ALEXITHYMIC TRAITS AS PREDICTORS OF DIFFICULTIES WITH ADJUSTMENT IN AN OUTPATIENT COHORT OF EXPATRIATES IN TOKYO¹

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Summary.—The purpose of this study was to examine whether alexithymic characteristics, which are thought to be related to poor coping with stress, would be associated with variables thought to reflect adjustment to life abroad. The subjects were 56 expatriates living in Tokyo, Japan. The Expatriate Adaptation Inventory, the Toronto Alexithymia Scale, and the Social Support Questionnaire of the Stress and Coping Inventory were given to the subjects. Scores on alexithymia were significantly associated with dissatisfaction with life abroad, higher satisfaction with life in one's home country prior to departure, and higher ratings on the perception of poor social support. An alexithymia variable, difficulty identifying feelings, was a significant predictor of dissatisfaction with life abroad and satisfaction with life in the home country. The results suggest that, because alexithymia was associated with lower satisfaction with life abroad and higher satisfaction in the home country prior to departure, it may be a predictor of adjustment difficulties when individuals live abroad. Empirical confirmation is needed.

Globalization of the world economy has led to an increasing number of employees of large corporations being relocated overseas. International companies typically place expatriates overseas for periods that average three years to expand into foreign markets (17). Currently, approximately 500,000 foreigners live in Tokyo. The English-speaking foreign community in Tokyo is comprised mostly of employees of international corporations, along with language teachers, local-hire expatriates, diplomats, missionaries, and others. The cultural barriers between the Japanese and the foreign community in Japan have been well described (3, 4) and would be expected to pose a psychosocial stress on an expatriate.

Previous studies have described personality characteristics and behaviors which affect adjustment to living overseas. The importance of language and communication skill (18, 22), interpersonal skills (13), and cultural empathy (17) have been reported as significant contributors to one's adjustment

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to life abroad. In addition, cross-cultural adaptation has been shown to affect job performance significantly (5).

Adjustment to life abroad is a multifaceted process. Cui and Njoku (1992) adopted a cognitive-affective-behavioral framework that included five major predictors of intercultural effectiveness: language and interpersonal skills, social interaction, cultural empathy, personality traits, and managerial ability (5). Of these factors, at least the former four appear related to the ability to identify and express emotions.

The concept of alexithymia was initially derived from clinical observations of patients with classic psychosomatic illness. Sifneos (23) proposed the term alexithymia to describe a cognitive-affective condition characterized by difficulty in identifying and describing feelings and in elaborating fantasies. Recent studies have now shown relatively high rates of alexithymia among psychiatric patients with substance use disorder, eating disorder, posttraumatic stress disorder, and panic disorder (14, 15, 16, 19). Moreover, several studies have demonstrated that alexithymic characteristics are closely related to poor coping with stress, e.g., negative reactions to stress, poor social support, etc. (12). Given this, we hypothesized that alexithymic traits would be correlated with variables that reflect adaptation to one's host country, and in particular perceived social support. To our knowledge, a psychiatric study on the relationship between alexithymia and life abroad has not previously been conducted.

Метнор

Subjects included 56 expatriates living in Tokyo, Japan who voluntarily sought psychotherapy with a psychiatrist at an outpatient clinic (private practice of Author D.B.) over an approximately 2-yr. period from 1995 to 1997. About two-thirds of the patients at this clinic are foreign. The remainder are Japanese with a small percent of mixed Japanese or those of foreign ethnicity. Subjects heard of the clinic through notices in news media or through referrals from other medical practitioners. None of the subjects were aware of the study prior to their first clinic visit. All provided informed consent for their participation in the study. Every patient who presented to the clinic over the study period and who did not have any cultural connection to Japan in his family of origin, i.e., mixed cultural families with one Japanese parent were excluded, was asked to fill out a questionnaire. Approximately 70% of foreign clinic patients agreed to complete the questionnaires. The characteristics of those who did not agree to complete the questionnaire or their reasons for such decision were not recorded.

