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PREDICTING ATTRITION FOR WOMEN AT WEST POINT:

IS IT A FUNCTION OF ADOPTING THE MALE DOMINANT CULTURE?

BY

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PREDICTING ATTRITION FOR WOMEN AT WEST POINT: IS IT A FUNCTION OF ADOPTING THE MALE DOMINANT CULTURE?

BY

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B.S., United States Military Academy, 1980

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Predicting Attrition for Women at West Point:

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Running head: PREDICTING ATTRITION

Abstract

This study examined 40 selected items from the Student Information Form that had been identified as representing cultural differences between men and women at the United States Military Academy. A principal components analysis of the data collected from 3005 male and 314 female cadets yielded 7 factors for men and 6 factors for women suitable for interpretation. As hypothesized, men and women were found to have similar cultual values, attitudes and experiences based on their similar factor structures. Next, item responses from 58 women attriters were compared to responses from the nonattriters. Using all the factors identified for the women, a discriminant function analysis to predict attrition resulted in the correct classification of 70% of the women. This exploratory approach is unique in that it is an attempt to predict and understand attrition of women from West Point through comparison to a norm of success based on women. Recommendations are made to focus future research on experiences and attitudes towards sexual harrassment at West Point along with measures of cultural ideation to better understand the dynamics which effect attrition.

Predicting Attrition for Women at West Point: Is it a Function of Adopting the Male Dominant Culture ?

In the past twenty years women have been granted access to most occupations that had previously been deemed "male". Yet, the numbers are small and acceptance of women into these careers continues to be tenuous. The epitome of such male-dominated vocations is that of Army officer (Goldman, 1973). The military was slow to integrate women fully. Until 1967, a 2% limit on the proportion of women in the military was in effect. Women were denied access into college Reserve Officer Training Corps (ROTC) programs until 1973. It took three more years for women to be allowed to apply to the military academies (Card & Farrell, 1983).

Although pressured by the women's movement of the 60's and 70's, it is more likely that the military opened its doors to women because of the abolition of the draft (Binkin & Bach, 1977). Replacement with an all-volunteer Army after the Vietnam conflict clearly demonstrated to military officials the need to increase the pool of individuals for recruitment into the service. However,

recruitment is just the first step in personnel management (Saal & Knight, 1988). Retention of qualified people is necessary to meet mission requirements, enhance stability, limit the financial drain of training replacements, and promote satisfied and favorable views of the organization.

Retention rates for women in the military have consistently lagged behind males in several domains. Enlisted women recruits are failing to finish their first enlistment at much higher rates than enlisted men. More female ROTC cadets leave the program than male cadets (Carl & Farrell, 1983). At the United States Military Academy, attrition percentages for women are higher than for men every year since women were admitted to the academy in 1976 (Toffler, 1988).

West Point screens and selects only those people who demonstrate the minimum essential qualifications deemed necessary to "survive" the four year program that emphasizes academic, physical and military development (Priest, 1988). The Admissions Committee has studied attrition as a function of admission variables that include: academic ability, physical ability, faculty appraisal, nonathletic extra-curricular activities, and athletic extra-curricular activities

during the candidates' high school years. The young men and women who are accepted to West Point have similar admission profiles based on demographic characteristics, education and leadership potential. Although the mean scores on the admission variables are slightly lower for cadets who chose to resign prior to graduation, these criteria did not discriminate between attriters and nonattriters for men or women (Priest, 1988). Overall quality of cadets entering the Corps does not differ between men and women and the variables presently used to select cadets do not help to explain the disproportionate numbers of women who choose to leave the academy before graduation.

Priest also studied in depth the attrition of women at West Point because of inconsistent attrition rates for different year groups. The admissions committee tried to determine if there were year to year variations in the quality of women entering the academy that could account for the fluctuating attrition rates. Once again, admissions profiles failed to account for the differences. The attrition of women has not been linked to academic, leadership or extra-curricular activities.

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In an attempt to facilitate the transition of women into the Corps of Cadets, the academy launched a longitudinal study of the first three coeducational classes to measure the similarities and differences of men and women based on personality variables, leadership ratings, and social relationships (Adams, 1984). This study marked the beginning of systematic research on coeducational officer career preparation. It relied on questionnaire data collected on entrance, at the end of the first summer training session, and during the academic year.

