

# Multivariate Analysis for the Questionnaire Investigation in the Support of High School Teachers by the School Social Worker

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**Abstract-**In Japan, High School teachers are busy with their daily works, including teaching, supporting the club activities and the desk work. Among them, they spend much more time in managing the club activities of students compared with that of other countries. In some area, professionals can make instructions much better than teachers for the special sports like Judo and Kendo (Japanese fencing) etc. School Social Worker not only can coordinate the professionals out of school, but also can help teachers by decreasing their burden on that area. There are few related papers concerning the support of club activities by utilizing the professionals outside. In this paper, a questionnaire investigation is executed to clarify their current condition and consciousness in order to seek the possibility of utilizing school social workers' support. Fundamental statistical analysis, hypothesis testing, factor analysis and multi corresponding analysis are performed. Some interesting and instructive results were obtained.

**Keywords-** School Social Worker; High School Teacher; Multi Corresponding Analysis; Factor Analysis

## I. INTRODUCTION

In Japan, teachers at High school/Junior High School are busy with their daily works including teaching, support the club activities and the desk work [1]-[4]. Among them, they spend much more time in managing the club activities of students compared with that of other countries. In particular, it takes time to manage the sports club activities. In that area, professionals can make instructions much better than teachers for the special sports like Judo and Kendo (Japanese fencing) etc. School Social Worker not only can coordinate the professionals out of school, but also can help teachers by decreasing their burden on that area.

There are many researches made on School Social Workers' function. For example, H. Konyuba[5] analyzed the teacher's spare time for club activities, and pointed out that there was a difference between the sports club and the culture club. K. Yonekawa [6] discussed the mental health supported by school social worker. M. S. Kelly et al. [7] made School Social work survey and derived instructive insight.

OECD (Organisation for Economic Co-operation and Development) has released the investigation report of "Teaching and Learning International Survey (TALIS)" on June 25, 2014. It is reported that the teachers' total working hours for a week in Japan were the longest among 33 countries. Main data are as follows:

/Teachers' total working hours for a week in Japan: 53.9 (Average: 38.3)

/Teachers' working hours of support for the club activities for a week in Japan: 7.7(Average: 2.1)

/Teachers' working hours of deskwork for a week in Japan: 5.5 (Average: 2.9)

/Teachers' teaching hours for a week in Japan: 17.7 (Average: 19.3)

Teachers' working hours of support for the club activities were nearly triple as the average, and those of the desk work double compared with the average, while the teaching hours were less than those of the average. They are too busy with the support of the club activities and the desk work, which causes bad influence on their teaching activities.

Although there are some related papers as above, there are few related papers concerning the support of club activities by utilizing the professionals outside, especially in the Japanese case.

In this paper, a questionnaire investigation is executed to clarify their current condition and consciousness in order to seek the possibility of utilizing school social workers' support. Fundamental statistical analysis, hypothesis testing, factor analysis

and multi corresponding analysis are performed. Some interesting results were obtained.

The rest of the paper is organized as follows. An outline of questionnaire investigation is stated in section 2. Hypothesis Testing is carried out in section 3. Factor Analysis is conducted in section 4 and Multi Corresponding Analysis is executed in section 5 which is followed by the Remarks of section 6.

## II. AN OUTLINE AND THE BASIC STATISTICAL RESULTS OF THE QUESTIONNAIRE RESEARCH

### A. An Outline of the Questionnaire Research

A questionnaire investigation for the Support of High School Teachers by the School Social Worker is made. The outline of questionnaire research is as follows. The questionnaire sheet is attached in Appendix.

- |     |                        |   |   |
|-----|------------------------|---|---|
| (1) | Scope of investigation | : | High School Teachers, 7 High Schools in Aomori Prefecture, Japan  |
| (2) | Period                 | : | January ~March 2014   |
| (3) | Method                 | : | Leave the questionnaire sheets to answerers until they are gathered on the collection date assigned                 |
| (4) | Collection             | : | Number of distribution : 231<br>Number of collection: 170 (collection rate: 73.6%)<br>Number of valid answers : 170 |

### B. Basic Statistical Results

Now, the main summary results are shown as single variable.

#### 1) Characteristics of answerers (Q4):

##### (1) Sex (Q4-1)

Male: 64.12%  
Female: 31.76%  
(Not filled in: 4.12%)

##### (2) Age (Q4-2)

20~29: 16.47%  
30~39: 28.82%  
40~49: 22.35%  
50~59: 29.41%  
More than 60: 1.76%  
(Not filled in: 1.19%)

##### (3) Position (Q4-3)

Deputy Principal: 3.53%  
A person in charge of educational affairs: 8.24%  
Teacher: 74.71%  
Lecturer: 9.41%  
Assistant: 1.18%  
Miscellaneous: 2.93%

##### (4) Experience as a teacher (Q4-4)

More than 10 years consists of 2/3.

##### (5) How many years are you working for the present school?

5~9 years and more than 10 years consist of nearly 3/4.

2) *Faculty Course (Q1-2):*

Ordinary Course and Technical Course consist of nearly 2/3 as a whole.

3) *Club Activities:*

(1) Sports Club (Q 1-2-1)

The large parts consist of Basketball (7.06%), Baseball (5.88%), Soccer (5.29%) and Badminton (5.29%).

Miscellaneous parts (14.12%) includes Ice hockey, Softball, Bowling, Boxing, Karate etc. "99" means "Else".

(2) Culture Club (Q1-2-2)

Main items are as follows:

/ART: 2.35%, /Broadcast Department: 2.94%, /Theater Photo Department: 1.76%,

23(25.29%) consists of the following clubs with small number % ratio.

/Housing Research, /PC, /Manufacturing, /Baton etc.

Sports clubs consist of nearly 60% and culture clubs 40% on the whole.

(3) How about the sort of job? (Q1-2-2-3)

/Adviser: 86.47%, /Deputy Adviser: 11.18%, Miscellaneous: 2.35%

Adviser takes the majority.

(4) Is the club strong enough to participate in the national sports match? (Q1-2-2-4)

Nearly 1/5 of them are the strong teams to participate in the national sports match.