The subjects included 34 men and 22 women of an age range of 22 to 51 years (M age, 32.7 yr., SD=7.2). The mean length of stay in Japan was 56.1 mo. (SD=55.0, range 2 to 240). Home countries were the United States

or Canada (n=36), Europe (n=9), Australia or New Zealand (n=4), Asia (n=5), and others (n=2).

Procedure

After obtaining informed consent, the Expatriate Adaptation Inventory, a self-report questionnaire of three scales thought to reflect adaptation to life abroad [(a) Satisfaction with Life Abroad (29 items), (b) Feelings Towards the Host Country (19 items), and (c) Satisfaction with Life in the Home Country (10 items) (Appendix 1, pp. 76-77)], was given to the subject to complete at home. The items in the Expatriate Adaptation Inventory were developed after lengthy discussion among three of the authors based on extensive psychotherapeutic clinical experience with the expatriate community in Japan and other countries. Positive and negative reactions to both one's host and home countries thought most likely to reflect the type of adaptation to expatriate life make up the bulk of the items. The questions were answered using a 3-point scale, with 0 (not true), 1 (somewhat or sometimes true), and 2 (very true or often true). Full scores for each factor were 58, 38, and 20 points, respectively. The Expatriate Adaptation Inventory also requests demographic data.

The 20-item Toronto Alexithymia Scale (1, 2) and the Social Support Questionnaire of the Stress and Coping Inventory (20, 21) were also administered.

The 20-item Toronto Alexithymia Scale (1, 2) is a self-report questionnaire which assesses alexithymia and has three subscales, namely, Difficulty Identifying Feelings (Factor 1), Difficulty Describing Feelings (Factor 2), and Externally Oriented Thinking (Factor 3). The items are rated on a 5-point scale. The reliability and validity of the 20-item Toronto Alexithymia Scale has been supported by various analyses (1, 2). Internal consistency of the 20-item Toronto Alexithymia Scale was supported by adequate Cronbach coefficients α.

According to Zeitlin and McNally (24), scores on the 20-item Toronto Alexithymia Scale are treated as continuous variables, consistent with the view that alexithymia is a graded rather than an all-or-none phenomenon. In secondary analysis, the cut-off score was used to examine the prevalence of alexithymia. A score of 61/62 has been regarded as an acceptable cut-off score on the 20-item Toronto Alexithymia Scale, i.e., alexithymic when the score is over 62. A score of 51/52 has been regarded as an acceptable cut-off score for the 20-item Toronto Alexithymia Scale (nonalexithymic when the score is under 51). Persons with a score between 52 and 61 are judged to be borderline. Thus, the subjects were divided into three groups: Alexithymic, Borderline, and Nonalexithymic.

The Stress and Coping Inventory is a self-report questionnaire battery

compiled and edited by Rahe (20) and Rahe and Veach (21). The Stress and Coping Inventory represents a collection of newly developed and previously standardized scales that provide four stress indicators and four measures of coping with stress: Health Habits, Social Support, Response to Stress (negative and positive responses to stress), and Life Satisfaction. The greater the score, the more adaptive the coping.

Previous studies have indicated a significant relationship between alexithymic traits and variables reflecting social supports. Of the four coping subscales of the Stress and Coping Inventory, we examined the Social Support subscale. The Social Support items measure existence of an individual's social network, the utilization of this network, and perception of the readiness of their network to come to their aid. The social support items have three subscales with six items each: Existence, Utilization, and Perception of Helpfulness.

Simple correlation analysis and multiple regression analysis were used. All differences were considered significant at p < .05. Statistica software (Japanese version) for the Macintosh was used for statistical analysis.

