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**An Investigation of Literacy, Attitudes, and Motivations  
 Concerning Research Methodology and Statistics Among  
 EFL Instructors in State Universities in Thailand**

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**Abstract**

This study, using a specifically designed questionnaire, investigated literacy, attitudes, and motivations concerning research methodology and statistics among 150 EFL instructors in state universities in Thailand. Respondents were asked to provide self-rated knowledge of statistics, ability to use research methodology, and demographic information. They were also asked to express their attitudes and motivations towards research in language education. The results strongly indicated that most instructors had positive attitudes and high motivations towards studying and conducting research. Overwhelmingly, they all agreed that knowledge of research methodology and statistics should be taught to all teacher students in foreign language programs. However, the majority of the respondents accepted that they had limited experiences and background knowledge of research procedures. On average, almost all of them indicated having severe difficulty in understanding and using appropriate statistical devices.

**Rationale**

A great deal of progress has been made in foreign language educational research. Previously, most of the studies in this area or related fields were basically exploratory and predominantly descriptive in nature. However, many of these research studies in languages and linguistics, interestingly, have broadened out vision and revealed new research questions to be answered.

Current foreign language studies, in addition, building upon the results of these earlier studies, have become more empirical and explanatory. The number of research questions has

thus multiplied, and the problems in need of scientific answers are becoming more and more complex. As a result, research design has become more difficult to understand and the statistical devices used are no longer simple.

This increasing development in language educational research has meant that those engaged in such research must have the ability to read and write research designs and statistical concepts (Flynn, 1985). This also implies that in order to make research findings useful, teachers and language educators in their career development have to understand them clearly (McMillan and Shumacher, 1984).

Henning (1986), however, reported on common problems in quantitative language acquisition research. These problems included unreliability and invalidity of data-elicitation techniques, failure of experimental studies to state a formal hypothesis for testing, failure to report frequency with percentages or standard deviations with means, and insufficient use of appropriate inferential statistics. Furthermore, Ediger, Lazaraton, and Riggerbach (1986) found that there is little formal statistical preparation on the part of the majority of language educators responsible for guiding graduate research in applied linguistics. Their study revealed that the advisors of university graduate theses and dissertations in applied linguistics, on average, have completed fewer than two formal courses in research methodology or statistics. More surprising is the fact that the majority reported no formal training in this area at all.

This seems to lead to the conclusion that steps must be taken to ensure that all foreign or second language researchers and language teachers are reasonably familiar with statistics and research methodology. Thus, future researchers in language education should acquire a more solid and extensive base from which to originate their investigations than those of the past.

If this can be achieved, foreign or second language education, specifically, curriculum planning, syllabus design and teaching methodology can then be augmented continually by adjustments based on theory and experimentation.

### Method and Procedures

The subjects used in this study were selected by means of a stratified random sampling and a convenient random sampling. The target number was 150 EFL instructors in state universities throughout the country. It was, however, assumed that each instructor was a representative of the state universities as a whole rather than of only an individual one. Thus, the proportion of respondents from each specific institution is not of particular concern.

A list of the most recent directory of addresses of the departments of English or foreign languages was obtained from the Ministry of University Affairs, Bangkok. Along with a cover letter ensuring confidentiality, the questionnaires were mailed in bulk to chairpersons of each department on the list. The number of questionnaires enclosed ranged from 5 to 30. The letter also requested each chairperson's cooperation in distributing each questionnaire to available EFL instructors in the department. In addition, a large stamped envelop for the return of all questionnaires was included. A reminder letter was sent one month after the initial mailing to all the chairpersons.

This investigation had a return rate of 60.67% (91 out of 150). Some of the questionnaires obtained, however, were not complete. They were therefore excluded from the study. The actual number of the questionnaires used for data collection was reduced to 54.67% (82 out of 150). Since the response rate did not reach the recommended rate of 60% (Fowler, 1983; McMillan & Shumacher, 1984), and since nonresponses can be a major source of error in survey research (Johnson, 1985), the findings reported in this paper might not apply to the entire population of EFL instructors in state universities in Thailand. Thus, the results in this study can not be generalized with complete confidence.