(5) Is the club activity active? (Q1-2-2-5)

More than half of them have selected "Yes".

(6) How long a time do you spare for the club activity (Include moving time) (Q1-2-2-6)

60 hours in month exceeds half and 90 hours reaches 3/4 in total.

4) *Consciousness for the Daily Works (Q2)*

(1) Feel it burden to teach (Q2-1)

Nearly 15% of the teachers feel it burden to teach. This is rather a small value.

(2) Feel it burden to prepare for teaching (Q2-2)

Nearly 21% of the teachers feel it burden to prepare for teaching. This is rather a small value.

(3) Feel it burden to instruct for learning (Q2-3)

Nearly 22% of the teachers feel it burden to instruct for learning.

(4) Feel it burden to handle the students' performance (Q2-4)

Nearly 24% of the teachers feel it burden to handle the students' performance.

The value is slightly increasing compared with those of above.

(5) Feel it burden to guide students (Q2-5)

Nearly 31% of the teachers feel it burden to guide students.

This value is rather big compared with those of above.

(6) Feel it burden to guide club activities (Q2-6)

Nearly 17% of the teachers feel it burden to guide club activities.

(7) Feel it burden to manage the class (Q2-8)

Nearly 19% of the teachers feel it burden to manage the class.

- (8) Feel it burden to deal with meeting, advance arrangement (Q2-9)

Nearly 28% of the teachers feel it burden to deal with meeting, advance arrangement.

This value is rather big compared with those of above.

- (9) Feel it burden to deal with parents (Q2-10)

Nearly 17% of the teachers feel it burden to deal with parents.

### 5) *Consciousness for Guiding the Club Activities (Q3)*

- (1) Worthwhile to guide club activities (Q3-1)

Positive attitude to this theme can be seen.

- (2) It is better for the professionals to guide club activities (Q3-2)

Strong positive attitude to this theme can be confirmed.

- (3) I do not know the club field precisely that I take charge of (Q3-3)

Rather many teachers (33.5%) feel anxiety for their expertise in their club field.

- (4) Quite tired because of the activity on holiday (Q3-5)

Nearly 1/3 of them feel tired because of the club activity on holiday.

- (5) Have a hard time for the technical guidance (Q3-6)

40% of them have a hard time for the technical guidance.

- (6) Have a hard time for the mental guidance (Q3-7)

Nearly 45% of them have a hard time for the mental guidance.

- (7) Want to have a person to consult with in guiding club activities (Q3-8)

Nearly 38% of them want to have a person to consult with in guiding club activities.

## III. HYPOTHESIS TESTING

Hereinafter hypothesis testing is made based upon the questionnaire investigation data.

### A. *Setting Hypothesis*

First of all, we start from the hypothesis testing.

Two main issues are set as follows.

A: When they have a hard time in guiding club activities, they think that they want to have a person to consult with or it is better for the professionals to guide club activities.

B: When they feel worthwhile to guide club activities, they feel less burden for it.

Next, we set the following 13 themes (sub issues) before setting Null hypothesis.

A-1 If they feel it burden to teach, they think that it is better for the professionals to guide club activities.

A-2 If they feel it burden to teach, they think that they cannot share enough time to prepare for teaching because of the workload for the guidance of club activities.

A-3 When they have a hard time for the technical guidance, they think that they want to have a person to consult with in guiding club activities.

A-4 When they have a hard time for the mental guidance, they think that they want to have a person to consult with in guiding club activities.

A-5 When they do not know the club field precisely, they think that they want to have a person to consult with in guiding club activities.

A-6 If they feel that they cannot share enough time to prepare for teaching because of the workload for the guidance of club activities, they think that they want to have a person to consult with in guiding club activities.

A-7 If they feel quite tired because of the activity on holiday, they think that they want to have a person to consult with in guiding club activities.

B-1 In the technical course, teachers in charge of club activities spare a lot of time.

B-2 Where the club activities are active, teachers in charge of club activities spare a lot of time.

B-3 Where the club is strong enough to participate in the national sports match, they feel worthwhile to guide club activities.

B-4 Even when they feel worthwhile to guide club activities, they feel it burden to guide club activities

B-5 Even when they feel worthwhile to guide club activities, they think that it is better for the professionals to guide club activities.

B-6 If the club activity is active, they feel worthwhile to guide club activities.

Now, we set the following 13 Null hypothesis.

Null Hypothesis:

A-1 Even if they feel it burden to teach, they do not think that it is better for the professionals to guide club activities.

A-2 Even if they feel it burden to teach, they do not think that they cannot share enough time to prepare for teaching because of the workload for the guidance of club activities.

A-3 Even when they have a hard time for the technical guidance, they do not think that they want to have a person to consult with in guiding club activities.

A-4 Even when they have a hard time for the mental guidance, they do not think that they want to have a person to consult with in guiding club activities.

A-5 Even when they do not know the club field precisely, they do not think that they want to have a person to consult with in guiding club activities.

A-6 Even if they feel that they cannot share enough time to prepare for teaching because of the workload for the guidance of club activities, they do not think that they want to have a person to consult with in guiding club activities.

A-7 Even if they feel quite tired because of the activity on holiday, they do not think that they want to have a person to consult with in guiding club activities.

B-1 In the technical course, teachers in charge of club activities do not spare a lot of time.

B-2 Even if where the club activities are active, teachers in charge of club activities do not spare a lot of time.

B-3 Even if where the club is strong enough to participate in the national sports match, they do not feel worthwhile to guide club activities.

B-4 When they feel worthwhile to guide club activities, they do not feel it burden to guide club activities

B-5 When they feel worthwhile to guide club activities, they do not think that it is better for the professionals to guide club activities.

B-6 Even if the club activity is active, they do not feel worthwhile to guide club activities.

## B. Hypothesis Testing

The results of statistical hypothesis testing are as follows.

The null hypothesis A-1 is rejected with 6% significance level. It can be concluded that if they feel it burden to teach, they think that it is better for the professionals to guide club activities.

The null hypothesis A-2 is rejected with 1% significance level. It can be concluded that if they feel it burden to teach, they think that they cannot share enough time to prepare for teaching because of the workload for the guidance of club activities.

