



HIGHER EDUCATION RESEARCH INSTITUTE AT UCLA  
HOME OF THE COOPERATIVE INSTITUTIONAL RESEARCH PROGRAM

# 2020 CIRP Freshman Survey

CIRP Construct Reports

First-time, Full-time Freshmen

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## Hope College

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Comparison group 1: Other Religious 4yr Colleges-high selectivity  
Comparison group 2: Other Religious 4yr Colleges



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## How to Read the CIRP Construct Mean Report

**CIRP Construct Definition** – Summarizes the theoretical rationale for creating the construct.

**Standard Deviation** – Measures the variability around the mean. A small standard deviation indicates that the responses for the construct tend to be very close to the mean, whereas a large standard deviation indicates that the responses are spread over a larger range of response options.

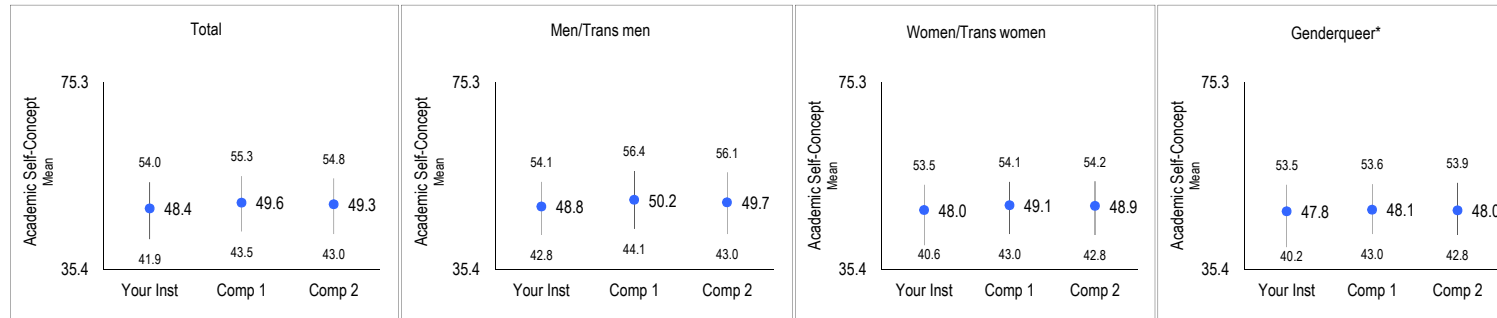
**Statistical Significance** – Uses t-test to examine the difference between the mean construct score for your institution and the comparison group. Constructs with mean differences that are larger than would be expected by chance are noted with one, two, or three stars, which correspond to the three standard levels of significance (\* $p < .05$ , \*\* $p < .01$ , and \*\*\* $p < .001$ ). Statistical significance measures the extent to which a difference is occurring by chance, not the extent to which a difference is practically important. Large sample sizes (like those in the comparison groups) tend to generate statistical significance even though the magnitude of the difference may be small and not practically significant. In order to provide additional context to statistical significance, effect sizes are provided.

CIRP Constructs are designed to capture the experiences and outcomes institutions are often interested in understanding, but that present a measurement challenge because of their complex and multifaceted nature. To measure these broad underlying areas more precisely, we use Item Response Theory (IRT) to combine individual survey items into global measures that capture these areas. CIRP Constructs are more than a summation of related items; IRT uses response patterns to derive construct score estimates while simultaneously giving greater weight in the estimation process to survey items that tap into the construct more directly. This results in more accurate construct scores. Constructs are particularly useful for benchmarking. They allow you to determine if the experiences and outcomes for your students differ from your comparison groups. Two reports are generated for each CIRP Construct. The Mean Score Report shows comparative information based on the mean score of a construct. The Percentage Report shows comparative information based on the percentage of students who score in the high, average, and low score groups of a construct. We suggest you use the report that best fits your needs as an institution. Both CIRP Construct reports are generated for first-time, full-time freshman, which we define as those respondents who first entered college in 2020 and are currently enrolled full-time. For more information about IRT and the CIRP Construct development process, see the CIRP Constructs Technical Report at [www.heri.ucla.edu](http://www.heri.ucla.edu).

**Academic Self-Concept** – is a unified measure of students' beliefs about their abilities and confidence in academic environments.

Sample University	Total			Men/Trans men			Women/Trans women			Genderqueer*		
	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2
Total (n)	619	21,085	42,939	300	10,706	19,535	319	10,379	23,404	19	105	214
Mean	48.4	49.6	49.3	48.8	50.2	49.7	48.0	49.1	48.9	47.8	48.1	48.0
Standard Deviation	8.74	8.55	8.85	8.67	8.67	8.97	8.80	8.41	8.74	8.80	8.41	8.74
Significance	-	***	*	-	**		-	*		-	*	
Effect Size	-	-0.14	-0.10	-	-0.16	-0.10	-	-0.12	-0.10	-	-0.12	-0.10
25th percentile	41.9	43.5	43.0	42.8	44.1	43.0	40.6	43.0	42.8	40.2	43.0	42.8
75th percentile	54.0	55.3	54.8	54.1	56.4	56.1	53.5	54.1	54.2	53.5	53.6	53.9

Note: Significance \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$



### Survey items and estimation "weights":

Rate yourself on each of the following traits as compared with the average person your age:

- \* Academic ability (3.52)
- \* Self-confidence - (intellectual) (1.22)
- \* Drive to achieve (0.95)
- \* Mathematical ability (1.22)

**Survey Items and Estimation "Weights"** – The survey items used in the creation of the CIRP Construct are presented in the order in which they contribute to the construct along with the estimation weights generated in IRT. Items that tap into a trait more effectively are given greater weight in the estimation process.

**Charts** – Provide a visual display of relevant construct scores for your institution and two comparison groups. The Y axis is defined by the highest and lowest possible construct score. Mean scores are represented by blue circles. The numbers at the top and bottom of the vertical line are values for the 75th and 25th percentiles.

**Comp 1** – The first comparison group is based on your institution's type, control, and selectivity.

**Comp 2** – The second comparison group is based on your institution's type and control.

**Mean** – The arithmetic mean is computed for each CIRP Construct based on the construct score. CIRP Constructs are scored on a z-score metric and rescaled for a mean of approximately 50 and standard deviation of 10.

**Effect Size** – Determines the practical significance of the mean difference between your institution and the comparison group. It is calculated by dividing the mean difference by the standard deviation of the comparison group. Generally, an effect size of .2 is considered small, .5 medium, and .8 large. A positive sign indicates that your institution's mean is greater than the mean of the comparison group; a negative sign indicates your mean is smaller than the mean of the comparison group.

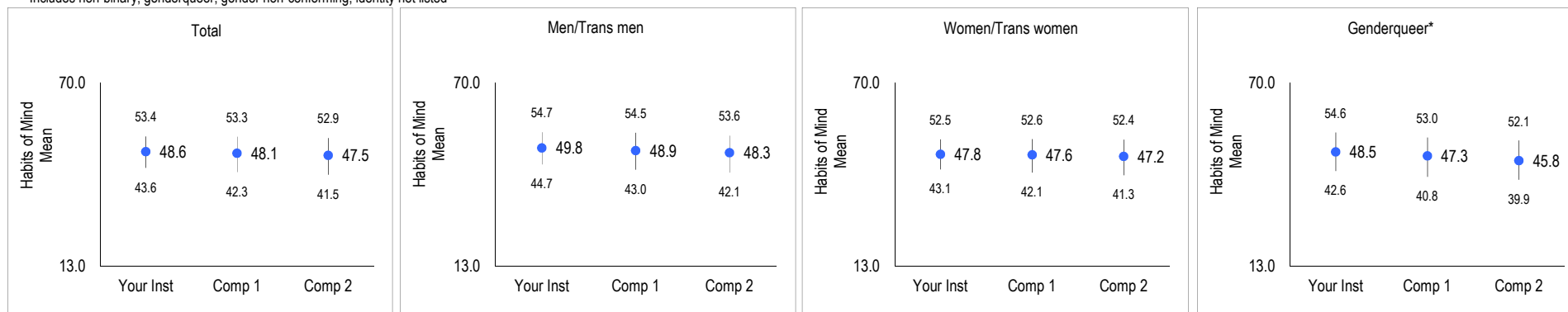
**2020 CIRP Freshman Survey**  
**First-time, Full-time Freshmen**  
**Habits of Mind**  
**CIRP Construct Mean Report**

**Habits of Mind** - is a unified measure of the behaviors and traits associated with academic success. These learning behaviors are seen as the foundation for lifelong learning.