## Findings and Discussion

### Demographics of Respondents

The proportion of respondents who hold high academic positions is small (Assoc. Prof. = 14.63%, Prof. = 0.00%). This is not surprising since the system of academic rank classification has not been in use for long in higher education in Thailand. Another consideration, however, is that promotion through research might be either too difficult and complicated or not challenging or rewarding enough. Further at least 45.12% had no experience with formal academic research during their studies (see Table 1).

**Table 1**  
Demographics of EFL Instructors in Thailand State Universities

Current Academic Position	Highest Degree Attained*				Total	Percent
	B.A.	M.A.+Thesis	M.A.	Ph.D.		
Instructor	0	18	10	0	28	34.15
Assist. Prof.	2	16	20	4	42	51.22
Assoc. Prof.	0	3	5	4	12	14.63
Prof.	0	0	0	0	0	0.00
Total	2	37	35	8	82	
Percent	2.44	45.12	42.68	9.76		100.00

\* Degrees listed here also included equivalent degrees for each category.

Respondents were also asked to indicate the number of formal courses in statistics and/or research methodology they had taken. In addition, excluding formal research for a degree, they were asked to specify the number of research studies they have previously conducted.

It is quite amazing to find that the number of formal courses in statistics and research methodology, and the number of research studies taken and conducted by EFL instructors, on average, are

low (see Table 2). Since many of them have limited background training in statistics and research methodology, it is not surprising that the majority of them have not conducted many research studies. The important question to be raised here, however, is why this has happened in spite of the fact that statistically based empirical research, according to Henning (1986), has been recognized in our area of study for over 15 years.

**Table 2**  
Formal Courses Taken and Research Studies Conducted by EFL Instructors  
in Thailand State Universities

Formal Course Work Taken in Research Meth. & Stat.			Research Studies Conducted		
Number of Courses	N	%	Number of Studies	N	%
None	34	41.46	None	26	31.70
One	20	24.39	One	38	46.34
Two	18	21.95	Two	4	4.88
Three	2	2.44	Three	6	7.32
Four	2	2.44	Four	0	0.00
Five to Ten	6	7.32	Five to Ten	4	4.88
Eleven to Twenty	0	0.00	Eleven to Twenty	4	4.88
Total	82	100.00	Total	82	100.00

A possible explanation may be that our EFL instructors have been teaching, rather than research-oriented, with teaching as their main responsibility. In addition they may have viewed the research task as part of linguists', theorists', and/or language educators' responsibility. Only after they were later required to do research work, as part of their career promotion, have they begun to recognize the necessity of research knowledge and tried to cope with it. Consequently, there has been not much development in this part of their knowledge and experience to date.

Regarding the sources of information and methods used when doing statistical analysis, the respondents were asked and allowed to choose more than one choice from the list of sources and methods provided. The responses indicate that a small percentage of the respondents 17.07 reported that they worked alone when doing statistical analysis, and a large percentage of them (56.10%) reported that they hired somebody else to do it (see Table 3). This fact seems to lead to the conclusion that many of the respondents did not feel capable enough to conduct statistically based research study independently.

**Table 3**

Sources of Information and Methods Used When Doing Statistical Analysis

Sources of Information and Methods	Number	Percent	Rank
A. Sources of Information			
1. Consulted Books	40	48.78	2
2. Consulted Other People	52	63.41	1
3. Worked Alone	14	17.07	3
B. Methods			
4. Did Computation By Hand	52	63.41	1
5. Used Computer To Do Statistical Work	44	53.66	3
6. Hired Somebody Else To Do it	46	56.10	2

