "I am satisfied with having studied in Japan" (OR 4.48, $p<0.05$), "I often think back to the time when I was studying in Japan" (OR 5.12, $p<0.01$), "I have good memories of studying in Japan" (OR 9.31, $p<0.01$), "I would like to live in Japan again" (OR 2.84, $p<0.05$), "After studying in Japan, my image of the country changed" (OR 3.74, $p<0.05$), and "I learned vari-

ous ways to overcome difficulties" (OR 4.85, $p<0.01$).

A significant association was observed between the statement "I often spent time with my Japanese friends" and five items: "I am satisfied with having studied in Japan" (OR 4.14, $p<0.05$), "I often think back to the time when I was studying in Japan" (OR 3.37, $p<0.05$), "I have good memories of studying in Japan" (OR 7.33, $p<0.05$), "I learned various ways to overcome difficulties" (OR 3.52, $p<0.05$), and "I made Japanese friends" (OR 9.92, $p<0.01$).

A significant association was observed between the statement "At the beginning of my studies in Japan, I was filled with high hopes" and five items: "I am satisfied with having studied in Japan" (OR 4.79, $p<0.05$), "I often think back to the time when I was studying in Japan" (OR 4.46, $p<0.01$), "I would like to live in Japan again" (OR 2.65, $p<0.05$), "After studying in Japan, my image of the country changed" (OR 5.03, $p<0.001$), and "I learned various ways to overcome difficulties" (OR 7.77, $p<0.001$).

A significant association was observed between the statement "There were people at my university who supported me in my studies and/or research" and five items: "I am satisfied with having studied in Japan" (OR 3.79, $p<0.05$), "I often think back to the time when I was studying in Japan" (OR 3.10, $p<0.05$), "I have good memories of studying in Japan" (OR 4.74, $p<0.05$), "I still have connections to Japan and/or the Japanese language" (OR 3.79, $p<0.05$), and "After studying in Japan, my image of the country changed" (OR 2.78, $p<0.05$).

A significant association was observed between the statement "I actively sought to learn more about subjects such as Japanese culture and custom" and four items: "I often think back to the time when I was studying in Japan" (OR 3.40, $p<0.05$), "I have good memories of studying in Japan" (OR 5.12, $p<0.05$), "I still have connections to Japan and/or the Japanese language" (OR 6.11, $p<0.01$), and "After studying in Japan, my image of the country changed" (OR 5.62, $p<0.01$).

A significant association was observed between the statement "Whenever I encountered a difficult situation, I attempted to find different approaches to deal with the problem" and three items: "I have good memories of studying in Japan" (OR 5.53, $p<0.05$), "I still have connections to Japan and/or the Japanese language" (OR 9.14, $p<0.001$), and "I learned various ways to overcome difficulties" (OR 10.44, $p<0.001$). There was a non-significant tendency between "Whenever I encountered a difficult situation, I attempted to find different approaches to deal

Table 1 Odds ratios based on Fisher's exact test for the contingency table for each item of "experiences in student life at the time of study abroad" and "satisfaction with study abroad"

