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An Analysis of Adolescents' Self-Concept Using

the WAI Test

Chizuko Saeki

Using the WAI test, self-concepts of adolescents were examined mainly on the two problems. One is how a subjective eye and an objective eye (ways of looking at us), or a subjective importance and an objective importance (importances assigned to self-concepts by these two eyes) are related with each other. The other is to investigate a developmental change between high school students and college students. The following is a summary of the discussion.

For the first problem,

1) a subjective eye is more important than an objective eye, though both of them are significantly associated with each other. This trend suggests an intrapersonal interaction between self and society.

2) we can take an objective standpoint at ourselves, separately from our subjective eye.

3) our impression concerning a wide gap between a subjective importance and an importance given by a third party to the same self-concept was indirectly supported.

For the developmentel change,

1) high school students are more conscious of *jibunrashisa* than college students, who do not give any special treatment to *jibunrashisa*.

2) college students think much of social self more than high school students and college students are prepared to accept social self more positively.

3) a complex mechanism of self-evaluation is thought to exist among college students.

We know that our self-concepts or images of ourselves are quite often different from what other people think of us. This arises from a discrepancy between self-perception and perception of others (Fig. 1). This kind of discrepancy has been dealt with in many studies, and is not the concern of the present study.

If we reflect upon ourselves for a while, we notice that we have two different ways of looking at outselves. In other words, there is what I define as an objective eye, that is, our way of perception of how we are perceived

A: SELF-CONCEPT
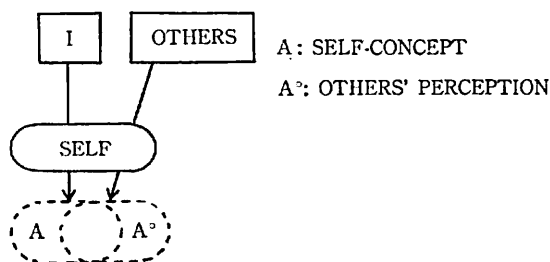
A': OTHERS' PERCEPTION

Fig. 1

by people in general or society at large, in addition to a subjective eye, which is our natural way of perceiving ourselves. An objective eye naturally presupposes our ability of putting ourselves in the position of others.

Roughly speaking, an objective eye is similar to Mead's *generalized others*, although the latter denotes a wider concept of internalized attitudes, roles, standards and values of others and society, while the former denotes not any substance but a standpoint itself.

Although there are studies about a relationship between one's self-concept and one's social attitude, that is, one's image of a present or future society such as the one done by Kato (1977), as is shown in Fig. 2, there are no researches on the difference and relationship between the above standpoints of view—subjective and objective eyes. And the author intends to examine this problem (Fig. 3).

A special concern of this paper is to investigate whether it really happens that one tends to put so much emphasis on one's self-concept or a part of it, while others surrounding himself do not give it any corresponding importance at all, as our general impression tells us.
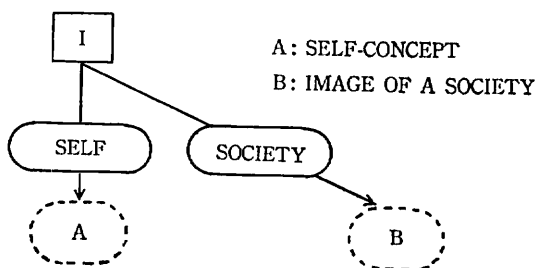

A: SELF-CONCEPT
B: IMAGE OF A SOCIETY

Fig.　2

→ SUBJECTIVE EYE
--→ OBJECTIVE EYE
A: SELF CONCEPT FROM SUBUJECTIVE EYE
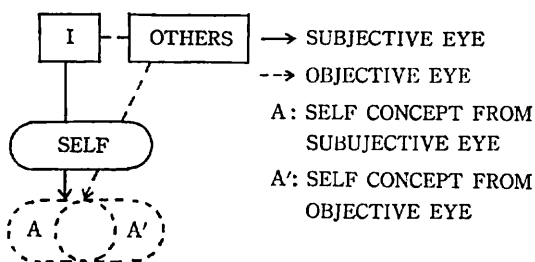A': SELF CONCEPT FROM OBJECTIVE EYE

Fig.　3

Let us take an example of a girl who is worried so much about her face, while other people in general regard her to be normally beautiful and think that she worries over a trifle. Here is involved the problem of a difference between self-concept and perception of others, and of a gap between one's self-concept and one's objective reality.

