

Group Membership and Writing Apprehension: Do they affect Academic Writing?

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グループメンバーシップとライティングの理解力 (本学アカデミックライティング・クラスに与える影響)

スティーブ・コーンウェル

Abstract

This study was a follow-up to Cornwell and McKay's 1997 study measuring Writing Apprehension (WA) at Osaka Jogakuin Junior College (OJJC). It has been documented that writing is an important part of the curriculum at OJJC. (Cornwell & McKay 1997; Cornwell & McKay 1998) It has also been seen that students with high levels of writing apprehension perform less successfully than those with lower levels. (Powell, 1984; Frankinburger, 1991) The main purpose of this study was to see if the makeup of peer editing groups within a writing class would have any effect on either WA or grades over the course of a ten-week semester. Would a mixed group consisting of both high and low apprehensive do better than a group consisting of only high apprehensive? This study's results, along with suggestions for future research, are presented.

Key words : group makeup, writing apprehension, anxiety, questionnaire

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抄 録

本研究は、1997年のコーンウェルとマッケイの研究に続く、大阪女学院短期大学でのライティング理解力の測定に関するものである。ライティングの授業は、同学のカリキュラムの重要な部分である (Cornwell & McKay, 1997, 1998)。一方、ライティング理解力の高い学生が、同理解力の低い学生より、成功していないとも言われている (Powell 1984, Frankinburger 1991)。本調査の主な目的は、10週間の英作文コースにおいて、ペアによる作業が、ライティング理解力や成績に少しでも影響を与えるかどうかをみることにある。グループをつくる折、能力の高い学生と低い学生を組み合わせる方が、高い学生のみグループより良い結果を生むのであろうか。今後のリサーチへの提言と共に、調査結果を示すものである。

キーワード : グループ作り、ライティング理解力、不安、質問紙

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This study was a follow-up to Cornwell and McKay's 1997 study measuring Writing Apprehension (WA) at Osaka Jogakuin Junior College (OJJC). It has been documented that writing is an important part of the curriculum at OJJC. (Cornwell & McKay 1997; Cornwell & McKay 1998) It has also been seen that students with high levels of writing apprehension perform less successfully than those with lower levels. (Powel, 1984; Frankinburger, 1991) The main purpose of this study was to see if the makeup of peer editing groups within a writing class would have any effect on either WA or grades over the course of a ten-week semester. Would a mixed group consisting of both high and low apprehensive do better than a group consisting of only high apprehensive?

Subjects

The subjects were 31 first year junior college students from an intact Academic Writing class at OJJC. Two students dropped out so the final results are based on 29 students. At OJJC students are placed into classes according to their scores on a placement test, so for the purpose of this study, these students can be considered to have the same English proficiency.

Material

On both the first and last day of the semester students were administered a writing apprehension questionnaire in Japanese. An earlier study suggested that the questionnaire tapped four sub domains of anxiety: enjoyment of writing, self-perceptions of ability, attitudes toward evaluation, and willingness to show their work to others. For a detailed description of the questionnaire and its development see Cornwell and McKay, 1997 and Cornwell and McKay, in press. Students were asked to answer 26 questions dealing with their attitudes toward writing. The following 5 point Likert scale was used: Strongly Agree, Agree, Not Sure, Disagree, and Strongly Disagree. The split half reliability of the first administration was .74. The full reliability for the questionnaire using the Spearman-Brown prophecy formula was .851. (Hatch & Lazaraton, 1991) The split half reliability of the second administration was .67 with the full reliability .80. See table one for a copy of the questions in English along with a breakdown of the percentage of students that chose each answer in the pre and post questionnaire.

TABLE ONE: Questions with percentages for pre and post administrations

SA=Strongly Agree;A=Agree;U=Uncertain;D=Disagree;SD=Strongly Disagree

	SA	A	U	D	SD
1. I avoid writing.					
pre	0.00	24.14	10.34	44.83	20.69
post	0.00	6.90	13.79	55.17	24.14
2. I have no fear of my writing being evaluated.					
pre	0.00	34.48	6.90	34.48	24.14
post	0.00	6.90	6.90	58.62	27.59
3. I look forward to writing down my ideas.					
pre	10.34	34.48	17.24	37.93	0.00
post	13.79	31.03	24.14	24.14	6.90
4. I am afraid of writing essays when I know they will be evaluated.					
pre	3.45	34.48	6.90	41.38	13.79
post	0.00	17.24	13.79	44.83	24.14
5. Taking a composition course is a very frightening experience.					
pre	0.0	6.90	6.90	48.28	37.93
post	0.00	3.45	3.45	44.83	48.28
6. Handing in a composition makes me feel good.					
pre	6.90	31.03	27.59	34.48	0.00
post	17.24	31.03	27.59	20.69	3.45
7. My mind seems to go blank when I start to work on a composition.					
pre	0.00	17.24	10.34	48.28	24.14
post	0.00	10.34	6.90	62.07	20.69
8. Expressing ideas through writing seems to be a waste of time.					
pre	0.00	0.00	0.00	27.59	72.41
post	3.45	0.00	0.00	34.48	62.07

