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ORIGINAL

The relationship between psychological comfort space and self-esteem in people with mental disorders

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Abstract : The purpose of this study was to demonstrate a causal model of the sense of having psychological comfortable space that is call '*ibasho*' in Japanese and self-esteem in people with mental disorders who had difficulty in social activities. The subjects were 248 schizophrenia patients who were living in the community and receiving day care treatment. Data were collected from December 2007 to April 2009 using the Scale for the Sense of *ibasho* for persons with mentally ill (SSI) and the Rosenberg Self-Esteem Scale (RSES), and analyzed for cross-validation of construct validity by conducting covariance structure analysis. A relationship between the sense of having comfortable space and self-esteem was investigated. Multiple indicator models of the sense of having psychological comfortable space and self-esteem were evaluated using structural equation modeling. Furthermore, the SSI scores were compared between the high- and low-self-esteem groups. The path coefficient from the sense of having comfortable space to self-esteem was significant (0.80). High-self-esteem group scored significantly higher in the SSI subscales, 'the sense of recognizing my true self' and 'the sense of recognizing deep person-to-person relationships' than the low-self-esteem group. It was suggested that in order to help people with mental disorders improve self-esteem, it might be useful to support them in a way they can enhance the sense of having comfortable space. J. Med. Invest. 58 : 56-62, February, 2011

Keywords : *mental disorder, psychological comfortable space, self-esteem, social activity,* ibasho

INTRODUCTION

Recently, the Japanese government has been encouraging people with mental disorders to live a healthy life as a member of the community. However, this has not been realized yet. A nation-wide survey disclosed that 36% of schizophrenia outpatients whose ages were less than 65 years had not participated in social activities in the community for more than one year, and indicated the necessity of early intervention for such persons (1). The fact that those with mental disorders do not participate in social activity in community means that they do not have comfortable space outside their own house.

Having the sense of *ibasho* that is feelings of having psychological comfort space is one of important elements for persons with mentally ill to live with a better quality of life (2).

Taking account of the possibility that the sense of *ibasho* may enable persons with mentally ill to participate in the community, we have developed the Scale of the Senses of *Ibasho* for persons with mentally ill (SSI) (3). The SSI has been studied in the aspect of concomitant and predictive validity.

On the other hands, Kunikata *et al*. (4) reported that the self-esteem in persons with mentally ill correlates with their quality of life (path coefficient= 0.45). According to the survey conducted in their investigation, self-esteem was found to be the predictor in 4 domains of the schizophrenia patients' quality of life. Also, the proportion of physical and psychological dimensions in the quality of life predicted by self-esteem increased over time, while the proportion of the social relationship and environmental dimension remained stable (5). Fialko *et al*. pointed out that the suicidal ideation of schizophrenia patients was associated with low self-esteem, depressed mood, and so on (6). Smith *et al*. reported that persons with mentally ill and low self-esteem suffered from severe auditory hallucinations of intensely negative contents as well as from severe persecutory delusion, and were thus distressed and preoccupied with them (7). Thus, self-esteem is a very important concept for persons with mentally ill. So, we had a hypothesis that if they have the sense of *ibasho*, it would give them a positive effect on their self-esteem. If the sense of *ibasho* affects self-esteem, it may be possible for them to control their quality of life, suicidal ideation, and symptoms by supporting them to get the sense of *ibasho*.

The purpose of this study was to empirically examine the causal model of the sense of having psychological comfortable space that is call '*ibasho*' in Japanese and self-esteem, in order to obtain indicators for the social involvement and community participation of persons with mentally ill.

THEORETICAL FRAMEWORK

The Kōjien, Japanese dictionary first published by Iwanami Shoten in 1998, defines the Japanese word '*Ibasho*' as a space for being (8), and it is usually thought to be a physical phenomenon. We are usually unconscious that we can have psychological comfortable space but we are normally aware of that only when we think that there is no space for us (9), which means that the word '*Ibasho*' have psychological aspect rather than physical one. Most of those with mental disorders have a problem of

"where should I be?" or "what is the place I can show true self?" (10). We defined referring to the definition of Nakahara (11) as 'the sense of recognizing the place where I can stay, be as my true self, and I can feel as I am'.

Self-esteem isn't to feel superior or inferior by compare with others, is the emotion to respect oneself and to consider oneself as worthwhile. Self-esteem has two meanings ; to regard oneself as "very good", to regard oneself as "good enough". The degree of feeling of "good enough" indicates the altitude of self esteem (12). In addition, self esteem is mainly defined by discrepancy between self-actualization and ideal self (13).

