Supporting Information

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SI Materials and Methods

Participants. A total of 11,320 incoming cadets from 10 consecutive entering class years (the classes of 1997–2006) at West Point provided data. We had complete data for 9 of those 10 classes, as the Class of 2003 was not provided with the correct response categories for the survey items in question. Thus, 10,239 cadets were retained in the data analysis reported here. The measures analyzed were taken as part of standard surveys administered by West Point in the beginning of the first year of study. Participants were 15.1% female, 78.6% White, and 21.4% non-White. This was the sample used to determine the factor structure underlying cadets' reasons for attending West Point and to analyze who successfully graduated and became commissioned Army officers. Of the 10,239 participants for whom we had complete data upon entry at West Point, 7,868 graduated and became commissioned officers. For the subsequent analyses predicting officer retention following their 5-y mandatory commitment, we were able to secure data for 7,663 participants, who were 13.7% female, 79.5% White and 20.5% non-White. The remaining cases were not retained in the Army data or failed to achieve a matched identification of the case. For analyses predicting whether participants were considered for potential early promotion, we secured data for 7,862 participants (data were missing for the remaining 6 participants). The final two West Point classes in the sample did not have any data recorded for whether participants were considered for potential early promotion, reducing our sample for that analysis to 6,162 participants who were 14.0% female, 80.1% White and 19.9% Non-White. Table S1 shows all demographic control data used in the analyses.

Procedure. Incoming cadets at West Point routinely complete several survey instruments as part of their transition into the institution. The authors secured permission to use data from two instruments administered at the start of cadets' first year at West Point. Incoming cadets completed two survey instruments that assessed their reasons for attending West Point. The two instruments used different response formats. The first measure consisted of 11 questions and used a five-point scale to indicate whether the reason listed was: (*v*) a "Number one priority or most important consideration"; (*iv*) "A major consideration"; (*iii*) "A factor but not a major consideration"; (*ii*) "A minor consideration"; or (*i*) "Irrelevant or not applicable". The second measure consisted of 31 questions and used a three-point Likert-type scale to indicate whether the reason listed as: (*i*) "Very important"; (*ii*) "Somewhat important"; or (*iii*) "Not important". We combined the two scales by recoding reasons from the first measure that were rated as 4 or 5 (most important or major consideration) to be "very important," whereas recoding 3 (a factor but not a major consideration) as "somewhat important" and 1 and 2 (a minor consideration or irrelevant) as "not important," so that all items were coded using the same three-point scale.

Data for the first survey instrument were not included from the Class of 2003 because the institution did not ask these questions of that class. We also eliminated 11 items that were not included across all 10 y of the survey. The remaining 31 items were included in an explanatory factor analysis (EFA) run on the complete dataset. We used the full dataset to estimate the number of factors underpinning the 31 items and to remove those items that failed to load on any factor (i.e., an absolute loading of less than 0.30). The EFA analysis revealed five factors with eigenvalues close to 5, and two more with eigenvalues close to 1. Table S2 shows the EFA results with six factors. Seven questions failed to load significantly on any factor and were removed from further EFA analysis.

We then conducted a random split of the dataset to carry out the EFA on both halves of the data (n = 5,120 and n = 5,119, respectively) using the remaining 24 items. The results of both EFAs suggested six factors with at least three items loading on each at an absolute value of 0.30 or higher. We chose a six-factor model as the seven-factor model included factors with less than three items as well as several cross-loaded items. The six-factor model fit the data well based on the tests of model fit summarized in Table S3. Table S4 shows the item loadings for the EFAs conducted on each half of the data. The factors reflect (*i*) family influence, (*ii*) economic need, (*iii*) instrumental aims or expectations, (*iv*) internal desire to become an Army officer and leader, (*v*) others' influence, and (*vi*) to gain study skills/become more cultured. This factor structure was stable and highly similar using either orthogonal (Varimax) or oblique (Quartimin) rotation.

The EFA was followed by a confirmatory factor analysis (CFA) run on the second half of the data (n = 5,119) using the EFA results from the first half of the data (n = 5,120), and a CFA run on the first half of the data using the EFA results from the second half of the data. We compared the two models that resulted to determine the final model, which was tested on the full dataset, as well as on both halves of the data run separately. To refine the model, the possibility for correlations among the factors was taken into account. Thus, rather than using orthogonal rotation for the CFA, oblique rotation was used to allow for interpretability of the results. The Quartimin rotation was used in the CFA to confirm the number of factors and their loadings in the EFA exploration. It also serves to uncover more nuanced relationships between the factors and the psychological characteristics they represent compared with the orthogonal, Varimax rotations.

Table S5 shows the indicators of model fit for the final model with each half of the dataset and the full dataset. Table S6 summarizes the final model that resulted from the CFA analyses with factor loadings for the full dataset.

Collinearity diagnostics revealed that the highest variance inflation factor (VIF) score was 5.7 for F3, which falls below the level at which collinearity is considered problematic (1). We also examined condition index values, for which values close to 10 indicate weak dependencies among indicators that could affect regression estimates (2). The highest condition index value in our model is 5.3, again for F3. The proportion of variation was 0.48 for F2, 0.80 for F3, and 0.48 for F4 for this index. Judging from the VIF and condition index diagnostics, there is weak multicollinearity in our model that should not threaten the conclusions we draw from our analyses.

After the factor model was established, we examined the effect of class year, age, sex, and race on the factor estimates. Each of these variables is categorical; thus, we created dummy variables to test the effect of each covariate separately using a χ^2 test. The effect each covariate was significant based on a χ^2 test of difference in which the effect of the covariate restricted to zero was compared with the estimation of the effect of the covariate. Thus, factor scores for each cadet were estimated based on their class year, age, sex, and race, as well as their responses to the 24 items regarding reasons for attending West Point. We used the Mplus default procedure to estimate the factor scores.

Data were gathered from cadets to indicate their sex, age, race, high school grades, SAT score, parental income level and military service, and religion. Cadets must graduate from West Point to become commissioned officers. Data were gathered from the institution indicating cadets' commission status, retention as military officers following their 5-y mandatory period of military service following graduation into years 6, 7, 8, 9, 10, and 11, and their selection for consideration for early promotion during their 5-y mandatory period of military service.