9. I would enjoy submitting my writing to magazines for evaluation and publication.

pre	3.45	17.24	37.9	34.48	6.90
post	3.45	6.90	51.72	20.69	17.24

10. I like to write my ideas down.

pre	17.24	27.59	27.59	24.14	3.45
post	24.14	24.14	37.93	10.34	3.45

11. I feel confident in my ability to clearly express my ideas in writing.

pre	0.00	6.90	17.24	41.38	34.48
post	0.00	10.34	44.83	27.59	17.24

12. I like to have my friends read what I have written.

pre	3.45	20.69	24.14	41.38	10.34
post	0.00	24.14	41.38	31.03	3.45

13. I'm nervous about writing.

pre	6.90	27.59	17.24	27.59	20.69
post	6.90	20.69	6.90	48.28	17.24

14. People seem to enjoy what I write.

pre	0.00	6.90	62.07	17.24	13.79
post	0.00	0.00	82.76	13.79	3.45

15. I enjoy writing.

pre	20.69	34.48	27.59	13.79	3.45
post	27.59	31.03	27.59	10.34	3.45

16. I never seem to be able to clearly write down my ideas.

pre	0.00	48.28	20.69	27.59	3.45
post	0.00	27.59	31.03	34.48	6.90

17. Writing is a lot of fun.

pre	20.69	34.48	20.69	20.69	3.45
post	17.24	48.28	24.14	6.90	3.45

18. I expect to do poorly in composition classes even before I enter them.

pre	6.90	31.03	37.93	24.14	0.00
post	0.00	17.24	48.28	27.59	6.90

19. I like seeing my thoughts on paper.

pre	6.90	41.38	31.03	13.79	6.90
post	6.90	55.17	20.69	13.79	3.45

20. Discussing my writing with others is an enjoyable experience.

pre	6.90	37.93	37.93	13.79	3.45
post	3.45	51.72	31.03	10.34	3.45

21. I have a terrible time organizing my ideas in a composition course.

pre	10.34	48.28	27.59	13.79	0.00
post	6.90	41.38	6.90	31.03	13.79

22. When I hand in a composition I know I'm going to do poorly.

pre	6.90	20.69	41.37	24.14	6.90
post	3.45	10.34	48.28	31.03	6.90

23. It's easy for my to write good compositions.

pre	3.45	0.00	0.00	55.17	41.38
post	0.00	3.45	10.34	65.52	20.69

24. I don't think I write as well as most other people.

pre	17.24	31.03	34.48	17.24	0.00
post	6.90	27.59	55.17	10.34	0.00

25. I don't like my compositions to be evaluated.

pre	0.00	24.14	13.79	44.83	17.24
post	0.00	6.90	13.79	48.28	31.03

26. I'm no good at writing.

pre	27.59	27.59	24.14	20.69	0.00
post	0.00	34.48	31.03	31.03	3.45

Note: The Japanese version of the questionnaire is available by contacting the author at OJJC or cornwell@wilmina.ac.jp

The questionnaire also asked students to rate the level of their writing experience in high school. Students rated their experience writing on the sentence, paragraph, and essay level. A high school experience score was calculated ranging from a low of 3 to a high of 12. See table two for a copy of the questions in English along with descriptive statistics and frequencies.

TABLE TWO High school writing experience questions and statistics

In high school how much writing experience did you have with the following:

	a lot	some	not much	almost none
Sentences	4	3	2	1
Paragraphs	4	3	2	1
Essays	4	3	2	1

Descriptive Statistics

	mean	Std Dev	Min	Max
High school Writing Experience	6.23	2.17	3.00	12.00

Frequencies of Response

Value	Frequency	Percentage
3	4	12.9
4	2	6.5
5	5	16.1
6	9	29.0
7	3	9.7
8	3	9.7
9	3	9.7
10	1	3.2
11	0	0.0
12	1	3.2
Total	31	100.0

Procedure

Based on the scores from the first administration of the questionnaire, students were placed into eight groups of four (one group had three members). Group size was determined subjectively by the teacher who felt that four was the optimal small group size for a writing class. Following Daly and Miller (1975) high apprehensive and low apprehensive were defined as being one standard deviation above or below the mean. There were 6 students who were considered to be high apprehensive and 6 students who were considered to be low apprehensive. See table three for descriptive statistics and pre and post writing apprehension scores.