We thought that if someone can have the sense of having the space called "*ibasho*", he or she can express one's real self, and by expressing real self, self-acceptance which regard oneself as "good enough" occur and self-acceptance affects self-esteem.

METHODS

Subjects

The subjects were 248 outpatients with schizophrenia. The diagnosis was based on DSM-IV criteria for schizophrenia. They were living in the community and were receiving day-care treatment at psychiatric hospitals in Okayama City, Takamatsu City, or Miyazaki City. The age distribution of the subjects was from 19 to 82 years, with a mean of 49.2 ± 12.1. 77% of the subjects were men, 72% were not married, 65% lived alone, 95% had a history of hospitalization, and the average period of day care commute was 7.1 ± 6.3 years.

Questionnaire

The authors administered the SSI (3) and the Rosenberg Self-Esteem Scale (RSES) (12) to the subjects to test the hypotheses. The factor model of the SSI was established as a second-order factor model by adopting 'the sense of recognizing my true self', 'the sense of recognizing deep person-to-person relationships', and 'the sense of establishing myself' as a primary factor, and by adopting 'the sense of *ibasho*' as a secondary factor. The SSI consists of 8 items, and the responses to the questions on recognition level were rated according to a four-point scale : 1 point for "Strongly disagree" ; 2 points for "Disagree" ; 3 points for "Agree" ; and 4 points for "Strongly agree". A higher total score indicates greater level of the sense of *ibasho*. The RSES is a

well-known 10-item self-report questionnaire for measuring self-esteem and self-regard. The items were measured by the responses of : 'Strongly disagree' scored as 1 ; 'Disagree' as 2 ; 'Neither' as 3 ; 'Agree' as 4 ; and 'Strongly agree' as 5. A higher total score indicates a greater level of self-esteem. A Japanese version of the RSES has good reliability and validity (14). We asked the subjects about their personal characteristics : age, sex, marital status, family composition, the history of hospitalization, and the period of daycare.

Data collection

The implementation of this study was approved by the ethical committee of the university to which the researchers belonged in 2007. An explanation about the objective of the study was given to the head of the nursing department of each hospital, and their permission was obtained. The subjects were explained about the purpose of this study and their freedom of participation, and their agreement form was submitted to us. The investigation period was from December 2007 to April 2009. The data concerning the SSI, RSES, and personal characteristics were collected in each hospital. Upon a request from individual subjects, the researchers read the questionnaire items for them and collected the survey sheets afterward.

Statistical analysis

Firstly, based on the data of the group consisting of 248 subjects which were the data not involved in the development of the SSI, covariance structure analysis was conducted to examine the cross-validation of the construct validity of the SSI. The reliability of the scale was examined with Cronbach's alpha. Secondly, we investigated a connection between the sense of *ibasho* and self-esteem. The multiple indicator models for the sense of *ibasho* model and self-esteem model was analyzed by structural equation modeling. The goodness of fit of the model to the data was evaluated with Goodness of Fit Index (GFI), Adjusted GFI (AGFI), Comparative Fit Index (CFI), and Root Mean Squares Error of Approximation (RMSEA). When the GFI, AGFI and CFI were > 0.9 and the RMSEA was < 0.08, the above mentioned model was judged as good fit to the data. The significance of path coefficient was evaluated with a critical ratio (1.96). The self-esteem scores were divided into a high group and a low group by the average self-esteem score. The SSI scores of these groups were then compared. All the analytical procedures were carried out using statistical software of SPSS version 15.0 for Windows (SPSS Japan Inc.) or Amos 7.0 (SPSS Japan Inc.).

RESULTS

Distribution of the responses to questions on the sense of ibasho

Table 1 shows the distribution of the responses to questions on the sense of *ibasho*.

The responses of 'Slightly applicable' or 'Very applicable' were more observed in all the question items than 'Not applicable' or 'Not very applicable'.