Analytic Approach. Logistic regression was used to assess two binary outcomes of whether or not a cadet became a commissioned Army officer and whether or not, once an Army officer, was considered for potential early promotion during the 5-y mandatory commitment period. For the analyses predicting officer retention following their 5-y mandatory commitment, we had only yearly retention outcomes available (i.e., no information regarding the day or month of exit). The data itself were discrete even though the actual retention process was continuous; after 5 y, officers could exit the military any time of the year. The complementary log-log model with PROC GENMOD procedure is more appropriate for this type of discrete data than a Cox proportional hazard model with the PROC PHERG procedure (3). The interpretation of coefficients in complementary log-log modeling results is the same as in Cox proportional hazard modeling results. For the logistic regression assessing whether officers were considered for potential early promotion and the survival analysis of officer retention following their 5-y mandatory commitment, we included cadets who made commission and excluded those who did not. Because the analysis was limited to cadets who made commission, potential selection bias applies to the results. To address this bias, inverse probability weighting (IPW) was used. The weight for cadets who made commission was generated based on the probability of making commission from the logistic regression predicting commission. These weights were then incorporated into the analyses of whether officers were considered for potential early promotion and their retention in the military following their mandatory 5 y of service. Dummy codes were used to represent sex (0 = female, 1 = male), age (0 = 19 or younger, 1 = 20 or older), race (0 = non-White, 1 = White), high-school grade average (0 = C or below, 1 = above C), parental income (0 = below $30,000 a year, 1 = $30,000 or more a year), religion, and class year. For religion, the reference group was "Other Christian" and separate dummy codes were created for Catholic, Evangelical Protestant, Islamic/Jewish/Buddhist/other, Mainline Protestant, or None. For class year, 2006 was the reference group with dummies for each of the other years. Additional covariates included SAT score. For each analysis, the focal predictors were the standardized latent factor scores for each participant as well as the interaction term of the internal motive (Factor 4) and instrumental motive (Factor 3) factor scores. We expected the interaction term to be negative, indicating that having instrumental motives for attending West Point would decrease the positive impact of having internal motives. For the logistic regression and survival analyses, all estimated factor scores were standardized and multiplicative two-way interaction terms were created using the factor scores indicating the reasons participants chose to attend West Point. To interpret significant interaction effects from these analyses, we estimated the probability of events (making commission or being considered for early promotion) for female participants given their set of factor scores. For the survival analyses with complementary log-log model, we estimated the probability of an event (i.e., exiting the military) occurring for female participants with a given set of factor scores in year 1(P_1), year 2 (P_2), year 3 (P_3), year 4(P_4), year 5 (P_5), and year 6 (P_6), respectively, given that the individual did not have events in any of previous years using *Lsmeans* statement with *ilink* option[1]. The survival probability (probability of retention) for year 1: $S_1 = (1 - P_1)$; for year 2: $S2 = S_1(1 - P_2) = (1 - P_1)(1 - P_2)$; for year 3: $S_3 = S_1S_2(1 - P_3) = (1 - P_1)(1 - P_2)(1 - P_3)$; for year 4: $S_4 = S_1S_2S_3(1 - P_4) = (1 - P_1)(1 - P_2)(1 - P_3)(1 - P_4)$; for year 5: $S_5 = S_1S_2S_3S_4(1 - P_5) = (1 - P_1)(1 - P_2)(1 - P_3)(1 - P_4)(1 - P_5)$; for year 6: $S_6 = S_1S_2S_3S_4S_5(1 - P_6) = (1 - P_1)(1 - P_2)(1 - P_3)(1 - P_4)(1 - P_5)(1 - P_6)$.

SI Results

Logistic regression results controlling for age, sex, race, high-school grades, SAT score, parental income, religion, and entering year indicated that cadets with stronger internally based reasons for attending West Point were significantly more likely to graduate and become commissioned officers (F4: $\beta = 0.22$, $P < 0.0001$) (see Table S7 for univariate results and Table S8 for the full set of regression results). The results also indicated that cadets with stronger internally based reasons for attending West Point were more likely to extend their service as Army officers beyond the 5-y mandatory period into years 6, 7, 8, 9, 10, and 11. All retention and consideration for promotion analyses used an inverse probability weighting to account for potential bias introduced by including only those cadets who made commission in the analysis for these two outcomes. Survival analysis was used to assess the impact of cadets' reasons for attending West Point on the hazard of quitting the military beyond their mandatory service period (F4: $\beta = -0.12$, $P = 0.0009$) (see Table S9 for univariate analysis of this outcome, and Table S10 for the full set of multivariate results). Finally, logistic regression results controlling for age, sex, race, high-school grades, SAT score, parental income, religion, and entering year indicated that cadets with stronger internally based reasons for attending West Point were significantly more likely to be considered for early career promotions during their mandatory five years of service ($\beta = 0.20$, $P = 0.0006$), an indication of high-level performance (see Table S11 for univariate analysis of this outcome, and Table S12 for the full set of regression results).

The main text describes the results for effects of the interaction of instrumental and internal motives for attending West Point on making commission, retention beyond the 5-y mandatory service period, and being considered for potential early promotion. In all cases, the interaction of these two factor scores was significant (Factor 3 × Factor 4), although the form of the interaction differed across outcomes. For making commission, the form of the interaction suggests a negative impact of instrumental motives for attending West Point on likelihood of commission at any level of internal motives ($\beta = -0.07$, $P = 0.0006$), an outcome that is consistent with motivational crowding-out. Once this attrition from the institution has occurred, the interaction of these two motives continues to be significant for the likelihood that an officer will remain after serving the 5-y mandatory period in the Army. However, the form of the interaction suggests that instrumental motives for attending West Point make it more likely that officers exit the military following their mandatory service period, except in cases where their internal motives for attending were strongest (F3: $\beta = 0.16$, $P = 0.0003$; F3 × F4: $\beta = -0.03$, $P = 0.01$). Similarly, the interaction of these two motives is also significant for the likelihood that an officer would be considered for potential early promotion. Officers were less likely to be considered for early promotion in their period of mandatory service to the extent that their instrumental motives reasons for attending West Point were strong but their internal motives were weak (F3: $\beta = -0.27$, $P < 0.0001$; F3 × F4: $\beta = 0.06$, $P = 0.04$).