$N = 82$

### Knowledge of Research Methodology

The second section of the questionnaire surveyed information concerning the respondents' self-rated levels of their ability to understand and apply a knowledge of research design. Twenty six concepts and procedures necessary for research designs were listed, and respondents were asked to rate their ability to understand and apply them. The results in Table 4 show that the respondents' self-rated ability to understand and apply

each research concept and procedure, on average, lay between the levels of "half to most of it" (3.47, 3.24). The result of a t-test (not presented in the Table) indicates that the respondents' reported ability to interpret all the research concepts, on average, was not statistically different from their reported ability to apply it at the .05 level of significance. This result seems to suggest that the ability to understand or interpret a concept or step of research procedure may not be easier than the ability to write or apply it.

**Table 4**  
**EFL Instructors' Self-Rated Levels of Knowledge of Research Methodology**

Research Designs	Levels of Ability to Understand			Levels of Ability to Write/Apply		
	Mean / S.D.	Rank		Mean / S.D.	Rank	
1. Rationale for the Study .....	3.80	1.36	5	3.51	1.45	5
2. Statement of the Problem .....	3.88	1.33	3	3.66	1.49	2
3. Statement of the Purpose .....	4.07	1.31	1	3.83	1.45	1
4. Hypotheses .....	3.63	1.28	8	3.37	1.46	9
5. Research Questions .....	3.63	1.34	9	3.37	1.48	10
6. Scope or Limitation of the Study .....	3.77	1.26	6	3.46	1.38	7
7. Definition of Terms .....	3.80	1.19	4	3.56	1.38	4
8. Basic Assumption .....	3.61	1.32	10	3.37	1.41	8
9. Review of Literature and Related Research ..	3.98	1.37	2	3.61	1.39	3
10. Number and Selection of Population/ Subjects .....	3.37	1.28	16	3.17	1.36	15
11. Methods of Random Sampling .....	3.19	1.30	21	3.10	1.39	18
12. Functions of Variables .....	2.95	1.24	26	2.80	1.33	25
13. Descriptive Research .....	3.41	1.28	15	3.17	1.43	16
14. Experimental Research .....	3.12	1.23	22	2.83	1.32	24
15. Quantitative Research .....	2.98	1.29	25	2.71	1.36	26
16. Qualitative Research .....	3.12	1.27	23	2.95	1.36	21
17. Pilot Study .....	3.32	1.37	17	3.02	1.46	20
18. Tests/Measurement .....	3.24	1.28	19	2.95	1.36	21
19. Questionnaire .....	3.66	1.24	7	3.29	1.44	14
20. Observation .....	3.52	1.29	13	3.29	1.36	12
21. Interview .....	3.54	1.18	12	3.29	1.33	11
22. Reliability .....	3.19	1.29	20	3.02	1.40	19
23. Validity .....	3.12	1.29	24	2.93	1.33	23
24. Sorting and Displaying the Data .....	3.29	1.27	18	3.12	1.36	17
25. Interpretation and Implication of the Findings .....	3.49	1.31	14	3.29	1.40	13
26. Suggestions for Further Study .....	3.58	1.22	11	3.46	1.36	6
Average Mean	3.47	0.31		3.24	0.29	

*N* = 84

According to the information in Table 4, the best understood concepts of research procedures are similar. They are items 1,2,3,4, and 5. This result tends to show that the respondents are more familiar with the requirements of the first two chapters of a formal academic research thesis: Introduction and Review of Literature and Related Research. Research concept item 12, Functions of Variables, has the lowest mean for both ability to understand and apply. This finding seems to suggest that one must encounter a great deal of difficulty when conducting a research study without a clear understanding of the roles or functions of the variables needed to be tested.

The results also show that the respondents' reported ability to understand and apply qualitative research (item 16) is slightly higher than the quantitative one (item 15). This is surprising since the former has played a smaller role in modern applied linguistics than the latter. This may be due to the fact that quantitative research requires some degree of knowledge of statistics which some respondents are not prepared to learn. For this reason, it may make them feel better to report they are more able to understand and apply qualitative research.