Table 1   Distribution of the responses to questions on the sense of *ibasyo*

Items	n (%)			
	Strongly disagree (1 point)	Disagree (2 points)	Agree (3 points)	Strongly agree (4 points)
The sense of recognizing my true self				
x1 I have an existential place where I am accepted by others	37 (14.9%)	55 (22.2%)	73 (29.4%)	83 (33.5%)
x2 I have an existential place where I can appreciate my true self	37 (14.9%)	51 (20.6%)	81 (32.7%)	79 (31.9%)
The sense of recognizing deep person-to-person relationships				
x3 I have a person who influences me and I can influence	34 (13.7%)	40 (16.1%)	62 (25.0%)	112 (45.2%)
x4 I have a person with whom I can devote myself to things	44 (17.7%)	46 (18.5%)	58 (23.4%)	100 (40.3%)
x5 I have a person with whom I share a common objective	59 (23.8%)	60 (24.2%)	51 (20.6%)	78 (31.5%)
x6 I have a person with whom I can grow together	38 (15.3%)	45 (18.1%)	61 (24.6%)	104 (41.9%)
The sense of establishing myself				
x7 I have an existential place where I think of who I am	35 (14.1%)	47 (19.0%)	67 (27.0%)	99 (39.9%)
x8 I have an existential place where I think of what kind of person I am	33 (13.3%)	45 (18.1%)	79 (31.9%)	91 (36.7%)

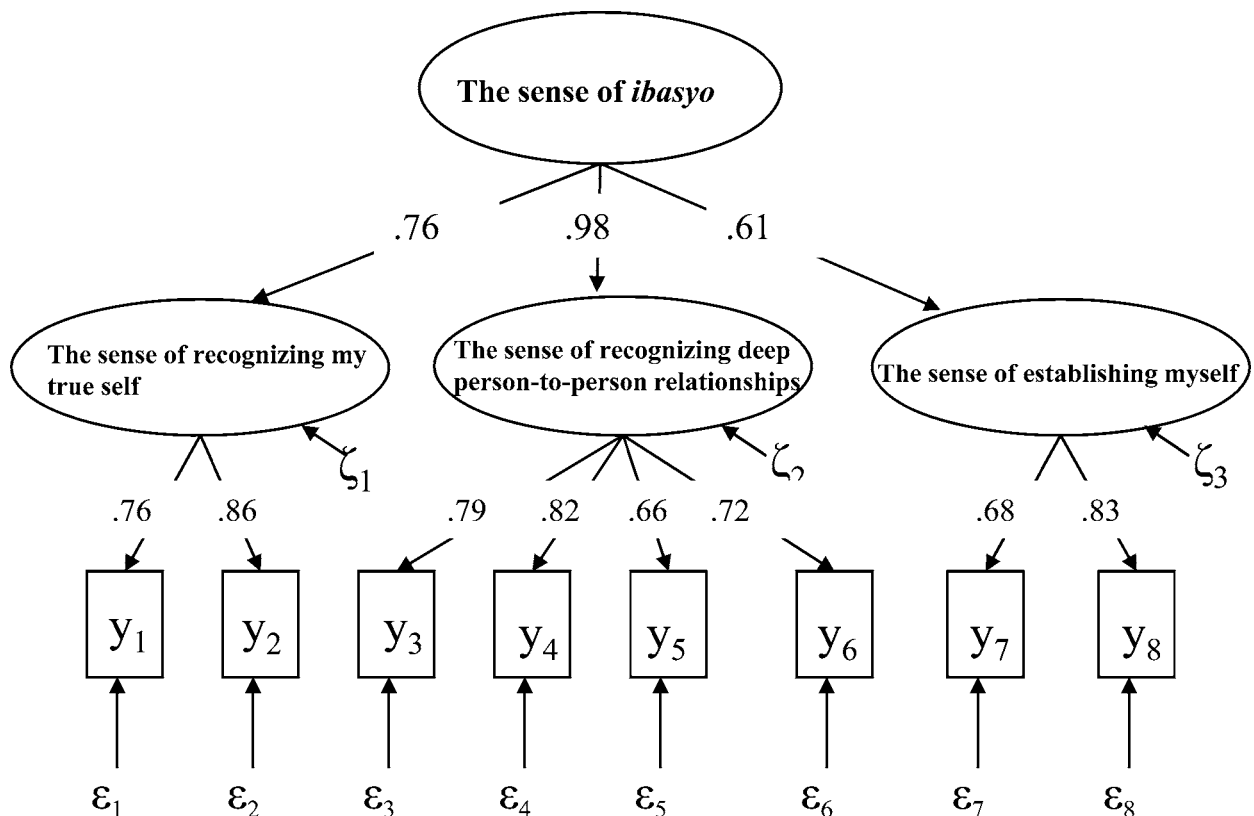*Goodness of fit of the factor model of the sense of ibasho to the data*

