

NATIONAL SURVEY RESULTS: RETENTION OF WOMEN IN COLLEGIATE AVIATION

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ABSTRACT

Since the numbers of women pursuing technical careers in aviation continues to remain very low, a study on retention of women was undertaken by a team of university faculty from Embry Riddle Aeronautical University, Arizona State University, and Kent State University. The study was initiated to discover the factors that influence women once they have already selected an aviation career and to ascertain what could be done to support those women who have demonstrated a serious interest in an aviation career by enrolling in a collegiate aviation program.

This paper reports preliminary results of data collected in the first and second years of the study. The data was collected from surveys of 390 college students (195 women and 195 men) majoring in aviation programs in nine colleges and universities, representing widely varied geographic areas and including both two- and four-year institutions.

Results revealed significant areas of concern among women in pilot training. When queried about these concerns, differences were evident in the responses of the male and female groups. These differences were expected. However, a surprising finding was that women in early stages of pilot training responded differently from women in more experienced stages. These response differences did not occur among the men surveyed. The results, therefore, suggest that women in experienced stages of training may have gone through an adaptation process and reflect more male-like attitudes about a number of subjects, including social issues, confidence, family, and career.

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INTRODUCTION

Looking ahead, we see a tremendous rise in the numbers of women entering the workforce. U.S. Department of Labor statistics (Rosser, 1995) predict that 80-90% of workforce growth after 2000 will be women and minorities—a population that is apparently not attracted to careers in aviation (Turney, 2000). The percentage of women working particularly in the technical side of aviation has not significantly increased in the past twenty years. Women, for example, still constitute less than 6% of the airline-qualified pilots (FAA pilot data, 1997) and less than 5% of aviation maintenance/avionics technicians. This is somewhat surprising since a number of barriers have been lifted in the past twenty years, notably the exclusion by the military of women pilots in combat aircraft and the emergence of women airline captains.

Studies in science and engineering indicate that less than 10% of the programs studied were specifically focused on the recruitment and retention of women (Matyas & Malcolm, 1991). The small numbers of women entering careers in aviation is evidenced in collegiate aviation where enrollment and retention of women remain low. After close analysis of demographic trends in the aviation workforce, a team of university faculty from Embry Riddle Aeronautical University (ERAU), Daytona Beach, FL, Arizona State University, Phoenix, AZ, and Kent State University, Kent undertook a research project, OH. The research was funded by grants from the Department of Education Fund for the Improvement of Secondary Education (FIPSE) and the Alfred P. Sloan Foundation.

The research focused on the question of why greater numbers of women do not choose aviation career opportunities. The goals of the research team were (a) to identify factors that affect the numbers of women pursuing a pilot career in the aviation industry, (b) to create a model that reflects those factors and fosters retention of women in aviation, and (c) to disseminate the model throughout academic institutions and industry training centers. Although the study data was collected from a collegiate aviation population of both men and women, it was understood that many of the findings may apply to a number of technical career options in which women are seriously underrepresented.

BACKGROUND

Since women are seriously underrepresented in aviation, the problem was to discover the factors that influence women once they have already selected an aviation career, and to support those women who have demonstrated a serious interest in an aviation career by enrolling in a

collegiate aviation program.

The research team from the three universities jointly developed a series of open-ended questions to reflect the major themes that had emerged from the women's studies literature. Focus groups were held at each university for the purpose of identifying topics and commonalities that could be used to design a survey. Experience levels of the focus group members ranged from a private pilot with 12 hours of flight time to an 800-hour flight instructor seeking regional airline employment. Two of the women had recently dropped out of flight training.

The responses of the focus groups were analyzed and seven areas of concern emerged from the data. The researchers compared the results of the focus groups and designed a thematic architecture for the survey phase of the study. The survey included 65 Likert scale items, a learning style inventory, and 14 open-ended items. In order to replicate some of the "richness" of the focus groups, it was decided to include some open-ended questions designed in a similar format as those used in the focus groups. The results of that phase of the study will be published at a later date. Only the Likert scale items are included in this paper (see Appendix A); however copies of the entire survey can be obtained from maturney@asu.edu.

PRELIMINARY FINDINGS

This paper reports preliminary results of data collected in the first and second years of the study. The data was collected from surveys of 390 collegiate aviation majors (195 women and 195 men). The participants were selected from nine colleges and universities, representing widely varied geographic areas and including both two- and four-year institutional members of the University Aviation Association (UAA). Since the researchers decided to maximize the number of potential survey responses, the entire female population was surveyed in each institution and a matching number of male participants were selected randomly at each institution. Institutional participation was voluntary and the researchers selected colleges and universities that represented a broad spectrum of geographic location and size; thus the conclusions are restricted to this representative group.

