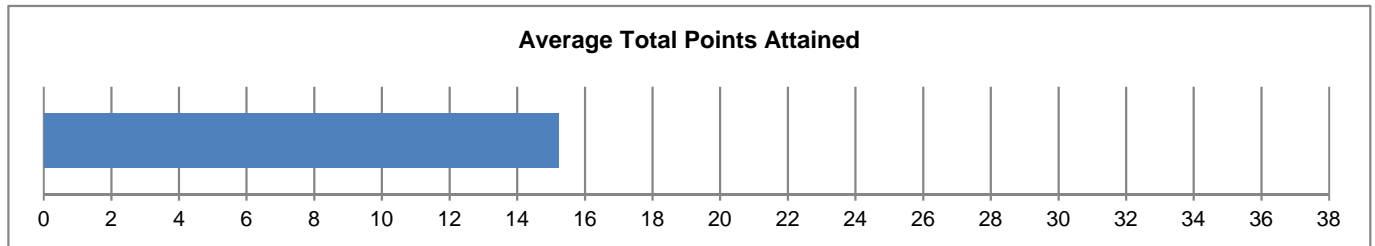# Sam Houston State University

CAT Institutional Report

August 2018 - College of Health Sciences

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

	N	Min.	Max.	Mean	Std. Dev
CAT Total Score	237	4.00	28.00	15.22	5.32

Average Total Points Attained

CAT Demographics: Descriptive Statistics for Sample

		Freq.	Freq. %
Gender	**Male**	51	21.7%
	Female	184	78.3%
Class Standing	**Freshman**	1	0.4%
	Sophomore	4	1.7%
	Junior	113	48.3%
	Senior	116	49.6%
Class	**Undergraduate**	236	99.6%
	Graduate	1	0.4%
Age	**≤ 20 years**	44	19.9%
	21-25 years	151	68.3%
	≥ 26 years	26	11.8%

		Freq.	Freq. %
Race**	**White**	169	71.3%
	Black or African American	46	19.4%
	American Indian or Alaska Native	2	0.8%
	Asian	19	8.0%
	Native Hawaiian or Other Pacific Islander	5	2.1%
	Other Race	16	6.8%

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

		Freq.	Freq. %
Proficiency with the English Language*	**Excellent**	180	75.9%
	Very Good	39	16.5%
	Good	17	7.2%
	Fair	0	0.0%
	Poor	1	0.4%

* Self-rated

	Freq.	Freq. %
Spanish/Hispanic/Latino Ethnicity	49	20.7%
Considered English primary language?	223	94.1%

CAT Breakdown: Frequency of Points Awarded for Each Question

Sam Houston State University: August 2018 - College of Health Sciences

	Skill Assessed by CAT Question	Points Awarded	Freq.	Freq. %
Q1	Summarize the pattern of results in a graph without making inappropriate inferences.	0	98	41.4%
		1	139	58.6%
Q2	Evaluate how strongly correlational-type data supports a hypothesis.	0	88	37.1%
		1	100	42.2%
		2	29	12.2%
		3	20	8.4%
Q3	Provide alternative explanations for a pattern of results that has many possible causes.	0	122	51.5%
		1	62	26.2%
		2	35	14.8%
		3	18	7.6%
Q4	Identify additional information needed to evaluate a hypothesis.	0	114	48.1%
		1	65	27.4%
		2	35	14.8%
		3	17	7.2%
		4	6	2.5%
Q5	Evaluate whether spurious information strongly supports a hypothesis.	0	72	30.4%
		1	165	69.6%
Q6	Provide alternative explanations for spurious associations.	0	33	13.9%
		1	115	48.5%
		2	73	30.8%
		3	16	6.8%
Q7	Identify additional information needed to evaluate a hypothesis.	0	169	71.3%
		1	62	26.2%
		2	6	2.5%
Q8	Determine whether an invited inference is supported by specific information.	0	80	33.8%
		1	157	66.2%
Q9	Provide relevant alternative interpretations for a specific set of results.	0	105	44.3%
		1	97	40.9%
		2	35	14.8%
Q10	Separate relevant from irrelevant information when solving a real-world problem.	0	6	2.5%
		1	12	5.1%
		2	40	16.9%
		3	83	35.0%
		4	96	40.5%
Q11	Use and apply relevant information to evaluate a problem.	0	67	28.3%
		1	138	58.2%
		2	32	13.5%
Q12	Use basic mathematical skills to help solve a real-world problem.	0	47	19.8%
		1	190	80.2%
Q13	Identify suitable solutions for a real-world problem using relevant information.	0	110	46.4%
		1	81	34.2%
		2	26	11.0%
		3	20	8.4%
Q14	Identify and explain the best solution for a real-world problem using relevant information.	0	77	32.5%
		1	32	13.5%
		2	6	2.5%
		3	32	13.5%
		4	79	33.3%
		5	11	4.6%
Q15	Explain how changes in a real-world problem situation might affect the solution.	0	140	59.1%
		1	53	22.4%
		2	25	10.5%
		3	19	8.0%