Hope College	Total			Men/Trans men			Women/Trans women			Genderqueer*		
	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2
Total (n)	497	1,912	4,002	171	698	1,463	298	1,088	2,235	21	102	239
Mean	48.6	48.1	47.5	49.8	48.9	48.3	47.8	47.6	47.2	48.5	47.3	45.8
Standard Deviation	7.61	8.15	8.51	7.18	8.27	8.50	7.79	7.99	8.34	7.86	8.66	9.31
Significance	-		**	-		*	-			-		
Effect Size	-	0.06	0.13	-	0.11	0.18	-	0.03	0.08	-	0.14	0.29
25th percentile	43.6	42.3	41.5	44.7	43.0	42.1	43.1	42.1	41.3	42.6	40.8	39.9
75th percentile	53.4	53.3	52.9	54.7	54.5	53.6	52.5	52.6	52.4	54.6	53.0	52.1

Note: Significance \* p<.05, \*\* p<.01, \*\*\* p<.001

\* Includes non-binary, genderqueer, gender non-conforming, identity not listed



**Survey items and estimation "weights":**

**How often in the past year did you:**

- \* Seek solutions to problems and explain them to others (2.17)
- \* Support your opinions with a logical argument (1.81)
- \* Look up scientific research articles and resources (1.71)
- \* Take a risk because you felt you had more to gain (1.68)
- \* Accept mistakes as part of the learning process (1.24)
- \* Take on a challenge that scares you (1.20)

- \* Ask questions in class (1.26)
- \* Explore topics on your own, even though it was not required for a class (1.09)
- \* Evaluate the quality or reliability of information you received (1.13)
- \* Seek alternative solutions to a problem (1.14)
- \* Analyze multiple sources of information before coming to a conclusion (0.98)

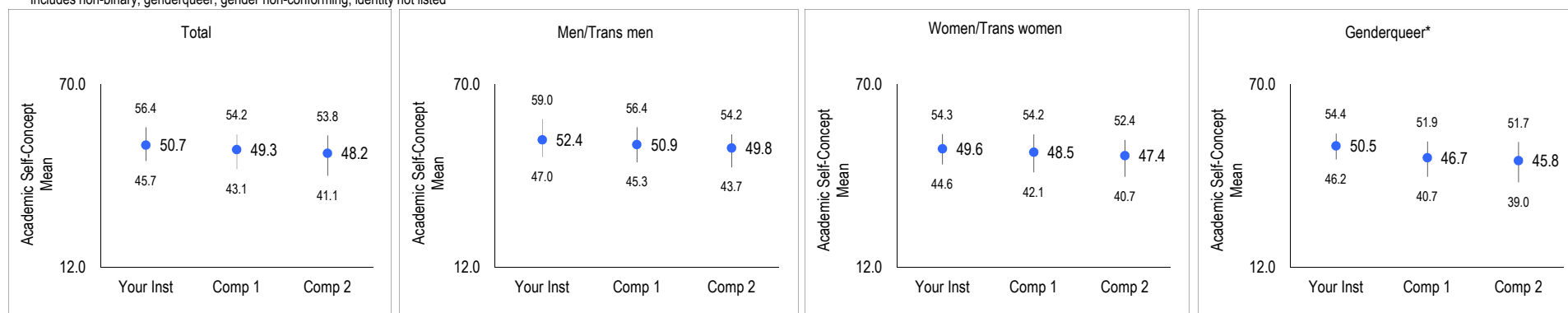
**2020 CIRP Freshman Survey  
First-time, Full-time Freshmen  
Academic Self-Concept  
CIRP Construct Mean Report**

**Academic Self-Concept** - is a unified measure of students' beliefs about their abilities and confidence in academic environments.

Hope College	Total			Men/Trans men			Women/Trans women			Genderqueer*		
	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2
Total (n)	489	1,884	3,946	167	684	1,442	294	1,076	2,205	21	101	235
Mean	50.7	49.3	48.2	52.4	50.9	49.8	49.6	48.5	47.4	50.5	46.7	45.8
Standard Deviation	8.55	8.58	8.61	8.16	8.56	8.47	8.49	8.46	8.54	9.70	8.17	8.33
Significance	-	***	***	-	*	***	-	*	***	-		*
Effect Size	-	0.17	0.30	-	0.17	0.30	-	0.13	0.25	-	0.47	0.56
25th percentile	45.7	43.1	41.1	47.0	45.3	43.7	44.6	42.1	40.7	46.2	40.7	39.0
75th percentile	56.4	54.2	53.8	59.0	56.4	54.2	54.3	54.2	52.4	54.4	51.9	51.7

Note: Significance \* p<.05, \*\* p<.01, \*\*\* p<.001

\* Includes non-binary, genderqueer, gender non-conforming, identity not listed



**Survey items and estimation "weights":**

Rate yourself on each of the following traits as compared with the average person your age:

\* Academic ability (3.08)

\* Mathematical ability (1.37)

\* Self-confidence (intellectual) (1.24)

\* Drive to achieve (0.91)

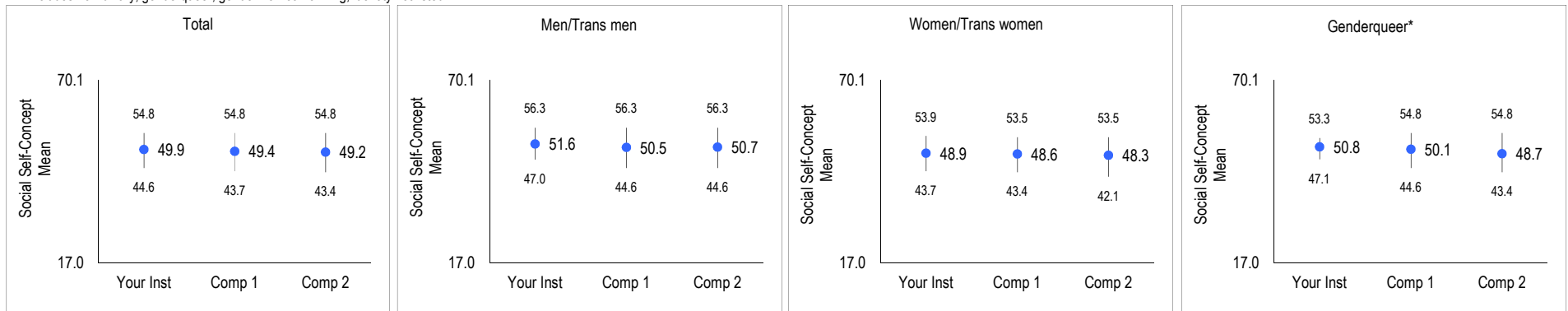
**2020 CIRP Freshman Survey**  
**First-time, Full-time Freshmen**  
**Social Self-Concept**  
**CIRP Construct Mean Report**

**Social Self-Concept** - is a unified measure of students' beliefs about their abilities and confidence in social situations.

Hope College	Total			Men/Trans men			Women/Trans women			Genderqueer*		
	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2
Total (n)	489	1,884	3,943	167	684	1,440	294	1,076	2,204	21	101	235
Mean	49.9	49.4	49.2	51.6	50.5	50.7	48.9	48.6	48.3	50.8	50.1	48.7
Standard Deviation	8.11	8.34	8.59	8.14	8.68	8.62	7.99	8.02	8.43	8.26	8.34	8.93
Significance	-	-	-	-	-	-	-	-	-	-	-	-
Effect Size	-	0.06	0.09	-	0.12	0.11	-	0.03	0.07	-	0.08	0.23
25th percentile	44.6	43.7	43.4	47.0	44.6	44.6	43.7	43.4	42.1	47.1	44.6	43.4
75th percentile	54.8	54.8	54.8	56.3	56.3	56.3	53.9	53.5	53.5	53.3	54.8	54.8

Note: Significance \* p<.05, \*\* p<.01, \*\*\* p<.001

\* Includes non-binary, genderqueer, gender non-conforming, identity not listed



**Survey items and estimation "weights":**

Rate yourself on each of the following traits as compared with the average person your age:

\* Self-confidence (social) (1.55)

\* Leadership ability (2.43)

\* Public speaking ability (1.90)