A quantitative statistical analysis was completed on the 65 Likert scaled items in the survey (see Appendix B). These items queried student subjects on seven areas of concern including social issues, mentoring, faculty support, learning styles, family and career, standards, and confidence. Differences between women and men were analyzed for each of the 65 items using a pooled *t test* of unequal variances on the average response rates (linear ordinal scale). The test was performed at the 5% significance

level. A number of items tested revealed significant differences (see Appendix B Table 1). However, the size of the difference was small for many of the questions. This led researchers to further in-depth item analysis.

A further study of the data was performed based on both the sex and flight experience of the respondents. The flight experience variable was considered to have two levels: novice and experienced. For each of the 65 items in the survey, the number of agreement/disagreement responses was counted in each of the four categories (female novice, female experienced, male novice, male experienced). A Chi-square test was performed on the categorical data at the 5% significance level (see Appendix B Table 2). The resulting table of significant items (see Appendix B Table 2) shows the agreement/disagreement percentages for the four categories. Many of the items in the initial findings revealed unique responses from one group—the novice women, that is, female students who were student or private pilots. The responses of this group often differed from the responses of experienced women, that is, commercial pilots with advanced flight ratings, and from the responses of males with both novice and advanced flight ratings. It should be noted that the student and private pilots were generally freshmen and sophomores and the commercial pilots were generally juniors and seniors in collegiate aviation programs.

A significant finding was that as women progress to experienced pilot status, they respond more like males. This suggests an adaptive process and is not unlike the findings of Seymour and Hewitt (1997) in their study of women in engineering program throughout the United States. The analysis revealed that novice women pilots differed from males in their responses considerably more than experienced women pilots. The regularity of these response differences between the novice women pilots and the experienced women pilots suggests that experienced women pilots are more adapted to the male-oriented aviation culture and have, in fact, acquired more male-like attitudes than the novice women. If this is the case, it follows that a novice's lack of ability to undergo such an adaptation, or her lack of understanding that an adaptation generally takes place by the time women reach experienced training, may be a factor in the attrition rate among this population.

Following is a detailed discussion of response differences between novice and experienced women pilots. These responses are also compared to the responses of male pilots in the novice and experienced group. Appendix C contains a complete graphic representation of these comparisons and can be cross-referenced with the item numbers identified in bold in the following text

LEARNING STYLE PREFERENCES

In order to maximize transfer of knowledge, educators conducted extensive studies of learning style differences among individuals regardless of gender. Some learning style theorists suggest that differences can be identified by models such as auditory learners, visual learners, and kinesthetic learners and that all dominant learning styles should be addressed in the classroom situation (Karp, 2000). In the process of these studies, several researchers noticed trends indicating a pattern of gender differences (Belenky et al, 1986; Emanuel & Potter, 1992; Gilligan, 1982; Sitler, 1999; Tannen, 1990). Recent discoveries using magnetic brain imaging, offer evidence of men and women using different parts of the brain while engaged in the same cognitive task (*New York Times*, 1995; *New York Times*, 1997). Based on an in-depth study of flight students, Sitler (1999) concludes that the time has come to make major changes in curriculum and instruction in order to make flight careers more appealing to women and to fill the expected pilot shortage.

Based on strong evidence of gender differences in learning, this study asked participants several questions about learning differences between women and men. For example, Item 29 asked whether participants agreed or disagreed with the statement, “Women and men both learn the same way.” Women disagreed while men were neutral. Only women’s responses suggest an awareness of learning differences between women and men.

Another item related to learning differences was Item 47, “I do better working alone than working in a group.” Women’s responses were neutral while men agreed. When asked about learning style preferences (“I prefer to learn by discussion with others, rather than by myself” Item 2) the novice women showed more agreement. The literature on women’s learning styles suggests that women prefer cooperative learning. (Belenky et al., 1986; Gilligan, 1982; Tannen, 1990). However, in this study, since the degree of agreement among the experienced women is less, it seems that they have adapted to a more independent, male-like learning style.

SOCIAL ACCEPTANCE

When asked about social acceptance in Item 20, “I don’t think men like women who fly better than they do,” novice women agreed more strongly than the other groups. This would suggest some social concerns (associated with competition) among the novices—concerns that the experienced women pilots do not share. Similarly, when asked to respond to Item 36, “I have to prove myself to be accepted by the men in the flight program,” women’s levels of agreement were higher than men’s levels of agreement with novice women’s responses showing stronger agreement than

experienced women showed. Possibly the experienced women disagree more often because they have already proven their abilities.