	I am satisfied with having studied in Japan	Studying in Japan was a significant experience in my life	I often think back to the time when I was studying in Japan	I have good memories of studying in Japan	I still have connections to Japan and/or the Japanese language	I would like to live in Japan again	After studying in Japan, my image of the country changed	I did experience many hardships/difficult moments	I learned various ways to overcome difficulties	I made Japanese friends
There were people at my university who supported me in my studies and/or research	3.79*	2.60	3.10*	4.74*	3.79*	2.10	2.78*	2.71+	2.12	2.04
It was extremely difficult to study and/or pursue my research	1.93	-	1.27	0.43	1.09	0.29*	1.16	1.92	1.64	0.26+
At the beginning of my studies in Japan, I was filled with high hopes	4.79*	1.16	4.46**	1.18	3.06	2.65*	5.03***	2.35+	7.77***	1.75
I felt it was difficult to understand the feelings or "ways of thinking" of Japanese people	1.12	0.49	0.80	0.71	1.77	0.78	1.12	1.11	1.77	0.43
I possessed adequate information about the culture, social systems, etc. of Japan	3.38+	-	6.52**	-	3.38+	1.50	1.27	1.74	1.77	12.04**
I understood the etiquette and various other rules expected by society in Japan	3.66+	-	7.84***	15.45**	2.46	2.39+	1.01	1.48	2.26	8.76**
It was difficult to behave in the same way as Japanese people did	0.67	-	0.79	0.36	0.97	0.95	2.51+	0.62	1.14	0.83
The differences between Japan and my home country, in terms of living environment and customs, were a source of stress	1.04	-	1.01	0.72	1.04	0.22*	11.40**	2.46	3.58	2.26
I felt that the differences between Japan and my home country were interesting, and enjoyed these differences	4.48*	2.95	5.12**	9.31**	3.04+	2.84*	3.74*	0.99	4.85**	1.55
Even though I was aware of differences in customs, etc., I tried not to dwell on or think too deeply about them	1.30	-	0.64	0.48	1.93	1.25	0.88	0.93	3.11+	1.11
Whenever I encountered a difficult situation, I attempted to find different approaches to deal with the problem	2.63	1.95	2.06	5.53*	9.14***	2.23	2.43+	2.47+	10.44***	3.21+
I actively sought to learn more about subjects such as Japanese culture and custom	2.80+	-	3.40*	5.12*	6.11**	0.89	5.62**	1.10	2.31	1.44
As much as possible, I tried to behave in accordance with Japanese customs, and to act in ways similar to Japanese people	4.90*	-	3.04+	3.72+	2.22	3.40*	1.92	1.52	1.97	3.92+
I often thought of my home country	1.44	0.60	1.42	1.48	9.05*	1.17	3.19*	2.20	3.48+	3.49
Even after coming to Japan to study, I continued to eat certain foods and practiced specific behaviors to maintain the customs of my home country	2.38	-	2.46	3.91	2.38	0.78	2.71+	1.33	2.06	2.13
I often spent time with my Japanese friends	4.14*	1.49	3.37*	7.33*	2.78	2.40+	2.24	1.54	3.52*	9.92**
Small, relatively-inconsequential things would often make me irritable or anxious	-	-	-	-	0.36	-	1.50	2.75	-	-
I often found it difficult to fall asleep	-	-	-	-	0.36	-	1.50	2.75	0.51	0.33
I often found myself feeling blue, or listless (losing the energy to actively do things)	-	-	2.23	0.97	1.35	0.51	2.39	4.57+	-	0.24
I often caught colds or otherwise felt unwell	-	-	0.59	0.26	0.36	-	0.36	0.66	-	0.08+

+p<0.1; *p<0.05; **p<0.01; ***p<0.001

Notes: A hyphen in the table indicates that the odds ratio cannot be calculated because one of the cells in the contingency table contains 0s.

with the problem” and “I did experience many hardships/difficult moments.”

A significant association was observed between “I understood the etiquette and various other rules expected by society in Japan” and three items: “I often think back to the time when I was studying in Japan” (OR 7.84, $p < 0.001$), “I have good memories of studying in Japan” (OR 15.45, $p < 0.01$), and “I made Japanese friends” (OR 8.76, $p < 0.01$).

An association was observed between the ability to respond positively to cultural differences and difficulties encountered, and a flexible way of looking at things (as evidenced in the study by statements like “I felt that the differences between Japan and my home country were interesting, and enjoyed these differences” and “Whenever I encountered a difficult situation, I attempted to find different approaches to deal with the problem”) and students’ level of satisfaction with their period of study in Japan. An association was also observed between this way of looking at things during the period of study in Japan, agreement with the statements “I learned various ways to overcome difficulties” and “I did experience many hardships/difficult moments,” and the student’s level of satisfaction with study in Japan, showing that when these students looked back on their time in Japan, they perceive the situation objectively and positively, in spite of the hardships and difficulties they had faced.

An association was also observed between students’ understanding of Japanese behavioral norms and a proactive willingness to learn and adapt to life in Japan (as evidenced by statements such as “I actively sought to learn more about subjects such as Japanese culture and custom,” “At the beginning of my studies in Japan, I was filled with high hopes” and “I understood the etiquette and various other rules expected by society in Japan”) and the students’ level of satisfaction with their studies in Japan.

