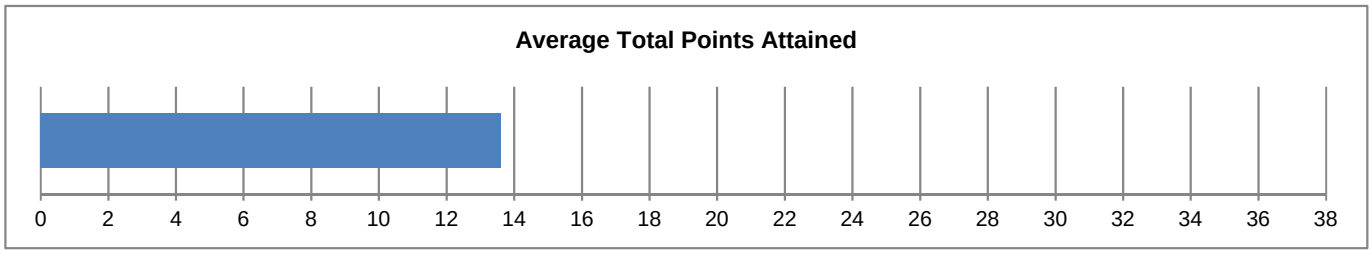
Sam Houston State University

CAT Institutional Report

August 2018 - College of Criminal Justice

CAT Overview: Descriptive Statistics for CAT Total Score
Sam Houston State University: August 2018 - College of Criminal Justice

	N	Min.	Max.	Mean	Std. Dev
CAT Total Score	177	1.00	28.00	13.61	5.28



CAT Demographics: Descriptive Statistics for Sample

		Freq.	Freq. %
Gender	**Male**	78	44.3%
	Female	98	55.7%
Class Standing	**Freshman**	1	0.6%
	Sophomore	12	6.8%
	Junior	64	36.4%
	Senior	99	56.3%
Class	**Undergraduate**	169	100.0%
	Graduate	0	0.0%
Age	**≤ 20 years**	56	32.6%
	21-25 years	100	58.1%
	≥ 26 years	16	9.3%

		Freq.	Freq. %
Race**	**White**	114	64.4%
	Black or African American	25	14.1%
	American Indian or Alaska Native	4	2.3%
	Asian	5	2.8%
	Native Hawaiian or Other Pacific Islander	1	0.6%
	Other Race	30	16.9%

**The cumulative percent may exceed 100% as students are allowed to select more than one category.

		Freq.	Freq. %
Proficiency with the English Language*	**Excellent**	127	72.2%
	Very Good	38	21.6%
	Good	9	5.1%
	Fair	2	1.1%
	Poor	0	0.0%

* Self-rated

	Freq.	Freq. %
Spanish/Hispanic/Latino Ethnicity	70	39.5%
Considered English primary language?	161	91.0%