From another perspective, the situation of this girl may be analyzed as a gap between a subjective importance given by a subjective eye to her self-concept about her face, and an objective importance given by an objective eye to the same self-concept. In this interpretation, it is assumed that she is able to look at herself as though from the eyes of general others. The author tries to investigate how these importances or eyes are related with each other.

The second problem of the present study is a developmental change in adolescent's self-concept. Kato (1977) made a developmental research on three aspects of adolescents' self-concept, namely, *self-acceptance* and *self-criticality*, *self-disclosure*, and *self-independence* and *self-dependence*.

The author will analyze adolescents' self-concept from two perspectives—a subjective eye and an objective eye as defined previously. In other words, I will examine a developmental change found between high school students and college students, mainly through the relationship of how a subjective eye and an objecive eye are related in these groups. And this analysis, hopely will shed light on how self and society are differentially associated in the minds of the two groups.

Review of WAI Research

WHAT IS WAI?

An instrument named WAI or known as TST was originally developed by a sociologist, Manford Kuhn, in order to capture social self (Kuhn & McPartland, 1954). "*It simply asks respondents to make twenty statements in response to the question "Who Am I?"* (Spitzer, Couch & Stratton, ND.). The aim of questioning in this manner is to tap the subjects's self-definition.

Three distinctive features of this instrument are as follows:

First, it has an unstructured format: subjects can express themselves freely in their own words, and in their spontaneous order, and along the dimensions of their choice so that it is expected to obtain self-concept which is closer to real feelings and thoughts in comparison with fixed formats such as semantic differentials or personality inventories.

Second, it has a semi-structured framework: though TST uses an open-ended format, subjects must nevertheless respond to a question, "Who Am I?", on the twenty lines. This makes statistical analysis of respoeses easier in comparison with completely non-structured techniques like TAT or a free essay format.

Third, this instrument measures not only an evaluative or affective aspect of self-concept which is often examined and discussed in adaptation theories but also a social aspect of self-concept, namely, how self is located in relation to others and society (Wylie, 1974).

REVIEW OF WAI RESERCH AND ITS RELATION TO THE PRESENT STUDY

Hoshino (1967) reviewed TST research conducted in Japan since 1958, referring to several studies in the United States. Concerning methods of response analysis in terms of categories, he points out that three main categories were generally used for classification: 1) social description (social anchorage), 2) description of one's body, ability, and characteristics, and 3) interests in external things and one's needs. Each of them is subdivided into smaller categories. Fundamentally he is opposed to the use of many categories, since it results in a loss of reliability of classification. Instead he suggests a formal analysis or an analysis of inter-relationships among meanings and weights of responses.

According to Hoshino, the greatest difficulty of TST is that meanings of responses are not necessarily clear to researchers as they are written on the lines. Various attempts have been made to clarify meanings and weights of TST self-concept. Generally a subject is instructed to return to his responses and to assign a value to each according to certain criteria like satisfaction, consciousness, fitness or importance.

The first main problem of the present study is fundamentally in line with this direction, though the ultimate purpose of the study does not lie in a clarification of meanings and weights of responses of specific persons, but rather in a discussion of a dynamic relationship between a subjective eye and an objective eye, to be found as a general tendency. An insight into human beings as interactional beings is also intended.

Many studies have been made upon a developmental change of WAI responses concerning mean locus score, and content of responses themselves in terms of frequency by category, of reality vs. ideal references (Takahashi, 1978) and so on.