TABLE THREE Basic Descriptive Statistics & Pre and Post WA scores listed by grouping

	N	Mean	Std.Dev.	Min	Max
PRE-Wa	29	76.20689	12.33572	48.00	95.00
POST-WA	29	70.31035	11.16469	43.00	90.00
CHANGE IN WA	29	-5.89655	10.58417	-29.00	16.00
FINAL GRADE	29	79.55173	6.47294	61.00	86.00

Group	Pre	Post	Final Grade	change
1*	60	57	70	-3
1*	63	65	86	2
1*	54	70	82	16
1*	53	67	77	14
2	68	71	71	3
2	72	63	81	-9
2	67	62	84	-5
2	72	57	85	-15
3	79	72	82	-7
3	77	78	81	1
3	77	77	80	0
3	74	70	81	-4
4	84	81	85	-3
4	81	77	61	-4
4	83	64	84	-19
5*	64	61	81	-3

5*	95	66	83	-29
5*	48	43	66	-5
5*	92	83	85	-9
6	80	76	82	-4
6	81	67	83	-14
6	79	50	84	-29
6	79	82	84	3
7	85	63	82	-22
7	86	89	68	3
8*	88	90	80	2
8*	90	81	73	-9
8*	88	82	81	-6
8*	91	75	85	-16

* = treatment groups (1=Low, 5=Mixed, 8=High)

Three treatment groups were created: one comprised of high apprehensive (HA), one comprised of low apprehensive (LA), and one comprised of mixed apprehensive (MA), i.e. low and high apprehensive. Students were randomly assigned to these three groups based on their scores. The rest of the students were assigned to groups which served as a control. Group Members did not know they were grouped according to writing apprehension. Groups worked together on peer editing assignments and any other group work such as pre-writing assignments, group essay writing, and other group assignments.

Analysis

As mentioned earlier, on the last day of the semester students were again given the WA questionnaire. The scores of the pre and post questionnaires were analyzed using a repeated measures analysis of variance (ANOVA). See Table four. An initial ANOVA showed that there was a significant difference between the groups. Since an ANOVA can only show if there are significant differences, but not where they are located, a Scheffe post hoc test was run. Scheffe was chosen since it is a conservative test which is unlikely to falsely reject the null hypothesis. (Hatch & Lazaraton, 1991, p. 354) It showed one significant interaction $p > .04$ between treatment group 1 (LA) and treatment group 8 (HA) and the first administration of the WA questionnaire. The other groups did not have any significant interactions.

TABLE FOUR Repeated measures ANOVA of 8 groups (HA, N=4; LA, N=4; Mixed, N=4; &Control, N=17) STATISTICA summary of all effects; Effect1=Group; 2=Time

	df	MS	df	MS		
Effect	Effect	Effect	Error	Error	F	p-level
1	7	414.3218	21	144.3016	2.871222	.0286996
2	1	381.0060	21	59.7778	6.373705	.0197001
1*2	7	93.9130	21	59.7778	1.571035	.1986540

In addition to the ANOVA measuring the effect of treatment group (HA, LA, Mixed), a second ANOVA was computed on combined groups with the same membership, i.e. all HA, n=6; all LA, n=6; and all Control groups, n=17. See Table Five. While this ANOVA could not show the effect of group make up (High versus Low versus Mixed) it could provide insight into any differences between HAs, LAs, and the control over time. The post hoc tests showed several significant interactions. LA and the Control differed significantly on the pre-questionnaire but not the post. LA and HA differed significantly on both the pre and post-questionnaire. There were no significant differences between HA and the control group for either the pre or post questionnaire.

TABLE FIVE Repeated measures ANOVA of 3 groups (HA, N=6; LA, N=6; &Control, N=17) STATISTICA summary of all effects; Effect1=Group; 2=Time

	df	MS	df	MS		
Effect	Effect	Effect	Error	Error	F	p-level
1	2	2023.994	26	72.40762	27.95278	.0000003
2	1	195.796	26	57.66553	3.39537	.0768110
1*2	2	206.710	26	57.66553	3.58464	.0421779

Finally, correlations were run between the WA questionnaire scores and the students' final scores. Taken as an entire class there were no significant correlations between the WA scores and the final scores. However, looking at individual groupings there were some interesting results. The HAs pre WA and post WA scores were negatively correlated at $-.838$ significant at $p < .05$.

