

**Supplemental Materials for**  
**Predictive Validity of the Air Force Officer Qualifying Test (AFOQT) for Pilot Performance:**  
**A Meta-analytic Investigation at the Subtests Level**

Correlation Coefficients Accumulated for the Relationships Between AFOQT Scores and Flight Performance Scores

*Table S1. AFOQT Subtests-Flight Performance Relationships*

Study	VA	AR	RC	DI	WK	MK	MC	EM	SR	IC	BC	TR	AI	RB	GS	HF	Criteria
1	-.05	.04	-.04	.09	-.11	-.01	.11	.05	.09	.34	.04	.06	.27	.11	.02	.05	Pass/Fail*
3-A	.01	.06			.01	.04				.08	.06	.08	.06		.03		First OPR*
3-B	.02	.07			-.02	.07				.06	.05	.13	.04		.03		Third OPR*
4												.14		.12		.10	DFA
												.15		.08		.06	CFA
												.18		.13		.10	Overall Composite*
10-A	.01	.08	-.01	.09	-.02	.07	.08	.06	.11	.14	.07	.09	.07	.07	.03	.05	Pass/Fail*
10-B	-.08	.16	.05	.05	-.03	.16	.02	.06	.13	.12	.09	.04	.14	.07	.12	.10	Pass/Fail*
14	.00	.10	.06	.13	.05	.00	.11	.03	.16	.18	.07	.11	.25	.05	.07	.03	PH2 DFA
	.03	.13	.04	.14	.00	.08	.11	.06	.17	.19	.09	.14	.19	.09	.06	.06	PH2 CFA
	-.03	.05	.01	.06	-.01	.01	.03	.02	.08	.08	.04	.08	.07	.02	-.01	.00	PH3 DFA
	.00	.08	.01	.09	-.02	.05	.05	.03	.13	.11	.07	.12	.05	.06	.00	.03	PH3 CFA
	.13	.20	.17	.17	.13	.18	.14	.03	.16	.07	.07	.10	.11	.08	.16	.06	Academic
	.04	.16	.08	.17	.04	.09	.13	.05	.21	.19	.10	.16	.20	.09	.08	.05	Overall Composite*
17	.03	.12	.05	.16	.01	.11	.12	.03	.18	.18	.09	.15	.19	.10	.06	.09	Class Rank*
	-.02	.06	-.01	.12	-.04	.05	.07	.01	.12	.13	.06	.10	.14	.05	.02	.05	FT37
	-.01	.04	.01	.09	.01	.07	.03	.01	.12	.15	.05	.09	.12	.09	.00	.06	FT38
18	.13				.03		.10	.13	.19		.18	.17		.08		.05	Pass/Fail*
	.19				.15		.12	.14	.16		.15	.08		.10		.03	Pass/Fail (FTD)
21	.00	.11	.03	.12	-.02	.04	.10	.08	.17	.23	.10	.15	.18	.10	.04	.06	Pass/Fail
	.10	.13	.04	.15	-.02	.07	.15	.07	.20	.26	.09	.12	.24	.10	.04	.04	PH2 CFA
	.01	.07	.01	.07	-.02	.03	.08	.08	.12	.15	.09	.13	.10	.05	.01	.07	PH3 CFA