Novice women agreed with the statement, “Sexist remarks annoy me” more than did experienced women pilots (see Item 51). The response of novice women pilots in contrast to experienced women pilots may reflect the difference in levels of adaptation to sexist language in aviation and a male-oriented environment.

Experienced women disagreed with the statement “I sometimes feel like an outsider with men around airplanes” (Item 58). Novice women’s responses showed much greater agreement. The issue of inclusivity is likely related to the disproportionate numbers of men and women and may be related to lack of a women-friendly atmosphere in the aviation environment.

Even though all groups showed some agreement with the following statement, “My male peers always want to decide who is in charge” (Item 8), novice women agreed to a greater extent than other groups. This response suggests more sensitivity to status-related issues among novice women pilots.

STANDARDS

When queried about standards (“I think that women have to work harder than men do when learning to fly,” Item 24) responses of novice women were mixed while the other three groups disagreed. The mixed response may mean that novice women are not clear about whether standards are the same for both men and women. Similarly, when asked to respond to the statement “Women who go into aviation have to be psychologically stronger than other women” (Item 39) women agreed more than men agreed with this statement (with novice women agreeing more strongly than experienced women). In contrast, women in both groups disagreed with the statement “Men have to prove themselves to be accepted by women” (Item 62).

Mentors

Gender studies suggest that mentoring is an effective means of supporting retention in science-related careers. Successful women and men scientists credit their mentors who were helpful in establishing contacts and connections; others have experienced fewer opportunities when advisors held prejudicial views about women scientists in the workforce (Sonnert, 1995).

When asked if “Women need mentors to succeed in aviation” women agreed and men disagreed (see Item 22). Similarly, women agreed that

“Women should mentor women who are learning to fly” (see Item 59). Interestingly, more women than men disagreed with the statement “I am acquainted with women experienced in aviation” (Item 14). These responses would suggest a need for a closer look at mentoring among women in aviation.

FACULTY SUPPORT

Seymour and Hewitt’s extensive research on factors that influence retention in science, mathematics, and engineering suggests that faculty support is crucial to student success (1997). Astin and Sax (1996) found that interacting with faculty actually had a negative effect on women’s mathematics confidence, the opposite effect of that observed in men. They stated that science faculty, most of whom are male, can tend to discourage women from science, downplay women’s intellectual capabilities, and make women feel unwelcome in the classroom. These findings suggest that before simply advocating more faculty-student interaction, we should focus on the nature of the interaction, especially for women students (p. 110).

When asked to respond to Item 27 “Some faculty members treat women with a ‘stand off’ attitude because they believe aviation is a man’s world” data from novice women were mixed. The mixed response may suggest ambivalence among novices about whether or not they belong in aviation. Men, in contrast, disagreed with this statement. Not surprisingly however, more novice women agreed, “Women faculty are more supportive than male faculty”(Item 46).

CONFIDENCE

Gender studies reveal that confidence is a significant issue related to women’s career success (Turney, 1994). A major study by Sitler on teaching women to fly suggests that women are slower than men to gain confidence (1999). Women avoid taking chances and thus prefer to spend more hours of preparation prior to solo flight. Women also express a need to understand a subject thoroughly before proceeding in their training. They do not like the trial and error method of flight training.

When responding to the statement “I prefer my flight instructor demonstrate a maneuver before I have to try it,” women agreed more than men (see Item 6).

FAMILY AND CAREER

Studies in technology, science, and aviation reveal that family matters can become obstacles to women pursuing professional careers. Young women consider marriage and family as desirable goals and they are willing to make sacrifices to attain those goals. Although researchers found no negative effect of marriage and motherhood on productivity, women who persist in their careers may appear to violate societal role expectations (Sonnert, 1995; Turney, 1996).

Responses to Item 5 on the survey “I may be unable to have a family and a career” showed disagreement from experienced men. Novice men and women’s responses were mixed. Although flexible time and scheduling have done much to alleviate family pressures for women professionals, structural and attitudinal barriers related to family and careers still exist for women.

