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ABSTRACT

This study was conducted to determine if relationships exist between preservice teachers' preferences for instructional methods, course goals, and learning activities and university level, gender, and teaching level interest. A learning preference questionnaire was administered to 121 freshmen, 165 sophomores, 165 juniors, and 100 seniors all enrolled in teacher education courses. A number of clear preferences for instructor behaviors and course learning activities were discovered. For example, women prefer instructors who exhibit high levels of teaching skill; first year students prefer structured college classes; elementary school majors prefer expressive learning options; first year students do not prefer the use of outside speakers; men prefer structured grading practices with objective as opposed to essay tests, and mid-term and final examinations as the basis for course grades. Results suggest that college instructors' planning could reflect this information, presenting courses that take these preferences into account. Additional research should seek to determine which instructional preferences, when provided for in courses, increase satisfaction, motivation, and cognitive complexity. (Contains 11 references.) (LL)

Preservice Teachers Preference for Course Learning Activities

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Abstract

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This research analyzed interactions between year in college, gender, and teaching level interest and college course learning activities. Six different factors called preference for teaching skill, student active participation in learning, structural courses, expressive learning, use of teaching aids, and structured grading practices accounted for forty percent of the total variance. Women have a higher preference than men for instructors who exhibit teaching skill but there is no difference between women and men nor is there an interaction between year in college or teaching level interest and preference for active participation in college learning. First year students hold higher preference for structured college classes but not juniors. Elementary school majors prefer expressive learning options but not middle or high school preservice teachers. First year students do not prefer the use of outside speakers, but the three other college groups prefer such learning experiences. Men prefer structured grading practices with objectives as opposed to essay tests and having only a mid-term and final exam as the basis for a course grade.

The purpose of this research was to determine if there are any relationships between student preference for instructional methods, course goals and learning activities and university level, gender and teaching level interest in a sample of preservice teachers. If relationships are found between the groups in their preference for specific learning activities, teaching methods and course goals, then college instructors can use this information to plan and present courses that take these differences into account and make learning more interesting and personally satisfying and increase learning efficiency.

The research on college level students and their instructional preferences is presented below. In general the findings indicate granting college students their instructional preference improved the level of satisfaction in the course and increased motivation to take future courses when preferences were granted but few achievement differences have been reported.

Guetzkow, Kelly and McKeachie (1954) studied the effects of three teaching methods, recitation-drill, group-discussion, and tutorial-study on achievement and attitudes toward psychology in a freshman general psychology course. They found no practical differences between the three teaching methods on achievement but the discussion method produced slightly more favorable attitudes toward psychology than drill and tutorial methods. Preference for instructional method was also examined by comparing preference before and after the course. At the beginning of the course recitation and discussion were equally preferred and tutorial less so. Students in recitation sections showed a statistically significant gain in their preference for this method, while students in discussion and tutorial sections showed no significant changes in preference. Preference for a teaching method and learning under that method had no influence on performance on the final examination.

James (1962) attempted to enhance student achievement in Air Force trainees by comparing student preference for reading or lecture modes. He found two significant interactions--reading produced higher achievement and the reading preference produced greater achievement for higher ability students. But he also found that the highest achievement was earned by trainees who had no instructional preference. The limitations of the study are that no objective measure of preference for instruction was used, the "lecture" was listening to a tape recording, and no attitude measures toward instruction were used.

Domino (1971) studied college students and found that those with independent learning orientations learned more and preferred an unstructured course, whereas students who were more conforming did better in structured courses. Both groups gave their courses higher evaluations than students who were not matched with their preferred learning orientation.

Pascal (1971) examined the educational outcomes of matching undergraduate students' instructional preferences for lecture, lecture and discussion, and independent study in an undergraduate psychology course titled "Socialization." A minimum of fifty students were assigned to each of the three instructional options. About one-half of each group were randomly

assigned to the method which they listed as their first option; the other half were randomly assigned to their second or third choice. Students who received their preferred learning method did not earn higher grades or rate the course as more valuable compared to students who did not learn under their first preference. However, students who learned under their preferred method expressed a more positive attitude toward psychology and students who preferred lecture and lecture and discussion performed better on knowledge and comprehension type final examination questions. Students in the lecture-discussion and independent study options did not perform better on the application part of the final examination; however independent reading students scored higher than the other two groups on the evaluation of a novel article. Students assigned to the non-preferred independent study option rated the course more difficult and anxiety provoking than students who preferred this option. Students in the study favored having instructional options (93.5 percent) and 91.6 percent thought options provided them with freedom and individualization. Pascal suggested that more differences were not found due to the preference factor because of the professor of the lecture option who was well liked. Students commented that her lectures caused some to change their minds as to which option they preferred.