The first objective of the study was to examine the sex-role attribute orientation of the young men and women entering the academy. The Personal Attributes Questionnaire (PAQ; developed by Spence, Helmreich & Stapp, 1974), was administered at entrance and revealed that most cadets score high on psychologically masculine attributes (i.e., competitiveness, assertiveness, independence, etc.) regardless of their gender. The United States Military Academy goal is to develop cadets who are competitive, aggressive, assertive and physically fit. The socialization process used to train cadets can be accurately described by masculine or agentic role characteristics. It

was to be expected that those young people applying to the institution would be not only aware of this, but be psychologically compatible with this type of environment.

Additionally, high masculinity scores rather than the gender of the cadets were found to correlate positively with leadership, self-concept and an inner sense of control over the environment (Adams, 1984). Current research with civilian populations supports this phenomenon (Stein & Weston, 1982; Lee, 1987).

The second objective was to examine male and female cadets using a modified version of the Work and Family Orientation Scale (WOFO; developed by Helmreich & Spence, 1978). Achievement related attitudes and behavior are categorized as: mastery (preference for difficult, complex, challenging tasks), work (desire to work hard and keep busy), competitiveness (desire to be better than others) and personal unconcern (describing negative reactions of others to one's achievement or fear of success). Although small differences were found in Mastery and Work for gender, by examining the relationship between the WOFO with the PAQ, much larger differences were found for psychological masculinity and femininity in all categories.

Educational aspirations and professional career goals were similar for both the male and female cadets who scored high on masculine personal attributes. No sex or psychological gender differences were found in motivations to achieve (Adams, Priest, & Prince, 1985).

Cadets were asked to respond to questions in the WOFO about their lifestyle preferences for marriage, children and full-time jobs. Both genders expected to marry and maintain a full-time job (women, 70+%; men, 85+%). The desire for marriage is not a predictor for attrition because, as evidenced by the data, career and marriage are not considered mutually exclusive events.

The final objective of Adam's study was to assess the cadets' perceptions of women's rights and roles as measured by the Attitudes towards Women Scale (AWS; developed by Spence & Helmreich, 1972). Although males and females had already been demonstrated to be similar on personality, achievement, leadership, self-concept, and locus of control measures because of very small differences reported with the WOFO and PAQ, large differences were found with the AWS. Male cadets were found to be more traditionally oriented and the women more egalitarian. These attitudes were also more extreme on

opposite dimensions than those ascribed to by the cadets' civilian cohorts (Adams, 1984; Renzetti, 1987). The different expectations for women's roles and rights have heightened group polarization within the corps of cadets and may serve to create an environment that is hostile to the assimilation of women (Yoder, 1985). The AWS was administered to the male faculty members and while they were found to be more egalitarian than the male cadets, they were still less so than the women. It was assumed that as more women successfully graduated from West Point, the negative attitudes towards women entering the academy would lessen. However, Lueptow (1985), using college student subjects, reported that exposure to women in non-traditional roles could not be demonstrated to decrease sex-related traits or stereotypes. He concluded that even with increasing numbers of men and women entering non-traditional roles, sex-type differentiation of personality traits, expectations and behavior have increased among college students from the 1970's into the mid-80's.

In 1986 a Prevention of Sexual Harassment (POSH) Survey was administered to all female cadets and an equivalent number of men to

ascertain the existing level of harassment (Working Paper; Priest, 1987). In 1988 the Superintendent, concerned with a marked difference in the attrition rates of women by year group, directed the Office of Institutional Research (OIR) to investigate the phenomenon. Specifically, OIR was asked to examine the attitudes towards and experiences of sexual harassment among the four classes of cadets. Sexual harassment is defined as "deliberate or repeated unsolicited verbal comments, gestures, or physical contact of a sexual nature which are unwelcome" (U.S. House of Representatives, 1980:8). A reanalysis of the POSH data collected in 1986 showed that lower attrition of women was associated with a slightly more permissive attitude towards sexual harassment; i.e., indecent posters, sexual innuendoes, flirtatious touching, unwanted pressure for sexual favors, and an attitude that women should not be at West Point (Toffler,1988). All classes surveyed reported approximately equal levels of sexual harassment, so sexual harassment itself was ruled out as a cause of attrition. Instead, it was concluded that the women in the class with low attrition had "...bought into the dominant male culture of West Point..." (Toffler, 1988, p. A3-4). These women were believed to be

more tolerant of sexual harassment than the women in other classes.