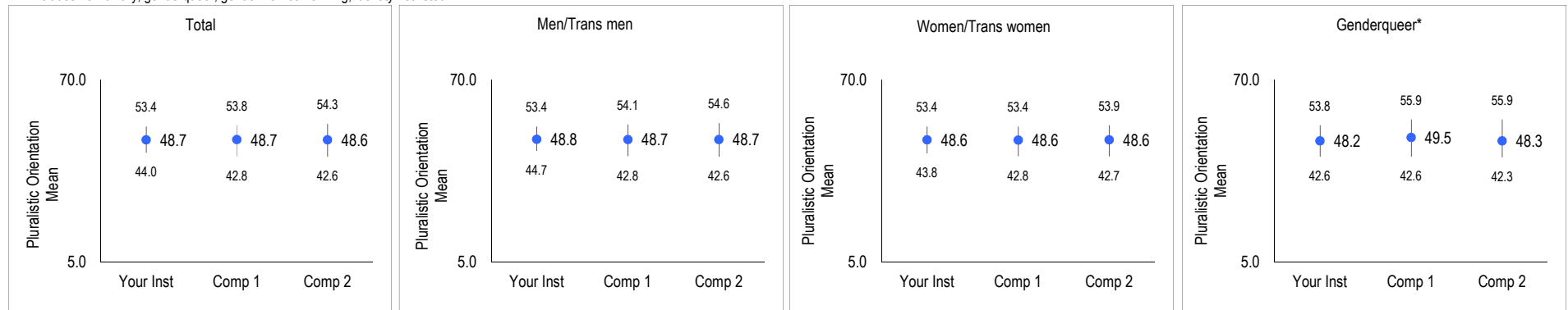
**2020 CIRP Freshman Survey  
First-time, Full-time Freshmen  
Pluralistic Orientation  
CIRP Construct Mean Report**

**Pluralistic Orientation** - measures skills and dispositions appropriate for living and working in a diverse society.

Hope College	Total			Men/Trans men			Women/Trans women			Genderqueer*		
	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2
Total (n)	501	1,915	4,003	173	699	1,462	300	1,091	2,242	21	101	236
Mean	48.7	48.7	48.6	48.8	48.7	48.7	48.6	48.6	48.6	48.2	49.5	48.3
Standard Deviation	7.53	8.00	8.48	7.39	8.00	8.62	7.63	7.95	8.25	8.39	8.47	9.69
Significance	-			-			-			-		
Effect Size	-	0.00	0.01	-	0.00	0.00	-	0.00	0.00	-	-0.15	-0.01
25th percentile	44.0	42.8	42.6	44.7	42.8	42.6	43.8	42.8	42.7	42.6	42.6	42.3
75th percentile	53.4	53.8	54.3	53.4	54.1	54.6	53.4	53.4	53.9	53.8	55.9	55.9

Note: Significance \* p<.05, \*\* p<.01, \*\*\* p<.001

\* Includes non-binary, genderqueer, gender non-conforming, identity not listed



**Survey items and estimation "weights":**

**Rate yourself on each of the following traits as compared with the average person your age:**

- \* Ability to see the world from someone else's perspective (1.40)
- \* Tolerance of others with different beliefs (1.64)
- \* Openness to having my own views challenged (1.57)
- \* Ability to discuss and negotiate controversial issues (1.53)
- \* Ability to work cooperatively with diverse people (1.68)

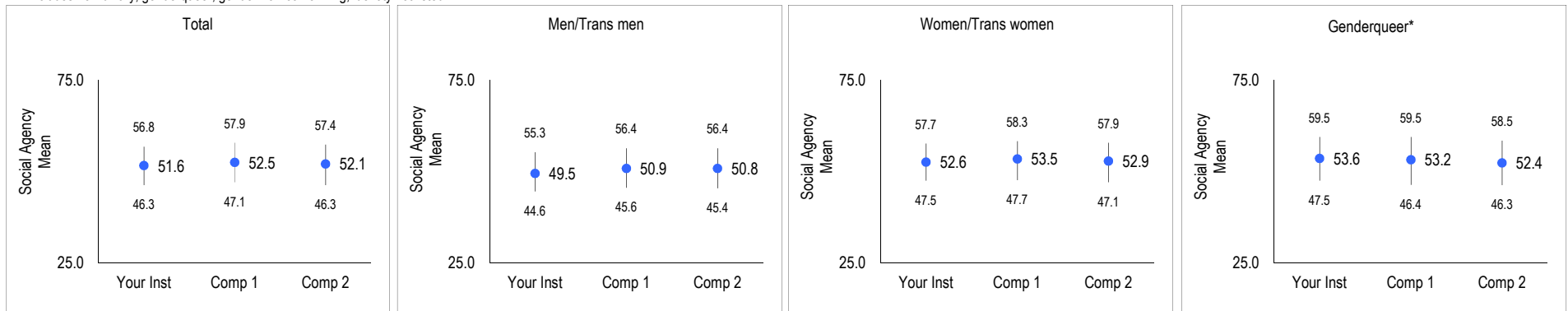
**2020 CIRP Freshman Survey  
First-time, Full-time Freshmen  
Social Agency  
CIRP Construct Mean Report**

**Social Agency** - measures the extent to which students value political and social involvement as a personal goal.

Hope College	Total			Men/Trans men			Women/Trans women			Genderqueer*		
	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2
Total (n)	478	1,843	3,852	160	668	1,404	291	1,055	2,160	21	99	228
Mean	51.6	52.5	52.1	49.5	50.9	50.8	52.6	53.5	52.9	53.6	53.2	52.4
Standard Deviation	8.15	8.33	8.50	8.18	8.35	8.48	7.86	8.13	8.39	9.64	8.25	8.14
Significance	-	*		-			-			-		
Effect Size	-	-0.10	-0.05	-	-0.16	-0.15	-	-0.10	-0.03	-	0.05	0.15
25th percentile	46.3	47.1	46.3	44.6	45.6	45.4	47.5	47.7	47.1	47.5	46.4	46.3
75th percentile	56.8	57.9	57.4	55.3	56.4	56.4	57.7	58.3	57.9	59.5	59.5	58.5

Note: Significance \* p<.05, \*\* p<.01, \*\*\* p<.001

\* Includes non-binary, genderqueer, gender non-conforming, identity not listed



**Survey items and estimation "weights":**

Indicate the importance to you personally of each of the following:

- \* Keeping up to date with political affairs (1.48)
- \* Participating in a community action program (2.41)
- \* Influencing social values (1.64)

- \* Becoming a community leader (2.09)
- \* Helping others who are in difficulty (1.17)
- \* Helping to promote racial understanding (2.15)



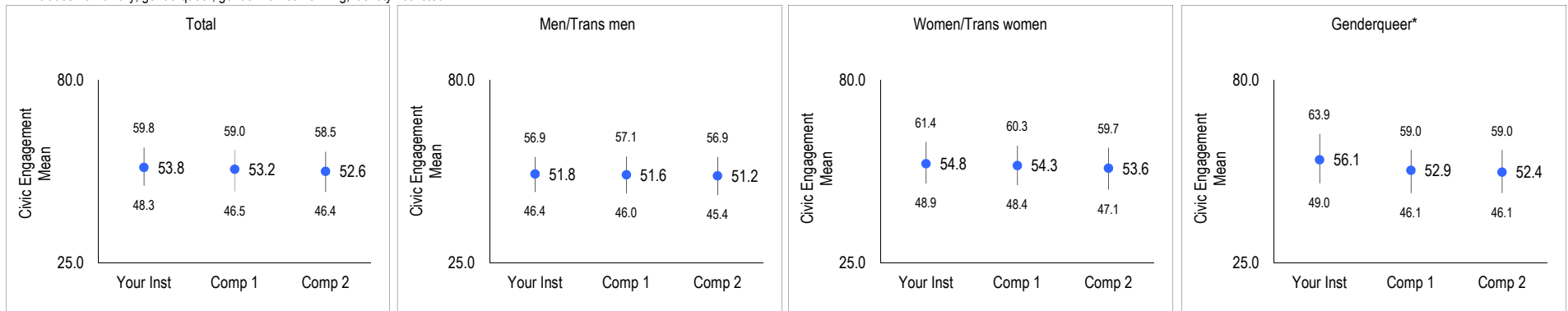
**2020 CIRP Freshman Survey**  
**First-time, Full-time Freshmen**  
**Civic Engagement**  
**CIRP Construct Mean Report**

**Civic Engagement** - measures the extent to which students are motivated and involved in civic, electoral, and political activities.

