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Agriculture and Natural Resources ■ 4-H Youth Development Program

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Program Experience

Scale	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Safety (range= 1-5)						
Mean (SD)	--	--	--	--	--	3.99 (.60)
Alpha	--	--	--	--	--	.88
N	--	--	--	--	--	688
Physical Environment (subscale of "Safety"; range= 1-5)						
Mean (SD)	--	--	--	--	--	4.04 (.61)
Alpha	--	--	--	--	--	.80
N	--	--	--	--	--	687
Emotional Environment (subscale of "Safety"; range= 1-5)						
Mean (SD)	--	--	--	--	--	4.29 (.74)
Alpha	--	--	--	--	--	.91
N	--	--	--	--	--	671
Relationship Building (range= 1-5)						
Mean (SD)	--	--	--	--	--	4.29 (.76)
Alpha	--	--	--	--	--	.83
N	--	--	--	--	--	665
Youth Engagement (range= 1-5)						
Mean (SD)	--	--	--	--	--	4.17 (.76)
Alpha	--	--	--	--	--	.95
N	--	--	--	--	--	649
Community Involvement (range= 1-5)						
Mean (SD)	--	--	--	--	--	4.24 (.92)
Alpha	--	--	--	--	--	N/A
N	--	--	--	--	--	630
Skill Building (range= 1-5)						
Mean (SD)	--	--	--	--	--	3.75 (.91)



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Alpha	--	--	--	--	--	.90
N	--	--	--	--	--	636
Content/Diversity (range= 1-5)						
Mean (SD)	--	--	--	--	--	4.19 (.82)
Alpha	--	--	--	--	--	.89
N	--	--	--	--	--	628
Teaching Methods (range= 1-5)						
Mean (SD)	--	--	--	--	--	4.11 (.83)
Alpha	--	--	--	--	--	.93
N	--	--	--	--	--	625
Extended Learning (range= 1-5)						
Mean (SD)	--	--	--	--	--	4.40 (.86)
Alpha	--	--	--	--	--	N/A
N	--	--	--	--	--	611

N/A= this subscale has only one item, therefore alpha cannot be calculated.

Mindset

Scale	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Mindset-Intelligence (range= 1-5)						
Mean (SD)	3.98(.65)	3.94(.80)	3.98 (.65)	3.97 (.85)	4.08 (.73)	3.96 (.81)
Alpha	.72	.81	.72	.78	.72	.79
N	490	439	490	376	278	483
Mindset-Health (range= 1-5)						
Mean (SD)	--	--	--	4.15 (.98)	4.13 (.93)	4.12 (.97)
Alpha	--	--	--	.92	.90	.90
N	--	--	--	437	275	469
Mindset-Science (range= 1-5)						
Mean (SD)	--	--	--	4.01 (.79)	4.08 (.69)	4.01 (.76)



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Alpha	--	--	--	.86	.84	.85
N	--	--	--	348	275	470



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Sparks

Scale	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Original 3 (range= 1-5)						
Mean (SD)	3.56(1.01)	3.41(1.12)	3.33(1.18)	3.53 (1.29)	3.71 (1.07)	3.73 (1.13)
Alpha	.83	.89	.90	.93	.89	.91
N	452	381	400	331	285	632
External Influences (range= 1-5)						
Mean (SD)	--	3.60(.82)	3.25(1.12)	3.47 (1.23)	3.66 (1.01)	3.55 (1.09)
Alpha	--	.85	.90	.91	.89	.83
N	--	182	400	331	285	900
Internal Influences (range= 1-5)						
Mean (SD)	--	--	4.35(.65)	4.31 (.73)	4.28 (.60)	4.28 (.59)
Alpha	--	--	.59	.91	.86	.80
N	--	--	226	327	284	609
Health Spark (range= 1-5)						
Mean (SD)	--	--	--	4.04 (.90)	4.08 (.84)	4.10 (.73)
Alpha	--	--	--	.90	.89	.83
N	--	--	--	443	284	609
Science Spark (range= 1-5)						
Mean (SD)	--	--	--	--	4.11 (.84)	3.93 (.83)
Alpha	--	--	--	--	.88	.84
N	--	--	--	--	284	608



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Goal Management

Scale	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Youth Selection, Optimization, Compensation-Likert (range= 1-5)						
Mean (SD)	--	--	--	4.16 (.66)	4.28 (.57)	4.10 (.68)
Alpha	--	--	--	.92	.91	.93
N	--	--	--	401	243	537
Youth Selection, Optimization, Compensation-Binary (range= 0-9; sum of responses)						
Mean (SD)	3.44 (1.37)	5.43 (2.34)	6.90 (1.91)	--	7.06 (1.98)	--
Alpha	.62	.73	.64	--	.70	--
N	179	519	517	--	81	--
Goal Management (Thrive items) (range= 1-5)						
Mean (SD)	--	--	3.84 (.66)	4.03 (.74)	--	--
Alpha	--	--	.70	.82	--	--
N	--	--	293	289	--	--