It must be kept in mind that an association between tolerance for sexual harassment and low attrition does not necessarily imply cause and effect. Although Toffler concluded that adoption of the male dominant culture may explain the lower attrition rate for this class of women, it was not established that entering cadets differed on cultural attitudes.

The OIR at West Point analyzed data obtained from the Student Information Form completed by the class of 1992 during their first week at the academy. This questionnaire was developed by the American Council on Education in 1966 and is used in an ongoing longitudinal study of American higher education systems (Mitchell, 1983). Questions include demographic characteristics, orientation towards college, aspirations, attitudes, and values. The Higher Education Research Institute collects and reports national norms for comparable institutions but leaves more detailed analysis for the institutions to perform themselves (Buros, 1978). OIR's report focused on those items yielding significant mean differences for men and women cadets on the strength of their convictions (strongly agree

to strongly disagree) for specific attributes, beliefs, and attitudes (Priest, 1989). According to Priest, the men reported more stereotypical and conservative beliefs: for example, they believed it is important to have laws against homosexuality; that the activities of married women are best confined to home and family; that military spending should be increased; and that the chief benefit of college is that it increases one's earning power. Women reported that the government is not doing enough to promote disarmament; think the death penalty should be abolished; and believe more strongly than men that "just because a man thinks a woman has led him on does not entitle him to have sex with her."

Men and women cadets also reported significantly different experiences in high school. The men claimed they were more popular (particularly with the opposite sex), had more social self-confidence and better public speaking and leadership abilities. They did not complete homework assignments on time and frequently watched t.v., socialized, drank beer and talked about sex. The women rated themselves better in foreign language proficiency. They claimed they spent more time doing homework, participating in student clubs or

groups, tutoring other students and feeling overwhelmed during high school. Important goals for the men included raising a family, being an expert on finance, having administrative expertise, and being successful in business. The women wanted to "help others in difficulty" and "write original works."

While this study clearly demonstrated differences between males and females on selected items from the Student Information Form, there was no clear indication of what these items were actually measuring or if these items could be used to predict attrition by discriminating between those women who stay at West Point and those who voluntarily chose to leave before graduation. Although "cultural differences" between male and female cadets were purportedly measured, further analysis of the items may be necessary before definitive conclusions can be drawn. More specifically, what types of "cultural differences" exist between male and female cadets which would cause them to respond differently to the selected items from the Student Information Form?

Attrition at West Point has been informally assumed to be the result of weeding out those people who could not meet the standards

(Yoder, 1985). The present study will examine selected items from the Student Information Form that have been shown to differentiate between male and female cadets. Through careful analysis of these items, the underlying dimensions of the Student Information Form can be identified. This analysis will improve the interpretability and scientific utility of this questionnaire by identifying those dimensions or latent factors that are responsible for the "cultural differences" between the men and women entering the academy. It is hypothesized that even though males and females have been shown to respond differently to certain items, the underlying factors that govern their responses are expected to be similar in many regards. This would be consistent with the similarities found in psychological masculinity (Adams,1984), motivations to achieve (Adams, Priest & Prince, 1985), and academic and leadership potential (Priest, 1988).

Once identified, these factors from the Student Information Form can be used to compare the responses of those women who chose to leave the academy with those that stay. This exploratory approach is unique in that it is an attempt to predict and understand the attrition of women from West Point through comparisons of women to each

other as opposed to the traditional approach of comparing women to men.

Method

Subjects

The sample for this study consisted of the 3305 men and 314 women admitted to the United States Military Academy classes of 1990 and 1992 who recently completed the Student Information Form. Women were then grouped in two categories for comparison: Attriters and Nonattriters. The Attriters were those 58 women who voluntarily decided to leave West Point after the initial summer training and before graduation as reported in the Separation Report for their respective year groups.

Materials

The data collected with the Student Information Form was used to examine the differences between the experiences, attitudes, and beliefs the Attriters and Nonattriters formed prior to attending West Point.

Procedure

Forty questions from the Student Information Form, defined as

items representative of the major cultural differences between male and female cadets, based on mean differences of their responses, (Priest, 1989) were used for analysis. The questions common to year groups 1990 and 1992 are found in the Appendix. A Factor Analysis was performed on these items separately for men and women in the classes of 1990 and 1992 in order to evaluate the factor structure for each group and determine if there were inherent cultural differences and similarities between males and females entering West Point.