The null hypothesis A-3 is rejected with 1% significance level. It can be concluded that when they have a hard time for the technical guidance, they think that they want to have a person to consult with in guiding club activities.

The null hypothesis A-4 is rejected with 1% significance level. It can be concluded that when they have a hard time for the mental guidance, they think that they want to have a person to consult with in guiding club activities.

The null hypothesis A-5 is rejected with 1% significance level. It can be concluded that when they do not know the club field precisely, they think that they want to have a person to consult with in guiding club activities.

The null hypothesis A-6 is rejected with 1% significance level. It can be concluded that if they feel that they cannot share enough time to prepare for teaching because of the workload for the guidance of club activities, they think that they want to have a person to consult with in guiding club activities.

The null hypothesis A-7 is rejected with 1% significance level. It can be concluded that if they feel quite tired because of the activity on holiday, they think that they want to have a person to consult with in guiding club activities.

The null hypothesis B-1 is rejected with 1% significance level. It can be concluded that in the technical course, teachers in charge of club activities spare a lot of time.

The null hypothesis B-2 is rejected with 1% significance level. It can be concluded that where the club activities are active, teachers in charge of club activities spare a lot of time.

The null hypothesis B-3 is not rejected with 9% significance level. It cannot be concluded that even if where the club is strong enough to participate in the national sports match, they feel worthwhile to guide club activities.

The null hypothesis B-4 is not rejected with 9% significance level. It cannot be concluded that even when they feel worthwhile to guide club activities, they feel it burden to guide club activities

The null hypothesis B-5 is not rejected with 9% significance level. It cannot be concluded that even when they feel worthwhile to guide club activities, they think that it is better for the professionals to guide club activities.

The null hypothesis B-6 is rejected with 1% significance level. It can be concluded that if the club activity is active, they feel worthwhile to guide club activities.

### C. Remarks

The Results for Hypothesis Testing are as follows.

Main issue A consists of 7 sub issues (A-1~A-7). All of their Null Hypotheses were rejected and the main issue A was supported clearly. 6 sub issues were set for the main issue B. Three of their Null Hypotheses were rejected (B-1,B-2,B-6). Three of them were not rejected. But the statement of B-4 and B-5 are inversely expressed. Therefore, that it is not rejected means the consistency to the main issue B. Thus, it means that 5 out of 6 coincide with the main issue B substantially.

## IV. FACTOR ANALYSIS

Factor Analysis is executed. As for the extraction method of the factor, “the principal axis factoring” is adopted, and as for the rolling-method, “the varimax rotation which is accompanied by the normalization of kaiser as orthogonal rotation” is adopted. Also, it is confirmed the validity of the model is in the KMO (Kaiser-Meyer-Olkin) specimen validity measure. When the value is more than 0.8, it is said meritorious, more than 0.7 middling, more than 0.6, mediocre. Bartlett sphericity test is executed as well. If the score is less than 0.05, there is a correlation among observation variables.

### (1) Q2 “Consciousness for the daily works”

KMO measure is 0.852 and Bartlett Score is 0.000. It is confirmed a rather appropriate common factor. From the Factor Matrix after rotation (Table 1), it can be extracted 3 meaningful axes. Summary of factor loading value is 52.700%, therefore extracted 3 factors can explain 52.700% of the data. It shows that the first axis is the factor about “Teaching and learning for student” as the score for “1.Teaching”, “2. Preparing Teaching”, “3. Instructing Learning”, “4. Handling Students Performance”, and “5. Student Guidance” are high (Exhibition of characters in the Fig. 1 is limited therefore abbreviated expression is used.). Second axis is the factor about “Miscellaneous jobs without Teaching, Learning and Management” as the score for “7. Committee Guidance”, “9. Meeting”, and “10. PTA meeting” are high. Third axis is the factor about “Management” as the score for “6. Club Activities” and “8. Class Management” are high.

TABLE 1 FACTOR MATRIX AFTER ROTATION

	Factor		
	1	2	3
1.Teaching	.748	.050	.255
2.Preparing Teaching	.796	.149	.246
3.Instructing Learning	.623	.218	.060
4.Handling Students Performance	.684	.399	.009
5.Student Guidance	.618	.312	.400
6.Club Activities	.096	.092	.559
7.Committee Guidance	.163	.417	.176
8.Class Management	.361	.448	.558
9.Meeting	.370	.522	.131
10.PTA meeting	.068	.760	.087

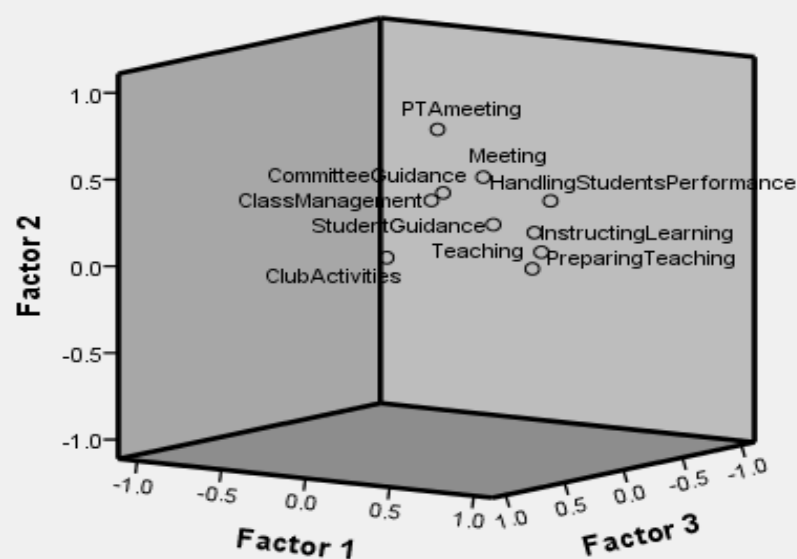


Fig. 1 Factor Plotting in Factor Space

## (2) Q3 “Consciousness for guiding the club activities”

KMO measure is 0.741 and Bartlett Score is 0.000. It is confirmed a rather appropriate common factor. From the Factor Matrix after rotation, it can be extracted 2 meaningful axes. Summary of factor loading value is 37.855%, therefore extracted 2 factors can explain 37.855% of the data. It can be seen that the first axis is the factor about “Feel it burden for

the club activities” as the score for “5. Burden for Holiday Activities”, “6. Struggling in Technical Guidance”, “4. Cutting Subject Preparation Time”, “8. Want the person to consult with”, and “7. Struggling in Mental Guidance” are high. Second axis is the factor about “Career” as the score for “1. Feel Worthwhile” and “3. Inexperience” are high.