Hope College	Total			Men/Trans men			Women/Trans women			Genderqueer*		
	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2
Total (n)	506	1,931	4,052	177	706	1,477	301	1,099	2,265	21	102	243
Mean	53.8	53.2	52.6	51.8	51.6	51.2	54.8	54.3	53.6	56.1	52.9	52.4
Standard Deviation	8.65	8.70	8.64	7.85	8.34	8.25	8.90	8.80	8.82	9.81	8.76	8.30
Significance	-		**	-			-		*	-		
Effect Size	-	0.07	0.14	-	0.03	0.07	-	0.06	0.15	-	0.37	0.45
25th percentile	48.3	46.5	46.4	46.4	46.0	45.4	48.9	48.4	47.1	49.0	46.1	46.1
75th percentile	59.8	59.0	58.5	56.9	57.1	56.9	61.4	60.3	59.7	63.9	59.0	59.0

Note: Significance \* p<.05, \*\* p<.01, \*\*\* p<.001

\* Includes non-binary, genderqueer, gender non-conforming, identity not listed



**Survey items and estimation "weights":**

Indicate activities you did in the past year:

\* Demonstrated for a cause (e.g., boycott, rally, protest) (1.46)

\* Performed volunteer work (0.80)

\* Helped raise money for a cause or campaign (1.42)

\* Publicly communicated my opinion about a cause (e.g., blog, email, petition) (1.11)

Indicate the importance to you personally of each of the following:

\* Influencing social values (0.97)

\* Keeping up to date with political affairs (0.86)

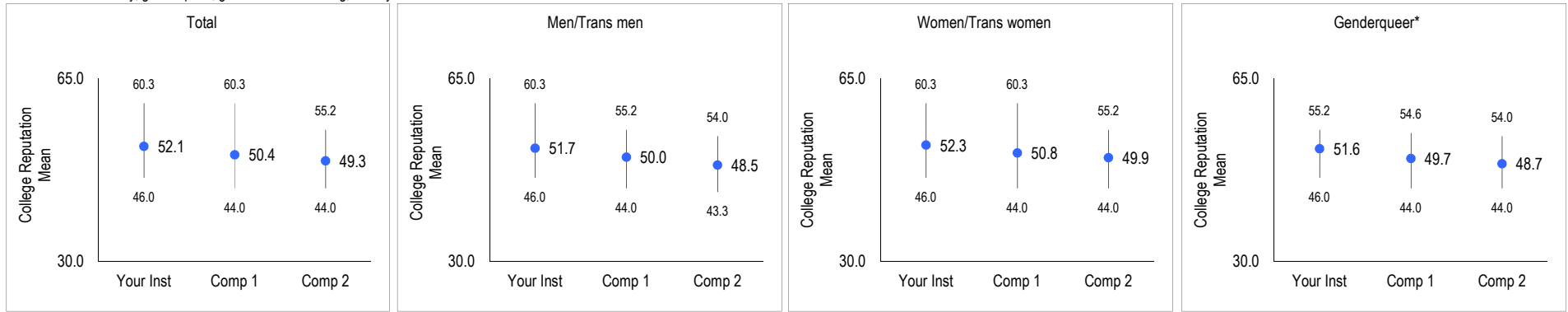
**2020 CIRP Freshman Survey  
First-time, Full-time Freshmen  
College Reputation Orientation  
CIRP Construct Mean Report**

**College Reputation Orientation** - measures the degree to which students value academic reputation and future career potential as a reason for choosing this college.

Hope College	Total			Men/Trans men			Women/Trans women			Genderqueer*		
	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2
Total (n)	483	1,860	3,887	164	677	1,423	291	1,060	2,176	21	100	228
Mean	52.1	50.4	49.3	51.7	50.0	48.5	52.3	50.8	49.9	51.6	49.7	48.7
Standard Deviation	7.61	7.91	8.27	6.87	7.68	8.27	8.13	8.00	8.25	6.42	7.69	8.13
Significance	-	***	***	-	**	***	-	**	***	-		
Effect Size	-	0.21	0.34	-	0.22	0.39	-	0.18	0.29	-	0.25	0.35
25th percentile	46.0	44.0	44.0	46.0	44.0	43.3	46.0	44.0	44.0	46.0	44.0	44.0
75th percentile	60.3	60.3	55.2	60.3	55.2	54.0	60.3	60.3	55.2	55.2	54.6	54.0

Note: Significance \* p<.05, \*\* p<.01, \*\*\* p<.001

\* Includes non-binary, genderqueer, gender non-conforming, identity not listed



**Survey items and estimation "weights":**

**How important was each reason in your decision to come here?**

\* This college's graduates get good jobs (4.90)

\* This college's graduates gain admission to top graduate/professional schools (2.10)

\* This college has a very good academic reputation (1.48)

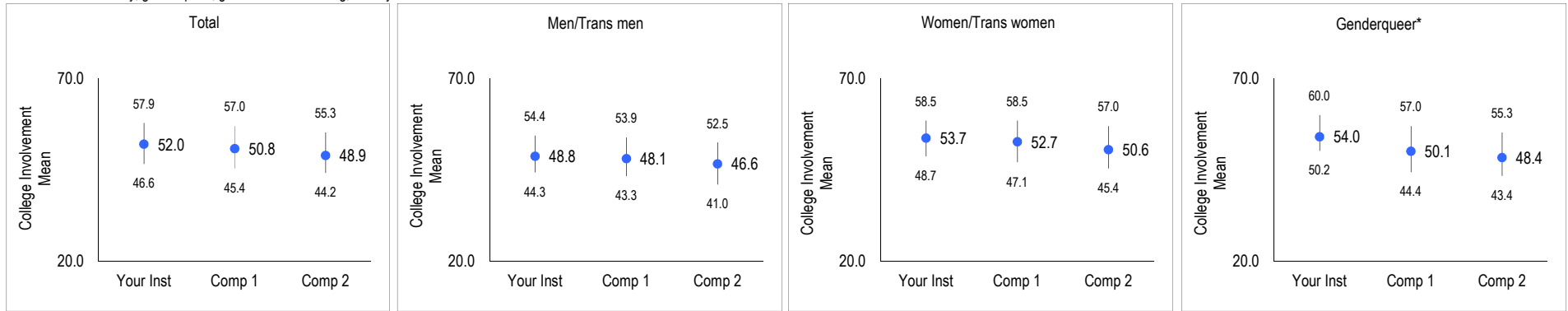
**2020 CIRP Freshman Survey**  
**First-time, Full-time Freshmen**  
**Likelihood of College Involvement**  
**CIRP Construct Mean Report**

**Likelihood of College Involvement** - is a unified measure of students' expectations about their involvement in college life generally.

Hope College	Total			Men/Trans men			Women/Trans women			Genderqueer*		
	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2
Total (n)	478	1,842	3,853	160	666	1,403	291	1,056	2,161	21	99	229
Mean	52.0	50.8	48.9	48.8	48.1	46.6	53.7	52.7	50.6	54.0	50.1	48.4
Standard Deviation	7.35	7.76	8.19	7.97	7.81	8.14	6.44	7.16	7.77	6.67	7.87	8.38
Significance	-	**	***	-		**	-	*	***	-	*	**
Effect Size	-	0.16	0.38	-	0.08	0.26	-	0.15	0.40	-	0.50	0.67
25th percentile	46.6	45.4	44.2	44.3	43.3	41.0	48.7	47.1	45.4	50.2	44.4	43.4
75th percentile	57.9	57.0	55.3	54.4	53.9	52.5	58.5	58.5	57.0	60.0	57.0	55.3

Note: Significance \* p<.05, \*\* p<.01, \*\*\* p<.001

\* Includes non-binary, genderqueer, gender non-conforming, identity not listed



**Survey items and estimation "weights":**

**What is your best guess as to the chances that you will:**

- \* Participate in a study abroad program (1.28)
- \* Participate in volunteer or community service work (1.51)
- \* Participate in student government (0.79)
- \* Participate in student clubs/groups (3.39)