Institutional/Departmental Profile

Sam Houston State University: August 2018 - College of Health Sciences

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.	0.59	59%
X			X	Q2	Evaluate how strongly correlational-type data supports a hypothesis.	0.92	31%
		X	X	Q3	Provide alternative explanations for a pattern of results that has many possible causes.	0.79	26%
	X	X	X	Q4	Identify additional information needed to evaluate a hypothesis.	0.89	22%
X				Q5	Evaluate whether spurious information strongly supports a hypothesis.	0.70	70%
		X	X	Q6	Provide alternative explanations for spurious associations.	1.31	44%
	X	X	X	Q7	Identify additional information needed to evaluate a hypothesis.	0.31	16%
X				Q8	Determine whether an invited inference is supported by specific information.	0.66	66%
		X	X	Q9	Provide relevant alternative interpretations for a specific set of results.	0.70	35%
X	X			Q10	Separate relevant from irrelevant information when solving a real-world problem.	3.06	76%
X	X		X	Q11	Use and apply relevant information to evaluate a problem.	0.85	43%
	X			Q12	Use basic mathematical skills to help solve a real-world problem.	0.80	80%
X	X			Q13	Identify suitable solutions for a real-world problem using relevant information.	0.81	27%
X	X		X	Q14	Identify and explain the best solution for a real-world problem using relevant information.	2.16	43%
	X	X	X	Q15	Explain how changes in a real-world problem situation might affect the solution.	0.67	22%
					CAT Total Score	15.22	40%

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 Health Sciences

Evaluate and Interpret Info	Problem Solving	Creative Thinking	Effective Comm.		Skill Assessed by CAT Question	Institution Mean	National Mean	Probability of difference[a]	Effect Size[b]
X				Q1	Summarize the pattern of results in a graph without making inappropriate inferences.	0.59	0.67	**	-.18
X			X	Q2	Evaluate how strongly correlational-type data supports a hypothesis.	0.92	1.21	***	-.28
		X	X	Q3	Provide alternative explanations for a pattern of results that has many possible causes.	0.79	1.35	***	-.56
	X	X	X	Q4	Identify additional information needed to evaluate a hypothesis.	0.89	1.41	***	-.45
X				Q5	Evaluate whether spurious information strongly supports a hypothesis.	0.70	0.73		
		X	X	Q6	Provide alternative explanations for spurious associations.	1.31	1.56	***	-.31
	X	X	X	Q7	Identify additional information needed to evaluate a hypothesis.	0.31	0.82	***	-.84
X				Q8	Determine whether an invited inference is supported by specific information.	0.66	0.68		
		X	X	Q9	Provide relevant alternative interpretations for a specific set of results.	0.70	0.93	***	-.31
X	X			Q10	Separate relevant from irrelevant information when solving a real-world problem.	3.06	3.14		
X	X		X	Q11	Use and apply relevant information to evaluate a problem.	0.85	1.11	***	-.40
	X			Q12	Use basic mathematical skills to help solve a real-world problem.	0.80	0.82		
X	X			Q13	Identify suitable solutions for a real-world problem using relevant information.	0.81	1.18	***	-.37
X	X		X	Q14	Identify and explain the best solution for a real-world problem using relevant information.	2.16	2.29		
	X	X	X	Q15	Explain how changes in a real-world problem situation might affect the solution.	0.67	1.15	***	-.47
					CAT Total Score	15.22	19.04	***	-.67

[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.