Brainard and Omen (1977) surveyed community college students on their instructional preferences using the Canfield-Lafferty Learning Styles inventory. They found females were statistically significantly different from males in their preference for course structure and organization, academic expectations, interest in the use of language, and the importance of people in their courses of study. By contrast, males expressed higher preference for independent learning, using numbers in learning, having direct learning experiences and a competitive learning environment.

Ristow and Edeburn (1983) surveyed 115 sophomore/junior level preservice teachers in Educational Psychology classes at South Dakota State University on their instructional preferences using the Renzuli-Smith Learning Style Inventory. The five instructional methods receiving the highest percentage of favorable responses were: lecture (72%), teaching games (68%), programmed instruction (67%), peer teaching (65.5%), and discussion (60.9%). The three methods reserving the lowest percentage of favorable responses were: independent study (24.5%), simulations (21.8%) and drill recitation (19.1%). They replicated their study in 1984 with 150 sophomore/juniors and found the lecture (71.9%), discussion (68.6%), peer teaching and teaching games both (60.1%) to be most preferred. Only programmed instruction, which declined from 67% to 26% favorable attitudes changed among the first five preferred methods in 1983. They found the three least preferred methods, all with 20.3% unfavorable attitudes were independent study, drill and recitation and projects.

Smith (1976) researched teaching method preference by developing a 54-item instrument that measured nine different instructional strategies: (1) projects, (2) drill and recitation, (3) peer teaching, (4) discussion, (5) teaching games, (6) independent study, (7) programmed instruction, (8) lecture, and (9) simulation. She then used the instrument in an experiment with young adolescents who were matched in instruction preference for lecture, discussion and simulation. She found that the teaching method preference correlated .38 with achievement and .23 with motivation. Smith concluded

students differ in their preference for teaching modalities and that teaching method matching can significantly enhance educational outcomes.

Methods

Subjects in the present study were enrolled in the undergraduate teacher preparation program at Miami University where there are 1540 full time and 79 part time students, for a total of 1619. A cross sectional method of data collection was used with a total sample of 551. There were 121 freshmen, 165 sophomores, 165 juniors, and 100 seniors, all enrolled in appropriate teacher education courses during the second semester of the academic year when data were collected. The Learning Preference Questionnaire (LPQ), developed by the author, has 37 Likert-type items that ask students to express their preference for course learning activities by using a five point scale where 1 was most effective and 5 most ineffective. The scale was factor analyzed using a varimax rotation that yielded six factors that accounted for 40 percent of the total variance. The first factor, called preference for teaching skill and concern for students accounted for 14.7 percent of the variance and has nine items that measured instructor skill, organization and instructor rapport with students and has an alpha reliability of .80. The second factor, preference for active participation in class learning has seven items, accounted for eight percent of the variance, and asked for preference about role playing, case studies, instructional games, discussions and panel membership, and has an alpha reliability of .50. Factor three is preference for course structure and organization and accounts for 5.6 percent of the variance. It has seven items that ask for preference for using workbooks, taking quizes, holding review sessions and reading the text before class, and has an alpha reliability of .60. The fourth factor is called preference for expressive learning and accounts for 4.2 percent of the variance. Four items make up this scale that ask for preference for essay exams, term papers, oral reports and library assignments, and has an alpha reliability of .58. The fifth factor is called preference for using learning aids and accounts for 3.9 percent of the variance and consists of four items that ask for preferences on viewing films, field trips, guest speakers and computer aided instruction. The alpha reliability is .56. The sixth factor is called preference for structured grading practices and accounts for 3.5 percent of the variance. The four items ask for preference for fixed grading standards, true-false exams, grading on the curve, and having only a mid term and final exam and has an alpha reliability of .12.

The data was analyzed using analysis of variance. If main effects were found between a factor and university level, gender, or teaching level interest, a one way analysis of variance and the Scheffe test were used to identify if other, more specific relationships could be found.

Results

The results of the study will be presented according to each of the six factors of preference for instructional activities by indicating main effects and interactions with university level, gender, and teaching level interest with each factor.

A significant main effect between preference for instructors who are perceived to have teaching skill and concern for students and gender was found ($F = 37.22$, $df = 6$, $p = .00$) with women having a significantly higher preference ($F = 43.83$, $df = 1$, $p = .00$) than men. No other main effects were found but a three way interaction between this factor and university level, gender, and teaching level interest was also found.