TABLE 2 FACTOR MATRIX AFTER ROTATION

	Factor	
	1	2
1. Feel Worthwhile	.044	.405
2. Better for the professionals to Guide	.073	.171
3. Inexperience	.456	-.572
4. Cutting Subject Preparation Time	.613	.058
5. Burden for Holiday Activities	.700	.205
6. Struggling in Technical Guidance	.677	.102
7. Struggling in Mental Guidance	.605	.388
8. Want the person to consult with	.610	-.154



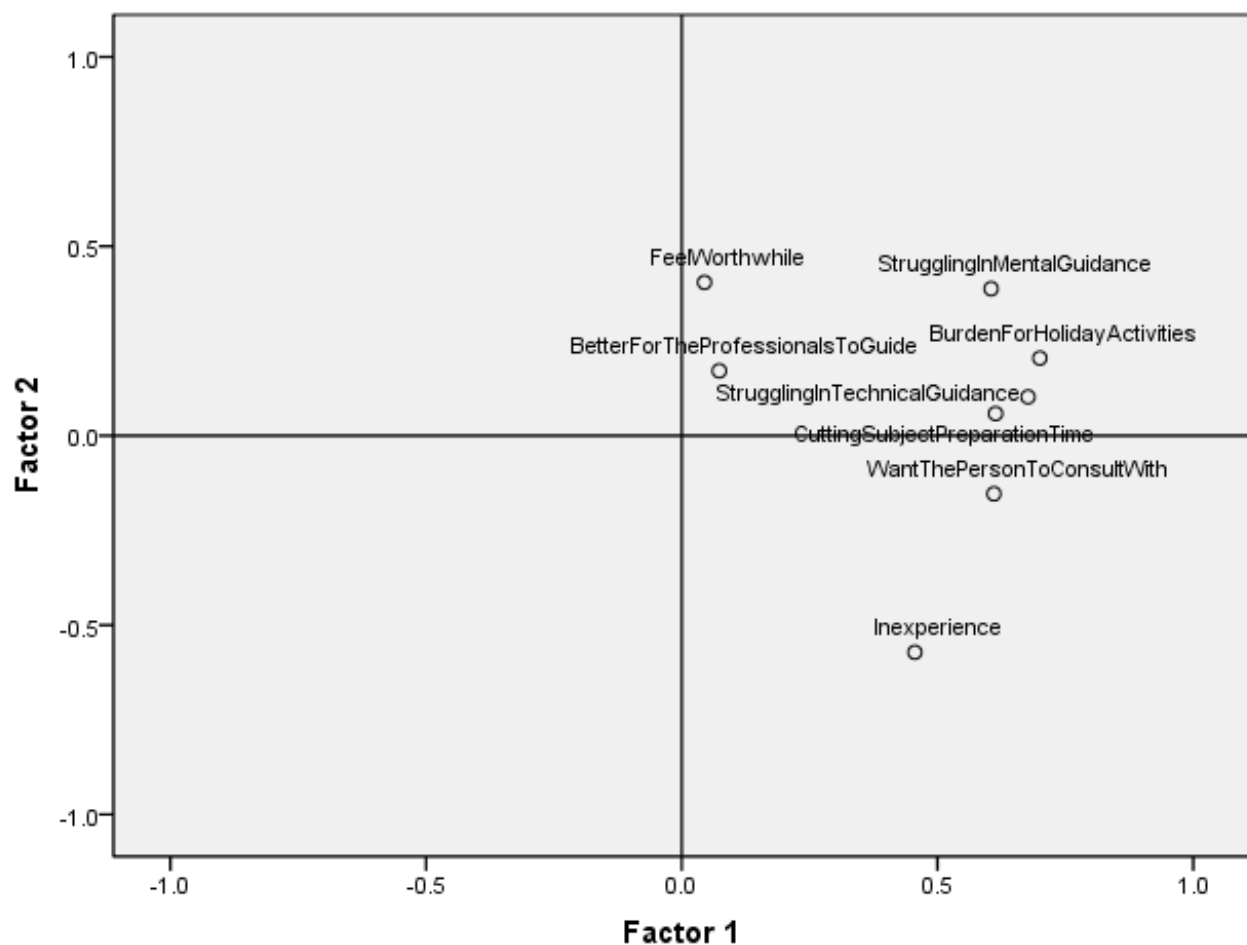


Fig. 2 Factor plotting in factor space

In the above Table 2, there was no hatched part in “2. Better for the professionals to Guide”, therefore we skip this part and check them again without this.

KMO measure is 0.743 (nearly the same with before) and Bartlett Score is 0.000. We can confirm a rather appropriate common factor. From the Factor Matrix after rotation, we can extract 2 meaningful axes. Summary of factor loading value is 43.039%, therefore it can be said that the relation among items became much clearer. The meaning of the first axis is basically the same with before, while the second axis is the factor about “Negative Career” as the score for “3. Inexperience” is high.