Separation Reports for each class accurately defined two groups, Attriters and Nonattriters. A discriminant analysis was then performed using only the factors obtained for the women to determine if they could be used to accurately discriminate between those women who choose to stay and those who choose to leave.

Results

Principle components analysis with varimax rotation of 40 items from the Student Information Form resulted in 16 factors for women and 13 for men which had eigenvalues greater than one (see Table 1). Based on an examination of the scree plot (Cattel, 1966) the first 6 factors for women and 7 for men (accounting for about 38% of the

variability) were selected for interpretation.

Insert Table 1 about here

The factor loading matrices for the items are shown in Table 2 and 3 for women and men respectively. Items have been ordered and grouped by size of loading to facilitate interpretation. Failure of numerous variables to load on a factor reflects the heterogeneity of items on the Student Information Form. Factor loadings less than .3 were not interpreted and have have been replaced by zeros in the table. Interpretive labels are suggested for each factor at the end of the tables.

Insert Table 2 about here

Insert Table 3 about here

Inspection of the pattern of loadings in both Tables reveals

strong similarities between sexes. The self-esteem factors (factor 1 for both men and women) are identical except the men include a self-rating for foreign language ability. Factor 2 for males is similar for factor 3 for females; both are indicative of an active social life. Likewise, factor 2 for women and 3 for men both denote advocation of liberal military policies. Factor 4 for women is described as intellectual self-concept which is factor 6 for men. Factor 5 illustrates a subtle difference between the factor structure for both sexes. For the women this factor describes a career/success orientation. The men split factors with this concept into Factor 4 and Factor 5 with 5 representing the possibility of transferring to another school in order to achieve a successful career. Factor 6 for women and Factor 7 for men are labeled traditional family goals. Although both men and women express the desire to marry and raise a family, marriage loads more heavily for women, while raising a family loads more heavily for men.

The means and standard deviations for the items used in the discriminant analysis to compare women attriters to women nonattriters are in Table 4. Multiple t-tests were computed for each

item and there were no significant differences when alpha was adjusted using a Bonferroni correction (Keppel,1973).

Insert Table 4 about here

A direct discriminant analysis was performed using the 16 factors obtained from the women to determine if these factors were predictive of attriters and nonattriters. Of the original 314 cases, 77 were dropped due to missing at least one discriminating variable. Missing data were scattered over cases and variables, with no evident patterning on the basis of attrition or year groups.

The discriminant function was calculated with a $\underline{X}^2_{(16)}=27.06$, $p<.05$. The structure matrix in Table 5 contains the correlation between each discriminating variable and the discriminant function as well as the standardized discriminant function coefficients. Two factors contribute significantly to the discriminant function analysis: Factor 11 (pursuit of academic excellence with a math/science orientation), $\underline{F}(1,235)=8.48$ and Factor 7 (service/social responsibility), $\underline{F}(1,235)= 4.61$ using Wilks' Lambda and univariate

F-ratio at $p<.05$.

Insert Table 5 about here

With the use of a classification procedure for the total usable sample, 70.46% of the women were classified correctly (see table 6). Those women that choose to stay at West Point are more likely to be accurately classified (72.6%) than women that choose to leave (60.0%).

Insert Table 6 about here

Discussion

The results of this study provide a clearer indication of what the Student Information Form was measuring. The 6 factors accounting for about 34% of the variance allows for correct classification of 70% of the sample used in this study (women attriters and nonattriters). The factor analysis compressed the original 40 items, which had previously been interpreted as being cultural differences (Priest,1989) into fewer constructs that identify the underlying dimensions of this

questionnaire. This new interpretation of the data reflects that while some differences do exist between men and women who attend West Point, there are actually more similarities between the two sexes.

The strongest similarity was self-esteem, the first factor identified for men and women. Based on self-ratings of self-confidence, popularity, leadership ability, and health, this finding is consistent with previous research (Adams, 1984) which found that both male and female cadets with high psychological masculinity gender ratings scored similarly with positive measures of leadership and self-concept. Additionally, both men and women report similar views on federal military policies and social life histories.

Small differences were discovered in the factors that reflect future professional goals. While both men and women report a strong desire to have a career and do well in it, the men report a good possibility of transferring to another school to prepare for a successful career. The women appear to be more loyal to their decision to attend West Point and may believe a West Point education itself will open doors of opportunity in their future.