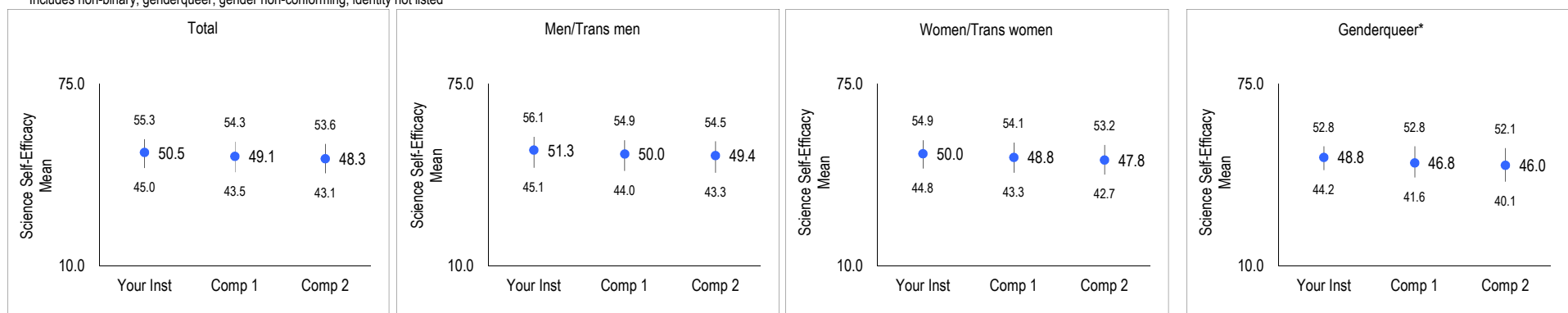
**2020 CIRP Freshman Survey  
First-time, Full-time Freshmen  
Science Self-Efficacy  
CIRP Construct Mean Report**

**Science Self-Efficacy** - is a measure of students' confidence in their ability to conduct scientific research

Hope College	Total			Men/Trans men			Women/Trans women			Genderqueer*		
	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2
Total (n)	491	1,894	3,962	167	690	1,449	296	1,079	2,214	21	101	235
Mean	50.5	49.1	48.3	51.3	50.0	49.4	50.0	48.8	47.8	48.8	46.8	46.0
Standard Deviation	8.85	8.92	9.23	8.90	8.92	9.11	8.88	8.86	9.15	8.63	9.65	9.75
Significance	-	**	***	-		*	-	*	***	-		
Effect Size	-	0.15	0.24	-	0.15	0.21	-	0.14	0.24	-	0.20	0.29
25th percentile	45.0	43.5	43.1	45.1	44.0	43.3	44.8	43.3	42.7	44.2	41.6	40.1
75th percentile	55.3	54.3	53.6	56.1	54.9	54.5	54.9	54.1	53.2	52.8	52.8	52.1

Note: Significance \* p<.05, \*\* p<.01, \*\*\* p<.001

\* Includes non-binary, genderqueer, gender non-conforming, identity not listed



**Survey items and estimation "weights":**

**How confident are you that you can:**

\* Use technical science skills (use of tools, instruments, and/or techniques) (1.49)

\* Generate an answerable research question (2.33)

\* Determine how to collect appropriate data (2.82)

\* Explain the results of a study (2.87)

\* Use scientific literature to guide research (2.70)

\* Integrate results from multiple studies (2.79)

\* Ask relevant questions (1.73)

\* Identify what is known and not known about a problem (1.95)

\* Understand scientific concepts (2.40)

\* See connections between different areas of science and mathematics (1.90)

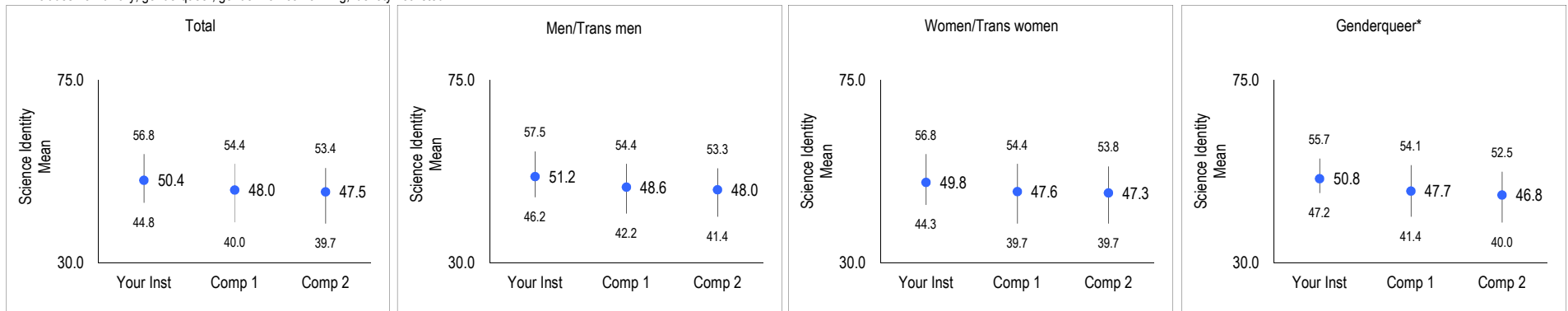
**2020 CIRP Freshman Survey  
First-time, Full-time Freshmen  
Science Identity  
CIRP Construct Mean Report**

**Science Identity** - measures the extent to which students conceive of themselves as scientists.

Hope College	Total			Men/Trans men			Women/Trans women			Genderqueer*		
	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2
Total (n)	479	1,844	3,856	161	670	1,407	291	1,054	2,160	21	99	229
Mean	50.4	48.0	47.5	51.2	48.6	48.0	49.8	47.6	47.3	50.8	47.7	46.8
Standard Deviation	8.65	8.77	8.64	8.71	8.54	8.39	8.73	8.91	8.82	7.53	8.46	8.14
Significance	-	***	***	-	***	***	-	***	***	-		*
Effect Size	-	0.27	0.33	-	0.30	0.38	-	0.25	0.29	-	0.36	0.49
25th percentile	44.8	40.0	39.7	46.2	42.2	41.4	44.3	39.7	39.7	47.2	41.4	40.0
75th percentile	56.8	54.4	53.4	57.5	54.4	53.3	56.8	54.4	53.8	55.7	54.1	52.5

Note: Significance \* p<.05, \*\* p<.01, \*\*\* p<.001

\* Includes non-binary, genderqueer, gender non-conforming, identity not listed



**Survey items and estimation "weights":**

To what extent are the following statements true of you:

- \* I have a strong sense of belonging to a community of scientists (3.52)
- \* I derive great personal satisfaction from working on a team that is doing important research (1.78)
- \* I think of myself as a scientist (5.54)
- \* I feel like I belong in the field of science (4.43)

## How to Read the CIRP Construct Percentage Report

CIRP Constructs are designed to capture the experiences and outcomes institutions are often interested in understanding, but that present a measurement challenge because of their complex and multifaceted nature. To measure these broad underlying areas more precisely, we use Item Response Theory (IRT) to combine individual survey items into global measures that capture these areas. CIRP Constructs are more than a summation of related items; IRT uses response patterns to derive construct score estimates while simultaneously giving greater weight in the estimation process to survey items that tap into the construct more directly. This results in more accurate construct scores. Constructs are particularly useful for benchmarking. They allow you to determine if the experiences and outcomes for your students differ from your comparison groups. Two reports are generated for each CIRP Construct. The Mean Score Report shows comparative information based on the mean score of a construct. The Percentage Report shows comparative information based on the percentage of students who score in the high, average, and low score groups of a construct. We suggest you use the report that best fits your needs as an institution. Both CIRP Construct reports are generated for first-time, full-time freshmen, which we define as those respondents who first entered college in 2020 and are currently enrolled full-time. For more information about IRT and the CIRP Construct development process, see the CIRP Constructs Technical Report at [www.heri.ucla.edu](http://www.heri.ucla.edu).

**CIRP Construct Definition** – Summarizes the theoretical rationale for creating the construct.

**Academic Self-Concept** – is a unified measure of students' beliefs about their abilities and confidence in academic environments.