The goodness of fit of the second-order factor model, which was established by using 'the sense of recognizing my true self', 'the sense of recognizing deep person-to-person relationships', and 'the sense of establishing myself' as a primary factor and by using 'the sense of *ibasho*' as a secondary factor, was examined by structural equation modeling. The result was : the χ^2/df : 1.42 ; the GFI : 0.98 ; the AGFI : 0.95 ; the CFI : 0.99 ; and the RMSEA : 0.04. The path coefficients from the secondary factor to the primary factors were 0.61-0.98, and those from the primary factors to the observed variables were 0.66-0.86 (Fig. 1). The Cronbach's alpha reliability coefficient of the SSI was 0.86 for the total scale. Cronbach's alpha coefficient for the subscales were 0.79 ('the sense of recognizing my true self'), 0.83 ('the sense of recognizing deep person-to-person relationships'), and 0.73 ('the sense of establishing myself'), respectively.

Goodness of fit of the multiple indicator model of the sense of ibasho and self-esteem model to the data

The goodness of fit of the multiple indicator models, which was established by using the SSI as an independent variable and by using self-esteem as a dependent variable, was examined by structural equation modeling. The result was : the χ^2/df : 1.93 ; the GFI : 0.90 ; the AGFI : 0.87, the CFI : 0.92 ; and the RMSEA : 0.06. The path coefficient from the sense of *ibasho* to self-esteem was 0.80 (Fig. 2).

The difference of the SSI scores between the high group and the low group of self-esteem were evaluated with the Student's t-test. As a result, the high group had a significantly higher score in 'the sense of recognizing my true self' and 'the sense of recognizing deep person-to-person relationships'' than the low group (Table 2).

$$n=248,\ \chi^2/df=1.42,\ \textbf{GFI}=0.98,\ \text{AGFI}=0.95,\ \text{CFI}=0.99,$$
$$\text{RMSEA}=0.04,\ \zeta=\text{disturbance variable},\ \varepsilon=\text{unique variable}$$

Fig. 1   The factor model of the sense of *ibasyo*
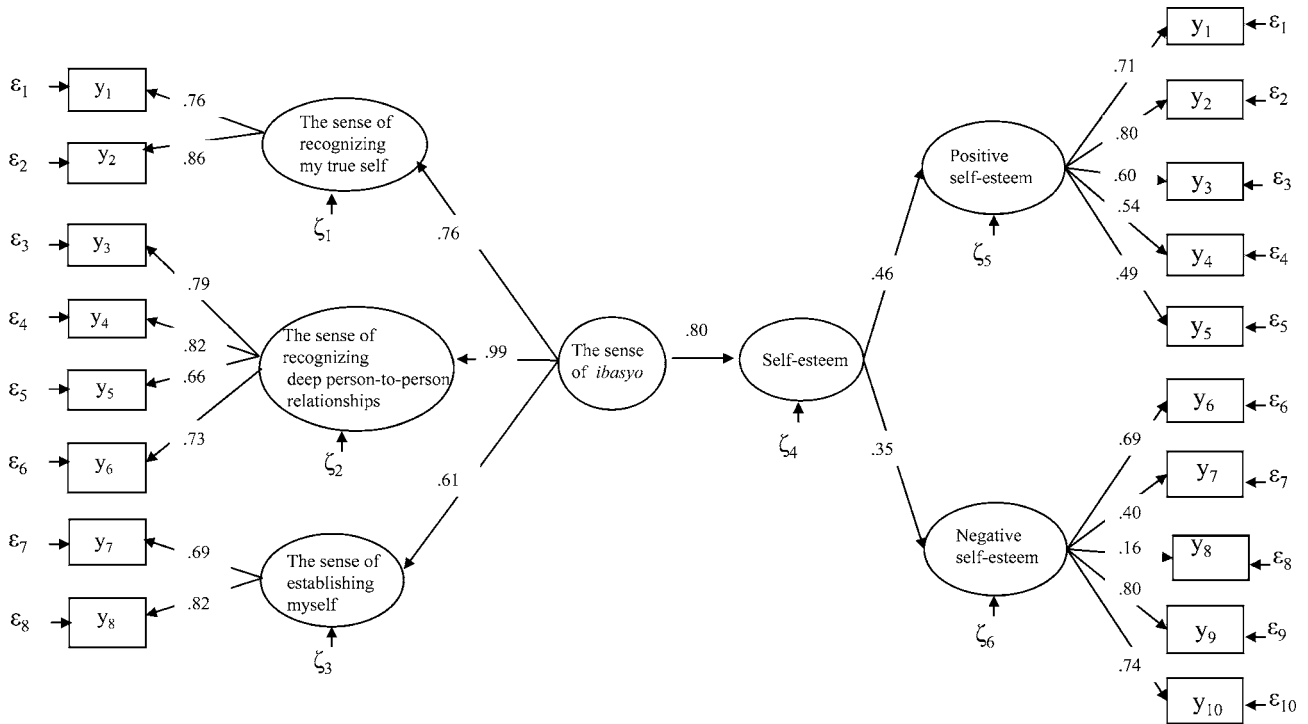
$$n = 243,\ \chi^2/df = 1.93,\ GFI = 0.90,\ AGFI = 0.87,\ CFI = 0.92,$$
$$RMSEA = 0.06,\ \zeta = \text{disturbance variable},\ \varepsilon = \text{unique variable}$$