Another slight difference was discovered in a factor labeled

family goals. While both men and women report similar desires to get married, the women's desire to raise children is not as strong as the men's desire. This finding is not surprising in that these women will be trying to establish themselves professionally in the Army during the first few years after graduation and may see raising a family as a burden. Because the responsibility of raising children generally belongs to the wife, the men may not see a problem with beginning their family sooner. These findings are consistent with those obtained by Adams (1984) who also found that the women at West Point were less likely than the men to include having children as a personal future goal.

The second goal of this study was unique in that it compared the women's scores on the Student Information Form to see if there were differences within this group of cadets that would separate the attriters from the nonattriters. This approach allows for the establishment of a norm to measure success at West Point based on those women who have succeeded instead of using a norm based on men. The discriminant function analysis, using the factors from the Student Information Form, classified women into attriters and

nonattriters with a 70% accuracy rate. Previous discriminant analyses, using admissions variables, failed to classify attriters above the level of 20% (Priest, 1988).

Although these results are significant, in practical terms there is still no easy way to identify women prior to matriculation who will eventually leave the academy from those who will stay. The discriminating variables, Factor 11 (pursuit of academic excellence with a math/science orientation) and Factor 7 (service/social responsibility) are not very well defined. Pursuit of academic excellence with a math/science orientation, the strongest factor, has just two items that load heavily on it. Choosing West Point for its academic reputation and no interest in writing original works both load at .60 or above. Likewise, the second discriminating variable, service/social responsibility has just one strong item, hours per week spent in student clubs or organizations. The other items all have loadings less than .38. These items include hours spent socializing and tutoring another high school student and a negative loading on physical health. Contributing to the problem of early identification of probable attriters is that none of the items from the Student Information Form

produced significant differences between attriters and nonattriters. In other words, these items analyzed individually do not contribute to explaining attrition.

In conclusion, this study has shown that attrition for women at West Point is not a function of adopting the male dominant culture. Instead, using specific dimensions of cultural ideation from the Student Information Form, men and women have been found to be more similar than different. Additionally, the Student Information Form can be used with a high degree of accuracy to identify women at entrance who are likely to be attrition risks. The results found here along with those obtained from previous studies (Toffler, 1988; Priest, 1989) have illustrated the necessity of understanding the cultural differences and similarities to promote better integration and understanding of men and women at the United States Military Academy. Toffler's approach of examining the experiences and attitudes towards sexual harassment should be included on the Student Information Form questionnaire. Combining these instruments may provide a more complete analysis of the uniqueness of the situation facing this institution, still wrestling with improving integration of

women into the cadet corps.

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Table 1

Results of Principle Components Analysis with Varimax Rotation for Men and Women

	Women		Men	
Factor	Eigenvalue	Pct of Var	Eigenvalue	Pct of Var
1	3.48	8.7	3.44	8.6
2	2.56	6.4	2.93	7.3
3	2.27	5.7	2.09	5.2
4	2.05	5.1	1.80	4.5
5	1.70	4.3	1.63	4.1
6	1.63	4.1	1.47	3.7
7	1.50	3.8	1.36	3.4
8	1.43	3.6	1.26	3.1
9	1.34	3.3	1.18	3.0

(table continues)

	Women		Men	
Factor	Eigenvalue	Pct of Var	Eigenvalue	Pct of Var
10	1.32	3.3	1.14	2.9
11	1.26	3.1	1.07	2.7
12	1.19	3.0	1.01	2.5
13	1.13	2.8	1.00	2.5
14	1.10	2.8		
15	1.05	2.6		
16	1.02	2.6		

Table 2

Rotated Factor Matrix for Women

	Factor					
Variable	1	2	3	4	5	6
SLFRATA6	.72	0	0	0	0	0
SLFRATA8	.71	0	0	0	0	0
SLFRATA3	.69	0	0	0	0	0
SLFRATA1	.64	0	0	0	0	0
SLFRATA5	.49	0	0	0	0	0
SLFRATA7	.56	0	0	.56	0	0
VIEWSA1	0	.77	0	0	0	0
VIEWSA2	0	-.73	0	0	0	0
FUTACTA3	0	.47	0	0	0	0
POLIVIEW	0	.39	0	0	.33	0
VIEWSA3	0	.34	0	0	0	0