SUMMARY

Interesting differences among the four groups of collegiate aviators were observed in the preliminary findings from this broad research effort. Novice women seem to need women role models and to perhaps have less confidence. They also like to work in teams more than their male counterparts and are more concerned that aviation is male-dominated. Family concerns are a strong issue for all groups of women surveyed. As women progress through early flight training to a more experienced level, they respond more like men, gain confidence and adopt more male-like attitudes. Greater awareness of this adaptation factor particular to women in collegiate aviation is needed. Some women may adapt quickly and others may need more time and encouragement in order to sustain retention of novice women in aviation.

The problem of retention for the future of the aviation industry, however, should now focus on identifying how many women are lost before they can adapt to the industry culture. As Tony Bailey, Vice President of the Boeing Company, recently stated, “The aviation industry is not at the leading edge, but at the trailing edge with the flaps and spoilers. Dynamic women are leaving aviation and going to other industries with their talents” (2001).

As research continues, new challenges emerge regarding potential industry and training adaptations that could support retention of women who have made an initial commitment to a technical career in aviation.

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APPENDIX A

1. Using the following choices, select the response that most reflects how strongly you feel about each statement. Write the letter of the response in the line preceding the statement. If you have not had experience with the issue, please write an X on the line

- | | |
|-------------------|--|
| A. Strongly Agree | D. Disagree |
| B. Agree | E. Strongly Disagree |
| C. I am not sure | X. I have no experience with this issue. |

- _____ 1. I have fun when I am flying
- _____ 2. I do not hesitate to ask my flight instructor any questions.
- _____ 3. It intimidates me if my flight instructor yells if I make a mistake.
- _____ 4. My friends support my flying aspirations.
- _____ 5. I may be unable to have a family and a flying career both.
- _____ 6. I prefer my flight instructor demonstrate a maneuver before I have to try it.
- _____ 7. I prefer to learn by discussion with others, rather than by myself.
- _____ 8. My male peers always want to decide who is in charge.
- _____ 9. Other women in the aviation program are friendly toward me.
- _____ 10. I get discouraged when a male peer advances faster in flight training.
- _____ 11. My male peers focus too much on my appearance.
- _____ 12. I experience frequent misunderstanding with my flight instructor.
- _____ 13. Sometimes my flight instructor talks down to me.
- _____ 14. I am acquainted with women experienced in aviation.
- _____ 15. My flight instructor moves too quickly through the flight lessons.
- _____ 16. I am sometimes uncomfortable working in a male oriented environment.
- _____ 17. Some of the comments made by my male peers make me feel uncomfortable.

- _____ 18. I prefer hands-on learning to learning from books.
- _____ 19. I believe women think and act differently from men.
- _____ 20. I don't think men like women who fly better than they do.
- _____ 21. My female peers always want to decide who is in charge.
- _____ 22. I think women should mentor women who are learning to fly.

Using the following choices, select the response that most reflects how strongly you feel about each statement. Write the letter of the response in the line preceding the statement. If you have not had experience with the issue, please write an X on the line

- | | |
|-------------------|--|
| A. Strongly Agree | D. Disagree |
| B. Agree | E. Strongly Disagree |
| C. I am not sure | X. I have no experience with this issue. |

- _____ 23. I think that women have to work harder than men do when learning to fly.
- _____ 24. I think that male flight instructors have an attitude that "flying is a man's profession."
- _____ 25. Male flight instructors often want to start a relationship with their female students.
- _____ 26. I get discouraged when a female peer advances faster in flight training.
- _____ 27. I feel that some faculty members treat women with a "stand-off" attitude because they believe aviation is a man's world.
- _____ 28. My parents did not believe I was serious about a flying career.
- _____ 29. Women and men both learn the same way.
- _____ 30. I prefer to learn by observing others.
- _____ 31. Some of the comments made by my male flight instructors make me feel uncomfortable.
- _____ 32. There should be more camaraderie between women and men classmates.
- _____ 33. I enjoy the attention I get from my male peers.
- _____ 34. I often worry about the costs of my flight lessons.

- _____ 35. Women are often excluded from peer socializing (like going to lunch) with male students.
- _____ 36. I have to prove myself to be accepted by the men in the flight program.
- _____ 37. Women should be actively recruited into aviation.
- _____ 38. My male flight instructors seem to feel uncomfortable with me in the cockpit.
- _____ 39. Women who go into aviation have to be psychologically stronger than other women.
- _____ 40. Most male flight instructors take female students seriously.
- _____ 41. I feel that the classroom faculty at my school support women students.
- _____ 42. Some flight instructors send the message that flying is something that men are supposed to do.
- _____ 43. My family has encouraged my flying.
- _____ 44. My male classmates seem to feel uncomfortable with me in the classroom.
- _____ 45. I am not sure I can afford to continue working toward a pilot career.
- _____ 46. Women faculty are more supportive of me as a flight student than male faculty.

