

Material

## Lunch Time Student Politics at University

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*(Accepted May 2, 2007)*

Key words: behavior, lunch time, university students, Japanese

### Introduction

It is very important to try to understand university students' views of their internal psychological situation in order to offer them a more suitable curriculum in university. Much research has already been conducted for this purpose, including relationships among students [1–18]. This time, we focused on students' social behavior at lunch time to try to better understand relationships among students. The object of this research is to add new data to understand today's university students.

Sato and Ochiai [10,11] studied the relationships among female students at high school and reported that 97.5% of high school female students ate lunch with fixed members as 'a group' and conformity of behavior was observed frequently. These studies suggested that it was very important for the students to belong to such groups formed unpremeditatedly in their school life. By belonging to a group, they could avoid feelings of being outcasts, or of being defensive [12]. Some research also showed that high school and/or university students kept their relationships superficial and avoided more intimate or open relationships to avoid hurting each other [13–15].

Such groups, even though superficial, were important to students, since eating alone was considered the most miserable situation for them [10–19]. Sometimes they belonged to a group which just ate lunch together [19]. Machizawa [19] reported that almost the same phenomenon was observed among young workers at an office and named this 'lunch mate syndrome'. Since they thought that eating lunch alone showed the lack of their social communication skills and/or their appeal for others, they hated to eat lunch alone and were afraid to be rejected by somebody whom they asked to eat lunch together with. In the worst cases, some people stopped going to school or the office just because they could not find a lunch mate [19]. Sato and Hatakeyama [18] showed that the university students whose social skills were lacking were uncomfortable at their lunch time.

Also, in what we will call X university, the relationships among group members have been researched since 1999 [1]. From the research conducted in 2001 [3] and 2002 [5], it was found that 95% of students belonged to a group unpremeditatedly formed from only females or males. The group members always acted the same (behaved together) and tried to behave in sync like the high school female students that were reported on by Sato and Ochiai [10–12]. These reports showed that they also ate lunch with group members at school, but the details of their social relationships at lunch time have not been made clear yet.

This survey was conducted to make the following more clear: 1. Whether the relationships among students are the same as the data from 2001 and 2002. 2. How they behave at lunch time and how their social behaviors at lunch time relate to their relationships with their daily school life. The data was

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analyzed statistically and discussed from the point of view of the meaning of lunch time for these students to enjoy a good school life.

## Methods

### 1. Subjects

The subjects available for analysis were 529 university students (males 228, females 301, freshmen 207, sophomores 191, juniors 131) belonging to X University.

### 2. Materials

To make clear the students' lunch time behavior relating to their relationships with others, a survey was done. Questions were asked about the relationships with other students (e.g. "Do you belong to one or more specific 'self-generated group/groups' in school?", 'Do you like your group?'), and their behaviors at lunch time in the university building (e.g. 'Do you have lunch with your friends or alone?'). The statistical analysis was made by using SPSS 10.0J.

### 3. Procedures

Upon receiving informed consent, the questionnaire was handed out to each student during lectures from 2004 to 2005. The following informed consent agreements were written on the head of the sheet and also read aloud · the object of this study is only to obtain mass data to know the character of relationships among students at lunch time · the unsigned data is calculated statistically and each individual's data will only be used to write a paper · there is no obligation to answer all of the questions. Five hundred and fifty four sheets were collected and five hundred twenty nine student responses (95.4%) were available for analysis.

## Results

### [Relationships among students]

Students' relationships with other students in daily school life were reconfirmed first according to Yoshida [12,13]. In this report, a group is defined as 'the company formed unpremeditatedly in school life' [12].

Five hundred and nine students (96.2%) belonged to 'group (s)'. Three hundred and thirty five students (65.8%) belonged to only one group and 174 students (34.2%) belonged to several groups. Three hundred and forty one students (67%) belonged to a group whose number of group members was from three to six. These facts were almost the same as our research in 2001, 2002.