A difference in a developmental change between high school and college students is another problem of the present study. However, the author is not concerned with a change in content of self-concept itself but with a change in attitudes or consciousness toward self-concept. And the point is how high school and college respondents differ in their attitudes toward *jibunrashisa*, and self-component (self-descriptive statements) and society-component (socially anchored description) of self-concepts.

The following is a brief explanation of *jibunrashisa*: originally a concept of *jibunrnshisa* was borrowed from Takagaki (1976). *Jibunrashisa* denotes, in this study, some parts of our self-concept, which characterize and sort out ourselves from others so distinctively. Specific *jibunrashisa* such as 'student' and 'romantic' are combined to constitute a whole *jibunrashisa* for us.

Method

Subjects: The Ss were 41 high school students, 15 to 18 years of age and 46 college students, 19 to 26 years of age. The high school group consisted of 32 girls and 9 boys from a prefectual high school and a private girls' high school. The college students were 23 girls and 23 boys both from private and national colleges.

Instrument: The author used her version of
a WAI test with four additional self-ratings.
Self-ratings are to be done on four criteria:
jibunrashisa, subjective importance, objective
importance and self-evaluation. Some tests
which were administered at an early stage in
this expertment had self-ratings either on two
criteria, subjective and objective importances,
or on the first three of the above criteria.
Test forms were of two types. Type I con-
sisted of the WAI only. Type II consisted of
the WAI and a personality inventory made of
a self-esteem subscale of Adaptability Diagnosis
Test of Nagashima, Yamazaki and Fujiwara
and a self-acceptance subscale of California
Personality Inventory. A personality inventory
was used for validity examination. Type II
was administered to 41 high school and 10
college students. The remainder took Type I.
Procedure: Experimental procedures involve
two stages for Type I and three stages for
Type II. In principle, tests were administered
in a group setting with experimentor giving
instructions. In some cases, Ss took tests in-
dividually. The outline of an experimental
procedure for Type II is described below.
STAGE 1 The experimentor instructed Ss to
read a problem and answer. A problem is as
follows: Please write 20 different answers to
a question "Who Am I?" on the lines below.
Answer as if you were asking and answering
yourself. Write answers in the order that
they occur to you.
STAGE 2 After stage 1, Ss were instructed
to return to their answers and assess them with
respect to the following four criteria.

1) *jibunrashisa* Ss have to choose the answers
which, they think, if removed from themselves,
would mean a loss of their *jibunrashisa*.

2) subjective importance Ss are instructed to
indicate, on 5-point scales, the degree to which
each answer is important to them personally.

3) objective importance Ss have to indicate,
on 5-point scales, their perception of how im-
portant each answer is regarded by people in
general, on the assumption that their answers
represent not themselves but other people.

4) self-evaluation Ss are to judge whether
each answer represents their good point, bad

point or something neither good nor bad, on
3-point scales.
STAGE 3 Ss have to answer yes or no to 34
statements in a personality inventory.

Validity of the WAI Test

One method of assessing the validity of a
personality test is through an examination of
concept validity. But it is often quite difficult.
Therefore, instead of concept validity, the
author examined convergent validity of the
WAI, through a comparison of two scores,
obtained from the WAI and another personality
test (ADT or CPI), designed to tap the same
concept, in this study, self-evaluation. A signi-
ficant correlation of .31(p<.1) was obtained be-
tween the self-acceptance score of CPI and
the GB score of the WAI. Accordingly, it was
concluded that the WAI test has a proper con-
vergent validity.

Results and Discussion

ANALYSIS OF RESULTS A statistical analy-
sis of the following scores and a classification
of all answers into the following seven cate-
gories was conducted on WAI responses.
A.) Statistical Analysis
SE score: percentile score on the self-esteem
          subscale
SA score: percentile score on the self-accept-
          ance subscale
IS score: subjective importance score (1-5)
IG score: objective importance score (1-5)
GB score: self-evaluation score (1-3)
DI score: difference between absolute values
          of IS and IG
DII score: IS -IG
L score: number of answers chosen as con-
         stituting *jbiunrashisa* (to be refer-
         red to as L items hereafter)
   Calculated means of IS, IG, GB, DI and DII
scores of 20 answers of each person are shown
as W.IS, W.IG, W.GB, W.DI, and W.DII re-
spectively. Similarly the means of IS, IG, GB,
DI and DII scores of L items of each person are
expressed here as P.IS, P.IG, P.GB P.DI and
P.DII respectively.