Using the following choices, select the response that most reflects how strongly you feel about each statement. Write the letter of the response in the line preceding the statement. If you have not had experience with the issue, please write an X on the line

- | | |
|-------------------|--|
| A. Strongly Agree | D. Disagree |
| B. Agree | E. Strongly Disagree |
| C. I am not sure | X. I have no experience with this issue. |

- _____ 47. I do better working alone than working in a group.
- _____ 48. I like to share my feelings to my peers.
- _____ 49. A good response to rude male behavior is to ignore it.
- _____ 50. I want to know who is in charge.
- _____ 51. Sexist remarks annoy me.
- _____ 52. In a group of my peers, women talk more than men do.

- _____ 53. I am comfortable with the level of competitiveness in aviation.
- _____ 54. Sexual jokes make me uncomfortable.
- _____ 55. Women are not asked to answer in class as often as men.
- _____ 56. Some of the comments made by my male classroom instructors make me feel uncomfortable.
- _____ 57. Expectations and class standards are the same for men and women.
- _____ 58. I sometimes feel like an outsider working with men around airplanes.
- _____ 59. I think women need mentors to succeed in aviation.
- _____ 60. I am not bothered by the special attention that I get from the men in my flight program.
- _____ 61. Women in aviation like to “hangar fly” without men around.
- _____ 62. Men have to prove themselves to be accepted by the women.
- _____ 63. I had difficulty learning the communication style required by ATC.
- _____ 64. Other women students resent attention I get from male peers.
- _____ 65. When a male peer is offensive, I confront him.

APPENDIX B

Table 1. Comparison of Response to Factors That Influence Women Pursuing Aviation Careers

Item	Average Response			Item	Average Response		
	Female	Male	t test		Female	Male	t test
1	1.302	1.258	0.418	34	1.837	1.985	0.203
2	1.456	1.527	0.339	35	3.978	4.118	0.132
3	2.733	2.784	0.724	36	2.995	3.571	0.000 *
4	1.461	1.557	0.135	37	1.907	2.314	0.000 *
5	3.361	3.494	0.274	38	3.953	4.210	0.007 *
6	1.641	1.849	0.021 *	39	2.649	3.028	0.001 *
7	2.540	2.613	0.527	40	2.127	2.102	0.704
8	3.482	3.538	0.621	41	1.874	1.860	0.821
9	1.969	1.844	0.149	42	3.388	3.572	0.099
10	3.736	3.396	0.005 *	43	1.508	1.508	0.976
11	3.410	3.649	0.029 *	44	3.974	3.989	0.820
12	4.030	3.879	0.131	45	3.359	3.577	0.079
13	3.775	3.789	0.865	46	3.024	3.463	0.000 *
14	2.508	2.189	0.008 *	47	2.979	2.747	0.071
15	4.068	3.849	0.011 *	48	2.479	2.719	0.054
16	4.047	4.116	0.465	49	2.755	2.803	0.659
17	3.395	3.926	0.000 *	50	2.104	2.160	0.549
18	1.606	1.534	0.373	51	2.325	2.698	0.003 *
19	1.974	2.203	0.025 *	52	3.359	3.041	0.003 *
20	2.565	3.017	0.000 *	53	2.130	2.183	0.555
21	3.652	3.594	0.572	54	3.359	3.738	0.001 *
22	2.253	2.865	0.000 *	55	3.781	3.721	0.525
23	3.346	3.523	0.123	56	3.691	4.148	0.000 *
24	3.494	3.549	0.603	57	1.974	1.852	0.167
25	3.735	3.517	0.060	58	3.365	3.901	0.000 *
26	3.718	3.710	0.958	59	2.881	3.420	0.000 *
27	3.296	3.706	0.001 *	60	2.420	2.000	0.000 *
28	3.676	3.871	0.149	61	3.241	2.983	0.031 *
29	3.352	3.016	0.004 *	62	3.780	3.556	0.019 *
30	2.882	2.908	0.776	63	3.721	3.645	0.538
31	3.737	3.857	0.292	64	3.339	3.593	0.018 *
32	2.397	2.409	0.921	65	2.236	2.431	0.109
33	2.570	2.206	0.000 *				

* denotes significance at the 5% level

Note: Response value 1.0 represents strong agreement; Response value 3.0 represents neutral; Response value 5.0 represents strong disagreement