TABLE 3 FACTOR MATRIX AFTER ROTATION

	Factor	
	1	2
1.Feel Worthwhile	.123	-.351
3.Inexperience	.322	.676
4.Cutting Subject Preparation Time	.608	.081
5.Burden for Holiday Activities	.730	-.055
6.Struggling in Technical Guidance	.680	.049
7.Struggling in Mental Guidance	.685	-.266
8.Want the person to consult with	.560	.287

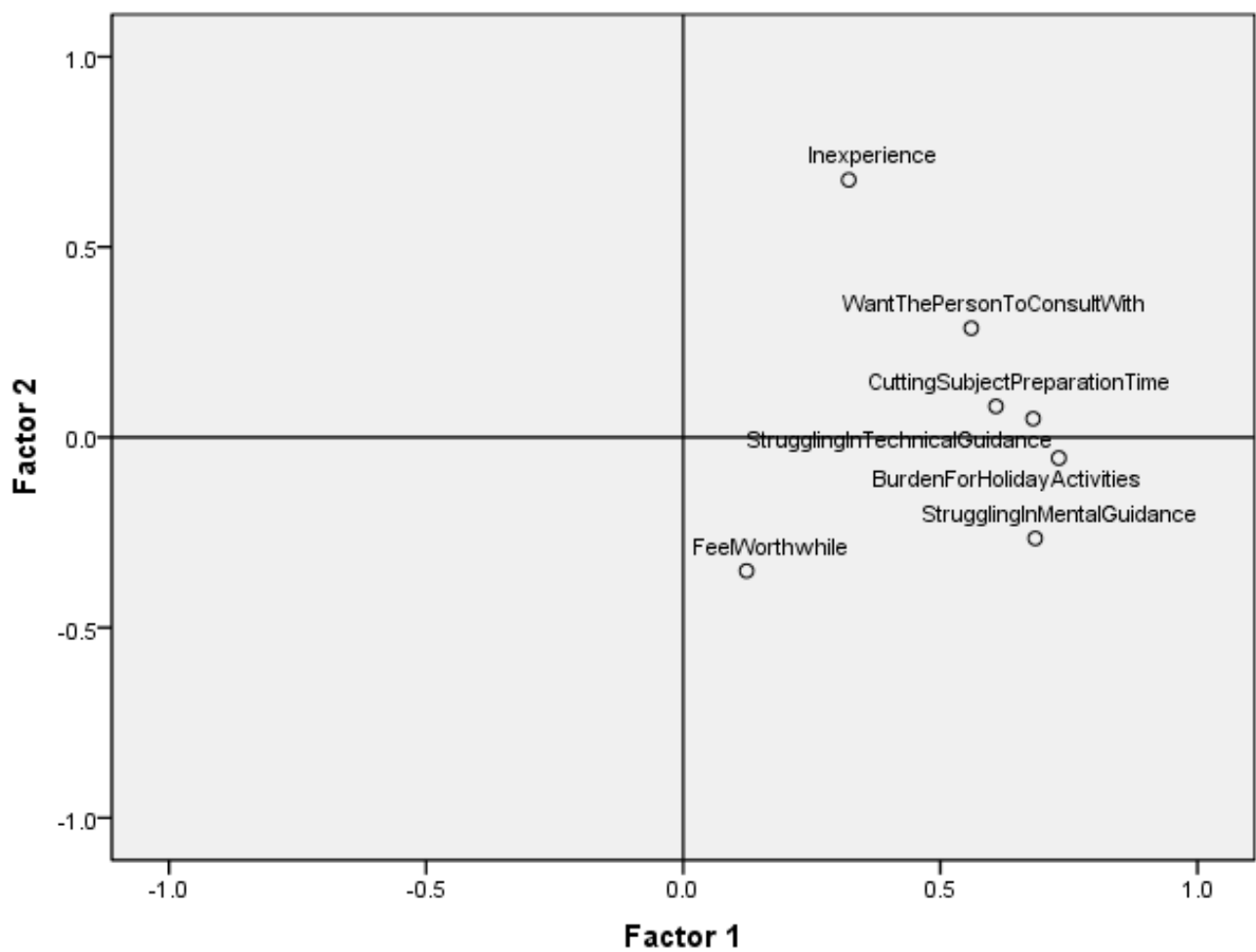


Fig.3 Factor plotting in factor space

In the above Table 3, there was no hatched part in “1.Feel Worthwhile”, therefore we skip this part and check them again

without this.

KMO measure is 0.748(nearly the same with before) and Bartlett Score is 0.000. We can confirm a rather appropriate common factor. From the Factor Matrix after rotation, we can extract 2 meaningful axes. Summary of factor loading value is 47.102%, therefore it can be said that the relation among items became much clearer. We can see that the first axis is the factor about “Feel it burden for the club activities” as the score for “7.Struggling in Mental Guidance”, “5.Burden for Holiday Activities”, “6.Struggling in Technical Guidance” and “4.Cutting Subject Preparation Time” are high. Second axis is the factor about “Lack of Experience” as the score for “3.Inexperience”, “8.Want the person to consult with” are high and this meaning of axis became much clearer.

TABLE 4 FACTOR MATRIX AFTER ROTATION

	Factor	
	1	2
3.Inexperience	.066	.688
4.Cutting Subject Preparation Time	.524	.318
5.Burden for Holiday Activities	.695	.225
6.Struggling in Technical Guidance	.627	.281
7.Struggling in Mental Guidance	.738	.003
8.Want the person to consult with	.399	.513