Furthermore, none of the mean levels of knowledge of research methodology reported by the respondents is close to the level of "fully understand it." This may be seen as evidence that the respondents, on average, seem to have severe limitations in research training. This limitation may call for remedial courses of training in research methodology if more or better qualified research studies are required of them in future plans of language education development.

### **Knowledge of Statistical Concepts and Procedures**

Nineteen-terms used for statistical concepts and procedures were listed. The respondents were asked to rate the levels of their ability to interpret and to use or apply them. The terms of statistical concepts and procedures were chosen from journal research reports and papers in language education or applied linguistics on the basis of their

frequent use in statistical analysis. The data obtained are presented in Table 5.

The findings indicate that the top six statistical concepts and procedures, which most researchers have the ability to interpret and ability to apply, are similar. There are Mean, Median, Mode (item 4), Standard Deviation (item 5), Percent and Percentile (item 18). According to the mean rank of each concept, the respondents reported a greater familiarity with Correlation and Item Analysis than with many other more fundamental concepts, such as Nominal and Ordinal Scales. Only one concept, the Interval Scale, seems to show a remarkable difference in rank order between the ability to interpret and the ability to apply. This concept ranks first for the ability to apply while, surprisingly, it ranks tenth for the ability to interpret. In addition, the five lowest ranking concepts and procedures are also similar for both categories. These are Post hoc Comparisons, Factor Analysis, Regression, Degree of Freedom, and Analysis of Variance (ANOVA) (items 16,19,12,10 and 9 respectively).

It is noteworthy, however, that none of the means of these concepts for either the ability to interpret or the ability to apply reaches the level of "very confident of my ability" or even the level of "fairly certain of my ability." Furthermore, on average, for all statistical concepts and procedures, the respondents' knowledge lies slightly above the level of "not certain how to" (mean = 2.27, S.D. = 0.27; mean = 2.27, S.D. = 0.29). These findings strongly suggest that respondents would have encountered severe difficulty when doing research designed for statistical analysis without assistance from an expert.

### **Attitudes and Motivations of EFL Instructors Towards Studying and Conducting Research Studies**

Respondents' self-rated levels of attitudes towards four listed statements were examined. The results presented in Table 6 show that the largest group of respondents, pretty much agreed that they needed to study research and statistics in order to get promotion in their careers (34.16%

**Table 5**  
EFL Instructors' Self-Rated Level of Knowledge of Statistical Concepts and Procedures

Statistical Devices	Ability to Interpret			Ability to Use/Apply		
	Mean	S.D.	Rank	Mean	S.D.	Rank
1. Nominal Scale.....	2.37	1.18	7	2.29	1.21	8
2. Ordinal Scale.....	2.27	1.18	9	2.22	1.14	10
3. Interval Scale .....	2.22	1.11	10	2.76	1.24	1
4. Mean, Median, Mode.....	2.80	1.23	1	2.76	1.24	1
5. Standard Deviation .....	2.68	1.21	2	2.63	1.20	3
6. Level of Significance .....	2.15	1.17	12	2.22	1.19	11
7. Null Hypothesis.....	2.10	1.14	14	2.05	1.16	14
8. t test .....	2.32	1.15	8	2.27	1.16	9
9. Analysis of Variance .....	2.05	1.12	15	2.00	1.07	16
10. Degree of Freedom .....	2.02	1.17	16	2.05	1.22	15
11. Chi-Square.....	2.15	1.22	13	2.12	1.23	13
12. Regression .....	2.00	1.14	17	2.00	1.14	17
13. Correlation .....	2.51	1.21	4	2.41	1.18	6
14. Rank Order Correlation .....	2.22	1.15	11	2.19	1.14	12
15. Item Analysis.....	2.49	1.28	5	2.51	1.24	5
16. Post hoc Comparisons .....	1.83	1.07	19	1.80	1.05	19
17. Ratio, Proportion .....	2.41	1.22	6	2.41	1.22	7
18. Percent, Percentile .....	2.68	1.23	3	2.63	1.24	4
19. Factor Analysis .....	1.93	1.10	18	1.83	1.00	18
Average Mean	2.27	0.27		2.27	0.29	