(table continues)

	Factor[a]					
Variable	1	2	3	4	5	6
HRSPWKA3	0	0	.82	0	0	0
ACTA3	0	0	.77	0	0	0
HRSPWKA2	0	0	.56	0	0	0
CHOOSEA3	0	0	0	-.68	0	0
SLFRATA4	0	0	0	.67	0	0
VIEWSA7	0	0	0	0	.70	0
CHOOSEA4	0	0	0	0	.69	0
GOALSA2	0	0	0	0	.45	0
GOALSA3	0	0	0	0	.31	0
FUTACTA4	0	0	0	0	0	.76
GOALSA1	0	0	0	0	0	.51

(table continues)

	Factor					
Variable	1	2	3	4	5	6
FUTACTA2	0	0	0	0	0	-.44

[a]Factor 1 is Self esteem.

Factor 2 is Liberal Military Policy Views.

Factor 3 is Active Social Life History.

Factor 4 is Intellectual Self-confidence.

Factor 5 is Career Orientation.

Factor 6 is Traditional Family Goals.

Table 3

Rotated Factor Matrix for Men

	Factor[a]						
Variable	1	2	3	4	5	6	7
SLFRATA8	.74	0	0	0	0	0	0
SLFRATA6	.70	0	0	0	0	0	0
SLFRATA3	.66	0	0	0	0	0	0
SLFRATA1	64	0	0	0	0	0	0
SLFRATA5	.64	0	0	0	0	0	0
SLFRATA7	.61	0	0	0	0	.45	0
SLFRATA2	.36	0	0	0	0	.33	0
HRSPWKA3	0	.81	0	0	0	0	0
HRSPWKA2	0	.70	0	0	0	0	0
ACTA3	0	.69	0	0	0	0	0

(table continues)

	Factor						
Variable	1	2	3	4	5	6	7
VIEWSA5	0	.36	0	0	0	0	-.33
VIEWSA1	0	0	.70	0	0	0	0
POLIVIEW	0	0	.68	0	0	0	0
VIEWSA2	0	0	-.60	0	0	0	0
FUTACTA2	0	0	.49	0	0	0	0
VIEWSA3	0	0	.46	0	0	0	0
GOALSA2	0	0	0	.75	0	0	0
GOALSA5	0	0	0	.62	0	0	0
GOALSA3	0	0	0	.51	0	0	0
VIEWSA7	0	0	0	.39	0	0	0
FUTACTA1	0	0	0	0	.69	0	0
FUTACTA3	0	0	0	0	.68	0	0

(table continues

	Factor						
Variable	1	2	3	4	5	6	7
SLFRATA4	0	0	0	0	0	.73	0
CHOOSEA3	0	0	0	0	0	-.51	0
VIEWSA5	0	0	0	0	0	0	-.33
GOALSA1	0	0	0	0	0	0	.76
FUTACTA4	0	0	0	0	0	0	.73

[a]Factor 1 is Self-esteem.

Factor 2 is Active Social Life History.

Factor 3 is Liberal Military Policy Views.

Factor 4 is Career Orientation.

Factor 5 is Civilian Career Orientation.

Factor 6 Intellectual Self-confidence.

Factor 7 is Traditional Family Goals.

Table 4

Descriptive Statistics for Items Defining "Cultural Differences" For Women Attriters (A) and Women Nonattriters (NA)

Variable	Label	Group	Mean	S.D.	t*
ACTA1	DIDN'T DO HOMEWORK-HS	A	1.621	.587	.28
		NA	1.598	.572	
ACTA2	TUTORED OTHER STUDENTS-HS	A	1.983	.688	-.73
		NA	2.051	.627	
ACTA3	DRANK BEER IN HIGH SCHOOL	A	1.776	.727	1.71
		NA	1.620	.602	
ACTA4	FELT OVERWHELMED-HS	A	2.138	.544	1.25
		NA	2.043	.518	
CHOOSEA1	CHOSE COLL: GOOD ACAD REP	A	2.754	.474	-2.61
		NA	2.888	.315	

*Note: None of the t-tests were significant.