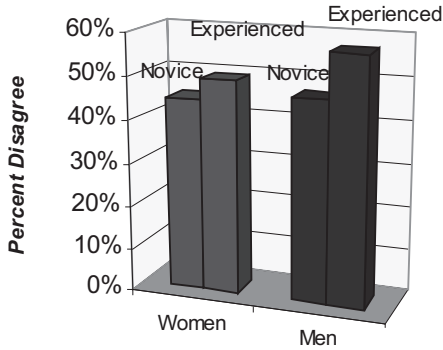
Table 2. Percent Agreement with Selected Factors that Influence Women Pursuing Aviation Careers

<i>Item</i>	<i>Agree / Disagree</i>	<i>Average</i>			
		<i>Novice</i>		<i>Experienced</i>	
		<i>Women</i> (<i>n</i> = 75-85)	<i>Men</i> (<i>n</i> = 75-90)	<i>Women</i> (<i>n</i> = 85-90)	<i>Men</i> (<i>n</i> = 85-100)
5	Disagree	44.7%	46.7%	49.4%	57.0%
6	Agree	88.1%	81.3%	90.0%	86.5%
7	Agree	63.2%	51.1%	46.7%	51.4%
8	Agree	27.6%	17.7%	13.9%	15.9%
14	Disagree	34.1%	25.0%	30.9%	8.7%
20	Agree	61.3%	38.9%	44.3%	33.7%
22	Agree	54.9%	29.5%	63.3%	44.0%
24	Disagree	50.6%	63.9%	68.2%	67.3%
27	Disagree	48.3%	75.0%	56.3%	68.1%
29	Disagree	58.9%	32.6%	50.0%	42.9%
36	Agree	46.6%	26.5%	40.0%	16.2%
39	Agree	51.1%	41.8%	49.5%	30.0%
46	Agree	43.0%	12.1%	26.3%	14.3%
47	Agree	33.7%	42.7%	38.9%	48.5%
48	Agree	71.1%	59.8%	62.6%	51.9%
51	Agree	73.6%	57.5%	64.8%	52.0%
58	Agree	38.6%	11.0%	24.7%	4.5%
59	Agree	34.4%	14.1%	46.7%	27.4%
62	Disagree	79.1%	60.5%	70.6%	66.0%

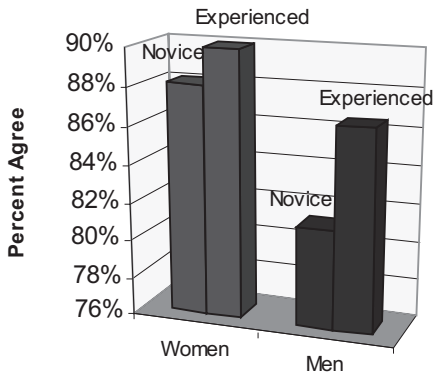
Note: Number of responses varied within (n) ranges.

APPENDIX C

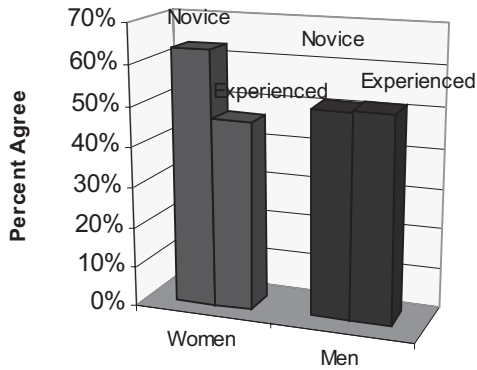
Question 5 - I may be unable to have a family and a flying career both



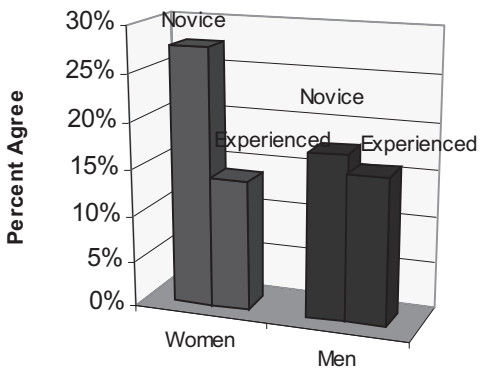
Question 6 - I prefer my flight instructor demonstrate a maneuver before I have to try it