There was also an association between exchanges with Japanese friends in the university setting (as measured by responses like “There were people at my university who supported me in my studies and/or research” and “I often spent time with my Japanese friends”) and satisfaction with study in Japan.

No association was found between responses to the questions about physical and mental health and students’ levels of satisfaction with their period of study in Japan.

Relationship between Life as a Student in Japan and Current Subjective Well-being

Welch’s t-test was used to determine whether there

was any association between responses to the 20 yes/no statements on respondents’ lives as students in Japan (where respondents were asked to check all applicable statements) and the four questions about subjective well-being at the time of the survey. The present level of subjective happiness was measured using the Subjective Happiness Scale (SHS), in which respondents rate their feelings on a score of one to seven in response to four questions/statements, and an average of the total is used as the SHS score.

Subjective happiness scores were higher for respondents who agreed with three statements: “There were people at my university who supported me in my studies and/or research” ($t(29.62) = 2.08$, $p < 0.05$), “I felt that the differences between Japan and my home country were interesting, and enjoyed those differences” ($t(35.05) = 2.38$, $p < 0.05$), and “Whenever I encountered a difficult situation, I attempted to find different approaches to deal with the problem” ($t(43.97) = 2.38$, $p < 0.05$). (Results are shown in **Table 2**)

Relationship between Gender, Length of Stay, Marital Status, Japanese Language Proficiency When at Beginning/Completion of Studies in Japan, and Satisfaction with Study in Japan

Fischer’s exact test was used to consider whether there was any association between factors such as respondents’ gender (male/female), length of stay (less than 1 year/1-2 years/2-3 years/3-5 years/5-10 years/more than 10 years), marital status: Did you have a spouse/partner (Yes: lived with spouse/partner/other family member(s)/Yes: Did not live with spouse/partner/other family member(s)/ No), Japanese language proficiency when arriving for studies in Japan (almost no Japanese/a few words in Japanese/daily conversational skills, enough to allow me to manage everyday life/with assistance, could study or conduct research in Japanese/could study or do research in Japanese), Japanese language proficiency after completing studies in Japan (daily conversational skills in Japanese, enough to manage everyday life/with assistance, could study or conduct research in Japanese/could study or do research in Japanese), and students’ responses to the ten agree/disagree statements relating to satisfaction with study in Japan. The results showed a significant association with gender for one item only: “I am satisfied with having studied in Japan” ($p < 0.05$). More men than women responded that they were satisfied with having studied in Japan.

A non-significant association, on the level $p < .10$, was

Table 2 The Subjective Happiness Scale (SHS) scores by presence or absence of “experiences in student life at the time of study abroad”

	Yes			No			<i>t-value</i>
	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	
There were people at my university who supported me in my studies and/or research	59	6.09	0.66	23	5.58	1.00	2.08
I felt that the differences between Japan and my home country were interesting, and enjoyed these differences	61	6.05	0.78	21	5.64	0.78	2.38
Whenever I encountered a difficult situation, I attempted to find different approaches to deal with the problem	54	6.11	0.69	28	5.64	0.90	2.38

Notes: Only the items that were significant differences of the SHS scores between “Yes” and “No” were extracted.

observed with other items, as listed below.

A weak association was observed between length of stay and the statement “I did experience many hardships/difficult moments.” Of the students who did not check the statement “I did experience many hardships/difficult moments” as applicable, many were in Japan for a relatively short length of stay ($p < 0.10$).

There was a weak association between length of stay and the response “I often think back to the time when I was studying in Japan.” A higher proportion of students who had spent five to ten years in Japan marked this response as applicable ($p < 0.10$).

There was a weak association between marital status (or presence of other partner or family member) and the response “I would like to live in Japan again.” A high proportion of people who agreed with the statement “I would like to live in Japan again” lived with a spouse or other partner during their time in Japan, while many who checked this response as not applicable lived apart from their spouse or other partner during their time in Japan. ($p < 0.10$)

Relationship between Gender, Length of Stay, Marital Status, Japanese Language Proficiency before/after Studies and Current Subjective Well-being

One-way analysis of variance did not show any significant difference for any of these factors.