First, to these students, the feelings toward their group members were asked. Twenty five choices (e.g. 2. I feel I can enjoy the relationship with my group members. 11. I feel I can talk frankly with my group members. 23. I wish to leave my group, but I cannot) were shown and students chose the ones that applied to them. The data was analyzed using factor analysis according to Yoshida [12,13] and three factors were extracted (Table 1).

In Factor 1, '2. I feel I can enjoy the relationships with my group members', '11. I feel I can talk frankly with my group members', '6. I feel my group members are reliable', '16. I feel my group members understand me', '14. I feel my group members will support me when I am in trouble', and '7. I feel at ease staying with my group members', showed the middle factor loading ('Factor loading' means the coefficients to tell how much weight is assigned to each factor for each variable [20,21,22]). It suggested that these students felt positive sympathy to group members. In Factor 2, '8. I feel I hope my group members

Table 1 The feelings toward friends belonging to the same group

factors	F1	F2	F3
eigenvalue	2.255	1.678	1.333
proportion of variance explained	9.020	6.713	5.333
feelings	factor loadings	factor loadings	factor loadings
2. I enjoy the relationships (n=322)	0.654		
11. I talk frankly with them (n=201)	0.612		
6. They are reliable (n=259)	0.610		
16. They understand me (n=285)	0.546		
14. They support me when I'm in trouble (n=232)	0.476		
7. I feel at ease with them (n=348)	0.403		
8. I hope they like me (n=175)		0.611	
15. I'm concerned about their feelings (n=114)		0.564	
22. I put up with the other members (n=129)		0.461	
1. I try not to displease them (n=62)		0.430	
19. I hope to be needed by them (=290)		0.412	
23. I wish to leave the group, but I can't (n=22)			0.848
5. I wish to join another group, but I can't (n=15)			0.579
interpretation	positive	obedient	negative

All students belonging to a 'group' (n=509) chose their 'feeling' toward the friends of their group. Factor analysis was done and the factors (proportion of variance explained was more than 4 %) were extracted.

like me', '15. I feel I am concerned about their feelings toward me', '22. I feel I put up with my group members', 'I feel I am always trying not to displease my group members', and '19. I hope I am needed by my group members' showed the middle factor loading. It meant that these students are always concerned about other members' feelings toward them and behaved obediently to get along well with them. In Factor 3, '23. I wish to leave my group, but I cannot' and '5. I wish to join another group, but I cannot' showed high/middle factor loading. It suggested that these students spent their time with their group members in spite of the fact they had negative feelings toward their group members.

Second, the concrete attitudes toward group members, which showed their relationships, were analyzed. Thirty attitudes (e.g. 4. I study and talk with my group members often after classes, 16. I always take care not to cause trouble (for others)', 17. I can solve problems by negotiation with my group members) were shown and students chose ones that they thought applied to them. The data was analyzed using factor analysis as shown in Table 2 and three factors were extracted (Table 2).

Table 2 The attitude of 'group' members to each other

factors	F1	F2	F3
eigenvalue	1.486	1.323	1.245
proportion of variance explained	4.954	4.409	4.151
attitudes	factor loadings	factor loadings	factor loadings
4. I study and talk together after classes (n=274)	0.623		
14. I exchange e-mail just for chatting (n=162)	0.477		
5. My best friend belongs to the group (n=277)	0.470		
16. I always try not to have trouble (n=129)		0.575	
13. I am subordinate to the others (n=116)		0.497	
17. I solve problems by negotiation (n=33)			0.507
25. I can discuss anything with them (n=65)			0.503
22. I open myself to them (n=217)			0.388
18. I can express my dissent (n=217)			0.370
interpretation	intimate	subordinate	coordinate

All students belonging to a 'group' chose their 'relationship' toward the friends of their group. Factor analysis was done and the factors (proportion of variance explained was more than 4 %) were extracted.