B.) Classification categories are defined below.

① description in terms of abstract, existential or super-concepts. (homo sapience, an organism)

② socially anchored description (woman, child)

③ hobbies and interests in external things (painting, friend of a macaw)

④ imaginary and figurative description (a bubble of the sea, I am like a robot.)

⑤ self-descriptive statements (romantist, passive, I am determined to go to Spain.)

⑥ emotional attitudes or wishes toward oneself and self-evaluation (I am not self-confident.)

⑦ miscellaneous statements (sorrow, joy, anger, and grief)

RESULTS AND DISCUSSION

(A) As is evident from Table 1 & 2., with both high school and college students, means of IS scores are significantly greater than means of IG scores in the relations between W.IS and W.IG, and between P.IS and P.IG respectively. Furthermore, that self-cocept in any category is assigned an IS score higher than an IG score (Fig. 4).

Table 1   Means and Standard Deviations
of Self-Rating Scores

		High School		College		Diff.
		M	SD	M	S D	
W	IS	3.37	0.56	3.53	0.47	−0.16
	IG	2.75	0.71	2.89	0.69	−0.14
	GB	1.90	0.33			
	DI	1.22	0.43	1.17	0.51	
	DII	0.62	0.59	0.65	0.66	
P	IS	4.16	0.77	3.88*	0.90*	0.28
	IG	3.08	0.97	2.91*	1.05*	0.17
	GB	2.23	0.59			
	DI	1.34	0.82	1.31*	0.74*	
	DII	1.07	0.96	0.96*	0.88*	

N=41 for High School, N=46 for College
* N=33

Table 2   Means of IS Scores and IG Scores

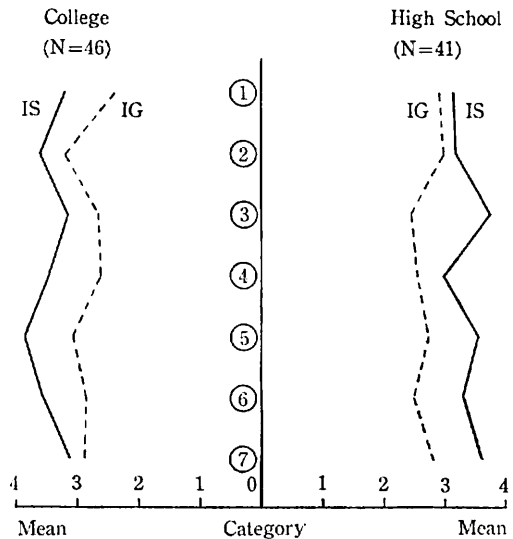|		IS	IG	Diff.
High School (N=41)	W	3.37	2.75	0.62*
College (N=46)		3.53	2.89	0.64*
High School (N=41)	P	4.16	3.08	1.08*
College (N=33)		3.88	2.91	0.87*

* p<.05 (one-tailed)

Fig. 4   Comparison of Mean IS Scores and
Mean IG Scores by Category

From these results, it can be said that a subjective standpoint is more important and assigned a greater weight than an objective standpoint when we regard our own self concept. And this finding might be a direct and natural reflection of the fact that men are really subjective beings with whom an internal and subjective point of view weighs very heavy.

Indeed this finding supports, though indirectly, our general impression that some of our self-concepts are extremely important to us, while they are perceived to be of a small importance by others. Such a tendency is

expected to be found strongly in self-concepts of neurotics. And research on this tendency from a clinical view-point appears to be interesting.

Another interpretation of the above results is that they show clearly the existence of a discrepancy between a subjective eye and an objective eye. In other words, the discrepancy itself indicates, irrespective of a direction of a discrepancy, that we can take an objective point of view at ourselves, separately from our own subjective point of view, as was presupposed in the first part of the present paper. This difference between a subjective standpoint and an objective standpoint is thought to arise from a fact that we are aware of a discrepancy between our self-perception and others' perception of us.