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Positive Youth Development

Scale	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Competence (range= 1-5)						
Mean (SD)	4.25(.61)	4.08(.62)	4.05(.61)	4.26 (.65)	4.24 (.60)	4.11 (.69)
Alpha	.74	.78	.80	.84	.83	.84
N	123	395	408	466	433	767
Character (range= 1-5)						
Mean (SD)	4.53(.49)	4.42(.55)	4.43(.56)	4.57 (.56)	4.57 (.54)	4.50 (.55)
Alpha	.81	.84	.85	.89	.88	.85
N	123	392	407	464	430	755
Connection (range= 1-5)						
Mean (SD)	4.38(.56)	4.20(.63)	4.2(.63)	4.32 (.65)	4.33 (.57)	4.26 (.61)
Alpha	.68	.76	.78	.80	.73	.74
N	122	390	406	464	427	754
Caring (range= 1-5)						
Mean (SD)	4.44(.52)	4.33(.59)	4.30(.59)	4.42 (.60)	4.43 (.58)	4.36 (.60)
Alpha	.78	.88	.87	.90	.89	.88
N	122	391	406	462	426	752
Confidence (range= 1-5)						
Mean (SD)	4.41(.48)	4.25(.51)	4.25(.59)	4.36 (.64)	4.33 (.57)	4.29 (.61)
Alpha	.79	.81	.81	.87	.81	.83
N	123	389	404	462	428	747
Contribution (range= 1-5)						
Mean (SD)	4.44(.47)	4.23(.60)	4.30(.60)	4.39 (.65)	4.42 (.60)	4.29 (.65)
Alpha	.88	.86	.88	.91	.91	.88
N	122	389	404	461	428	746



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PYD-Overall (range= 1-5)						
Mean (SD)	4.39(.47)	4.25(.51)	4.25(.51)	4.39 (.54)	4.39 (.47)	4.29 (.56)
Alpha	.90	.92	.93	.94	.91	.91
N	125	396	408	466	434	767

Academic Performance

Scale	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Effort (range= 1-5)						
Mean (SD)	--	4.42(.57)	4.36(.60)	4.47 (.58)	4.43 (.64)	4.36 (.69)
Alpha	--	.65	.69	.69	.72	.74
N	--	512	474	584	477	498

Wellbeing

Scale	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Stress (range= 1-4)						
Mean (SD)	2.33(.69)	2.34(.75)	2.44(.74)	2.43 (.79)	2.44 (.74)	2.42 (.72)
Alpha	.66	.75	.66	.67	.68	.57
N	470	431	488	387	193	463
Self-Esteem (range= 1-5)						
Mean (SD)	4.13(.61)	4.33(.70)	4.18(.72)	4.14 (.83)	4.27 (.68)	4.24 (.73)
Alpha	.70	.77	.72	.76	.69	.74
N	386	429	489	385	193	466
Self-Esteem (range= 1-5)						
Mean (SD)	--	--	--	--	--	4.09 (.84)
Alpha	--	--	--	--	--	.94
N	--	--	--	--	--	405
Depression (range= 1-4)						
Mean (SD)	1.67(.52)	3.80(.56)	1.72(.61)	--	--	--



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Alpha	.60	.68	.71	--	--	--
N	468	429	488	--	--	--

Teamwork

Scale	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Lead A Team (range=1-5)						
Mean (SD)	--	--	--	--	4.21 (.62)	4.07 (.69)
Alpha	--	--	--	--	.86	.87
N	--	--	--	--	376	630
Teamwork-Communication (range=1-5)						
Mean (SD)	--	--	--	--	4.11 (.65)	4.04 (.70)
Alpha	--	--	--	--	.88	.89
N	--	--	--	--	375	623
Teamwork-Interpersonal Skills (range=1-5)						
Mean (SD)	--	--	--	--	4.19 (.63)	4.10 (.69)
Alpha	--	--	--	--	.87	.89
N	--	--	--	--	374	623
Teamwork-Diversity (range=1-5)						
Mean (SD)	--	--	--	--	4.37 (.60)	4.29 (.66)
Alpha	--	--	--	--	.88	.90
N	--	--	--	--	375	623

Note: The full Social-Emotional Common Measure was collected only in Y5T2 and Y6T1. After that, only the teamwork items were assessed. The full Common Measure was implemented only for the military-connected youth, for whom the original measure was designed.



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Views about Science

Scale	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Usefulness (range= 1-5)						
Mean (SD)	--	--	3.98(.85)	3.97 (.86)	4.11 (.69)	3.87 (.88)
Alpha	--	--	.87	.85	.80	.85
N	--	--	408	447	533	413
Confidence (range= 1-5)						
Mean (SD)	--	--	4.04(.83)	4.15 (.84)	4.15 (.70)	3.99 (.94)
Alpha	--	--	.90	.88	.85	.91
N	--	--	407	447	531	412
Gender Bias (range= 1-5)						
Mean (SD)	--	--	4.46(.60)	4.44 (.70)	4.51 (.62)	4.40 (.74)
Alpha	--	--	.40	.78	.79	.76
N	--	--	406	447	530	410
Continuing Motivation (range= 1-5)						
Mean (SD)	--	--	--	3.72 (.81)	3.76 (.72)	3.60 (.75)
Alpha	--	--	--	.80	.78	.73
N	--	--	--	447	528	412