Discussion

Relationship between Life as a Student in Japan and Satisfaction with Study in Japan

(1) Awareness of Japanese culture and satisfaction with study in Japan

The study made clear that students who understood Japanese behavioral norms, who were prepared to study proactively to adapt to Japan, who accepted differences and the difficulties they faced positively, who had a flexible view of things and who were able to perceive hard-

ships and difficulties objectively and positively tended to express the highest satisfaction with their studies in Japan. The results of the survey suggest that although we cannot change the facts in front of us, we can control our own negative emotions by viewing these facts positively rather than negatively, and ultimately change our behavior as a result.

Studying in a foreign country involves living in another culture, which inevitably requires international students to confront differences between their own values, behavioral norms, and language and those of the Japanese society around them. This direct contact with another culture in daily life means not only working to understand the other culture and its people on a cognitive level, but also dealing with negative emotions including anxiety, irritation/frustration, and rejection provoked by this encounter with a foreign culture.

Experiencing the preconceptions presumably shared by people of another culture, the insufficient knowledge and information that exists on both sides, and the misunderstandings, distrust, frictions, and confrontations that can arise from this, brings a personal experience of the difficulty of understanding and accepting other people and other cultures. But this is something that many people experience when they come into contact with another culture in this type of context.

How a person copes with these situations as they inevitably arise varies according to the intercultural competence of the individual. The results of this study suggest the importance of this intercultural competence and the ability it gives a person to discern the different culture itself and respond appropriately. I believe that fostering this ability during the education of international students will help to support the mental health of international students in the future.

In terms of mental and physical health, rational emotive behavioral therapy already exists^{16,17} as a cognitive

behavioral therapy that intervenes in cognition, emotion, and behavior. Rational emotive behavior therapy holds that a person's behavior is based fundamentally not that person's experiences or external events, but his or her belief system. If these are rational beliefs, these can help a person cope with events in a rational manner, but if a person is controlled by irrational beliefs, this can lead to negative and inappropriate thoughts, making it impossible for the person to make rational decisions and sometimes leading to pathological symptoms. Rational therapy aims to resolve these problems by working to change the irrational beliefs into rational ones. The basic idea behind rational therapy therefore coincides with the basic idea of this study. It is to be hoped that a new approach will be put in place to help nurture this strength in settings providing counseling, advice, and support for international students in the future.

(2) Relationship between friendships and satisfaction with study in Japan

An association was observed between close relationships and exchanges with Japanese friends and international students' level of satisfaction with study in Japan. In particular, since having had "people at my university who supported me in my studies and/or research" is closely connected to students' levels of satisfaction with their period of study in Japan, this type of support should be regarded as an important aspect of overall support for international students. Relationships with Japanese friends also provide a valuable opportunity for international students to develop a sense of affinity for Japan and Japanese people. Even if students face hardships, the study suggests that they will still feel satisfied with their time in Japan and that their experience of studying here will remain as a positive memory if they are fortunate in this regard. A number of students also wrote comments to this effect in the open-ended section at the end of the survey, noting that their friendships with Japanese people had been an important aspect of their experience of study in Japan. By contrast, there were also negative comments from international students who had not been able to form close relationships with Japanese people. Previous research has already raised the problem of isolation among international students. The subjects of this study were international students who came to Japan in the 1980s relatively soon after the Japanese government put forward a plan to bring 100,000 foreign students to the country. It cannot be denied that some Japanese people were unaccustomed to dealing with international students and uncertain how to extend

a welcome to them. However, similar problems have been pointed to by studies carried out in recent years¹⁸, and the fact that the same problems still exist more than 30 years later needs to be taken seriously.

(3) Motivation for studies and level of satisfaction with study in Japan

Previous research on the education of international students has shown that factors such as students' enthusiasm for their studies and their motivations in coming to Japan can also have a significant impact on their mental health^{19,20}. In the present study, an association was observed between proactive willingness to study in order to understand Japanese behavior and students' levels of satisfaction with their studies in Japan. The subjects of the present study were government-supported students who had won a Japanese government scholarship; it may be therefore that the pride they felt in having been selected made the incentive to learn as much as possible from their time in Japan more evident than it might have been with another group of subjects. Additionally, in MMPI tests carried out on students who came to Japan on government scholarships between 1986 and 1988, prominent personality traits included extroversion, cheerfulness, and positivity were observed in general²¹. It should be taken into account that this survey was carried out on the assumption that the subject group was likely to share many of these characteristics.