(table continues)

Variable	Label	Group	Mean	S.D.	t*
CHOOSEA2	CHOSE COLL: ADV OF FRIEND	A	1.246	.544	1.57
		NA	1.145	.406	
CHOOSEA3	CHOSE COLL: ATH DEPT RECRUIT	A	1.607	.888	.67
		NA	1.526	.800	
CHOOSEA4	CHOSE COLL: GRADS-GOOD JOBS	A	2.750	.477	-.40
		NA	2.777	.454	
FUTACTA1	CHANGE CAREER CHOICE	A	2.630	.831	-.88
		NA	2.734	.783	
FUTACTA2	TAKE PART STUDENT PROTEST	A	1.741	.678	.66
		NA	1.667	.756	
FUTACTA3	TRANSFER TO OTHER COLLEGE	A	2.208	.927	2.84
		NA	1.834	.847	
FUTACTA4	MARRY 1 YR AFTER COLLEGE	A	2.673	.944	1.67
		NA	2.414	1.02	

(table continues)

Variable	Label	Group	Mean	S.D.	t*
GOALSA1	RAISE A FAMILY	A	2.684	1.05	-1.26
		NA	2.864	.950	
GOALSA2	BE EXPERT-FIN & COMMERCE	A	1.737	.835	-.55
		NA	1.802	.795	
GOALSA3	HAVE ADMIN RESPONSIBILITY	A	2.536	.808	-.28
		NA	2.570	.843	
GOALSA4	WRITE ORIGINAL WORKS	A	1.571	.783	.08
		NA	1.562	.809	
GOALSA5	BE SUCCESS IN OWN BUSINESS	A	1.964	1.09	-.21
		NA	1.996	.971	
HRSPWKA1	STUDYING/HOMEWORK	A	4.509	1.66	-2.50
		NA	5.116	1.62	
HRSPWKA2	SOCIALIZING W/FRIENDS	A	5.346	1.59	.87
		NA	5.134	1.63	

(table continues)

Variable	Label	Group	Mean	S.	t*
HRSPWKA3	PARTYING	A	3.054	1.35	1.07
		NA	2.818	1.50	
HRSPWKA4	WORKING FOR PAY	A	3.582	2.39	1.29
		NA	3.116	2.44	
HRSPWKA5	STUDENT CLUBS OR GROUPS	A	2.654	1.20	-2.01
		NA	3.045	1.33	
HRSPWKA6	WATCHING T.V.	A	3.019	1.47	-.71
		NA	3.168	1.38	
SLFRATA1	EMOTIONAL HEALTH	A	3.931	.814	-.36
		NA	3.973	.799	
SLFRATA2	FOREIGN LANGUAGE ABILITY	A	3.741	.849	-.28
		NA	3.773	.744	
SLFRATA3	LEADERSHIP ABILITY	A	4.069	.672	.54
		NA	4.016	.680	

(table continue

Variable	Label	Group	Mean	S.D.	t*
SLFRATA4	MATHEMATICAL ABILITY	A	3.862	.760	-.42
		NA	3.910	.799	
SLFRATA5	PHYSICAL HEALTH	A	3.913	.732	-.04
		NA	3.918	.765	
SLFRATA6	POPULARITY	A	3.655	.690	.92
		NA	3.563	.684	
SLFRATA7	SELF-CONFIDENCE (INTELL)	A	3.983	.827	.34
		NA	3.945	.755	
SLFRATA8	SELF-CONFIDENCE (SOCIAL)	A	3.827	.653	2.24
		NA	3.566	.833	
VIEWSA1	GOVT NOT PROMOTING DISARM.	A	2.571	.912	1.42
		NA	2.395	.822	
VIEWSA2	INCREASE FED MILITARY $$	A	2.536	.972	-.24
		NA	2.566	.819	

(table continues)

Variable	Label	Group	Mean	S.D.	t*
VIEWSA3	ABOLISH DEATH PENALY	A	1.772	.802	-.51
		NA	1.839	.924	
VIEWSA4	MARRIED WOMEN BEST IN HOME	A	1.429	.892	.33
		NA	1.387	.722	
VIEWSA5	LIVE TOGETHER BEFORE MARRY	A	2.446	.893	2.86
		NA	2.068	.893	
VIEWSA6	PROHIBIT HOMOSEX RELATIONS	A	2.346	1.06	-.68
		NA	2.446	.980	
VIEWSA7	COLL INCREASES $$ POWER	A	2.527	.813	-.02
		NA	2.530	.833	
POLITVIEW	POLITICAL VIEWS (CONS-LIB)	A	2.964	.852	1.23
		NA	2.834	.681	
REASON	COLL-GET AWAY FROM HOME	A	1.483	.655	-.06
		NA	1.488	.645	