Discussion

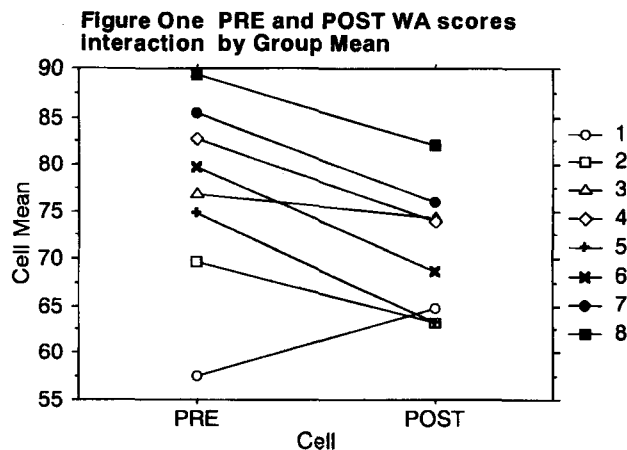
Before starting the discussion, it is important to note several shortcomings this study has. The sample size was very small therefore any effect would have to be very large to appear. Only one group could be formed for each treatment (high, low, mixed) and each group could only have 4 members. In addition, one of the control groups started with

three members but ended with two members after a student dropped out due to attendance problems. Given the small sample size drawn from an intact class, no generalizations to a larger population can be made. Furthermore, from time to time group members were absent necessitating an occasional combining of groups.

Additional comments about the design should examine the possibility of a teacher effect. Although the researcher and the teacher were the same, after making the groups, group membership was not referred back to until the semester was over. This should lessen the possibility of a teacher effect. Another comment related to the teacher is that the teacher assigned the students' final grade. The final grade is made up of students' composition grades plus their class work grades. Since it was not possible to get other raters to rate the students' work, it is not possible to report the reliability of the students' final grades.

A final subjective observation is that the low apprehensive group had some low achievers, not in terms of their grade, but in terms of their attitude toward the class; in other words, it had students who did not always prepare for class or who were often absent. This could have affected their performance. It is difficult to say whether or not the student's HA was the reason for their low achievement. However, it has been pointed out that sometimes students are mislabeled as indifferent when in reality their actions are due to anxiety (Horwitz, Horwitz, & Cope, 1986).

With the above shortcomings in mind, what can we learn from this study? It is interesting to note that while most groups apprehension level dropped (declines ranged from 2.5 to 11.5), the LAs' level rose 7.0 points. The mixed group attained the largest apprehension level drop with a fall of 11.5 and the high apprehensive level dropped 7.25. (See Figure One).



Why did the low groups' apprehension rise? To find out we would need to talk to the students. One might think that perhaps the members had false confidence based on their prior writing experiences. However, the high school writing experience scores did not correlate significantly with either WA or Final scores. Maybe, when actually writing they realized that academic writing is more challenging than they originally thought. Also, two of the lowest scores had the large increases; perhaps their original scores were incorrect. One of the LA students changed her opinion on what the researcher labeled "enjoyment of writing." She went from saying she enjoyed writing to saying she wasn't sure. The other LA students' opinion changed in the area of "showing her writing to others" and in her "own opinion of her writing." She went from a positive attitude to a negative one.

Some students' WA levels changed drastically between the pre and post administrations. While most groups' standard deviations ranged from below 1 to a little over 5, the mixed group's was 22.648 on the pre and 16.460 on the post. This is to be expected since it is a group comprised of high and low scores. However, one of the members dropped 29 points from a pre WA score of 95 to one of 66. One of the control groups also had a member whose score fell drastically from 85 to 63, a drop of 22 points. Finally, one of the low apprehensive scores rose from 54 to 70, an increase of 16 points. Given the size of the study, these three large, extreme changes probably affected the results.

The second ANOVA seems to indicate that some shifting in apprehension levels is occurring. This is counter to Spielberg's persistent trait anxiety which should not change. (1983) Nevertheless, the Control group and the Low groups' post scores appear to move together; hence, no significant difference was found in the post scores. The same thing is happening to the high group; however, while it moves close enough to the Control group to remove any significant difference between the two, it still is significantly different from the HAs.

Conclusions

This study was done to see if group makeup would have any effect on WA or final scores. The results of this study indicate that group makeup does not appear to change WA or final scores. However, scores do change. This can be seen by the tendency for LA's WA scores to increase. However, these results are not generalizable given the sample size and other problems mentioned earlier.

This study's value lies more in the questions it raises, rather than the answers it provides. And, it does raise some interesting questions. Why did the LAs level of apprehension rise? Why were the HAs pre and post scores negatively correlated? Why did most WA scores drop? Is there a connection between low achievement, i.e. poor attendance/

lack of preparation, and high apprehension? Does one cause the other? Or are they coincidental?

This study should be replicated with larger samples to try and answer some of these questions. Furthermore, since 9 students' WA level (some from each apprehension level) changed more than one standard deviation with no clear explanation as to why, a qualitative component should be added to any future studies to get students' opinions about why such a change occurred.

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