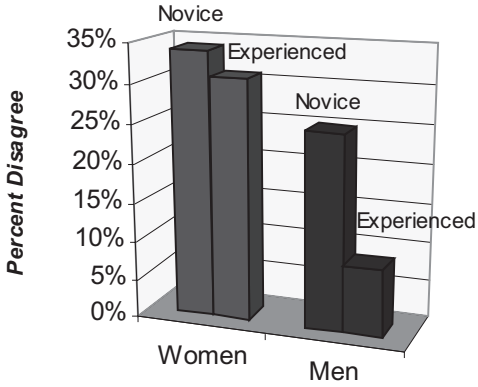
Question 7 - I prefer to learn by discussion with others, rather than by myself



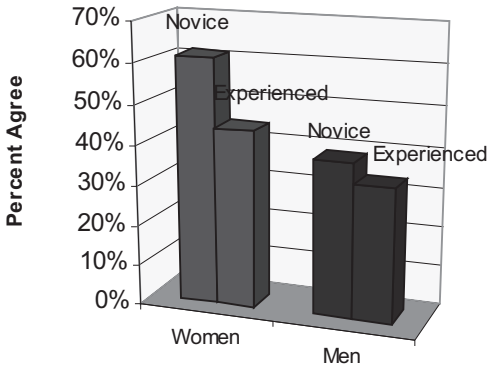
Question 8 - My male peers always want to decide who is in charge



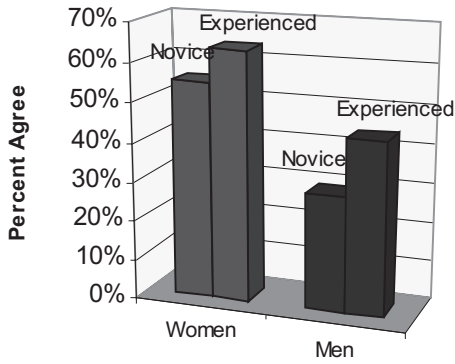
Question 14 - I am acquainted with women in aviation



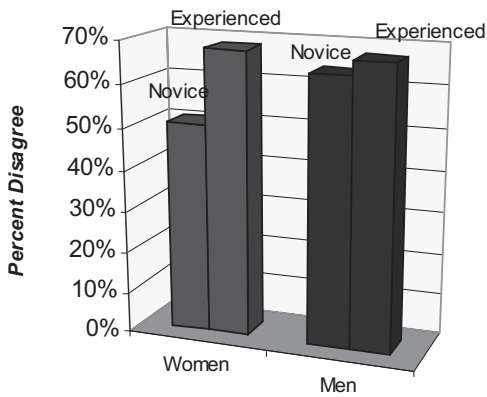
Question 20 - I don't think men like women who fly better than they do



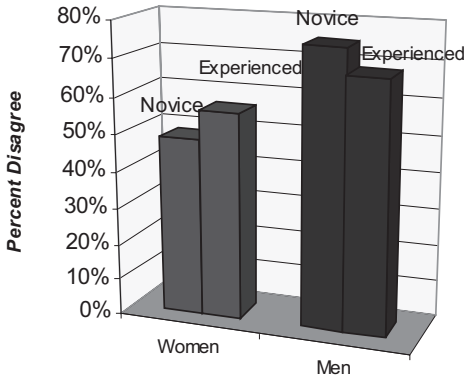
Question 22 - I think women should mentor women who are learning to fly



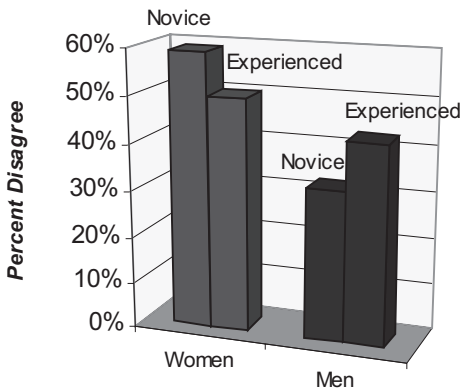
Question 24 - I think that women have to work harder than men do when learning to fly



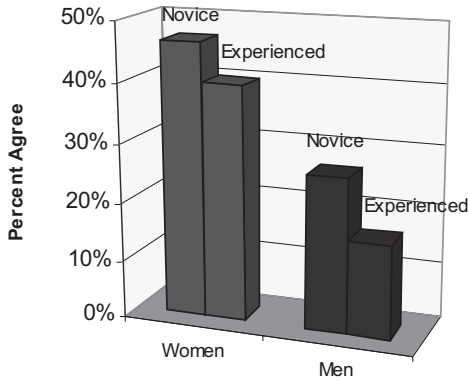
Question 27 - I feel that some faculty members treat women with a "stand-off" attitude because they believe aviation is a man's world