Sample University	Total			Men/Trans men			Women/Trans women			Genderqueer*		
	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2
Total (n)	1,309	3,271	11,432	653	1,586	5,527	648	1,644	5,847	8	41	58
High Academic Self-Concept	43.6%	33.2%	30.3%	59.6%	43.0%	36.7%	58.4%	43.0%	36.7%	34.3%	28.7%	26.5%
Average Academic Self-Concept	30.3%	33.9%	39.9%	23.5%	31.6%	39.1%	24.5%	31.6%	39.1%	34.3%	35.0%	40.4%
Low Academic Self-Concept	26.1%	32.8%	29.8%	16.9%	25.4%	24.2%	17.1%	25.4%	24.2%	31.5%	36.2%	33.1%
Significance (based on High score group)	-	***	***	-	***	***	-	***	***	-		**

Note: Significance \* p<.05, \*\* p<.01, \*\*\* p<.001

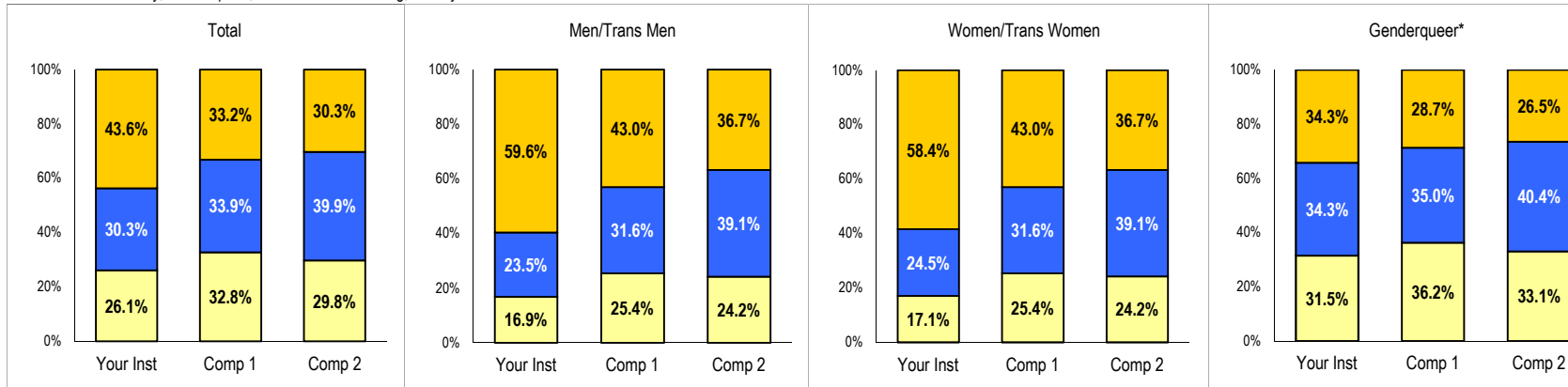
\* Includes Non-binary, Genderqueer, Gender non-conforming, Identity not listed

**Comp 1** – The first comparison group is based on your institution's type, control, and selectivity.

**Comp 2** – The second comparison group is based on your institution's type and control.

**Statistical Significance** – Uses a proportional difference test to examine the difference between the percentage of students in the high score group for your institution and the percentage of students in the high score group in the comparison group. Differences larger than what would be expected by chance are noted with one, two, or three stars, which correspond to the three standard levels of significance (\*p<.05, \*\*p<.01, \*\*\*p<.001). Statistical significance measures the extent to which a difference is occurring by chance, not the extent to which a difference is practically important. Large sample sizes (like those in the comparison groups) tend to generate statistical significance even though the magnitude of the difference might be small and not practically important.

Unlike the means scores report, in this case there are no effect size calculations to guide you in determining practical importance when comparing



### Survey items and estimation "weights":

Rate yourself on each of the following traits as compared with the average person your age:

\* Academic ability (3.52)

\* Self-confidence (intellectual) (1.22)

\* Drive to achieve (0.95)

\* Mathematical ability (1.32)

**Survey Items and Estimation "Weights"** – The survey items used in the creation of the CIRP Construct are presented in the order in which they contribute to the construct along with the estimation weights generated in IRT. Items that tap into a trait more effectively are given greater weight in the estimation process.

**Charts** – CIRP Constructs are scored on a z-score metric and rescaled for a mean of approximately 50 and standard deviation of 10. The Low, Average, and High construct score group percentages are reported here. The "Low" score group represents students who are one-half standard deviation below the mean. The "Average" score group represents students whose scores are within one-half standard deviation of the mean. The "High" score group represents students who are one-half standard deviation or more above the mean.

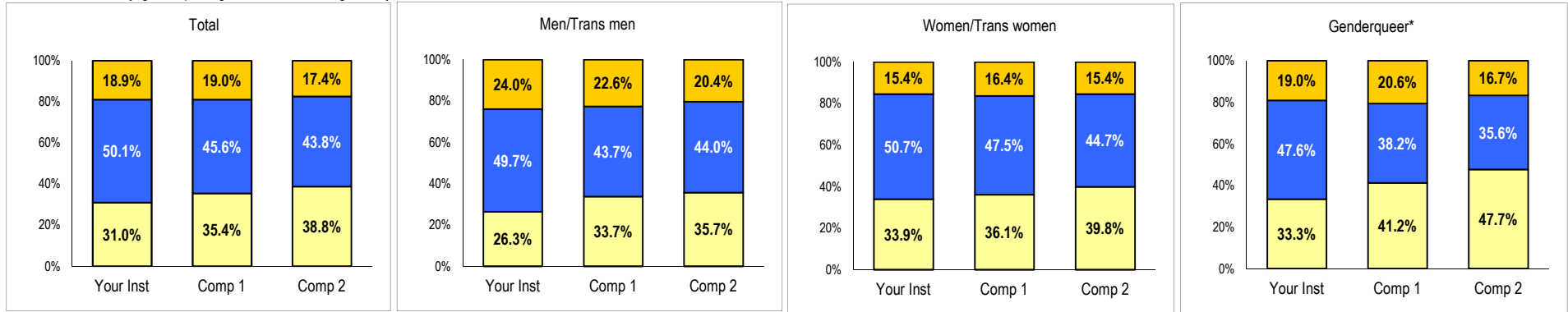
**2020 CIRP Freshman Survey  
First-time, Full-time Freshmen  
Habits of Mind  
CIRP Construct Percentage Report**

**Habits of Mind** - is a unified measure of the behaviors and traits associated with academic success. These learning behaviors are seen as the foundation for lifelong learning.

Hope College	Total			Men/Trans men			Women/Trans women			Genderqueer*		
	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2
Total (n)	497	1,912	4,002	171	698	1,463	298	1,088	2,235	21	102	239
High Habits of Mind	18.9%	19.0%	17.4%	24.0%	22.6%	20.4%	15.4%	16.4%	15.4%	19.0%	20.6%	16.7%
Average Habits of Mind	50.1%	45.6%	43.8%	49.7%	43.7%	44.0%	50.7%	47.5%	44.7%	47.6%	38.2%	35.6%
Low Habits of Mind	31.0%	35.4%	38.8%	26.3%	33.7%	35.7%	33.9%	36.1%	39.8%	33.3%	41.2%	47.7%
Significance (based on High score group)	-	-	-	-	-	-	-	-	-	-	-	-

Note: Significance \* p<.05, \*\* p<.01, \*\*\* p<.001

\* Includes non-binary, genderqueer, gender non-conforming, identity not listed



**Survey items and estimation "weights":**

**How often in the past year did you:**

- \* Seek solutions to problems and explain them to others (2.17)
- \* Support your opinions with a logical argument (1.81)
- \* Look up scientific research articles and resources (1.71)
- \* Take a risk because you felt you had more to gain (1.68)
- \* Accept mistakes as part of the learning process (1.24)
- \* Take on a challenge that scares you (1.20)

- \* Ask questions in class (1.26)
- \* Explore topics on your own, even though it was not required for a class (1.09)
- \* Evaluate the quality or reliability of information you received (1.13)
- \* Seek alternative solutions to a problem (1.14)
- \* Analyze multiple sources of information before coming to a conclusion (0.98)

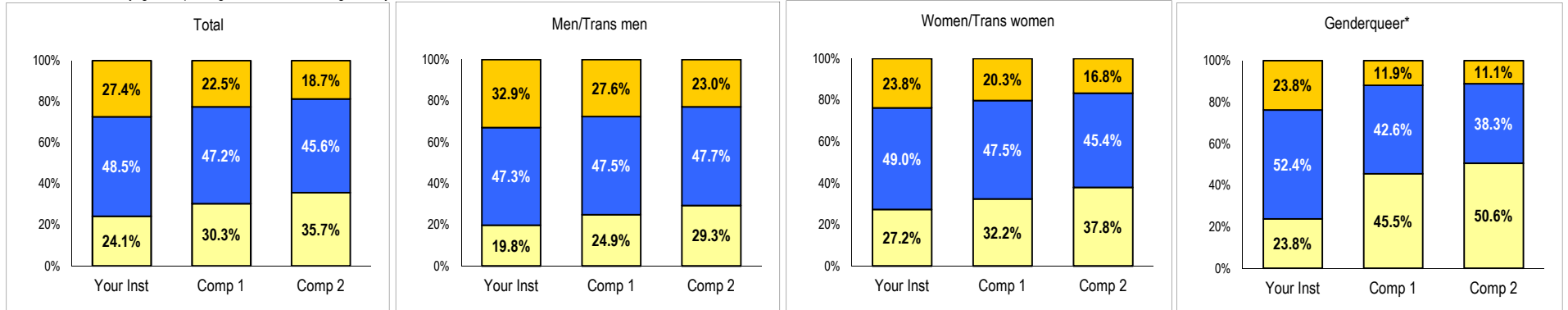
**2020 CIRP Freshman Survey**  
**First-time, Full-time Freshmen**  
**Academic Self-Concept**  
**CIRP Construct Percentage Report**

**Academic Self-Concept** - is a unified measure of students' beliefs about their abilities and confidence in academic environments.