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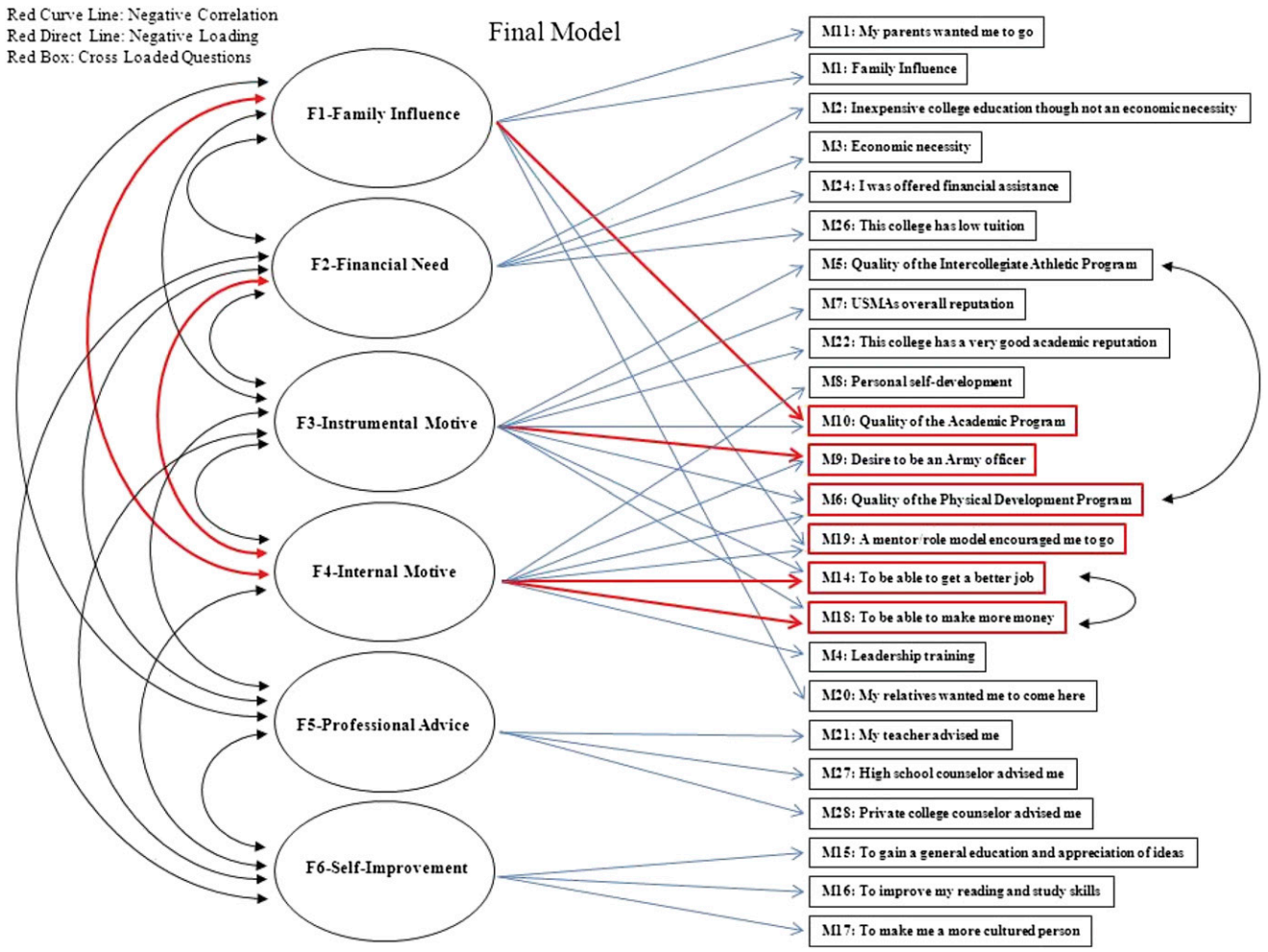

Fig. S1. Confirmatory factor analysis model.