CAT Breakdown: Frequency of Points Awarded for Each Question

Sam Houston State University: August 2018 - College of Criminal Justice

	Skill Assessed by CAT Question	Points Awarded	Freq.	Freq. %
Q1	Summarize the pattern of results in a graph without making inappropriate inferences.	**0**	63	35.6%
		1	114	64.4%
Q2	Evaluate how strongly correlational-type data supports a hypothesis.	**0**	73	41.2%
		1	66	37.3%
		2	28	15.8%
		3	10	5.6%
Q3	Provide alternative explanations for a pattern of results that has many possible causes.	**0**	99	55.9%
		1	47	26.6%
		2	21	11.9%
		3	10	5.6%
Q4	Identify additional information needed to evaluate a hypothesis.	**0**	96	54.2%
		1	51	28.8%
		2	14	7.9%
		3	14	7.9%
		4	2	1.1%
Q5	Evaluate whether spurious information strongly supports a hypothesis.	**0**	48	27.1%
		1	129	72.9%
Q6	Provide alternative explanations for spurious associations.	**0**	39	22.0%
		1	76	42.9%
		2	51	28.8%
		3	11	6.2%
Q7	Identify additional information needed to evaluate a hypothesis.	**0**	143	80.8%
		1	31	17.5%
		2	3	1.7%
Q8	Determine whether an invited inference is supported by specific information.	**0**	84	47.5%
		1	93	52.5%
Q9	Provide relevant alternative interpretations for a specific set of results.	**0**	96	54.2%
		1	67	37.9%
		2	14	7.9%
Q10	Separate relevant from irrelevant information when solving a real-world problem.	**0**	6	3.4%
		1	13	7.3%
		2	34	19.2%
		3	56	31.6%
		4	68	38.4%
Q11	Use and apply relevant information to evaluate a problem.	**0**	56	31.6%
		1	100	56.5%
		2	21	11.9%
Q12	Use basic mathematical skills to help solve a real-world problem.	**0**	61	34.5%
		1	116	65.5%
Q13	Identify suitable solutions for a real-world problem using relevant information.	**0**	77	43.5%
		1	77	43.5%
		2	15	8.5%
		3	8	4.5%
Q14	Identify and explain the best solution for a real-world problem using relevant information.	**0**	70	39.5%
		1	20	11.3%
		2	5	2.8%
		3	36	20.3%
		4	40	22.6%
		5	6	3.4%
Q15	Explain how changes in a real-world problem situation might affect the solution.	**0**	121	68.4%
		1	27	15.3%
		2	23	13.0%
		3	6	3.4%

Institutional/Departmental Profile

Sam Houston State University: August 2018 - College of Criminal Justice

Evaluate and Interpret Info	Problem Solving	Creative Thinking	Effective Comm.		Skill Assessed by CAT Question	Institution/Department	
						Mean	Avg. % of Attainable Points
X				Q1	Summarize the pattern of results in a graph without making inappropriate inferences.	0.64	64%
X			X	Q2	Evaluate how strongly correlational-type data supports a hypothesis.	0.86	29%
		X	X	Q3	Provide alternative explanations for a pattern of results that has many possible causes.	0.67	22%
	X	X	X	Q4	Identify additional information needed to evaluate a hypothesis.	0.73	18%
X				Q5	Evaluate whether spurious information strongly supports a hypothesis.	0.73	73%
		X	X	Q6	Provide alternative explanations for spurious associations.	1.19	40%
	X	X	X	Q7	Identify additional information needed to evaluate a hypothesis.	0.21	10%
X				Q8	Determine whether an invited inference is supported by specific information.	0.53	53%
		X	X	Q9	Provide relevant alternative interpretations for a specific set of results.	0.54	27%
X	X			Q10	Separate relevant from irrelevant information when solving a real-world problem.	2.94	74%
X	X		X	Q11	Use and apply relevant information to evaluate a problem.	0.80	40%
	X			Q12	Use basic mathematical skills to help solve a real-world problem.	0.66	66%
X	X			Q13	Identify suitable solutions for a real-world problem using relevant information.	0.74	25%
X	X		X	Q14	Identify and explain the best solution for a real-world problem using relevant information.	1.85	37%
	X	X	X	Q15	Explain how changes in a real-world problem situation might affect the solution.	0.52	17%
					CAT Total Score	13.61	36%

The map of skills covered by each question above is a suggested theoretical guide for interpreting results.