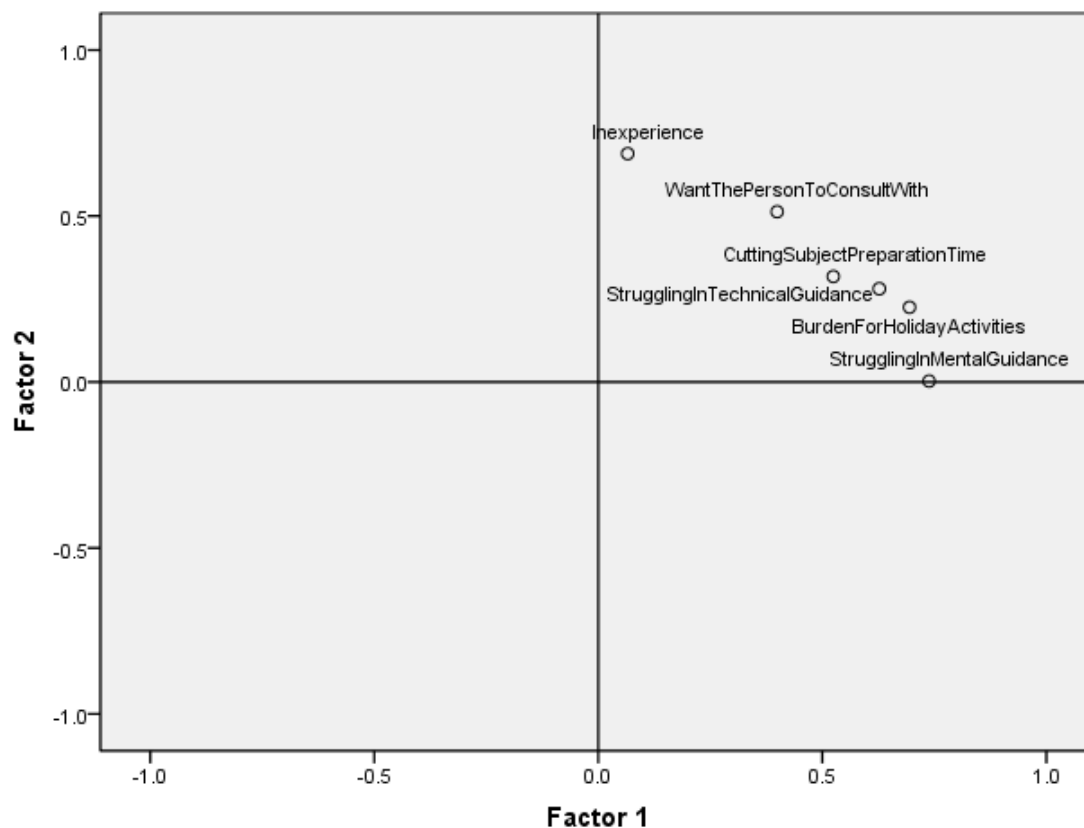


Fig 4 Factor plotting in factor space

## V. MULTI CORRESPONDING ANALYSIS

We execute the multi correspondence analysis in Q2: “Consciousness for the daily works” and Q3: “Consciousness for guiding the club activities” in order to find the correlation of each items.

## (1) Q2: “Consciousness for the daily works”

We can observe the following result from Fig. 5. From the data, an eigenvalue of Dimension 1 axis is 0.527 and those of Dimension 2 is 0.428. 95.4% can be explained by these two major axes. We can extract 6 clusters. We can assume that the first cluster (Right Upper) shows “Jobs concerning teaching” (2.Preparing Teaching, 4.Handling Students Performance, 3.Instructing Learning). The second one(Right Middle) would mean “Jobs about Teaching” (1.Teaching, 5.Student Guidance, 8.Class Management). Other 4 clusters are the independent item clusters. Among them, the cluster “6.Club Activities” is far from other clusters and it shows the uniqueness of its characteristics.