Fig. 2   Relationship between the sense of *ibasyo* and self-esteem

Table 2   The difference of the SSI score between the high group and the low group of the self-esteem score

	Factor 1	Factor 2	Factor 3
Low group (n=116)	5.31 (SD=1.98) t = -2.51	10.62 (SD=3.62) t = -3.43	5.67 (SD=1.93) t = -1.63
High group (n=127)	5.92 (SD=1.80) p< 0.05	12.20 (SD=3.54) p< 0.001	6.06 (SD=1.81) n.s.

Student's t-test

DISCUSSION

Validity of the scale of the sense of ibasho

In this study, we could get the same structural model of factors as the one we got before using different samples, which indicated that the cross-validation of the construct validity of the SSI was identified in other samples. The Cronbach's α reliability coefficient of the SSI was 0.86, which means that it has high internal consistency and reliability as a scale. The Cronbach's α reliability coefficients of three subscales were distributed over a range from 0.73 to 0.83, and additivity was observed in each of the subscales.

The Cause-and-effect relation between the sense of ibasho and self-esteem

The sense of *ibasho* significantly affected the self-esteem. This can be interpreted as follows ; having 'the sense of recognizing my true self', 'the sense

of recognizing deep person-to-person relationships', and 'the sense of establishing myself'' enhances subjective judgment in self-evaluation. The emotion for oneself based on subjective judgment in self-evaluation is self-esteem. Therefore, enhancing subjective judgment in self-evaluation influences self-esteem. So, the sense of *ibasho* affects self-esteem.

This can be rephrased as : the sense of *ibasho* is where the self and otherness cross each other, and is a dynamic occasion in which the sense of self expands and narrows through such interplay between self and otherness. In the space, one usually can construct relationship with other people, become conscious of self through them, and expand sense of self. On the other hand, in the space, one can also withdraw oneself from interaction with other people and retreat into his/her own internal world. Having such space is thought to help self-esteem increase.

The scores of 'the sense of recognizing my true

self' and 'the sense of recognizing deep person-to-person relationships'' in the high self-esteem group were significantly higher than those of the low group. For this reason, it is suggested that caregivers should create an atmosphere in which one can be one's true self, and conduct intermediary intervention by which one can have a deep relationship with others.

Wahl (15) reported discouragement, hurt, anger, and lowered self-esteem as results of their experiences, and they urged public education as a means for reducing stigma. Consequently, we should support persons with mentally ill with a perspective to recover their self-esteem when they attempt to establish their selves.

The previous study on university students pointed out the correlation between the sense of *ibasho* with self-esteem ; the self-esteem of those with the sense of *ibasho* was higher than the one of those without the sense of ibasho (16). This previous study corresponds to our study. However, it doesn't draw on an intervention method to achieve a better self-esteem. The present study may be a step forward in the study of self-esteem because we have derived a direction of intervention using actual data to achieve a better self-esteem. In future research, we would like to investigate how self-esteem changes by intervention.

CONCLUSION

In this study we examined the causal model of the sense of having psychological comfortable space that is call '*ibasho*' in Japanese and self-esteem, in order to obtain indicators for the social involvement and community participation of persons with mentally ill. The sense of *ibasho* significantly affected the self-esteem. The path coefficient from the sense of *ibasho* to self-esteem was significant. Specifically, the scores of 'the sense of recognizing my true self' and 'the sense of recognizing deep person-to-person relationships'' in the high self-esteem group were significantly higher than those in the low group. Therefore, it is suggested that caregivers should create an atmosphere in which one can show one's true self, and conduct intermediary intervention by which one can have a deep relationship with others. It is also suggested that in order to assist persons with mentally ill to enhance self-esteem it is useful to support them in a way they can get the sense of ibasho.

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