

# Male and Female Attitude Toward Research Course Syllabus and the Relationship Between Work Setting Preference and Usefulness Rating of a Research Course Among Chinese Graduate Students<sup>\*</sup>

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The purpose of this study is to (a) examine graduate students to see whether the syllabus of a research course is more important to male or female students and (b) determine whether graduate students who prefer educational work settings rate the usefulness of a research course higher than those who prefer non-educational work settings. Data were collected from a survey that was distributed to the subjects. These subjects included 57 graduate students enrolled in four classes of the same research course and all of them responded. The findings indicated that female graduate students considered the syllabus of this research course more important than the male graduate students did ( $p < 0.5$ ). The study also found that there was not a significant difference ( $p > 0.05$ ) between graduate students who prefer to work in the educational settings and those who prefer non-educational work settings rating the usefulness of a research course.

*Keywords:* attitude, research course syllabus, Chinese graduate students

Research is important in the development of almost every discipline and the research course is an indispensable part of school's curriculum at all levels. The understanding of students' attitude toward research and a research course is essential in the motivation of research activities among students, adaptation of school's curriculum and the improvement of the research course teaching. Research studies on students' attitude toward research have been done in many years and the different aspects related to it have been studied. According to Perl and Kahn (1983), a positive correlation existed between increased research interest and obtaining statistically significant results in one's research. Their findings suggested that demands of jobs, problems of learned models of research, or a shift of interest may affect subsequent research output. Winans and Madhavan (1992) found that students who have been involved in research projects and/or have mentors in research saw research more favorably. Ravid and Leon (1995) investigated the students' perception of the research component in Master's level teacher education programs and the findings indicated that the most important reasons given for learning

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research skills was the ability to use the library and the ability to critically analyze professional literature. Most subjects viewed research as a source for current information related to teaching practice and as a way of dealing with practical, day-to-day classroom issues.

The relationship between the research environment and the attitude to research has been investigated. It was found that the role of environment on attitude change seems to depend on students' training levels, suggesting a training environment by developmental level interaction regarding influence on research attitude (Royalty, Gelso, Mallinckrodt, & Garrett, 1986). Gelso, Mallinckrodt, and Judge (1996) found the Research Training Environment Scale (RTES) was unrelated to participants' interest in the practitioner's role and minimally related to general self-esteem.

In addition, African American students' attitudes toward research have been studied. Frierson, Hargrove, and Lewis (1994) obtained the interview results from African American summer research program students which indicated that those with black or female mentors had more positive perceptions and attitude toward research and the research environment than those with white male mentors. Richardson and Onwuegbuzie (2002) found that African graduate students enrolled at the urban institution reported statistically significantly higher levels of research self-efficacy.

What's more, the relationship between students' anxiety level on a research course and their attitude to research has been studied. It was found that students' self-perceptions seem to influence the level of anxiety in such courses, while the grades that students were expecting to earn did not predict student's anxiety. And students who considered research to be more important for their profession had higher level of anxiety (Papanastasiou & Zembylas, 2008).

Although numerous research studies have examined a wide variety of attitude toward research issues, none have examined the gender issues among graduate students on the syllabus rating on a research course. Furthermore, these studies have not taken into consideration whether the usefulness rating of a research course is related to the work setting preference among graduate students. The fact that the current research has ignored these two areas has promoted this investigator to explore the following two research questions:

1. Do male or female graduate students think more highly of the syllabus of a research course?
2. Do graduate students who prefer educational work settings or those who prefer non-educational work settings rate the usefulness of a research course higher?

The first hypothesis of the present study was that female graduate students would rate syllabus of a research course higher than male graduate students. Most people hold the opinion that females are more organized than male in daily life as well as work. Syllabus is the outline of a research course and probably female graduate students would use it more often to help organize their study on this course and consequently they would think more highly of it than their male counterparts. The second hypothesis was that graduate students who prefer to work in the educational setting would rate the usefulness of a research course higher than those who want to work in non-educational work settings. In educational work setting, research is important in the improvement of teaching and administration. In addition, the publication of research findings in professional literature is closely related to the advancement of a teacher's career.

## Method

### Subjects

Fifty-seven graduate students in College of Teacher Education, enrolled in four research classes (two research classes in the summer of 2008 and two research classes in the fall of 2008 at an eastern university in China), were selected. Each of them received a survey in class. All of them responded and returned the survey.

### Materials

A survey on attitude toward research was developed. This survey asked the subjects to provide information on demographics and their attitude toward research. Demographic information given by the subjects included major, gender, age, work setting preference and location of hometown or current residence. As part of the attitude portion of the survey, subjects were asked to rate the importance of different components of a research course, including textbook, lecture and discussion sessions, course syllabus, and lab sessions. Furthermore, subjects rated a research course as either relevant to their major or not relevant to their major, bad or good, useless or useful, and hard or easy. Finally, the subjects were asked to rank music, other fine arts (painting, sculpture, theatre, etc.), literature and language, mathematics, natural sciences (physics, chemistry, biology, etc.), and social science as research being important to their fields.

### Procedure

Each of the 57 graduate students mentioned above got the survey in class and all of them responded to it and returned it to the professor. During a subsequent class meeting, the students coded data from all the surveys for the entry into the Microsoft Excel spreadsheet. Then the professor with the help of a graduate assistant double checked and entered all the coded data into a Microsoft Excel spreadsheet. The complete data set was finally distributed to each student for further analysis.

## Results

To find out if male or female graduate students think more highly of the syllabus of a research course, the total rating score for each gender was averaged. The average (*M*), standard deviation (*SD*), and number of subjects (*n*) are listed below in Table 1.

Table 1

*Mean Syllabus Rating (1-5) by Gender, Standard Deviation, and Number of Students*

Gender	<i>M</i>	<i>SD</i>	<i>n</i>
Male	3.625	1.452	16
Female	4.488	0.914	41

*Note.* The difference between the two means (3.625 vs. 4.488) was significant,  $t(55) = -2.633$ ,  $p < 0.05$ .

To determine whether graduate students who prefer educational work settings or those who prefer to work in non-educational settings rate the usefulness of a research course higher, the total rating score for each group was averaged. The average (*M*), standard deviation (*SD*), and number of subjects (*n*) are listed on the next page in Table 2.

Table 2

*Mean a Research Course Usefulness Rating (1-7) by Work Setting Preference, Standard Deviation, and Number of Students*

Work Setting Preference	<i>M</i>	<i>SD</i>	<i>n</i>
Educational	5.378	1.440	37
Non-educational	5.000	1.975	20

*Note.* The difference between the two means (5.378 vs. 5.000) was not significant,  $t(55) = -0.813$ ,  $p > 0.05$ .

## Discussion

Based on the results of this research study, female graduate students think more highly of the syllabus of a research course than male graduate students. Data showed a significant difference, so the investigator's hypothesis can be retained. However, this research study did not find a significant difference when examining whether graduate students who prefer educational work settings or those who prefer to work in non-educational work settings rate the usefulness of a research course higher. Therefore, the second hypothesis from the investigator will be rejected.

This investigator was not surprised with the results from the first hypothesis. Female students often follow the syllabus in organizing their studies in a course. It was a surprise, however, to discover that this investigator's second hypothesis was not retained. Further study should be done in examining work setting preference and the attitude toward research courses.

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