Upper Division CAT Means Comparison Report

Sam Houston State University: August 2018 - College of Criminal Justice

Evaluate and Interpret Info	Problem Solving	Creative Thinking	Effective Comm.		Skill Assessed by CAT Question	Institution	National		
						Mean	Mean	Probability of difference[a]	Effect Size[b]
X				Q1	Summarize the pattern of results in a graph without making inappropriate inferences.	0.64	0.67		
X			X	Q2	Evaluate how strongly correlational-type data supports a hypothesis.	0.86	1.21	***	-.35
		X	X	Q3	Provide alternative explanations for a pattern of results that has many possible causes.	0.67	1.35	***	-.70
	X	X	X	Q4	Identify additional information needed to evaluate a hypothesis.	0.73	1.41	***	-.61
X				Q5	Evaluate whether spurious information strongly supports a hypothesis.	0.73	0.73		
		X	X	Q6	Provide alternative explanations for spurious associations.	1.19	1.56	***	-.43
	X	X	X	Q7	Identify additional information needed to evaluate a hypothesis.	0.21	0.82	***	-1.06
X				Q8	Determine whether an invited inference is supported by specific information.	0.53	0.68	***	-.34
		X	X	Q9	Provide relevant alternative interpretations for a specific set of results.	0.54	0.93	***	-.57
X	X			Q10	Separate relevant from irrelevant information when solving a real-world problem.	2.94	3.14	**	-.20
X	X		X	Q11	Use and apply relevant information to evaluate a problem.	0.80	1.11	***	-.48
	X			Q12	Use basic mathematical skills to help solve a real-world problem.	0.66	0.82	***	-.37
X	X			Q13	Identify suitable solutions for a real-world problem using relevant information.	0.74	1.18	***	-.48
X	X		X	Q14	Identify and explain the best solution for a real-world problem using relevant information.	1.85	2.29	**	-.24
	X	X	X	Q15	Explain how changes in a real-world problem situation might affect the solution.	0.52	1.15	***	-.66
					CAT Total Score	13.61	19.04	***	-.96

[a]. * p<.05 **p<.01 ***p<.001 (2 –tailed) Does not Account for entering ACT/SAT.

[b]. Mean difference divided by pooled group standard deviation.
(0.1 - 0.3 = small effect; 0.3 - 0.5 = moderate effect; >0.5 = large effect)

The map of skills covered by each question above is a suggested theoretical guide for interpreting results.

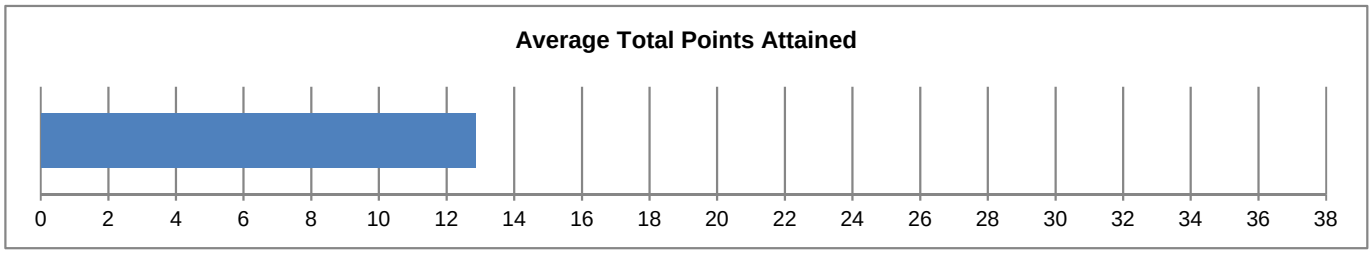
Sam Houston State University

CAT Institutional Report

August 2018 - COCJ - Criminal Justice & Criminology

CAT Overview: Descriptive Statistics for CAT Total Score
Sam Houston State University: August 2018 - COCJ - Criminal Justice & Criminology

	N	Min.	Max.	Mean	Std. Dev
CAT Total Score	122	1.00	28.00	12.85	5.15



CAT Demographics: Descriptive Statistics for Sample

		Freq.	Freq. %
Gender	**Male**	40	33.1%
	Female	81	66.9%
Class Standing	**Freshman**	0	0.0%
	Sophomore	5	4.1%
	Junior	47	38.8%
	Senior	69	57.0%
Class	**Undergraduate**	115	100.0%
	Graduate	0	0.0%
Age	**≤ 20 years**	36	30.3%
	21-25 years	71	59.7%
	≥ 26 years	12	10.1%