In Factor 1, ‘4. I study and talk with my group members often after classes’, ‘14. I exchange e-mail just for chatting with my group members’, and ‘5. My best friend belongs to the group’) showed the middle factor loadings. It suggested that these students had intimate relationships with their group members. In Factor 2, ‘16. I always take care not to have trouble’ and ‘13. I am subordinate to group members’ showed middle factor loadings. It meant that these students behaved subordinately to others intentionally to avoid conflicts. In Factor 3, ‘17. I solve problems among group members by negotiation’, ‘25. I can discuss anything with my group members’, ‘22. I open myself up to my group members’, and ‘18. I can express my dissent’ showed middle/low factor loadings. This suggested these students kept good relationships with their group members.

By these analyses, it was found that there were mainly two types of students. Some enjoyed positive relationships within their group, while others just spent their time with their group members reluctantly, often privately masking negative feelings to avoid conflicts. These facts have not changed since 2002 when we started to gather data.

[Lunch time behavior]

Then how about at lunch time? The first question was: ‘Do you have lunch alone or with somebody at school?’ Four hundred seventy four students (89.6%) answered that they always have lunch with other students. And it was found that 463 students (97.7% of the 474 students who have lunch with others) were eating lunch with their ‘group’ members. There were no significant differences between sexes and among grades in these percentages. Clearly most students ate lunch with their group members at school.

Whatever they felt toward their group members, 97.7% students ate lunch together. Why would these students want to eat lunch with their group members? The reasons are shown in Table 3. Students chose all sentences that they thought applied to them from 4 choices. In total, 88.6% of students answered ‘I ate lunch with group members to enjoy conversation’. The percentage of female students who chose this was significantly higher than that of males, and male students chose ‘because I have no other choice’ significantly more than females

Table 3 The reasons why I eat lunch with group members

reasons	male(n=199)	female(n=275)	total (n=474)
1.I enjoy talking to them	168 (84.4%) <sup>1)</sup>	252(91.6%) <sup>1)</sup>	420 (88.6%)
2.I feel a vague anxiety	37 (18.6%)	58(21.1%)	95(20.0%)
3.I am afraid of becoming outcast	9(4.5%)	18(6.5%)	20(5.7%)
4.I have no other choice	11(5.5%) <sup>2)</sup>	5(1.8%) <sup>2)</sup>	16(3.4%)

1) 2) There were significant differences between sexes.

1)  $\chi^2=5.953$  ( $p<.05$ ), 2)  $\chi^2=4.875$   $p<.05$

Then how do they behave towards each other during lunch time? Their social behaviors at lunch were shown in Table 4 (multiple choice). It was found that most of the students behaved very politely. Ninety three point nine percent (93.9%) of students did not leave their table until all members finished eating, and 50% of students started to eat only when everybody was also ready to eat. There were some students who followed whatever their friends’ decided. Twenty percent of students answered that ‘somebody other than me decides at which table to sit for lunch’, and 5% of students chose their lunch menu the same as others. These students behaved subordinately and seemed not to choose anything by themselves. Significantly the percentage of females who began to eat food after everybody’s lunch was ready was almost twice as high as that of males.

Table 4 Students' social behaviors at lunch time

behavior	male (n=199)	female (n=275)	total (n=474)
①I don't leave the table until all have finished eating	188 (94.5%)	257(93.5%)	445(93.9%)
②I start to eat only when everybody is ready	70(35.0%) <sup>1)</sup>	174(63.3%) <sup>1)</sup>	244(51.5%)
③I try to please the others by chatting	63(31.7%)	96(34.9%)	159(33.5)
④I try to behave the same as other members	41(20.6%)	61(22.2%)	102(21.5%)
⑤Somebody other than me decides at which table to sit for lunch	36(18.1%)	53(19.3%)	89(18.7%)
⑥I eat the same food as the others	10(5.0%)	9(3.3%)	19(4.0%)

1) There were significant differences between sexes.  $\chi^2=36.489$  ( $p<.01$ ),

[Behavior at lunch time and the relationships with group members]

How does the daily relationship with group members relate to their behaviors at lunch time?