(table continues)

Variable	Label	Group	Mean	S.D.	t*
BORNAGIN	BORNAGAIN CHRISTIAN?	A	1.222	.428	.23
		NA	1.198	.400	

Table 5

Structure Matrix of Correlations between Discriminating Variables and Discriminant Functions and Standarized Discriminant Coefficients

Variables	Correlations	Coefficients
Factor 11	.53	.581
Factor 7	.39	.435
Factor 9	.31	.341
Factor 6	-.29	-.326
Factor 8	.25	-.270
Factor 3	-.24	-.265
Factor 16	-.23	-.259
Factor 13	-.20	-.219
Factor 12	.16	.185
Factor 2	-.14	-.154

(table continues)

Variables	Correlations	Coefficients
Factor 14	-.11	-.124
Factor 5	-.08	-.094
Factor 10	-.06	-.074
Factor 15	-.06	-.067
Factor 4	-.03	-.039
Factor 1	.01	.012

Table 6

Classification Results of the Discriminant Function Analysis for Women

	Predicted Group Membership	
Actual Group	Attriters	Nonattriters
Attriters	60.0%	40.0%
Nonattriters	27.4%	72.6%

Appendix

Questions to be used as Variables

that Differentiate Cultural Differences

1. For the activities below, indicate which ones you did during the past year. If you engaged in an activity frequently, mark "F". If you engaged in an activity one or more times, but not frequently, mark "O". Mark "N" (not at all) if you have not performed the activity during the last year. (mark one for each item)

*complete homework on time	F	O	N
**drank beer	F	O	N
*tutored another student	F	O	N
*felt overwhelmed	F	O	N

*Describes responses with higher agreement from female cadets.

**Describes responses with higher agreement from male cadets.

2. Rate yourself on each of the following traits as compared with the average person your age. We want the most accurate estimate of how you see yourself. (Mark one in each row)

top 10%/above avg/avg/below avg/lower10%

**emotional health

*ability to learn foreign language

**leadership ability

**physical health

**popularity

**self-confidence (intellectual)

**self-confidence (social)

3. In deciding to go to college, how important to you was the following reason? (very-V, somewhat-S, not-N)

*wanted to get away from home	V	S	N

4. How would you characterize your political views? (circle one)

far left

liberal

*middle-of-the-road

**conservative

far right

5. Mark one in each row. (4-agree strongly, 3-agree somewhat, 2-disagree somewhat, and 1-disagree strongly)

*The federal government is not doing enough to promote disarmament.	4	3	2	1
**Fed military spending should be increased.	4	3	2	1
*The death penalty should be abolished.	4	3	2	1
**The activities of married women are best confined to the home and family.	4	3	2	1
**A couple should live together before deciding to get married.	4	3	2	1

**It is important to have laws prohibiting homosexual relationships.	4	3	2	1
**The chief benefit of a college education is that it increases one's earning power.	4	3	2	1

6. During your last year in high school, how much time did you spend during a typical week doing the following activities? (none/<1 hr/1-2hrs/3-5hrs /6-10hrs/11-15hrs/16-20hrs/over 20hrs)

*studying/homework

**socializing with friends

**partying

**working for pay

*student clubs/groups

**watching t.v.

7. Do you consider yourself a born-again Christian? Yes No(**)

8. Below are some reasons that might have influenced your decision to attend this particular college. How important was each reason in your decision to come here? (very-V, somewhat-S, Not-N)

*good academic reputation	V	S	N
**advice of friends	V	S	N
*recruited by athletic department	V	S	N
*graduates get good jobs	V	S	N

9. Indicate the importance to you personally. (E-essential, V-very, S-somewhat, N-not)

**raise a family	E	V	S	N
**become expert of finance and commerce	E	V	S	N
**have administrative responsibility	E	V	S	N
*write original works	E	V	S	N
**be successful in own business	E	V	S	N

10. What is the best guess as to the chances that you will:

(V-very good, S-some, L-very little, N-none)

*change career choice	V	S	L	N
*participate in student protests	V	S	L	N
*transfer to another college	V	S	L	N
**marry within a year after college	V	S	L	N

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