Table S1. Demographic information stratified by class year

Attributes	Class of 1997 (n = 1,092)	Class of 1998 (n = 1,080)	Class of 1999 (n = 1,133)	Class of 2000 (n = 1,122)	Class of 2001 (n = 1,162)	Class of 2002 (n = 1,217)	Class of 2004 (n = 1,137)	Class of 2005 (n = 1,150)	Class of 2006 (n = 1,146)	9-y Total (n = 10,239)
Commission										
Yes	829 (75.9)	834 (77.2)	895 (79.0)	890 (79.3)	899 (77.4)	949 (78.0)	866 (76.2)	876 (76.2)	830 (72.4)	7,868 (76.8)
No	263 (24.1)	246 (22.8)	238 (21.0)	232 (20.7)	263 (22.6)	268 (22.0)	271 (23.8)	274 (23.8)	316 (27.6)	2,371 (23.2)
Sex										
Male	969 (88.7)	938 (86.9)	965 (85.2)	943 (84.0)	979 (84.3)	1034 (85.0)	946 (83.2)	964 (83.8)	956 (83.4)	8,694 (84.9)
Female	123 (11.3)	142 (13.1)	168 (14.8)	179 (16.0)	183 (15.7)	183 (15.0)	190 (16.7)	186 (16.2)	190 (16.6)	1,544 (15.1)
Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.1)	0 (0.0)	0 (0.0)	1 (0.0)
Age										
19 or younger	968 (88.6)	942 (87.2)	978 (86.3)	968 (86.3)	994 (85.5)	1043 (85.7)	949 (83.5)	996 (86.6)	1,003 (87.5)	8,841 (86.3)
20 or older	120 (11.0)	136 (12.6)	153 (13.5)	153 (13.6)	168 (14.5)	172 (14.1)	187 (16.4)	153 (13.3)	143 (12.5)	1,385 (13.5)
Missing	4 (0.4)	2 (0.2)	2 (0.2)	1 (0.1)	0 (0.0)	2 (0.2)	1 (0.1)	1 (0.1)	0 (0.0)	13 (0.1)
Race										
White	880 (80.6)	886 (82.0)	919 (81.1)	897 (79.9)	923 (79.4)	944 (77.6)	845 (74.3)	860 (74.8)	897 (78.3)	8,051 (78.6)
Non-White	212 (19.4)	194 (18.0)	214 (18.9)	225 (20.1)	239 (20.6)	273 (22.4)	292 (25.7)	290 (25.2)	249 (21.7)	2,188 (21.4)
High-school grade										
C or below	13 (1.2)	12 (1.1)	14 (1.2)	17 (1.5)	24 (2.1)	28 (2.3)	29 (2.6)	22 (1.9)	17 (1.5)	176 (1.7)
Above C	1,073 (98.3)	1,058 (98.0)	1,112 (98.1)	1,098 (97.9)	1,133 (97.5)	1,185 (97.4)	1,103 (97.0)	1,122 (97.6)	1,121 (97.8)	10,005 (97.7)
Missing	6 (0.5)	10 (0.9)	7 (0.6)	7 (0.6)	5 (0.4)	4 (0.3)	5 (0.4)	6 (0.5)	8 (0.7)	58 (0.6)
SAT total score	1,202 ± 112.3	1,200 ± 117.2	1,202 ± 114.0	1,261 ± 115.9	1,259 ± 112.0	1,259 ± 111.9	1,257 ± 116.0	1,262 ± 118.8	1,269 ± 112.5	1,242 ± 117.8
Parental income										
Less than $30,000 a year	149 (13.6)	139 (12.9)	108 (9.5)	109 (9.7)	109 (9.4)	122 (10.0)	90 (7.9)	68 (5.9)	63 (5.5)	957 (9.3)
$30,000 or more a year	913 (83.6)	906 (83.9)	990 (87.4)	979 (87.3)	1031 (88.7)	1079 (88.7)	1023 (90.0)	1037 (90.2)	1,067 (93.1)	9,025 (88.1)
Missing	30 (2.7)	35 (3.2)	35 (3.1)	34 (3.0)	22 (1.9)	16 (1.3)	24 (2.1)	45 (3.9)	16 (1.4)	257 (2.5)
Parents in the Military										
Neither parent in military	0 (0.0)	0 (0.0)	494 (43.6)	520 (46.3)	563 (48.5)	576 (47.3)	515 (45.3)	583 (50.7)	653 (57.0)	3,904 (38.1)
At least one military parent	0 (0.0)	0 (0.0)	530 (46.8)	538 (48.0)	560 (48.2)	575 (47.2)	427 (37.6)	484 (42.1)	484 (42.2)	3,598 (35.1)
Missing	1,092 (100.0)	1,080 (100.0)	109 (9.6)	64 (5.7)	39 (3.4)	66 (5.4)	195 (17.2)	83 (7.2)	9 (0.8)	2,737 (26.7)
Religion										
Catholic	375 (34.3)	360 (33.3)	371 (32.7)	381 (34.0)	404 (34.8)	424 (34.8)	373 (32.8)	379 (33.0)	388 (33.9)	3,455 (33.7)
Evangelical Protestant	141 (12.9)	163 (15.1)	163 (14.4)	139 (12.4)	153 (13.2)	166 (13.6)	161 (14.2)	155 (13.5)	141 (12.3)	1,382 (13.5)
Mainline Protestant	275 (25.2)	250 (23.1)	262 (23.1)	268 (23.9)	265 (22.8)	268 (22.0)	260 (22.9)	233 (20.3)	268 (23.4)	2,349 (22.9)
Other Christian	137 (12.5)	170 (15.7)	176 (15.5)	182 (16.2)	184 (15.8)	192 (15.8)	173 (15.2)	199 (17.3)	196 (17.1)	1,609 (15.7)
Islamic, Jewish, Buddhist, or Other	58 (5.3)	30 (2.8)	38 (3.4)	36 (3.2)	41 (3.5)	37 (3.0)	51 (4.5)	59 (5.1)	37 (3.2)	387 (3.8)
None	98 (9.0)	91 (8.4)	108 (9.5)	97 (8.6)	108 (9.3)	122 (10.0)	114 (10.0)	113 (9.8)	110 (9.6)	961 (9.4)
Missing	8 (0.7)	16 (1.5)	15 (1.3)	19 (1.7)	7 (0.6)	8 (0.7)	5 (0.4)	12 (1.0)	6 (0.5)	96 (0.9)
F1-Family Influence Factor Score	0.05 ± 0.62	0.04 ± 0.60	0.09 ± 0.64	0.16 ± 0.63	0.08 ± 0.61	0.09 ± 0.58	0.04 ± 0.61	0.04 ± 0.63	−0.04 ± 0.63	0.06 ± 0.62
F2-Economic Need Factor Score	0.03 ± 0.45	0.10 ± 0.43	0.11 ± 0.45	0.13 ± 0.43	0.13 ± 0.44	0.11 ± 0.44	0.13 ± 0.45	0.18 ± 0.46	0.04 ± 0.44	0.11 ± 0.45
F3-Instrumental Motive Factor Score	−0.04 ± 0.39	−0.01 ± 0.39	−0.02 ± 0.40	0.01 ± 0.39	0.02 ± 0.39	0.08 ± 0.40	−0.01 ± 0.41	−0.02 ± 0.40	−0.07 ± 0.41	−0.01 ± 0.40
F4-Internal Motive Factor Score	−0.08 ± 0.66	0.04 ± 0.68	0.06 ± 0.69	−0.00 ± 0.68	0.03 ± 0.68	0.17 ± 0.69	0.21 ± 0.67	0.14 ± 0.65	0.11 ± 0.67	0.08 ± 0.68
F5-Professional Advice Factor Score	0.04 ± 0.44	0.10 ± 0.44	0.15 ± 0.45	0.08 ± 0.45	0.07 ± 0.44	0.03 ± 0.44	0.10 ± 0.45	0.07 ± 0.45	−0.03 ± 0.44	0.07 ± 0.45
F6-Self-Improvement Factor Score	0.03 ± 0.64	−0.08 ± 0.66	0.10 ± 0.67	0.03 ± 0.66	0.03 ± 0.64	0.22 ± 0.67	0.01 ± 0.66	0.04 ± 0.66	−0.00 ± 0.67	0.04 ± 0.66

n = 10,239. Values reported for factor scores reflect mean ± SD of the latent factor score. For all analyses, whether participants' parents served in the military was not included as a control variable, as there was extensive missing data for this variable and the participants from whom data for this variable were collected were not a representative set.