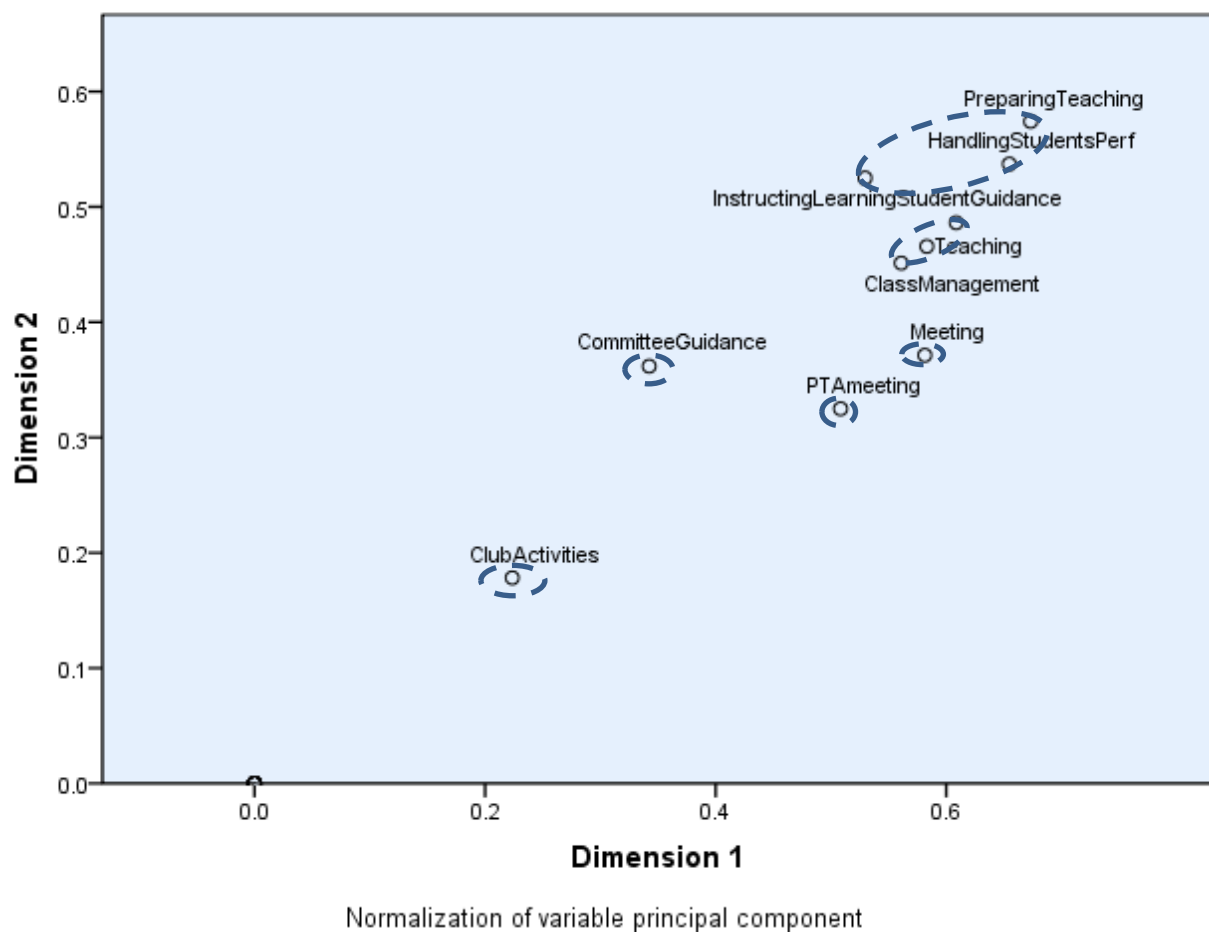
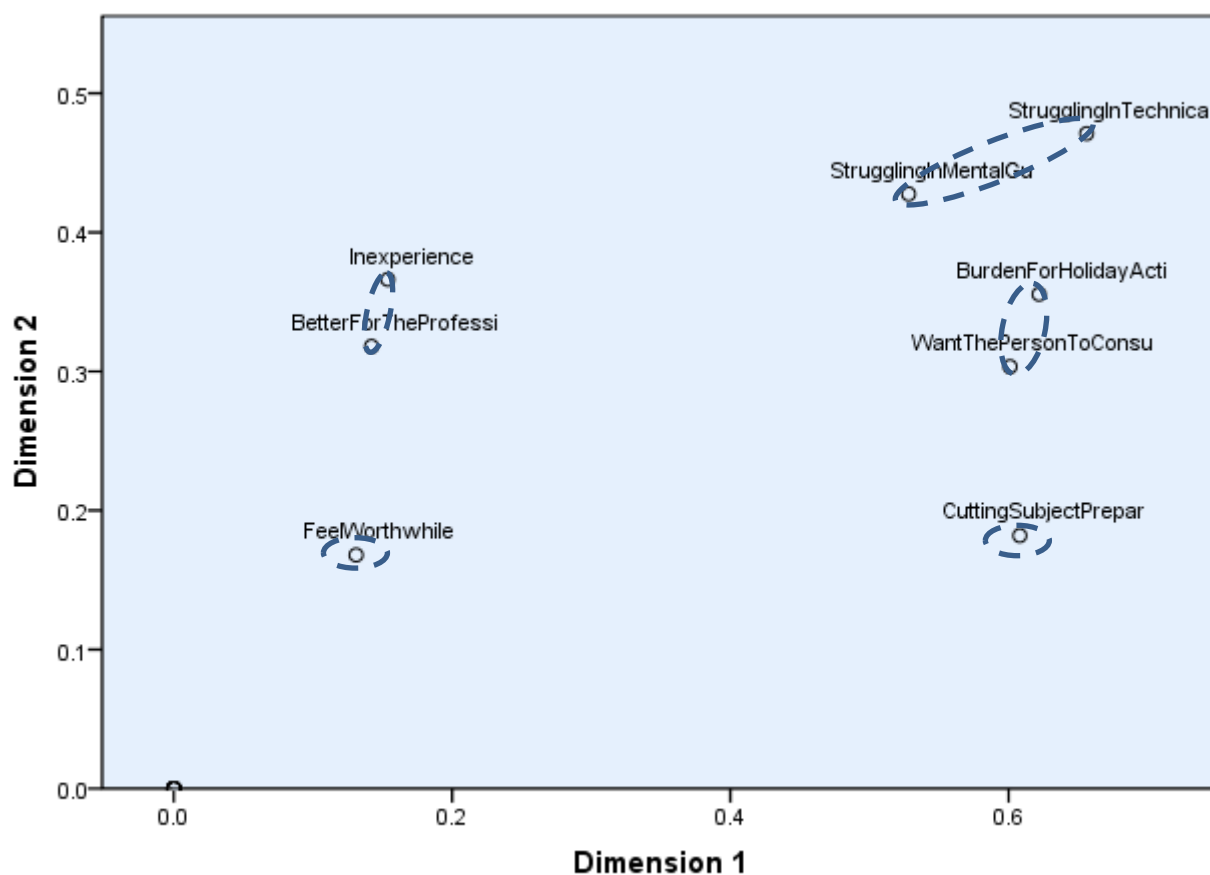


Fig.5 Q2 consciousness for the daily works

## (2) Q3: “Consciousness for guiding the club activities”

We can observe the following result from Fig. 6. From the data, an eigenvalue of Dimension 1 axis is 0.430 and those of Dimension 2 is 0.324. We can extract 5 clusters. We can assume that the first cluster (Right Upper) shows “Hardness in guiding” (6.Struggling in Technical Guidance, 7.Struggling in Mental Guidance). The second one(Right Middle) would mean “Mental burden” (5.Burden for Holiday Activities, 8.Want the person to consult with). The third cluster (Left Upper) would mean “Lack of Specialization” (3.Inexperience, 2.Better for the professionals to Guide). Other 2 clusters are the independent item clusters.



Normalization of variable principal component

Fig. 6 Q3 Consciousness for guiding the club activities

## VI. REMARKS

In this paper, a questionnaire investigation to the High School teachers was conducted in order to identify their current condition and their consciousness, and to seek the possibility of utilizing school social worker for their support. Hypothesis testing was executed based on that. Main issues are set as follows:

A: When they have a hard time in guiding club activities, they think that they want to have a person to consult with or it is better for the professionals to guide club activities.

B: When they feel worthwhile to guide club activities, they feel less burden for it.

For the A part, it consists of 7 sub issues and all of their Null Hypotheses were rejected and the main issue A was supported clearly. For the B part, 6 sub issues were set and three of their Null Hypotheses were rejected. Three of them were not rejected. But the statement of B-4 and B-5 are inversely expressed. Therefore, that these are not rejected means the consistency to the main issue B. Thus, it means that 5 out of 6 coincide with the main issue B substantially.

In the Factor Analysis, 3 meaningful axes could be extracted in the consciousness for the daily works. "Club Activities" and "Class Management" were included in the third factor. In the Multi Corresponding Analysis, 6 clusters could be confirmed. Among them, the cluster "6.Club Activities" existed as an independent item and was located far from other clusters, and it was shown the uniqueness of its characteristics.

Considering these facts, it is suggested that unique/original approach should be executed to the "Club Activities". Based upon the results of hypothesis testing, teachers' burden may be decreased by utilizing outer specialists in guiding club activities. School Social Worker can coordinate the professionals out of school and can help teachers by decreasing their burden on that area, which suggests the possibility of developing the new activity field for the School Social Worker.