RESULTS

Prevalence Rate of Alexithymia

The prevalence rate of alexithymia was 7.1% (4 to 56). The mean scores and standard deviations on the total scale and Factors 1, 2, and 3 of the 20-item Toronto Alexithymia Scale were 44.8 (SD = 11.8, range 21 to 66), 16.4 (SD = 6.8, range 7 to 29), 12.6 (SD = 4.3, range 5 to 21), and 15.7 (SD = 4.4, range 8 to 24).

Relationships for alexithymia with variables associated with adaptation to host country.—We examined the relationship of total scores as well as scores on the three factors of the Toronto Alexithymia Scale to scores on the three scales of the Expatriate Adaptation Inventory. Table 1 presents the results of simple correlational analyses on the relationship between alexithymia and variables associated with adaptation to host country (three subscales of the Expatriate Adaptation Inventory, age, length of stay, and three subscales of Social Support). Simple correlational analyses found that total scores on the 20-item Toronto Alexithymia Scale were significantly correlated with scores on Satisfaction with Life Abroad $(r_{54} = -.36, p < .05)$, scores on Satisfaction with Life in the Home Country (r_{54} = .35, p < .05), and scores on Perception of Social Support ($r_{54} = .47$, p < .05). Regarding three subscales of the 20-item Toronto Alexithymia Scale, although scores on Factor 1 were significantly correlated with scores on Satisfaction with Life Abroad ($r_{54} = -.35$, p < .05), scores on Satisfaction with Life in the Home Country (r_{54} = .38, p < .05) and scores on Perception of Social Support $(r_{54} = .43, p < .05)$, the scores on Fac-

TABLE 1
SIMPLE CORRELATIONAL ANALYSES ON THE RELATIONSHIP BETWEEN ALEXITHYMIA AND VARIABLES ASSOCIATED WITH ADAPTATION TO HOST COUNTRY

Measure	Toronto Alexithymia Scale-20			
	Total Scores	Difficulty Identifying Feelings (Factor 1)	Difficulty Describing Feelings (Factor 2)	Externally Oriented Thinking (Factor 3
Expatriate Adaptation Inventory		el labellos		
1. Satisfaction With Life Abroad	36*	35*	23	24
2. Feelings Towards the Host				
Country	11	08	07	09
3. Satisfaction With Life at Home	.35*	.38*	.14	.26
Social Support				(i)
Existence	18	17	10	19
Utilization	23	24	17	12
Perception of Helpfulness	47*	43 [±]	21	28
Sociodemographic Data				
Age	15	14	09	11
Length of Stay	11	07	06	12

^{*}p<.05, with a Bonferroni adjustment, p.05 = .001.

tors 2 and 3 were not correlated with any variables associated with adaptation to the host country.

Tables 2 and 3 show the results of multiple regression analyses on the relationship between alexithymia and variables associated with adaptation to

TABLE 2

Multiple Regression Analyses on Relationship Between Alexithymia (beta Scores) and Variables Associated With Adaptation to Host Country

Measure	beta for Factor 1	
Expatriate Adaptation Inventory		
1. Satisfaction With Life Abroad	36*	
2. Feelings Towards the Host Country	18	
3. Satisfaction With Life at Home	.35*	
Social Support (Stress and Coping Inventory)		
Existence	.01	
Utilization	12	
Perception of Helpfulness	39*	
Sociodemographic Data		
Age, yr.	17	
Length of Stay, mo.	08	

^{*}p<.05.

host country. Variance in total scores on the 20-item Toronto Alexithymia Scale was significantly explained by variables associated with adaptation to host country (R = .62, $R^2 = .38$, $F_{8,47} = 3.4$, p = .004). In particular, total scores on the 20-item Toronto Alexithymia Scale were significantly related to scores

TABLE 3

MULTIPLE REGRESSION ANALYSES ON RELATIONSHIP BETWEEN ALEXITHYMIA (BETA SCORES ON FACTOR 1) AND VARIABLES ASSOCIATED WITH ADAPTATION TO HOST COUNTRY