Table S2. Exploratory factor analysis results for full dataset

Reason for attending West Point	Item	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
Family influence	M1	0.74	−0.047	−0.021	−0.01	0.006	−0.06
Inexpensive college education although not an economic necessity	M2	0.111	−0.517	−0.05	−0.07	0.041	−0.046
Economic necessity	M3	0.03	−0.491	0.062	−0.054	0.095	−0.04
Leadership training	M4	−0.028	0.026	−0.125	0.761	−0.045	0.111
Quality of the intercollegiate athletic program	M5	−0.068	0.101	−0.522	−0.046	0.32	−0.088
Quality of the physical development program	M6	−0.136	0.109	−0.502	0.322	0.268	−0.016
USMA's overall reputation	M7	0.229	−0.123	−0.391	0.31	−0.117	−0.061
Personal self-development	M8	−0.033	0.011	−0.13	0.687	−0.021	0.18
Desire to be an Army officer	M9	−0.074	0.057	0.082	0.554	−0.08	0.04
Quality of the academic program	M10	−0.019	−0.051	−0.556	0.209	−0.039	0.067
My parents wanted me to go	M11	0.729	0.021	−0.016	−0.02	0.018	0.076
I could not find a job	M12	0.028	−0.187	0.096	−0.133	0.087	0.144
Wanted to get away from home	M13	−0.017	−0.181	0.037	−0.049	0.036	0.157
To be able to get a better job	M14	0.041	−0.125	−0.353	−0.362	−0.123	0.362
To gain a general education and appreciation of ideas	M15	−0.012	0.018	0.047	0.036	−0.033	0.828
To improve my reading and study skills	M16	−0.027	0.038	−0.022	0.076	0.129	0.707
To make me a more cultured person	M17	−0.018	0.03	0.025	0.096	0.049	0.674
To be able to make more money	M18	0.084	−0.168	−0.394	−0.443	−0.059	0.299
A mentor/role model encouraged me to go	M19	0.344	0.007	0.065	0.105	0.242	0.191
My relatives wanted me to come here	M20	0.956	0.01	0.029	0.003	0.041	−0.038
My teacher advised me	M21	0.342	−0.008	−0.02	−0.073	0.627	0.061
This college has a very good academic reputation	M22	0.161	−0.18	−0.511	0.165	−0.139	0.141
This college has a good reputation for its social activities	M23	−0.009	−0.111	−0.079	0.182	0.16	0.123
I was offered financial assistance	M24	−0.028	−0.805	−0.008	−0.02	0.048	−0.034
This college offers special educational programs	M25	−0.053	−0.252	0.036	0.252	0.083	0.186
This college has low tuition	M26	−0.021	−0.747	0.04	0.052	0.02	−0.025
High school counselor advised me	M27	0.099	−0.082	−0.061	−0.069	0.727	0.038
Private college counselor advised me	M28	−0.05	−0.15	0.061	0.043	0.67	0.029
I wanted to live near home	M29	0.025	−0.104	−0.054	0.036	0.202	0.006
I was attracted by the religious affiliation/orientation of the college	M30	−0.011	−0.132	0.076	0.215	0.245	0.158
I wanted to go to a school about the size of this college	M31	−0.023	−0.188	0.016	0.223	0.123	0.173

n = 10,239. Quartimin rotated loadings are reported.

Table S3. Tests of model fit for exploratory factor analyses

Test	First half of data	Second half of data
Comparative Fit Index (CFI)	0.965	0.962
Tucker Lewis Index (TLI)	0.935	0.929
Root mean square error of approximation	0.055	0.056
Standardized root mean square residual	0.04	0.04

First half of data n = 5,120; second half of data n = 5,119.

Table S4. Exploratory factor analysis results for both first and second half of dataset