Relationship between Life as a Student in Japan and Subjective Happiness

A relationship was observed between the ability to accept differences and difficulties positively and adopt a flexible way of looking at things and subjective happiness levels. The Subjective Happiness Scale is a standardized scale, and previous research has shown that higher SHS scores are associated with higher levels of self-esteem²². Self-esteem here means living without excessive anxiety, taking satisfaction in one's own way of life, feeling pride in oneself, and a sense that one is making a valuable contribution to society.

Since a high level of current happiness is underpinned by high levels of self-esteem, and also related to the high levels of intercultural competence that allowed students to respond objectively and flexibly to difficult situations during their time studying in Japan, we can predict that students who were better able to adapt to a foreign culture during their time in Japan will tend to have higher levels of self-esteem.

However, this remains a matter for speculation for now, since the present study did not measure levels of

self-esteem at the time of the respondents' studies in Japan. It is hoped that the relationship between these two factors can be further examined in the future.

Relationship between Gender, Length of Stay, Marital Status, Japanese Language Proficiency at Start and Conclusion of Studies, and Level of Satisfaction with Study in Japan

Previous research has often considered the relationship between attributes such as length of stay and Japanese language proficiency and satisfaction with study in Japan, but results have varied from one study to the next.

The present study found a significant association with gender for one item only, namely the statement "I am satisfied with having studied in Japan." ($p < 0.05$) More men than women marked this statement as applicable to their own situation. One reason may be that some women found living in Japan more difficult because of Japanese expectations, customs, and conventions relating to gender norms. The true reasons remain a matter for speculation on at this stage, however, and there is a need for further study.

The present study also observed a non-significant tendency of around $p < 0.10$ for a number of other items. These included: a weak association between marital status (spouse or other partner) and the response "I would like to live in Japan again," where many people who said that they would like to live in Japan again were former students who lived with their spouse during their studies, while many people who responded negatively to this question had lived apart from their spouse during their studies. When I was involved in providing counseling to international students more than 30 years ago, it was often quite difficult to provide support not only to the students themselves but also to their families, and many people had negative opinions about allowing students to have family members accompany them. However, the results of this study show that international students who brought their spouse with them to Japan still felt that they would like to live in the country again now, more than 30 years later. International students also have families. The results of this survey suggest that welcoming students' families to Japan can be an important factor in maintaining the mental health of international students.

Open-ended Responses

Some of the comments that respondents wrote in the "free comment" section are summarized below.

Although some students said that they had been helped by Japanese people who had supported them

during their time in Japan (including university faculty, international student advisors, students acting as what we would now call "tutors," and Japanese friends), many other students wrote that they were unable to make many Japanese friends, and that international students often kept to themselves.

These comments support the finding that close relationships with Japanese people and support had significant impact on students' levels of satisfaction with their studies in Japan.

Also, many students wrote that they struggled to keep up with lessons (in Japanese) during their first economic year. Similarly, some believed that opportunities or means to learn about Japanese language or culture were limited, and hoped this would change in the future.

Several students wrote that they experienced problems as a result of a refusal on the part of real estate companies and landlords to rent to foreigners. These responses revealed the dilemma that exists for many international students, who find it difficult to rent an apartment and therefore move into a dormitory with other international students, thereby reducing their opportunities to socialize with Japanese students. Have these problems been resolved today, more than 30 years after the students who were the subject of the present study came to Japan? Many issues still remain.

Conclusions

By this study it was proved that the former international students, those who were able to accept difficulties and differences they confronted positively and respond to situations flexibly tended to report higher levels of satisfaction with their studies in Japan and higher levels of happiness. These findings suggest that individual psychological factors, such as situation perception and associated coping behaviors, have a defining impact on mental health. The findings of this study can make a major contribution to providing better support to international students in the future.

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