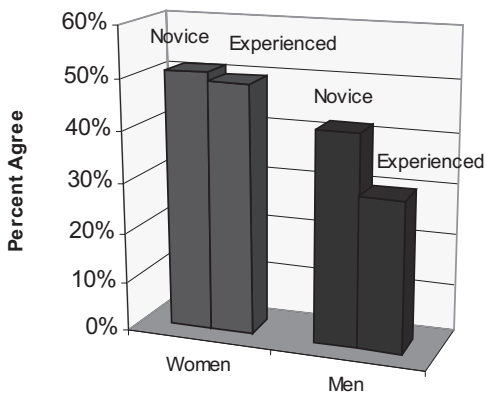
Question 29 - Women and men both learn the same way



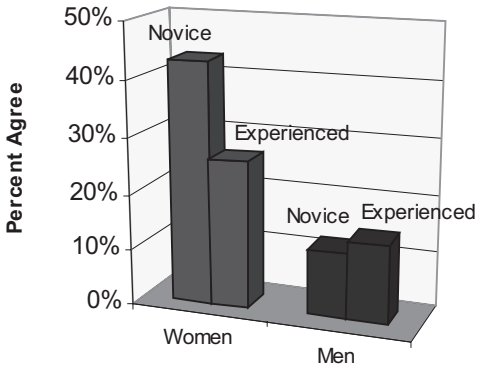
Question 36 - I have to prove myself to be accepted by the men in the flight program



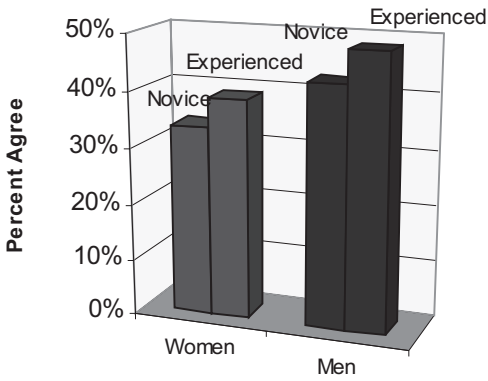
Question 39 - Women who go into aviation have to be psychologically stronger than other women



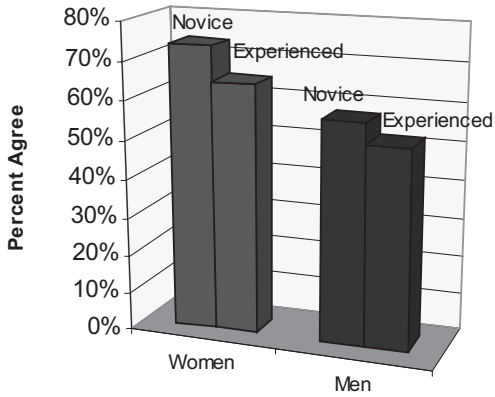
Question 46 - Women Faculty are more supportive than male faculty



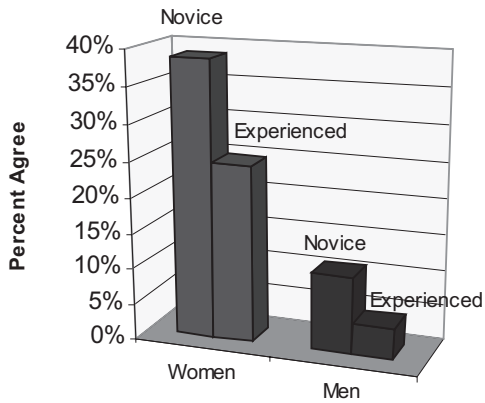
Question 47 - I do better working alone than working in a group



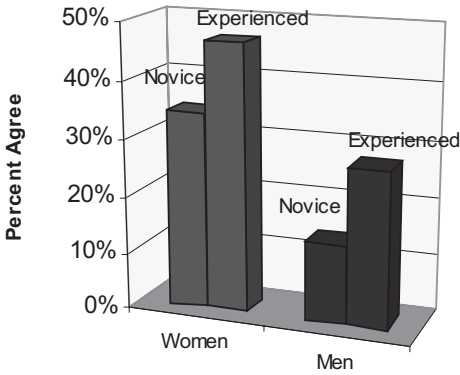
Question 51 - Sexist remarks annoy me



Question 58 - I sometimes feel like an outsider working with men around airplanes



Question 59 - I think women need mentors to succeed in aviation



Question 62 - Men have to prove themselves to be accepted by the women