First, the relation between the reasons for eating lunch together and the two categories, feelings and attitudes which reflected their relationships in daily school life, was analyzed (Table 5). The students who ate lunch with group members because they enjoyed talking were the majority of every student type from Factor 1 to 3. Enjoying talking at lunch was the first priority for them beyond their feeling toward group members. The percentage of the number of students who ate lunch together because of anxiety was significantly lower than that of the number of students who did not choose this in each feeling in Factor 2 and Factor 3. This suggested that the reason for eating lunch with their group was not so simple. This was also shown in the results of the analysis of the relationship of the reasons for eating lunch together as well as with their attitudes. The percentages of the number of students who ate lunch together because of anxiety and/or feeling afraid of becoming an outcast were also significantly lower than that of the number of students who did not choose them in the number of students who chose attitudes extracted as F2 (subordinate). These facts meant that even the students who did not have positive relationships with group members chose positive reasons for eating lunch together.

Next, the relation between their social behaviors at lunch and the two categories, feelings and attitudes, was analyzed in the same way as in Table 5 (Table 6). The students who had positive feelings toward group members (F1) behaved politely and dependently at lunch time. The percentage of the number of students who chose '①I do not leave table until all have finished eating' to the number of students who chose 'I feel my group members are reliable' (91%) was significantly higher than that of the number of students who did not choose this behavior. At the same time, the students who had negative feelings (F3) also behaved politely, because almost 60% to 70% of students who had negative feelings chose '② I start to eat lunch only when everybody is ready'. On the other hand, the students who felt subordinate toward others (F2) behaved not so obediently at lunch time. The percentages of the number of students who chose the behaviors suggesting obedience at lunch time (③④⑤) were not significantly higher than the number of students who did not choose them. This is the same in their attitudes. The students who knew how to coordinate each other (F3) behaved politely and dependently. The percentage of the number of students who chose '①I don't leave the table until all have finished eating' in the number of students who chose '18. I can express my dissent' (F3) was significantly high (80%), and the percentage of students who chose '⑥ I eat the same food as the others at lunch time' in the number of students who chose '18. I can express my dissent' and '25. I can discuss anything with them' was significantly low (5%, 8%). The students whose attitude seemed 'subordinate' (F2) did not behave so obediently at lunch. The percentage of the number of students who chose '③I tried to please others intentionally by chatting' in the number of students who chose '13. I am subordinate to them' was 47% ; those in the number of students who chose '16. I always try not to have trouble' was 49%, and 27% of students who answered '13. I am subordinate

Table 5 The reasons for eating lunch together and the relationships with group members

Factors	Feelings	Reasons	[1.1 Enjoy talking (n=401)]	
F1 (positive)	2. I enjoy the relationships (n=297)		277 <sup>1)</sup> (93%) <sup>2)</sup>	$\chi^2=9.560$ (p<.01)
	7. I feel at ease with them (n=319)		296 (92%)	$\chi^2=8.602$ (p<.01)
	11. I talk frankly with them (n=183)		172 (93%)	$\chi^2=5.169$ (p<.01)
	16. They understand me (n=261)		244 (93%)	$\chi^2=7.832$ (p<.01)
F2 (obedient)	1. I try not to displease them (n=53)		52 (98%)	$\chi^2=4.311$ (p<.05)
	19. I hope to be needed by them (n=290)		246 (85%)	$\chi^2=6.659$ (p<.05)
F3 (negative)	23. I wish to leave the group (n=17)		12 (70%)	$\chi^2=7.552$ (p<.01)
[2.Anxiety (n=92)]				
F2 (obedient)	1. I try not to displease them (n=53)		21 (40%)	$\chi^2=14.000$ (p<.01)
	8. I hope they like me (n=153)		47 (30%)	$\chi^2=15.752$ (p<.01)
	15. I'm concerned about their feelings (n=114)		30 (26%)	$\chi^2=7.237$ (p<.01)
	19. I hope to be needed by them (n=264)		68 (23%)	$\chi^2=11.956$ (p<.01)
F3 (negative)	22. I put up with other members (n=114)		34 (30%)	$\chi^2=8.699$ (p<.01)
	23. I wish to join another group (n=17)		7 (41%)	$\chi^2=4.808$ (p<.05)
[2.Anxiety (n=92)]				
Factors	Attitudes	Reasons	[2.Anxiety (n=92)]	
F2 (subordinate)	16. I always try not to have trouble (n=113)		33 (29%)	$\chi^2=7.522$ (p<.01)
[3.Afraid of becoming outcast(n=27)]				
F2 (subordinate)	13. I am subordinate to the others (n=97)		10 (10%)	$\chi^2=4.228$ (p<.05)
(subordinate)	16. I always try not to have trouble (n=113)		13 (11%)	$\chi^2=8.357$ (p<.01)