		Freq.	Freq. %
Race**	**White**	78	63.9%
	Black or African American	22	18.0%
	American Indian or Alaska Native	2	1.6%
	Asian	3	2.5%
	Native Hawaiian or Other Pacific Islander	1	0.8%
	Other Race	21	17.2%

**The cumulative percent may exceed 100% as students are allowed to select more than one category.

		Freq.	Freq. %
Proficiency with the English Language*	**Excellent**	86	71.1%
	Very Good	28	23.1%
	Good	6	5.0%
	Fair	1	0.8%
	Poor	0	0.0%

* Self-rated

	Freq.	Freq. %
Spanish/Hispanic/Latino Ethnicity	47	38.5%
Considered English primary language?	109	89.3%

CAT Breakdown: Frequency of Points Awarded for Each Question

Sam Houston State University: August 2018 - COCJ - Criminal Justice & Criminology

	Skill Assessed by CAT Question	Points Awarded	Freq.	Freq. %
Q1	Summarize the pattern of results in a graph without making inappropriate inferences.	**0**	45	36.9%
		1	77	63.1%
Q2	Evaluate how strongly correlational-type data supports a hypothesis.	**0**	52	42.6%
		1	46	37.7%
		2	21	17.2%
		3	3	2.5%
Q3	Provide alternative explanations for a pattern of results that has many possible causes.	**0**	73	59.8%
		1	32	26.2%
		2	13	10.7%
		3	4	3.3%
Q4	Identify additional information needed to evaluate a hypothesis.	**0**	72	59.0%
		1	33	27.0%
		2	10	8.2%
		3	6	4.9%
		4	1	0.8%
Q5	Evaluate whether spurious information strongly supports a hypothesis.	**0**	36	29.5%
		1	86	70.5%
Q6	Provide alternative explanations for spurious associations.	**0**	27	22.1%
		1	51	41.8%
		2	36	29.5%
		3	8	6.6%
Q7	Identify additional information needed to evaluate a hypothesis.	**0**	98	80.3%
		1	22	18.0%
		2	2	1.6%
Q8	Determine whether an invited inference is supported by specific information.	**0**	60	49.2%
		1	62	50.8%
Q9	Provide relevant alternative interpretations for a specific set of results.	**0**	65	53.3%
		1	50	41.0%
		2	7	5.7%
Q10	Separate relevant from irrelevant information when solving a real-world problem.	**0**	6	4.9%
		1	10	8.2%
		2	22	18.0%
		3	41	33.6%
		4	43	35.2%
Q11	Use and apply relevant information to evaluate a problem.	**0**	39	32.0%
		1	70	57.4%
		2	13	10.7%
Q12	Use basic mathematical skills to help solve a real-world problem.	**0**	47	38.5%
		1	75	61.5%
Q13	Identify suitable solutions for a real-world problem using relevant information.	**0**	59	48.4%
		1	48	39.3%
		2	11	9.0%
		3	4	3.3%
Q14	Identify and explain the best solution for a real-world problem using relevant information.	**0**	55	45.1%
		1	11	9.0%
		2	4	3.3%
		3	23	18.9%
		4	26	21.3%
		5	3	2.5%
Q15	Explain how changes in a real-world problem situation might affect the solution.	**0**	87	71.3%
		1	17	13.9%
		2	17	13.9%
		3	1	0.8%

Institutional/Departmental Profile

Sam Houston State University: August 2018 - COCJ - Criminal Justice & Criminology