## VII. CONCLUSION

High School teachers in Japan are very busy for teaching, supporting the club activities and for the desk work. Among them, time for managing the club activities of students is large compared with other countries. Professionals can make instructions much better than teachers for the special sports like Judo and Kendo (Japanese fencing) etc. School Social Worker can help teachers by decreasing their burden with the coordination of professionals outside. There are few related papers made on this theme. In this paper, a questionnaire investigation is executed in order to clarify their current condition and their consciousness, and to seek the possibility of utilizing school social worker for their support. Fundamental statistical analysis, Hypothesis Testing, Factor Analysis and Multi Corresponding Analysis were performed. Based upon the results, these suggest that unique/original approach should be executed to the "Club Activities". Based upon the results of hypothesis testing, teachers' burden may be decreased by utilizing outer specialists in guiding club activities. School Social Worker can coordinate the professionals out of school and can help teachers by decreasing their burden on that area. This suggests the possibility of developing the new activity field for the School Social Worker.

Further study on this should be executed, for example, text mining analysis etc. Various cases should be investigated here after.

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1, Please select the appropriate item in each column.

- |   |                   |                    |                     |                     |
|---|-------------------|--------------------|---------------------|---------------------|
| 1 | ① Private         | ②Public            |                     |                     |
| 2 | ① Ordinary course | ② Technical course | ③ Commercial course | ④ Miscellaneous ( ) |

Sports club

① Baseball ②Tennis ③Rugby ④Soccer ⑤Track-and-field ⑥Hockey ⑦Archery ⑧Golf ⑨Kyudo (Japanese Archery) ⑩ Horsemanship ⑪ Basketball ⑫ Badminton ⑬Heavy gymnastics ⑭Volleyball ⑮Table tennis ⑯Judo ⑰Kendo ⑱Alpine ⑲Skiing ⑳Swimming ㉑Miscellaneous ( )

Culture club

①Human sciences ②Research section ③Living thing research section ④Chemistry research section ⑤Physics research ⑥Mathematics research ⑦Brass ensemble ⑧Instrumental music ⑨Literature ⑩ Shogi (Japanese Chess) ⑪Art ⑫Calligraphy ⑬Railroad research ⑭ESS ⑮Newspaper ⑯Broadcast Department ⑰Classic ⑱Theater ⑲Debating ⑳Photo department ㉑Radio ㉒Movie research ㉓Miscellaneous ( )

3      ①Adviser              ②Deputy Adviser              ② Miscellaneous (              )

4      ①Yes                  ②Cannot say either                  ③ No

5      ①Yes                  ②Cannot say either                  ④ No

## 6 ( ) hours / month

## 2, Consciousness for the daily works

1	2	3	4	5
Think it very much	Slightly think so	Cannot say either	Slightly do not think so	Do not think so
1.	Feel it burden to teach			1 2 3 4 5
2.	Feel it burden to prepare for teaching			1 2 3 4 5
3.	Feel it burden to instruct for learning			1 2 3 4 5
4.	Feel it burden to handle the students' performance			1 2 3 4 5
5.	Feel it burden to guide students			1 2 3 4 5
6.	Feel it burden to guide club activities			1 2 3 4 5
7.	Feel it burden to attend conference			1 2 3 4 5
8.	Feel it burden to manage the class			1 2 3 4 5
9.	Feel it burden to deal with meeting, advance arrangement			1 2 3 4 5
10.	Feel it burden to deal with parents			1 2 3 4 5

## 3, Consciousness for guiding the club activities

1.	Feel worthwhile to guide club activities.	1 2 3 4 5
2.	It is better for the professionals to guide club activities.	1 2 3 4 5
3.	I do not know the club field precisely that I take charge of.	1 2 3 4 5
4.	I cannot share enough time to prepare for teaching because of the workload for the guidance of club activities.	1 2 3 4 5
5.	Quite tired because of the activity on holiday.	1 2 3 4 5
6.	Have a hard time for the technical guidance.	1 2 3 4 5
7.	Have a hard time for the mental guidance.	1 2 3 4 5
8.	Want to have a person to consult with in guiding club activities.	1 2 3 4 5



## 4, Personal Information

1	Sex	①Male	②Female					
2	Age	②20~29	③30~39	④40~49	⑤50~59	⑥More than 60		
3	Position.	①Principal	②Deputy Principal	③a person in charge of educational affairs	④Teacher	⑤Lecture	⑥Assistant	⑦ Miscellaneous ( )
4	Experience as a teacher.	①Within 1 year	② 1 ~ 2 years	③ 3 ~ 4 years	④5~9 years	⑤ 1 0 years or more		
5	How many years are you working for the present school?	①Within 1 year	② 1 ~ 2 years	③ 3 ~ 4 years	④5~9 years	⑤ 1 0 years or more		
6	Blood Type.	① A Type	② B Type	③O Type	④A B Type	⑤ Unknown		
7	Are you married ?	①Single	②Married					
8	How many children do you have?	① Member-of-society (daughter who got married) ( ) people	②College student ( ) people	③High school student ( ) people	④Junior high school student ( ) people	⑤Schoolchild ( ) people	⑥Less than kindergarten ( ) people	⑦Nothing
9	Are you positive to do anything?	③Positive	②Cannot choose either	①Not positive				
10	Do you like to be alone?	⑤Think it so much	④Slightly think it so	③Cannot choose either	②Slightly do not think it so	①Not think it so		
11	How do you spend holidays ?	①Outdoor	②Indoor	③Cannot choose either				
12	What is most important to you? Choose only one.	①Affection	②Money	③Honor	④ Clothes/Eating/House	⑤ Self-realization	⑥ Miscellaneous ( )	
13	Do you have a brother?	①Yes	②No					
14	In what situation among brothers?	①The eldest son or the eldest daughter	② Between ① and ③	③Youngest child				
<b>Current Condition</b>								
		⑤Very good	④Rather good	③Ordinary level	②Not so good	①Bad		
15	How about your physical condition?	⑤	④	③	②	①		
16	Is your work progressing smoothly?	⑤	④	③	②	①		
17	Do you living a full life?	⑤	④	③	②	①		