Study	VA	AR	RC	DI	WK	MK	MC	EM	SR	IC	BC	TR	AI	RB	GS	HF	Criteria
	.00	.14	.04	.16	-.01	.06	.16	.07	.20	.28	.09	.12	.27	.10	.04	.04	Phase 2 Average
	.00	.08	.02	.08	-.02	.03	.09	.09	.13	.17	.11	.13	.12	.06	.02	.07	Phase 3 Average
	.00	.12	.10	.12	-.02	.04	.11	.09	.18	.23	.10	.15	.21	.08	.04	.08	Overall*
22	.16	.12	.17	.16	.13	.18			.14	.12			.13				Academic 1
	.17	.17	.16	.12	.15	.15			.10	.09			.10				Academic 2
	.14	.14	.14	.14	.12	.16			.12	.09			.09				Academic 3
	.14	.17	.16	.14	.11	.17			.11	.11			.11				Academic 4
	.12	.16	.11	.12	.06	.16			.14	.05			.03				Academic 5
	.08	.16	.09	.12	.07	.12			.11	.05			.07				Academic 6
	.12	.14	.12	.19	.10	.15			.13	.07			.10				Academic 7
	.11	.18	.12	.14	.10	.12			.14	.06			.08				Academic 8
	.14	.14	.15	.12	.11	.16			.11	.06			.07				Academic 19
	.13	.14	.15	.14	.11	.22			.15	.05			.03				Academic 10
	.12	.19	.12	.16	.08	.18			.15	.06			.05				Academic 11
	.01	.07	.00	.08	.00	.05			.10	.10			.08				CFA 1
	.05	.08	.03	.10	.02	.07			.11	.09			.05				CFA 2
	.06	.09	.06	.10	.03	.12			.13	.08			.04				CFA 3
	.01	.06	.02	.08	.01	.07			.10	.10			.03				CFA 4
	.03	.04	.01	.06	.00	.05			.06	.09			.02				CFA 5
	.05	.08	.06	.10	.02	.12			.13	.08			.01				CFA 6
	.06	.12	.05	.15	.02	.14			.18	.16			.07				CFA Composite*
24	-.04	.05	-.06	.03	-.09	-.03	.02	.01	.03	.22	.08	.06	.17	.10	.00	.03	Pass/Fail
	.04	.13	.07	.11	-.03	.04	.10	.04	.10	.16	-.01	.12	.12	.05	.02	.05	ATRB*
26	.09	.18	.06	.16	.00	.23	.04	.10	.15	.13	.15	.19	-.01	.08	.12	.12	Pass/Fail*
<b>Total</b>	<b>43</b>	<b>41</b>	<b>39</b>	<b>39</b>	<b>43</b>	<b>41</b>	<b>23</b>	<b>23</b>	<b>41</b>	<b>41</b>	<b>25</b>	<b>28</b>	<b>41</b>	<b>26</b>	<b>23</b>	<b>26</b>	

Note. References of studies can be found in the article; gray rows are for coefficient composites that were computed by the authors; criteria followed with “\*” are for those used to estimate the relationships with the overall flight performance; OPR = Officer Performance Report (overall performance ratings given to the officer by his leaders in charge); FT = excess flying hours in primary training (37 for phase 2 and 38 for phase 3); CFA = Check Flight Average; DFA = Daily Flight Average; PH = phase; ATRB = Advanced Training Recommendation Board; FTD = Flying Training Deficiency; VA = Verbal Analogies; RC = Reading Comprehension; WK = Word Knowledge; AR = Arithmetic Reasoning; DI = Data Interpretation; MK = Math Knowledge; MC = Mechanical Comprehension; EM = Electrical Maze; BC = Block Counting; RB = Rotated Blocks; HF = Hidden Figures; SR = Scale Reading; TR = Table Reading; IC = Instrument Comprehension; AI = Aviation Information; GS = General Science.

Table S2. *AFOQT Pilot Composite-Flight Performance Relationships*

Study	Total Reported	Pass/Fail	Overall	Class Rank	Daily Flying	Check Flight	Academic	Flying hours	Other
1	1	<b>.210</b>							
2	2	.150	<b>.230</b>						
3-A	1		<b>.098</b>						
3-B	1		<b>.105</b>						
5	1	<b>.158</b>							
6	2	.120							<b>.140</b> (ATRB)
7	2	.109							<b>.138</b> (ATRB)
8	2	.090							<b>.090</b> (ATRB)
9	4	.120		<b>.130</b>				.130	.180 (Another suggested Rank)
10-A	1	<b>.155</b>							
10-B	1	<b>.143</b>							
11	2	.193	<b>.217</b>						
12	5	.132	<b>.273</b>		.275	.162	.187		
13	2	.168		<b>.200</b>					
15-A	1	<b>.100</b>							
15-B	1	<b>.090</b>							
16	2	<b>.160</b>							.170 (Attrition)
19	1	<b>.180</b>							
18	2	<b>.150</b>							.100 Pass/Fail (FTD)
20	1	<b>.160</b>							
23-A	1	<b>.219</b>							
23-B	1	<b>.112</b>							
23-C	1	<b>.127</b>							
23-D	1	<b>.157</b>							
25	1	<b>.160</b>							

Note. References of studies can be found in the article; bold coefficients are those used in the meta-analyses of the overall flight performance; the last column contains the coefficients used for the overall performance; ATRB = Advanced Training Recommendation Board; FTD = Flying Training Deficiency.