N = 82

**Table 6**

Attitudes and Motivations of EFL Instructors Towards Studying Research

(A) Attitudes and Motivations	Level of Opinion	
THE STUDY OF RESEARCH AND STATISTICS CAN BE IMPORTANT TO ME BECAUSE I:		
	Mean	S.D.
1. need it in order to get promotion in my career .....	3.07	1.38
2. need a good knowledge of research studies to merit professional recognition .....	3.32	1.47
3. will not be really educated unless I am capable of research studies .....	2.83	1.38
4. believe that research findings can help improve the process of teaching and learning	3.83	1.32

N = 82

(B) Levels of Attitudes and Motivations	Categories of Reason*							
	1.		2.		3.		4.	
	N	%	N	%	N	%	N	%
Definitely agree	12	14.63	20	24.40	12	14.63	34	41.46
Pretty much agree	28	34.16	30	36.59	14	17.07	22	26.83
Slightly agree	12	14.63	2	2.43	24	29.27	12	14.63
Not very much agree	14	17.07	16	19.51	12	14.63	6	7.32
Definitely disagree	16	19.51	14	17.07	20	24.40	8	9.76
Total	82	100.00	82	100.00	82	100.00	82	100.00

for statement 1). They also pretty much agreed that they needed a good knowledge of research study to merit professional recognition (36.59% for statement 2). In addition, they definitely agreed that research findings could help to improve the process of teaching and learning (41.46% for statement 4). On average, however, the mean levels of their opinions in the three aforementioned statements ranged from the levels of "slightly agree to pretty much agree" (means = 3.07, 3.32, 3.83). As for statement 3, 29.27% of the respondents, representing the largest group, slightly agree that they would not really be educated unless they were capable of research studies. This finding was also confirmed by the mean level (2.83 = almost slightly agree) of self-rated opinion in the same statement. These results, unmistakably, support

the notion that the respondents tend to view the study of research and statistics as being necessary and important to them. In other words, they have positive attitudes towards studying and conducting research.

The findings reported in Table 7 indicate that the largest group of respondents would do a research study as soon as possible if they had to do it (41.46% for question A). In addition, they reported that they read research journals as often as they could (43.90% for question B). It seems now fairly evident that the largest group would be happy to conduct research studies and to read research journals. These findings may imply that they have rather high motivation towards doing research studies and reading research journals.

**Table 7**

**Attitudes and Motivations of EFL Instructors Towards Conducting Research**

<b>Attitudes and Motivations towards Research</b>	<b>Number</b>	<b>Percent</b>
A. If I have to conduct a research study, I would:		
1. do it as soon as possible .....	34	41.46
2. become completely bored .....	4	4.88
3. put it off until all my other work is finished.	32	39.02
4. get to know the research procedures first .....	12	14.64
Total	82	100.00
B. If I had the opportunity, I would read research journals:		
4. as often as I could .....	36	43.90
5. fairly regularly .....	14	17.07
6. probably not very often .....	28	34.15
7. never .....	4	4.88
Total	82	100.00
C. I believe research methodology and statistics should be :		
8. taught to all teacher students in FL education .....	56	68.29
9. taught only to those who wish to study it .....	24	29.27
10. omitted from the curriculum .....	2	2.44
Total	82	100.00
D. I would find studying research methodology and statistics:		
11. very interesting .....	50	60.98
12. no more interesting than most subjects .....	22	26.83
13. not interesting at all .....	10	12.19
Total	82	100.00



Furthermore, the results from question C. show that the largest group (68.25%) believed that research methodology and statistics should be taught to all teacher students in foreign language education programs. These findings are obviously confirmed by the results from question D in which 60.98% expressed the view that the study of research methodology and statistics was very interesting while a smaller group of them (26.83%) at least found it equally interesting to most other subjects. Those who found it not interesting at all represented only 12.19% of all respondents.