Item	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
M1	0.733/0.754	−0.009/0.076	0.070/−0.019	0.110/0.02	−0.024/−0.035	−0.064/−0.033
M2	0.060/0.156	−0.542/0.548	0.077/−0.051	0.091/−0.043	0.034/−0.036	−0.016/−0.028
M3	0.013/0.033	−0.510/0.505	0.042/0.089	0.133/−0.003	0.079/0.068	−0.047/0.008
M4	−0.085/−0.029	0.062/−0.014	−0.014/−0.13	−0.819/0.766	0.059/−0.025	0.026/0.147
M5	−0.005/−0.035	0.041/−0.084	0.808/−0.444	0.096/0.06	0.010/0.254	−0.010/−0.104
M6	−0.096/−0.092	0.021/−0.113	0.506/−0.447	−0.396/0.403	0.061/0.228	0.052/−0.045
M7	0.285/0.168	−0.092/0.129	0.072/−0.464	−0.503/0.242	−0.240/−0.088	−0.089/−0.09
M8	−0.079/−0.047	0.016/−0.033	0.010/−0.139	−0.726/0.686	0.051/0.002	0.126/0.196
M9	−0.099/−0.095	0.128/−0.049	−0.167/0.073	−0.565/0.536	0.058/−0.058	−0.055/0.073
M10	0.016/−0.055	−0.092/0.035	0.303/−0.613	−0.402/0.152	−0.230/−0.021	0.069/0.057
M11	0.778/0.707	0.033/−0.044	−0.038/−0.046	−0.016/−0.05	−0.059/0.042	0.026/0.076
M14	0.134/−0.01	−0.237/0.05	−0.014/−0.408	0.048/−0.399	−0.454/0.019	0.352/0.274
M15	−0.043/0.002	0.044/0.017	−0.064/0.047	−0.029/0.031	−0.059/−0.047	0.805/0.853
M16	−0.043/−0.003	0.056/0.002	0.109/−0.021	0.017/0.106	0.075/0.076	0.783/0.686
M17	−0.044/−0.003	0.038/−0.038	−0.024/−0.005	−0.083/0.063	0.024/0.045	0.666/0.673
M18	0.189/0.036	−0.309/0.098	0.037/−0.442	0.118/−0.507	−0.420/0.058	0.291/0.249
M19	0.443/0.304	−0.002/−0.013	−0.032/0.069	−0.094/0.115	0.164/0.265	0.165/0.202
M20	0.969/0.94	0.046/0.005	−0.005/0.027	0.054/−0.004	0.002/0.045	−0.063/−0.02
M21	0.549/0.286	−0.158/−0.017	0.037/−0.021	−0.029/−0.054	0.457/0.678	0.140/0.014
M22	0.212/0.108	−0.173/0.143	0.139/−0.607	−0.375/0.066	−0.365/−0.098	0.142/0.091
M24	−0.088/−0.008	−0.870/0.77	0.004/−0.009	0.028/−0.01	−0.002/0.049	−0.046/−0.002
M26	−0.045/−0.048	−0.745/0.736	−0.092/−0.007	−0.037/0.038	0.011/0.034	−0.038/−0.007
M27	0.335/0.033	−0.281/0.041	0.084/−0.024	−0.060/−0.024	0.482/0.809	0.133/−0.007
M28	0.191/−0.115	−0.231/0.121	0.050/0.094	−0.102/0.03	0.469/0.715	0.064/0.026

n = 5,120 for first table entry, n = 5,119 for second table entry. Entries reflect quartimin rotated loadings.

Table S5. Tests of final model fit

Test	First half of data	Second half of data	Full dataset
Comparative Fit Index (CFI)	0.950	0.955	0.953
Tucker Lewis Index (TLI)	0.958	0.963	0.961
Root mean square error of approximation	0.044	0.041	0.042

n = 5,120 for first half of data, n = 5,119 for second half of data, n = 10,239 for full data set. Entries reflect quartimin rotated loadings.

Table S6. Factor loadings for all items based on confirmatory factor analysis

Reason for attending West Point	Item	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
Family influence	M1	0.761					
Inexpensive college education although not an economic necessity	M2		0.663				
Economic necessity	M3		0.548				
Leadership training	M4				0.852		
Quality of the intercollegiate athletic program	M5			0.291			
Quality of the physical development program	M6			0.179	0.462		
USMA's overall reputation	M7			0.480			
Personal self-development	M8				0.823		
Desire to be an Army officer	M9			−0.325	0.717		
Quality of the academic program	M10	−0.241		0.688			
My parents wanted me to go	M11	0.737					
To be able to get a better job	M14			0.536	−0.221		
To gain a general education and appreciation of ideas	M15						0.787
To improve my reading and study skills	M16						0.785
To make me a more cultured person	M17						0.700
To be able to make more money	M18			0.690	−0.453		
A mentor/role model encouraged me to go	M19	0.553			0.295		
My relatives wanted me to come here	M20	0.947					
My teacher advised me	M21					0.934	
This college has a very good academic reputation	M22			0.687			
I was offered financial assistance	M24		0.789				
This college has low tuition	M26		0.673				
High school counselor advised me	M27					0.767	
Private college counselor advised me	M28					0.580	

$n = 10{,}239$.

Table S7. Univariate analysis results for commission outcome

Attribute	Commissioned (n = 7,868)	Not Commissioned (n = 2,371)	P
Sex			0.0001
Male	6,738 (77.5)	1,956 (22.5)	
Female	1,130 (73.2)	414 (26.8)	
Missing	0 (0.0)	1 (100.0)	
Age			<0.0001
19 or younger	6,855 (77.5)	1,986 (22.5)	
20 or older	1,004 (72.5)	381 (27.5)	
Missing	9 (69.2)	4 (30.8)	
Race			0.0004
White	6,248 (77.6)	1,803 (22.4)	
Non-White	1,620 (74.0)	568 (26.0)	
High-school grade			<0.0001
C or below	114 (64.8)	62 (35.2)	
Above C	7,710 (77.1)	2,295 (22.9)	
Missing	44 (75.9)	14 (24.1)	
SAT total score	1,246 ± 117.6	1,229 ± 117.5	<0.0001
Parental income			<0.0001
Less than $30,000 a year	666 (69.6)	291 (30.4)	
$30,000 or higher a year	7,008 (77.7)	2,017 (22.3)	
Missing	194 (75.5)	63 (24.5)	
Parents in the military			0.3187
Neither parent in military	2,984 (76.4)	920 (23.6)	
At least one parent in military	2,792 (77.6)	806 (22.4)	
Missing	2,092 (76.4)	645 (23.6)	
Religion			<0.0001
Catholic	2,714 (78.6)	741 (21.4)	
Evangelical Protestant	1,030 (74.5)	352 (25.5)	
Mainline Protestant	1,876 (79.9)	473 (20.1)	
Other Christian	1,194 (74.2)	415 (25.8)	
Islamic, Jewish, Buddhist, or other	278 (71.8)	109 (28.2)	
None	704 (73.3)	257 (26.7)	
Missing	72 (75.0)	24 (25.0)	
F1-Family Influence Factor Score	−0.05 ± 0.97	0.15 ± 1.08	<0.0001
F2-Financial Need Factor Score	−0.03 ± 0.99	0.11 ± 1.02	<0.0001
F3-Instrumental Motive Factor Score	0.02 ± 0.99	−0.06 ± 1.05	0.0004
F4-Internal Motive Factor Score	0.06 ± 0.96	−0.20 ± 1.09	<0.0001
F5-Professional Advice Factor Score	−0.03 ± 0.97	0.08 ± 1.08	<0.0001
F6-Self-Improvement Factor Score	0.02 ± 0.99	−0.08 ± 1.04	<0.0001
Year of class			<0.0001
Class of 1997	829 (75.9)	263 (24.1)	
Class of 1998	834 (77.2)	246 (22.8)	
Class of 1999	895 (79.0)	238 (21.0)	
Class of 2000	890 (79.3)	232 (20.7)	
Class of 2001	899 (77.4)	263 (22.6)	
Class of 2002	949 (78.0)	268 (22.0)	
Class of 2004	866 (76.2)	271 (23.8)	
Class of 2005	876 (76.2)	274 (23.8)	
Class of 2006	830 (72.4)	316 (27.6)	

n = 10,239.