Measure	beta for Factor 1	
Expatriate Adaptation Inventory		
1. Satisfaction With Life Abroad	40*	
2. Feelings Towards the Host Country	11	
3. Satisfaction With Life at Home	.39*	
Social Support (Stress and Coping Inventory)		
Existence	.01	
Utilization	02	
Perception of Helpfulness	41*	
Sociodemographic Data		
Age, yr.	20	
Length of Stay, mo.	12	

*p < .05.

on Satisfaction with Life Abroad (p < .05), scores on Satisfaction with Life in the Home Country (p < .05), and scores on Perception of Social Support (p < .05). As for scores on Factor 1, significant results were also found (R = .55, $R^2 = .30$; $F_{8,47} = 2.4$, p = .03). Although the results of Factors 2 and 3 are not shown in the tables, no significant results were noted.

DISCUSSION

The purpose of this study was to examine whether alexithymic traits can predict difficulties with adjustment when individuals live abroad. We used the Expatriate Adaptation Inventory and the Social Support questionnaire of the Stress and Coping Inventory. In addition, we used age and length of stay as sociodemographic variables associated with alexithymia because previous studies have shown that scores on alexithymia may be influenced by age but not by sex (9). We assumed that increased length of stay is positively correlated with increased stress, although actually one's stress might actually decrease with longer lengths of stay due to acclimation to the host country. Also, we considered the possibility of a state reaction (secondary alexithymia), due to the length of stay in Japan on the expression of alexithymic characteristics.

Correlational analyses indicated that alexithymia was significantly related to dissatisfaction with life abroad, satisfaction with life in the home country prior to departure, and perception of poor social support. These findings indicate that alexithymia may predispose one to have difficulty adjusting to a stressful environment. Faced with the necessity of dealing with novel social and interpersonal scenarios as well as novel emotional and verbal reactions, inability to gauge one's own emotional reaction and difficulty

in reading the emotional state of the individuals around oneself could be seen as a predisposition for uncertainty as well as conflict (or perceived conflict) and thus increased stress. In one's home country, where the expected social and interpersonal cues are already intellectually practiced, fewer instances of conflict or frustration would be expected to develop.

Some of the common social stresses reported by the foreign community in Japan includes that the Japanese do not express their feelings clearly, that the Japanese communication style is vague and superficial, that the Japanese sometimes appear to go back with what they seemed to previously agree, and that there is considerable exclusion of foreigners from many aspects of Japanese life. This particular constellation of social stresses has been discussed widely in the literature (3, 4) and has seemed to us to cause varying amounts of difficulty in adjustment within the foreign community in Japan.

Alternatively, alexithymia could conceivably result secondarily to the stress. Recent studies have proposed that alexithymic characteristics are divided into two types, primary alexithymia as a personality trait and secondary alexithymia as a state reaction (6, 10). Generally, secondary alexithymia occurs when individuals are placed in severely stressful circumstances (10).

In previous prevalence studies in healthy controls, the rates of alexithymia were 8.3% or 2 of 24 persons (7), 4.7% or 2 of 43 (8), and 8.9% or 16 or 179 (11), respectively. Thus, previous studies have reported that the prevalence rate of alexithymia assessed by the Toronto Alexithymia Scale is less than 10% in healthy controls (7, 8, 11). In this study, the prevalence rate of alexithymia was approximately 7% or 4 of 56. Although the sample in this study was not large, the prevalence rate was consistent with that of several prior studies. Alexithymia did not seem to occur more frequently than the typical trait prevalence rate. It was therefore suspected that the alexithymic characteristics assessed by the 20-item Toronto Alexithymia Scale in this study reflected personality traits.

The alexithymic characteristics were also significantly related to the perception of poor social support. These results support the notion that expatriates exhibiting alexithymia tended to perceive little social support from their foreign environment. Alexithymic characteristics appeared related to individuals' expectations of the accessibility and responsiveness of available social support. Expatriates with alexithymic traits who perceive low levels of social support tended to feel less satisfaction with life abroad and to have higher ratings on satisfaction with life in the home country prior to departure.