### Summary

In view of the background knowledge and experience in research designs and statistics of EFL instructors in state universities in Thailand with respect to their positive attitudes and high motivations towards them, it would appear that these instructors have been struggling to fulfill research requirements in their career. It may be that they are reluctant, or feel uncomfortable, to pursue any further research study and some of them will finally perform only teaching duties.

### The Authors

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Anchalee Wannaruksa is a former M.A. student in Applied Linguistics for ESP at Mahidol University, where she also taught ESP to first-year nursing students. Her research interests include quantitative research methodology.

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In spite of considerably inadequate preparation in research methodology and statistics, the majority of them still recognize the significant role of research studies. Most of them, as revealed by the present research findings, still keep themselves informed through reading research journals.

As mentioned earlier, in order to cope with the increasing development in language educational research, EFL instructors, especially those who want to understand it, must have a mutual basic ability to read and write research designs and statistical concepts. Since the need for cooperation and communication among language researchers, teachers and educators is greater, EFL instructors have to understand research findings clearly in order to make them helpful guides in their career development.

The knowledge of statistically based empirical research is significant for EFL instructors in state universities in Thailand. The point which does remain to be questioned is how the weakness and difficulty in research designs and statistics can be remedied.

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## Appendix

## THE QUESTIONNAIRE

**A Note :**

This study is intended to investigate literacy, attitudes and motivation concerning research methodology and statistics among EFL instructors in all Thailand state universities. All of the data obtained will be reported on a group basis and no individual or institute will be identified. Your immediate concern and collaboration in this study will be greatly appreciated.

**1. Demographic Information**

Directions : Please write a check (✓) in front of your description in each case, and fill in the information requested.

*1.1 Current Position*

- ( ) Instructor ( ) Assist. Prof.  
( ) Assoc. Prof. ( ) Prof.

*1.2 Educational Backgrounds* (all degrees attained)

- ( ) B.A. or equivalent Major : \_\_\_\_\_  
( ) M.A. or equivalent + thesis Major : \_\_\_\_\_  
( ) M.A. or equivalent +non thesis Major : \_\_\_\_\_  
( ) Ph.D. or equivalent Major : \_\_\_\_\_  
( ) Others : please specify

*1.3 Formal Course Work in Statistics and Research Methodology*

*Number of courses taken :*

- ( ) none ( ) one or more-please specify

*1.4 Research Experiences* (excluding formal research studies for degrees)

*Number of research studies conducted :*

- ( ) none ( ) one or more-please specify \_\_\_\_\_

*1.5 Sources of Information Used When Doing Statistical Analyses*

- ( ) 1.5.1 consulted book (s)  
( ) 1.5.2 consulted other people  
( ) 1.5.3 worked alone  
( ) 1.5.4 other sources (please specify) \_\_\_\_\_

*1.6 Methods of Doing Statistical Work*

(can choose more than one)

- ( ) 1.6.1 did computations by hand  
( ) 1.6.2 used computer to do statistics  
( ) 1.6.3 hired somebody else to do statistics

**2. Self-Rating of Knowledge of Research Methodology**

Directions : Please rate your knowledge of research design by using the following (5-point scale) criteria :

- fully understand it = 5  
understand most of it = 4

- understand about half of it = 3  
 hardly understand it = 2  
 do not understand at all = 1