Table S8. Logistic regression results for commission outcome

Attribute	β	*p*
Sex		
Male	0.31	<0.0001
Female	Ref	
Age		
19 or younger	0.21	0.11
20 or older	Ref	
Race		
Non-White	−0.08	0.34
White	Ref	
High-school grade		
Above C	0.51	<0.0001
C or below	Ref	
SAT total score	0.0009	0.0001
Parental Income		
$30,000 or higher a year	0.35	<0.0001
Less than $30,000 a year	Ref	
Religion		<0.0001
Catholic	0.24	<0.0001
Evangelical Protestant	0.20	0.005
Islamic, Jewish, Buddhist, or other	−0.13	0.31
Mainline Protestant	0.33	0.0001
None	0.03	0.74
Other Christian	Ref	
F1-Family influence factor score	−0.02	0.67
F2-Financial need factor score	0.03	0.56
F3-Instrumental motive factor score	−0.07	0.37
F4-Internal motive factor score	0.22	<0.0001
F5-Professional advice factor score	−0.12	<0.0001
F6-Self-improvement factor score	0.06	0.20
F1 × F4	0.06	0.03
F2 × F4	0.01	0.44
F3 × F4	−0.07	0.0006
F5 × F4	0.03	0.16
Year of Class		<0.0001
Class of 1997	0.27	<0.0001
Class of 1998	0.37	<0.0001
Class of 1999	0.37	<0.0001
Class of 2000	0.49	<0.0001
Class of 2001	0.34	<0.0001
Class of 2002	0.28	<0.0001
Class of 2004	0.15	<0.0001
Class of 2005	0.14	<0.0001
Class of 2006	Ref	

Ref refers to this group or category being used as the comparison group in analyses that employ dummy variables. n = 10,239.

Table S9. Univariate analysis results for exit from military

Attribute	Yes, event (left military) (n = 4,664)	Censored (stay in the military during follow-up time) (n = 2,999)	P
Sex			<0.0001
Male	3,935 (59.5)	2,676 (40.5)	
Female	729 (69.3)	323 (30.7)	
Age			0.0018
19 or younger	4,101 (61.5)	2,563 (38.5)	
20 or older	555 (56.1)	435 (43.9)	
Missing	8 (88.9)	1 (11.1)	
Race			0.6795
White	3,716 (61.0)	2,374 (39.0)	
Non-White	948 (60.3)	625 (39.7)	
High-school grade			0.3277
C or below	62 (55.4)	50 (44.6)	
Above C	4,578 (61.0)	2,930 (39.0)	
Missing	24 (55.8)	19 (44.2)	
SAT total score	1,239 ± 116.7	1,252 ± 117.1	0.0026
Parental income			<0.0001
Less than $30,000 a year	386 (58.9)	269 (41.1)	
$30,000 or higher a year	4,172 (61.2)	2,649 (38.8)	
Missing	106 (56.7)	81 (43.3)	
Parents in the military			<0.0001
Neither parent in military	1,767 (61.0)	1,132 (39.0)	
At least one parent in military	1,610 (59.5)	1,098 (40.5)	
Missing	1,287 (62.6)	769 (37.4)	
Religion			<0.0001
Catholic	1,669 (63.1)	978 (36.9)	
Evangelical Protestant	594 (59.0)	412 (41.0)	
Mainline Protestant	1,104 (60.2)	729 (39.8)	
Other Christian	659 (57.3)	492 (42.7)	
Islamic, Jewish, Buddhist, or other	174 (64.4)	96 (35.6)	
None	422 (61.7)	262 (38.3)	
Missing	42 (58.3)	30 (41.7)	
F1-Family influence factor score	−0.01 ± 0.98	−0.11 ± 0.96	0.0034
F2-Financial need factor score	−0.01 ± 0.99	−0.07 ± 0.99	0.0230
F3-Instrumental motive factor score	0.08 ± 0.97	−0.08 ± 1.02	0.0001
F4-Internal motive factor score	0.03 ± 0.98	0.10 ± 0.94	0.0457
F5-Professional advice factor score	−0.01 ± 0.97	−0.04 ± 0.98	0.2656
F6-Self-improvement factor score	0.07 ± 0.99	−0.05 ± 0.98	0.0909
Year of class			<0.0001
Class of 1997	514 (63.4)	297 (36.6)	
Class of 1998	522 (63.7)	298 (36.3)	
Class of 1999	577 (65.8)	300 (34.2)	
Class of 2000	597 (68.2)	279 (31.8)	
Class of 2001	591 (66.9)	292 (33.1)	
Class of 2002	904 (97.9)	19 (2.1)	
Class of 2004	442 (52.4)	401 (47.6)	
Class of 2005	314 (37.5)	523 (62.5)	
Class of 2006	203 (25.6)	590 (74.4)	

n = 7,663.