Table 3 & 4 show correlations between various scores obtaied from self-ratings on 20 an-

swers. In both high school and college students, there are significant correlations between W.IS and W.IG. and between P.IS and P.IG, although absolute values of r's are different between L items and 20 items, and between high school students and college students to a small degree.

According, our subjective point of view is significantly associated with our objective standpoint. And this is partly because men are social beings who are not independent of other people's standpoints.

This discussion and the previous discussion about men as subjective beings do not contradict, but rather supplement each other to help clarify the dynamism of self and society interacting in our minds. Such an intrapersonal interaction is similar to an intrapersonal communication described by Kato (1966).

It is clear from Table 3 & 4, that IG and

Table 3　Correlation Coefficients among Self-Rating Scores in High School Students (N=41)

		W				P			
		IG	GB	DI	DII	IG	GB	DI	DII
W	IS	.75***	.36** a	.23	.27*				
	IG		.28* a	−.44***	−.62****				
P	IS					.48***	.60**** b	.12	.27*
	IG						.44*** b	−.72****	−.69****

　* p<.1,　　** p<.05,　　*** p<.01,　　**** p<.001　　　　a　N=40,　　b　N=39

Table 4　Correlation Coefficients among Self-Rating Scores in College Students (N=46)

		W (N=46)				P (N=33)			
		IG	GB	DI	DII	IG	GB	DI	DII
W (N=46)	IS	.34***	−.01	.17	.29**				
	IG		.15	−.62*****	−.78*****				
P (N=33)	IS					.61*****		.06	.24
	IG							−.52****	−.60*****

　** p<.05,　　*** p<.02,　　**** p<.01,　　***** p<.001

DI, IG and DII are significantly and negatively correlated both among 20 items combined and among L items only, while IS and DI, IS and DII are positively correlated both among 20 items combined and among L items only. Absolute values of r's between IS and DI, and IS and DII are much smaller than those of r's between IG and DI, and IG and DII. The above trend is found equally in high school and college students.

Consequently, it is argued that, on one hand, if an objective importance becomes greater, its discrepancy from a subjective importance decreases to a considerable degree, while, on the other hand, if a subjective importance becomes greater, its discrepancy from an objective importance increases, though only to a small degree.

A latter part of the above analysis agrees with the general impression of a wide gap between a subjective importance and an importance given by a third party which was taken up in the first part of the paper (see page 82). It is regrettable that an importance given by a third party was not measured in this experiment. If such importance instead of an objective importance defined in this paper showed the similar relationship with a subjective importance, our general impression would be proved decisively.

(B) For the problem of a developmental change in adolescents' self-concept, the following results were obtained and I will discuss them below.

1) To clarify an importance and meaning of *jibunrashisa*, a comparison was made between the mean of 20 items (a whole self-concept for each person) and the mean of L items (part of a self-concept chosen as constituting *jibunrashisa*) on both aspects of IS and IG, regarding the two groups. Fundamentally, tests of significance for these differences between P.IS and W.IS, and between P.IG and W.IG are not theoretically possible, since L items constitute a part of 20 items. For convenience's sake, however, let us assume that L items and 20 items are mutually corresponding separate items and perform tests of significance.

From Table 5, it can be said that high school students attach a greater importance to L items

Table 5   Comparisons of Mean P.IS and Mean W.IS, and of Mean P.IG and Mean W.IG

High School (N=41)			College (N=33)		
P.IS	W.IS	Diff.	P.IS	W.IS	Diff.
4.16	3.37	0.79*	3.88	3.51	0.37*
P.IG	W.IG	Diff.	P.IG	W.IG	Diff.
3.08	2.75	0.33*	2.91	2.75	0.16

* p<.05 (one-tailed)

in comparison with 20 items both from a subjective eye and an objective eye. On the contrary, L items seem to more important than their whole self-concept to college students, only from their subjective standpoint. It may be that college students treat *jibunrashisa* as something which matter only in a subjective level not on an objective level.