Multiple regression analyses found that regardless of the perception of social support and sociodemographic data, i.e., age and length of stay, alexithymic traits, in particular difficulty identifying emotions, appear to be psychological predictors of adjustment when individuals live abroad. The alexithymic variable may be related to other predictors of cross-cultural adjust-

ment, e.g., communication ability, interpersonal skills, etc.; however, this was not specifically examined in this study. Also, the subjects in this study may not have been representative of all expatriates living in Tokyo with regard to the items investigated.

These results may aid mental health workers in their approach to expatriates and help to stimulate empirical confirmation and further research in this area. Focusing on the meaning of social cues and cultural differences in the expression of emotional states might be helpful in the psychotherapy of expatriates who are having difficulty with the host society. Social supports and adjustment variables as measured by the Expatriate Adaptation Inventory might be the focus of corporate and embassy personnel departments and/or employee-assistance programs.

Further study is necessary to evaluate the usefulness of the Expatriate Adaptation Inventory in the assessment of expatriates' adjustment as well as elucidate the intriguing questions posed by this study, especially the relationship of alexithymia and its relationship to social adaptability.

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APPENDIX 1

EXPATRIATE ADAPTATION INVENTORY

We are attempting to evaluate adaptation to living overseas. Please choose the answer that best describes your feelings averaged over the past 2 weeks. Please answer all items as best as you can, even if some do not seem to apply to you. By completing this questionnaire, you consent to allow the information you provide to be used for research. All information will be strictly confidential. If either of your parents is a native of this country, please do not complete this questionnaire. Thank you for taking the time to complete this questionnaire.

0 1 2 26. The native people seem to like me.

- 0 1 2 27. I find the people in this country to be kind and considerate.
- 0 1 2 28. I believe this is a good country in which to raise children.
- 0 1 2 29. Living in this country is educational.

Feelings Towards the Host Country

- 0 1 2 1. I would prefer to be living in another country.
- 0 1 2 2. I seldom interact with the native people of this country.
- 0 1 2 3. The customs of the people here seem strange to me.
- 0 1 2 4. I have had hostile encounters with the native people here.
- 0 1 2 5. I have been discriminated against because I am a foreigner.
- 0 1 2 6. The main reason I am in this country is for the money.
- 0 1 2 7. I have mixed feelings about the native people.
- 0 1 2 8. Some of the habits of the native people irritate me.
- 0 1 2 9. I do not feel I will ever "fit" into this country.
- 0 1 2 10. I sometimes feel strong hate toward the native people.
- 0 1 2 11. The native people often stare at me.
- 0 1 2 12. I sometimes feel clumsy in this country.
- 0 1 2 13. I feel self-conscious in this country.
- 0 1 2 14. The native people talk about me behind my back.
- 0 1 2 15. The native people follow me.
- 0 1 2 16. I often get frustrated with the native people here.
- 0 1 2 17. I prefer to interact as little as possible with the natives of this country.
- 0 1 2 18. The air pollution in this country is bothersome.
- 0 1 2 19. I am bothered by the lack of easily accessible open space in this country.

Satisfaction With Life at Home

- 0 1 2 1. I don't feel very attached to the hometown where I grew up.
- 0 1 2 2. While growing up, I felt that I didn't "fit" into the culture in which I lived.
- 0 1 2 3. I don't feel I "fit" into the culture in which I grew up.
- 0 1 2 4. I feel homesick much of the time.
- 0 1 2 5. My only real friends come from my hometown.
- 0 1 2 6. Other people who want me to return home are emotionally stressful to me.
- 0 1 2 7. I miss people who are living in my home country.
- 0 1 2 8. I miss the customs and ways of doing things at home.
- 0 1 2 9. I miss the media (radio, T.V., newspapers, etc.) from home.
- 0 1 2 10. I miss the food in my home country.