Table S10. Survival analysis results for exit from military

Attribute	β	*P*
Sex		
Male	−0.20	<0.0001
Female	Ref	
Age		
19 or younger	0.10	0.01
20 or older	Ref	
Race		
Non-White	0.04	0.23
White	Ref	
High-school grade		
Above C	0.05	0.65
C or below	Ref	
SAT total score	−0.0005	0.003
Parental income		
$30,000 or higher a year	0.13	0.0004
Less than $30,000 a year	Ref	
Religion		<0.0001
Catholic	0.15	<0.0001
Evangelical Protestant	0.03	0.50
Islamic, Jewish, Buddhist, or other	0.32	<0.0001
Mainline Protestant	0.13	<0.0001
None	0.15	0.03
Other Christian	Ref	Ref
F1-Family Influence Factor Score	−0.008	0.68
F2-Financial Need Factor Score	−0.05	0.01
F3-Instrumental Motive Factor Score	0.16	0.0003
F4-Internal Motive Factor Score	−0.12	0.0009
F5-Professional Advice Factor Score	−0.02	0.12
F6-Self-Improvement Factor Score	−0.04	0.06
F1 × F4	−0.1	0.04
F2 × F4	−0.04	0.41
F3 × F4	−0.11	0.01
F5 × F4	0.10	0.08
Retention		<0.0001
First year after 5-y commitment	Ref	
Second year after 5-y commitment	−0.02	0.92
Third year after 5-y commitment	−0.71	<0.0001
Fourth year after 5-y commitment	−0.71	<0.0001
Fifth year after 5-y commitment	−1.10	<0.0001
Sixth year after 5-y commitment	−0.05	0.96
Year of class		<0.0001
Class of 1997	0.49	<0.0001
Class of 1998	0.56	<0.0001
Class of 1999	0.62	<0.0001
Class of 2000	0.74	<0.0001
Class of 2001	0.72	<0.0001
Class of 2002	1.13	<0.0001
Class of 2004	0.52	<0.0001
Class of 2005	0.34	<0.0001
Class of 2006	Ref	

Ref refers to this group or category being used as the comparison group in analyses that employ dummy variables. n = 7,663.

Table S11. Univariate analysis results for being considered for potential early promotion

Attribute	Considered for potential early promotion (n = 2,565)	Not considered for potential early promotion (n = 3,597)	P
Sex			<0.0001
Male	2,290 (43.2)	3,007 (56.8)	
Female	275 (31.8)	590 (68.2)	
Age			0.0046
19 or younger	2,182 (40.8)	3,163 (59.2)	
20 or older	381 (47.1)	428 (52.9)	
Missing	2 (25.0)	6 (75.0)	
Race			0.9697
White	2,043 (41.4)	2,893 (58.6)	
Non-White	522 (42.6)	704 (57.4)	
High-school grade			0.1586
C or below	46 (50.5)	45 (49.5)	
Above C	2,508 (41.5)	3,529 (58.5)	
Missing	11 (32.4)	23 (67.6)	
SAT total score	1,242 ± 117.4	1,238 ± 117.4	0.0490
Parental income			<0.0001
Less than $30,000 a year	281 (47.9)	306 (52.1)	
$30,000 or higher a year	2,224 (41.0)	3,204 (59.0)	
Missing	60 (40.8)	87 (59.2)	
Parents in the military			0.0125
Neither parent in military	796 (38.4)	1,278 (61.6)	
At least one parent in military	887 (43.1)	1,172 (56.9)	
Missing	882 (43.5)	1,147 (56.5)	
Religion			<0.0001
Catholic	827 (38.9)	1,297 (61.1)	
Evangelical Protestant	373 (45.5)	446 (54.5)	
Mainline Protestant	618 (41.4)	875 (58.6)	
Other Christian	420 (45.9)	495 (54.1)	
Islamic, Jewish, Buddhist, or other	75 (36.2)	132 (63.8)	
None	229 (41.9)	317 (58.1)	
Missing	23 (39.7)	35 (60.3)	
F1-Family influence factor score	−0.06 ± 0.94	0.01 ± 0.98	0.0084
F2-Financial need factor score	−0.05 ± 0.98	−0.02 ± 0.99	0.0185
F3-Instrumental motive factor score	−0.01 ± 1.01	0.09 ± 0.96	<0.0001
F4-Internal motive factor score	0.07 ± 0.96	0.02 ± 0.97	0.0882
F5-Professional advice factor score	0.01 ± 0.97	0.00 ± 0.98	0.7405
F6-Self-improvement factor score	0.00 ± 0.99	0.06 ± 0.98	0.1080
Year of class			<0.0001
Class of 1997	370 (44.6)	459 (55.4)	
Class of 1998	354 (42.4)	480 (57.6)	
Class of 1999	363 (40.6)	532 (59.4)	
Class of 2000	338 (38.0)	552 (62.0)	
Class of 2001	384 (42.7)	515 (57.3)	
Class of 2002	356 (37.5)	593 (62.5)	
Class of 2004	400 (46.2)	466 (53.8)	

n = 6,162.

Table S12. Logistic regression results for being considered for potential early promotion

Attribute	β	*p*
Sex		
Male	0.38	<0.0001
Female	Ref	
Age		
19 or younger	−0.10	0.06
20 or older	Ref	
Race		
Non-White	−0.11	0.04
White	Ref	
High-school grade		
Above C	−0.23	0.13
C or below	Ref	
SAT total score	0.0003	0.07
Parental income		
$30,000 or higher a year	−0.21	0.01
Less than $30,000 a year	Ref	
Religion		<0.0001
Catholic	−0.24	<0.0001
Evangelical Protestant	0.004	0.97
Islamic, Jewish, Buddhist, or other	−0.52	<0.0001
Mainline Protestant	−0.20	0.002
None	−0.16	0.08
Other Christian	Ref	
F1-Family influence factor score	−0.01	0.76
F2-Economic need factor score	0.09	<0.0001
F3-Instrumental motive factor score	−0.27	<0.0001
F4-Internal motive factor score	0.20	0.0006
F5-Professional advice factor score	0.06	0.01
F6-Self-improvement factor score	0.06	0.09
F1 × F4	0.07	0.02
F2 × F4	0.01	0.88
F3 × F4	0.06	0.04
F5 × F4	−0.07	0.004
Year of class		<0.0001
Class of 1997	−0.002	0.87
Class of 1998	−0.19	<0.0001
Class of 1999	−0.23	<0.0001
Class of 2000	−0.35	<0.0001
Class of 2001	−0.15	<0.0001
Class of 2002	−0.31	<0.0001
Class of 2004	Ref	

Ref refers to this group or category being used as the comparison group in analyses that employ dummy variables. $n = 6{,}162$.