Research Designs	Levels of Ability to Understand	Levels of Ability to Write/Apply
1. Rationale for the Study _____		
2. Statement of the Problem _____		
3. Statement of the Purpose _____		
4. Hypotheses _____		
5. Research Questions _____		
6. Scope or Limitation of the Study _____		
7. Definition of Terms _____		
8. Basic Assumption _____		
9. Review of Literature and Related Research _____		
10. Number and Selection of Population/Subjects _____		
11. Method of Random Sampling _____		
12. Functions of Variables _____		
13. Descriptive Research _____		
14. Experimental Research _____		
15. Quantitative Research _____		
16. Qualitative Research _____		
17. Pilot Study _____		
18. Tests/M Measurement _____		
19. Questionnaire _____		
20. Observation _____		
21. Interview _____		
22. Reliability _____		
23. Validity _____		
24. Sorting and Displaying the Data _____		
25. Interpretation and Implication of the Findings _____		
26. Suggestions for Further Study _____		

### 3. Self-Rating of Knowledge of Statistical Concepts and Procedures

Directions : Please rate your ability to interpret and ability to use or apply the following statistical concepts and procedures by using the following (4-point scale) criteria :

- I am very confident of my ability to \_\_\_\_\_ = 4  
 I am fairly certain of my ability to \_\_\_\_\_ = 3  
 I am not certain how to \_\_\_\_\_ = 2  
 I have no idea how to \_\_\_\_\_ = 1

Statistical Devices	(Ability to Interpret)	(Ability to Use / Apply)
1. Nominal Scale _____		
2. Ordinal Scale _____		
3. Interval Scale _____		
4. Mean, Median, Mode _____		
5. Standard Deviation _____		
6. Level of Significance / p value _____		
7. Null Hypothesis _____		
8. t test _____		
9. Analysis of Variance (ANOVA) _____		
10. Degree of Freedom _____		
11. Chi-Square _____		
12. Regression _____		
13. Correlation _____		
14. Rank Order Correlation _____		
15. Item Analysis _____		
16. Post hoc Comparisons, e.g. Scheffe' Test _____		
17. Ratio, Proportion _____		
18. Percent, Percentile _____		
19. Factor Analysis _____		

#### 4. Attitude and Motivation towards Research in Language Education

4.1 Directions : Below are reasons which might be given for studying and conducting research.  
Please read each reason carefully and rate it by using the following criteria :

- definitely my feeling = 5  
pretty much my feeling = 4  
slightly my feeling = 3  
not very much my feeling = 2  
definitely not my feeling = 1

[THE STUDY OF RESEARCH AND STATISTICS CAN BE IMPORTANT TO ME BECAUSE I :]

Attitude and Motivation	Self-Rated Level of Opinion
4.1.1 need it in order to get promotion in my career _____	
4.1.2 need a good knowledge of research studies to merit professional recognition _____	
4.1.3 will not be really educated unless I am capable in research studies _____	
4.1.4 believe that research findings can help improve the process of teaching and learning _____	

4.2 Directions : Please write a check (✓) in front of the answer that *best* represents your feelings.

4.2.1 If you have to conduct a research study, you would :

- \_\_\_\_\_ do it as soon as possible.  
 \_\_\_\_\_ become completely bored.  
 \_\_\_\_\_ put it off until all your other work is finished.  
 \_\_\_\_\_ none of these (explain)
- 

4.2.2 If I had the opportunity, I would read research journals :

- \_\_\_\_\_ as often as I could.  
 \_\_\_\_\_ fairly regularly.  
 \_\_\_\_\_ probably not very often.  
 \_\_\_\_\_ never.

4.2.3 I believe research methodology and statistics should be :

- \_\_\_\_\_ taught to all teacher students in foreign language education.  
 \_\_\_\_\_ taught only to those students who wish to study it.  
 \_\_\_\_\_ omitted from the curriculum.

4.2.4 I would find studying statistics and research methodology :

- \_\_\_\_\_ very interesting.  
 \_\_\_\_\_ no more interesting than most subjects.  
 \_\_\_\_\_ not interesting at all.

End of the Questionnaire

Please return the completed questionnaire to your departmental chairperson.  
 Thank you very much. Your collaboration in this matter is greatly appreciated.