1) The number of students who chose from both the reasons and the sentences is shown.

Only the cases in which there were significant differences between the percentages of number of students by 2x2 Chi square test are shown.

2) The percentage of the number of students who chose the 'reason', out of students who chose the 'feeling' or the 'attitude', is shown.

to them' thought '⑤Somebody other than me decides at which table to sit for lunch'.

## Discussion

It was recognized in this research that most students belonged to a 'group' defined as 'the company formed unpremeditatedly in their school life' ; the same as in the research in 2001 [3] and 2002 [5]. As in 2001 [3], they behaved in almost the same way as high school female students. On the other hand, in 2001 [3], these students had been divided mainly into two types: some were satisfied with their group members, and the others kept being members of their group in spite of wishing to leave their group. These two types were also extracted in this research. And this time, another type was also extracted: the students who behaved obediently toward the other members and always try carefully not to displease or upset the others. Some of them admitted themselves that they were subordinate to the others. It suggests that the number of students who behave independently decreased. However, in this research, the proportion of variance explained in each factor result from factor analysis was low (less than 5%) when compared with previous research. This means that the variety of their answers caused by their individuality became larger. They seemed to relate to others by more various thoughts than before. The questionnaire sheet should be reviewed and now questions added and others dropped for the next study.

This research also made clear that most students ate lunch with their group members. On the face of it most of them enjoyed their lunch time and behaved politely towards each other. But once their feelings and attitudes were analyzed in detail, it became clear that some really enjoyed their lunch time with chatting, while others did not. The students who were not satisfied with their group behaved more politely toward

Table 6 The social behavior of group members at lunch time and their relationship with each other