Evaluate and Interpret Info	Problem Solving	Creative Thinking	Effective Comm.		Skill Assessed by CAT Question	Institution/Department	
						Mean	Avg. % of Attainable Points
X				Q1	Summarize the pattern of results in a graph without making inappropriate inferences.	0.63	63%
X			X	Q2	Evaluate how strongly correlational-type data supports a hypothesis.	0.80	27%
		X	X	Q3	Provide alternative explanations for a pattern of results that has many possible causes.	0.58	19%
	X	X	X	Q4	Identify additional information needed to evaluate a hypothesis.	0.61	15%
X				Q5	Evaluate whether spurious information strongly supports a hypothesis.	0.70	70%
		X	X	Q6	Provide alternative explanations for spurious associations.	1.20	40%
	X	X	X	Q7	Identify additional information needed to evaluate a hypothesis.	0.21	11%
X				Q8	Determine whether an invited inference is supported by specific information.	0.51	51%
		X	X	Q9	Provide relevant alternative interpretations for a specific set of results.	0.52	26%
X	X			Q10	Separate relevant from irrelevant information when solving a real-world problem.	2.86	72%
X	X		X	Q11	Use and apply relevant information to evaluate a problem.	0.79	39%
	X			Q12	Use basic mathematical skills to help solve a real-world problem.	0.61	61%
X	X			Q13	Identify suitable solutions for a real-world problem using relevant information.	0.67	22%
X	X		X	Q14	Identify and explain the best solution for a real-world problem using relevant information.	1.70	34%
	X	X	X	Q15	Explain how changes in a real-world problem situation might affect the solution.	0.45	15%
					CAT Total Score	12.85	34%

The map of skills covered by each question above is a suggested theoretical guide for interpreting results.

Upper Division CAT Means Comparison Report

Sam Houston State University: August 2018 - COCJ - Criminal Justice & Criminology

Evaluate and Interpret Info	Problem Solving	Creative Thinking	Effective Comm.		Skill Assessed by CAT Question	Institution	National		
						Mean	Mean	Probability of difference[a]	Effect Size[b]
X				Q1	Summarize the pattern of results in a graph without making inappropriate inferences.	0.63	0.67		
X			X	Q2	Evaluate how strongly correlational-type data supports a hypothesis.	0.80	1.21	***	-.42
		X	X	Q3	Provide alternative explanations for a pattern of results that has many possible causes.	0.58	1.35	***	-.82
	X	X	X	Q4	Identify additional information needed to evaluate a hypothesis.	0.61	1.41	***	-.73
X				Q5	Evaluate whether spurious information strongly supports a hypothesis.	0.70	0.73		
		X	X	Q6	Provide alternative explanations for spurious associations.	1.20	1.56	***	-.42
	X	X	X	Q7	Identify additional information needed to evaluate a hypothesis.	0.21	0.82	***	-1.05
X				Q8	Determine whether an invited inference is supported by specific information.	0.51	0.68	***	-.38
		X	X	Q9	Provide relevant alternative interpretations for a specific set of results.	0.52	0.93	***	-.60
X	X			Q10	Separate relevant from irrelevant information when solving a real-world problem.	2.86	3.14	**	-.27
X	X		X	Q11	Use and apply relevant information to evaluate a problem.	0.79	1.11	***	-.51
	X			Q12	Use basic mathematical skills to help solve a real-world problem.	0.61	0.82	***	-.46
X	X			Q13	Identify suitable solutions for a real-world problem using relevant information.	0.67	1.18	***	-.56
X	X		X	Q14	Identify and explain the best solution for a real-world problem using relevant information.	1.70	2.29	***	-.33
	X	X	X	Q15	Explain how changes in a real-world problem situation might affect the solution.	0.45	1.15	***	-.76
					CAT Total Score	12.85	19.04	***	-1.10

[a]. * p<.05 **p<.01 ***p<.001 (2 –tailed) Does not Account for entering ACT/SAT.

[b]. Mean difference divided by pooled group standard deviation.
(0.1 - 0.3 = small effect; 0.3 - 0.5 = moderate effect; >0.5 = large effect)

The map of skills covered by each question above is a suggested theoretical guide for interpreting results.