No significant main effects or interactions were found between preference for active participation in learning and gender, university level or teaching level interest.

A significant main effect between the factor preference for a structured course and university level was found ($F = 2.67$, $df = 3$, $p = .04$). Further analysis using one way analysis of variance and the Scheffe test indicated a significant F ratio ($F = 2.77$, $df = 3$, $p = .04$) with the Scheffe test indicating that freshmen felt more structured courses were most effective compared to juniors who expressed a preference for less structure in courses (freshmen M = .1953, juniors M = .1455).

The factor, preference for expressive learning, showed a main effect with teaching level interest ($F = 5.00$, $df = 2$, $p = .00$). Further analysis showed that elementary school majors had a significantly higher preference for expressive learning than secondary or middle school majors ($F = 8.51$, $df = 2$, $p = .00$) with the factor means as follows (elementary .1717, secondary -.1429, and middle school teachers -.2375).

The factor preference for using teaching aids, shows two significant main effects, university level ($F = 15.36$, $df = 3$, $p = .00$) and teaching level interest ($F = 4.82$, $df = 2$, $p = .00$). No other main effects or interactions were found. Further analysis revealed university level preferences for using learning aids differentiated the four university levels ($F = 12.31$, $df = 3$, $p = .00$) and the Scheffe test showed that freshmen do not prefer speakers and films compared to sophomores, juniors and seniors (freshman M = .3624, sophomore M = .0976, junior M = -.1333, senior M = -.3796). The one way analysis of variance did not detect any significant mean differences between elementary, middle and secondary teaching interest and preference for using learning aids.

Two main effects, gender ($F = .901$, $df = 1$, $p = .00$) and teaching level interest ($F = 3.49$, $df = 2$, $p = .00$) were related to preference for structured grading practices. No other main effects or interactions were found. Further analysis showed women preferred less structured grading practices than men ($F = 4.28$, $df = 1$, $p = .03$); (women M = .0449, men M = -.1722). No significant differences between the three levels of teaching interest and preference for structured grading practices were discovered ($F = 1.05$, $df = 1$, $p = .34$).

Discussion

A number of clear preferences for instructor behaviors and course learning activities were found in a sample of preservice teachers. Women hold a higher preference for instructors who exhibit teaching skill and concern for students while men are not as concerned about these instructor behaviors. The findings of this study that women prefer instructors who exhibit high levels

of teaching skill support the findings by McKeachie, Len, and Mann (1971) who found higher correlations for women than men between their rating of teacher skill and achievement in various academic courses. In their study of student-instructor rapport, McKeachie and Lin (1971) concluded:

> A warm, interpersonally oriented teaching style seems to be generally effective for women teachers, but for men teachers it is effective only for women students and men high in need affiliation, a result fitting with the idea that women are more interpersonally oriented than men.

These two studies are consistent with the findings of this study where females prefer instructors who are friendly, give individual attention, provide after class help, and encourage mutual respect. Freshmen prefer more structured courses than juniors while elementary majors prefer less instructor control and prefer to express themselves in class by writing and giving reports while middle and secondary teachers do not share these learning activities. Also freshmen do not prefer speakers and films while all other undergraduates prefer using these learning aids. The finding that Freshmen preservice teachers prefer courses that are highly structured and well organized by instructors is supported by Hunt's (1975) theory that personal development leads from simple to complex information processing. According to Hunt, higher conceptual complexity and independence should be the goals of personal development and these goals can be achieved in learning situations that challenge students to engage in slightly more complex thinking and less structure. It seems logical that freshmen, new to the university and unsure of what and how to learn, would prefer instructors and courses learning activities that would reduce their anxiety by providing high levels of organization and structure.

Women prefer less structured grading practices like grading on a curve compared to grades based on a fixed standard and prefer essay exams. They want more than a mid term and final examination to determine their final grade while men expressed lower preferences for these educational practices.

No significant relationships between university level, gender, or teaching level interest and preference for active participation in learning was found.

In terms of gender and instructional preference, women, but not men, prefer instructors who are high in teaching skill, where clear explanations are given and important points are emphasized in language that is easy to understand. This finding is consistent with the survey data of Brainard and Omen (1977) who found female community college female students have a higher preference for courses that are structured and organized than do males. Further, women show greater preferences than men for expressing themselves in written and oral work in class. Also women prefer less structured grading practices like grading on a curve and essay rather than objective test items.

Additional research should seek to determine which of these instructional preferences, when provided for in courses, increased satisfaction, higher motivation and greater cognitive complexity.

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