Factors	Feelings	Behaviors		
			①I don't leave the table until all have finished eating (n=427)	
F1 (positive)	6 They are reliable (n=240)		219 <sup>1)</sup> (91%) <sup>2)</sup>	$\chi^2=5.928$ (p<.05)
			②I start to eat only when everybody is ready (n=236)	
F3 (negative)	5. I wish to join another group (n=15)		9 (60%)	$\chi^2=4.642$ (p<.05)
	23. I wish to leave the group (n=22)		16 (73%)	$\chi^2=12.627$ (p<.01)
			③I try to please the others by chatting (n=151)	
F2 (obedient)	8. I hope they like me (n=153)		61 (40%)	$\chi^2=5.955$ (p<.05)
	15. I'm concerned about their feelings (n=114)		46 (40%)	$\chi^2=8.941$ (p<.01)
	19. I hope to be needed by them (n=264)		100 (38%)	$\chi^2=6.244$ (p<.05)
	22. I put up with the others (n=114)		52 (46%)	$\chi^2=10.595$ (p<.01)
			④I behave the same as the others (n=100)	
F1(positive)	2. I enjoy the relationships (n=297)		57 (19%)	$\chi^2=3.872$ (p<.05)
F2(obedient)	22. I put up with the others (n=114)		36 (32%)	$\chi^2=8.177$ (p<.01)
			⑤Somebody other than me decides at which table to sit for lunch (n=87)	
F2 (obedient)	1. I try not to displease them (n=53)		17 (32%)	$\chi^2=6.792$ (p<.01)
	8. I hope they like me (n=153)		42 (27%)	$\chi^2=10.993$ (p<.01)
	15. I'm concerned about their feelings (n=101)		28 (25%)	$\chi^2=6.591$ (p<.05)
Factors	Attitudes	Behaviors		
			①I don't leave the table until all have finished eating(n=427)	
F3 (coordinate)	18. I can express my dissent (n=192)		175 (80%)	$\chi^2=4.194$ (p<.05)
			③I try to please others by chatting (n=151)	
F2 (Subordinate)	13. I am subordinate to them (n=97)		46 (47%)	$\chi^2=11.268$ (p<.01)
	16. I always try not to have trouble (n=113)		55 (49%)	$\chi^2=16.259$ (p<.01)
			⑤Somebody other than me decides at which table to sit for lunch (n=87)	
F2	13. I am subordinate to them (n=97)		26 (27%)	$\chi^2=5.023$ (p<.05)
			⑥I eat the same food as the others (n=16)	
F3 (coordinate)	18. I can express my dissent (n=192)		11 (5%)	$\chi^2=4.793$ (p<.05)
	25. I can discuss anything with them (n=56)		5 (8%)	$\chi^2=5.513$ (p<.05)

1) The number of students who chose from both the behaviors and the sentences is shown.

Only the cases in which there were significant differences between the percentages of number of students by 2x2 Chi square test are shown.

2)The percentage of the number of students who chose the 'behavior', out of students who chose the 'feeling' or the attitude', is shown.

the others than the students who liked their group. Surely there were students who preferred to belong to a group just eating lunch with the others, even though they were not satisfied with their 'lunch mates'. These students placed priority on eating lunch with fixed group members before everything else. In other words, the most important thing was not to eat lunch alone, and they had no other choices except to stay with somebody who accepted them. Their psychological situation seems almost to apply to the person's character which Machizawa called 'lunch mate syndrome' [19].

For some students, the situation was very severe. They seemed to be afraid of being alone. This fear may cause too much adaptable behavior toward others because they don't want others to know their discomfort. Their fear of becoming outcast was so great that they tried to obey everything the others in their group suggested. Some of them admitted by themselves that the others decided for them, from their lunch menu to the table at which they sat for lunch. Their social skills had them allowing others to decide everything for them.

Though the number of these students was small, they should not be ignored from the point of view of

social support to which they need in their school life. For such students whose first priority is staying with the others at school, sometimes their daily school life can be very stressful. They always have to pretend as if they were satisfied with their group members to avoid conflict. These students seem to have possibilities to be maladjusted to school life in the future and should be paid more attention to by supervisors.

What can we do for these students? Why are they are so afraid of being alone? Is there bullying even among university students? We cannot answer these basic questions by this data. Clearly it is very important to continue this research about students' behavior to understand their psychological situation. This can be the first step to giving them a better school life.

## Conclusion

We studied the relationship among university students from the view of lunch time behavior. First, it was recognized again that most students belonged to a group, similar to results found on the students in the same university three or four years ago. This group had a very important meaning for students at lunch time. Most students ate lunch with their group members and enjoyed chatting. Some were afraid of being alone at lunch time and these students' situation could be seen as 'lunch mate syndrome' [18,19].

In conclusion, this research showed that there were university students who might have trouble with their social skills. Their attitudes toward the others at lunch time seemed only to be a part of their difficulties in their school life. These results suggest that we have to give understanding and support to educate students more widely, with an overview of their school life, in addition to their study.

## Acknowledgements

The data for this report was collected by Yasuyo Hanada for her graduate thesis in 2006. We wish to express our deep gratitude to her. We also would like to thank Ms. Akiko Watanabe and Ms. Jane T. R. Dewar for their guidance and advice on English in this paper.

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