2) Second, Table 5 shows that the difference between the mean P.IS and the mean W.IS is greater for high school students than for college students. A similar trend is found also in the difference between the P.IG and the mean W.IG, regarding the two groups. But, in either case, differences canot be tested for their significance.

This finding may indicate that high school students are more conscious of *jibunrashisa* than college students, who do not give any special treatment to *jibunrashisa*.

3) The author would like to turn here to an examination of two categories ② and ⑤, because they are regarded to be quite important and their comparison has been one of the primary interests in TST research.

Table 6   Mean IS Scores and Mean IG Scores of Category ②L Items and Category ⑤L Items

		High School	College	Diff.
②L	IS	4.02(N=42)	3.85(N=33)	0.17
②L	IG	3.24(N=42)	3.15(N=33)	0.09
⑤L	IS	4.17(N=200)	4.02(N=174)	0.15
⑤L	IG	3.20(N=200)	2.91(N=174)	0.29*

* p<.05 (one-tailed)

Table 6 shows that in category ② L items, high school students score higher than college students both for their subjective and objective importances, though not at a significant level. However, in category ⑤ L items, an objective importance of high school students is significantly higher than that of college students, while for a subjective importance a difference is not signigicant.

It is a remarkable result in that only an objective importance of category ⑤ L items shows such a significant difference between the two groups, while for L items of all categories combined no such significant difference is found between the two groups concerning both a subjective importance and an objective importance, as is shown in Table 1.

Table 6 shows that category ⑤ L items receive higher subjective importance than category ② L items both among high school students and college students.

From the results described above, it can be argued that high school students attach a relatively great objective importance even to the quite subjectively important category ⑤ L items, though college students regard category ⑤ L items to be important only at a subjective level. This discussion is in accordance with the foregoing discussion in 1).

4) To turn to the correlations of Table 3 & 4, the r between P.IS and P.IG in college students is greater than the r between P.IS and P.IG in high school students, though a difference between these two r's is not significant.

Taking into consideration here the foregoing findings shown in 1), it might be argued about high school students that not only IS but also IG are significantly higher in L items than in 20 items, and that IS is remarkably higher than IG in L items, and as a result the association of IS and IG is not so strong in *jibunrashisa*, and that *jibunrashisa* is more heavily weighted in subjective importance. For college students, on the other hand, though only IS is significantly higher in L items than in 20 items, association between IS and IG is stronger in L items than in 20 items. Accordingly, *jibunrashisa* seems to be located on a closer relation of a subjective standpoint and an objective

standpoint among college students.

The above interpretation contradicts the interpretation given in 1), and the author is regrettably not able to solve this contradicton. Research for confirmation and analysis of this inconsistency is required.

5) Concerning category ② items or social self description, college students score higher than high school students for an objective importance though not at a statistically significant level. But, in a subjective importance, college students score significantly higher than high school students. These are summed up in Table 7.

Table 7   Mean IS Scores and Mean IG Scores
of Category ②L Items

		College (N=128)	High School (N=129)	Diff.
②	IS	3.15	3.02	0.13
②	IG	3.64	3.16	0.48*

* $p < .05$

It is evident that college students think much of social self more than high school students, and college students are prepared to accept social self more positively and subjectively than high school students. This may suggest that college students are more socially mature than high school students.

6) Table 3 shows that self-evaluation is significantly correlated with a subjective importance and an objective importance respectively among high school students. Interestingly enough, college students show a marked contrast with high school students in that neither a subjective importance nor an objective importance is significantly correlated with self-evalution among college students (Table 4). Morever, r between a subjective importance and self-evaluation in college students is negative, whereas it is positive in high school students.

Therefore, among high school students self-concept tend to be evaluated highly when they are subjectively important and objectively important respectively. However, such a simple

relation does not exist in college students. With college students, if a subjective importance becomes greater, self-evaluation becomes lower. These differences may indicate a complex mechanism of self-evaluation in collge students.

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