Hope College	Total			Men/Trans men			Women/Trans women			Genderqueer*		
	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2
Total (n)	489	1,884	3,946	167	684	1,442	294	1,076	2,205	21	101	235
High Academic Self-Concept	27.4%	22.5%	18.7%	32.9%	27.6%	23.0%	23.8%	20.3%	16.8%	23.8%	11.9%	11.1%
Average Academic Self-Concept	48.5%	47.2%	45.6%	47.3%	47.5%	47.7%	49.0%	47.5%	45.4%	52.4%	42.6%	38.3%
Low Academic Self-Concept	24.1%	30.3%	35.7%	19.8%	24.9%	29.3%	27.2%	32.2%	37.8%	23.8%	45.5%	50.6%
Significance (based on High score group)	-	-	*	-	-	-	-	-	-	-	-	-

Note: Significance \* p<.05, \*\* p<.01, \*\*\* p<.001

\* Includes non-binary, genderqueer, gender non-conforming, identity not listed



**Survey items and estimation "weights":**

Rate yourself on each of the following traits as compared with the average person your age:

\* Academic ability (3.08)

\* Mathematical ability (1.37)

\* Self-confidence (intellectual) (1.24)

\* Drive to achieve (0.91)



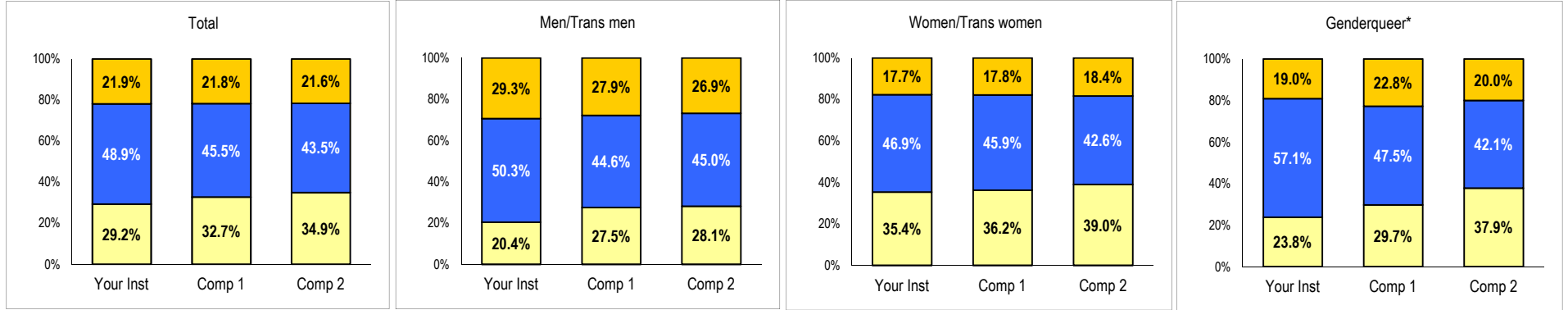
**2020 CIRP Freshman Survey**  
**First-time, Full-time Freshmen**  
**Social Self-Concept**  
**CIRP Construct Percentage Report**

**Social Self-Concept** - is a unified measure of students' beliefs about their abilities and confidence in social situations.

Hope College	Total			Men/Trans men			Women/Trans women			Genderqueer*		
	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2
Total (n)	489	1,884	3,943	167	684	1,440	294	1,076	2,204	21	101	235
High Social Self-Concept	21.9%	21.8%	21.6%	29.3%	27.9%	26.9%	17.7%	17.8%	18.4%	19.0%	22.8%	20.0%
Average Social Self-Concept	48.9%	45.5%	43.5%	50.3%	44.6%	45.0%	46.9%	45.9%	42.6%	57.1%	47.5%	42.1%
Low Social Self-Concept	29.2%	32.7%	34.9%	20.4%	27.5%	28.1%	35.4%	36.2%	39.0%	23.8%	29.7%	37.9%
Significance (based on High score group)	-	-	-	-	-	-	-	-	-	-	-	-

Note: Significance \* p<.05, \*\* p<.01, \*\*\* p<.001

\* Includes non-binary, genderqueer, gender non-conforming, identity not listed



**Survey items and estimation "weights":**

Rate yourself on each of the following traits as compared with the average person your age:

\* Self-confidence (social) (1.55)

\* Leadership ability (2.43)

\* Public speaking ability (1.90)

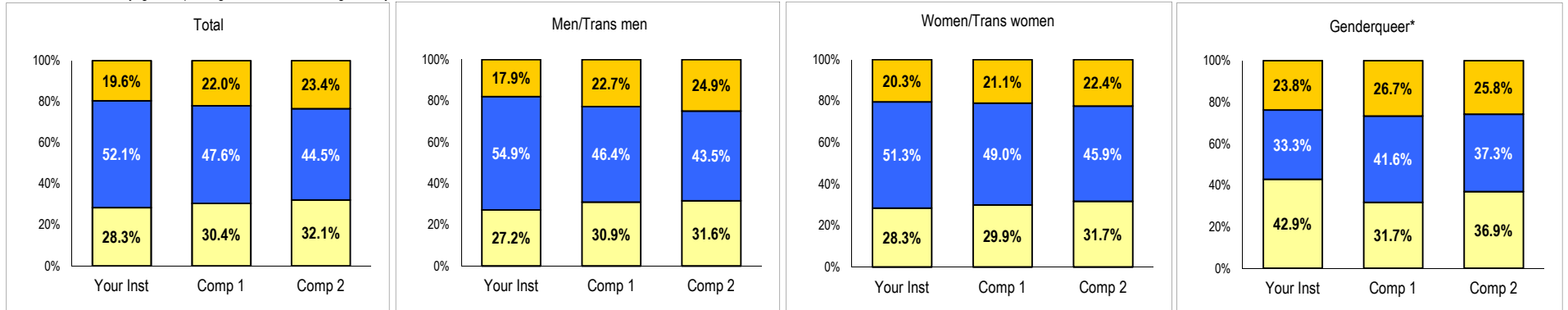
**2020 CIRP Freshman Survey  
First-time, Full-time Freshmen  
Pluralistic Orientation  
CIRP Construct Percentage Report**

**Pluralistic Orientation** - measures skills and dispositions appropriate for living and working in a diverse society.

Hope College	Total			Men/Trans men			Women/Trans women			Genderqueer*		
	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2
Total (n)	501	1,915	4,003	173	699	1,462	300	1,091	2,242	21	101	236
High Pluralistic Orientation	19.6%	22.0%	23.4%	17.9%	22.7%	24.9%	20.3%	21.1%	22.4%	23.8%	26.7%	25.8%
Average Pluralistic Orientation	52.1%	47.6%	44.5%	54.9%	46.4%	43.5%	51.3%	49.0%	45.9%	33.3%	41.6%	37.3%
Low Pluralistic Orientation	28.3%	30.4%	32.1%	27.2%	30.9%	31.6%	28.3%	29.9%	31.7%	42.9%	31.7%	36.9%
Significance (based on High score group)	-	-	-	-	-	-	-	-	-	-	-	-

Note: Significance \* p<.05, \*\* p<.01, \*\*\* p<.001

\* Includes non-binary, genderqueer, gender non-conforming, identity not listed



**Survey items and estimation "weights":**

Rate yourself on each of the following traits as compared with the average person your age:

- \* Ability to see the world from someone else's perspective (1.40)
- \* Tolerance of others with different beliefs (1.64)
- \* Openness to having my own views challenged (1.57)
- \* Ability to discuss and negotiate controversial issues (1.53)
- \* Ability to work cooperatively with diverse people (1.68)

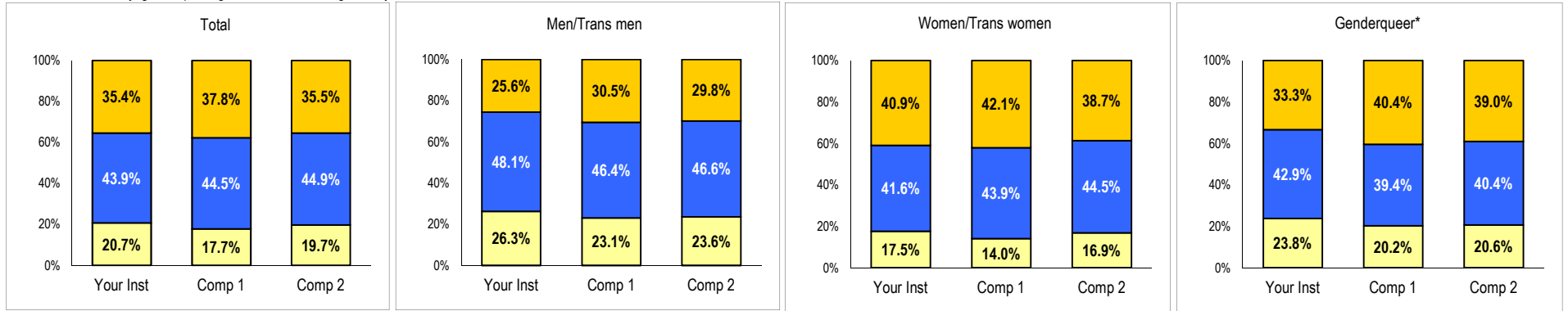
**2020 CIRP Freshman Survey**  
**First-time, Full-time Freshmen**  
**Social Agency**  
**CIRP Construct Percentage Report**

**Social Agency** - measures the extent to which students value political and social involvement as a personal goal.

Hope College	Total			Men/Trans men			Women/Trans women			Genderqueer*		
	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2
Total (n)	478	1,843	3,852	160	668	1,404	291	1,055	2,160	21	99	228
High Social Agency	35.4%	37.8%	35.5%	25.6%	30.5%	29.8%	40.9%	42.1%	38.7%	33.3%	40.4%	39.0%
Average Social Agency	43.9%	44.5%	44.9%	48.1%	46.4%	46.6%	41.6%	43.9%	44.5%	42.9%	39.4%	40.4%
Low Social Agency	20.7%	17.7%	19.7%	26.3%	23.1%	23.6%	17.5%	14.0%	16.9%	23.8%	20.2%	20.6%
Significance (based on High score group)	-			-			-			-		

Note: Significance \* p<.05, \*\* p<.01, \*\*\* p<.001

\* Includes non-binary, genderqueer, gender non-conforming, identity not listed



**Survey items and estimation "weights":**

Indicate the importance to you personally of each of the following:

\* Keeping up to date with political affairs (1.48)

\* Participating in a community action program (2.41)

\* Influencing social values (1.64)

\* Becoming a community leader (2.09)

\* Helping others who are in difficulty (1.17)

\* Helping to promote racial understanding (2.15)

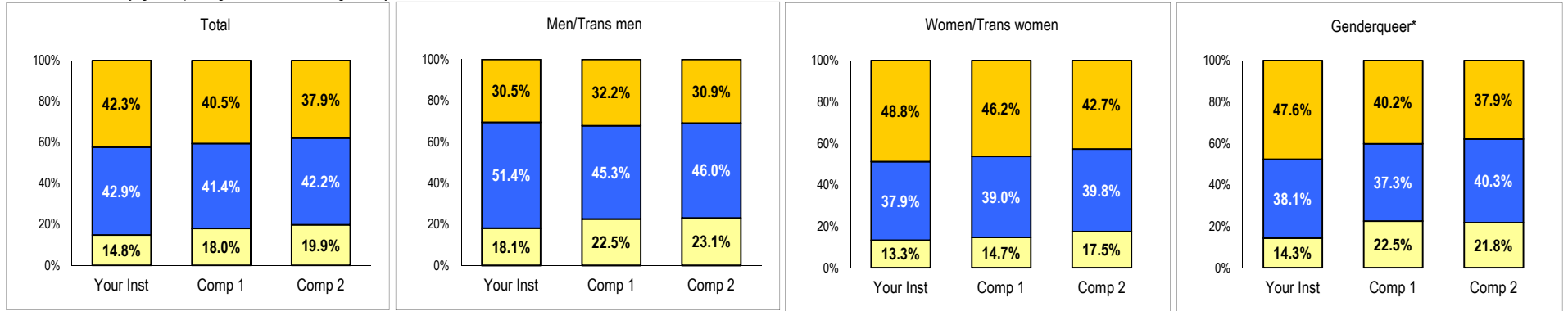
**2020 CIRP Freshman Survey**  
**First-time, Full-time Freshmen**  
**Civic Engagement**  
**CIRP Construct Percentage Report**

**Civic Engagement** - measures the extent to which students are motivated and involved in civic, electoral, and political activities.

Hope College	Total			Men/Trans men			Women/Trans women			Genderqueer*		
	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2
Total (n)	506	1,931	4,052	177	706	1,477	301	1,099	2,265	21	102	243
High Civic Engagement	42.3%	40.5%	37.9%	30.5%	32.2%	30.9%	48.8%	46.2%	42.7%	47.6%	40.2%	37.9%
Average Civic Engagement	42.9%	41.4%	42.2%	51.4%	45.3%	46.0%	37.9%	39.0%	39.8%	38.1%	37.3%	40.3%
Low Civic Engagement	14.8%	18.0%	19.9%	18.1%	22.5%	23.1%	13.3%	14.7%	17.5%	14.3%	22.5%	21.8%
Significance (based on High score group)	-			-			-			-		

Note: Significance \* p<.05, \*\* p<.01, \*\*\* p<.001

\* Includes non-binary, genderqueer, gender non-conforming, identity not listed



**Survey items and estimation "weights":**

**Indicate activities you did in the past year:**

\* Demonstrated for a cause (e.g., boycott, rally, protest) (1.46)

\* Performed volunteer work (0.80)

\* Helped raise money for a cause or campaign (1.42)

\* Publicly communicated my opinion about a cause (e.g., blog, email, petition) (1.11)

**Indicate the importance to you personally of each of the following:**

\* Influencing social values (0.97)

\* Keeping up to date with political affairs (0.86)

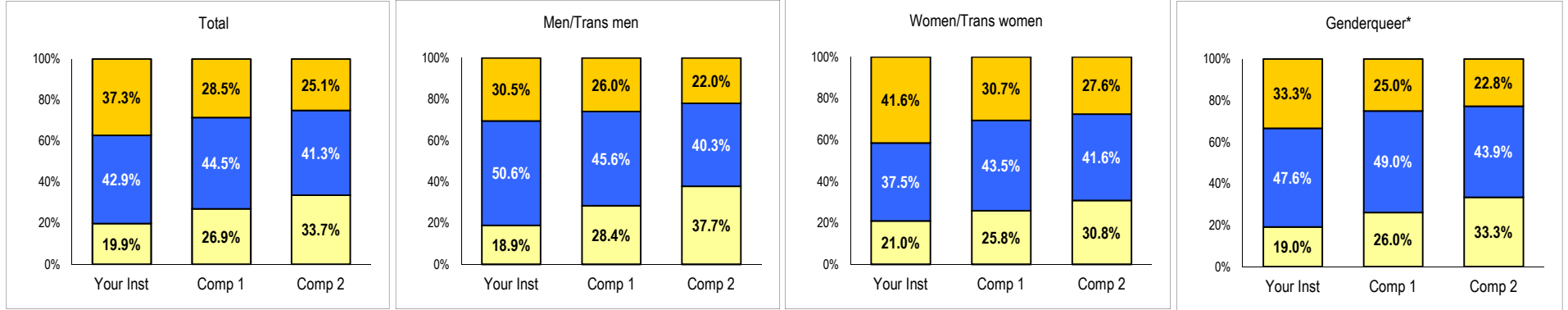
**2020 CIRP Freshman Survey  
First-time, Full-time Freshmen  
College Reputation Orientation  
CIRP Construct Percentage Report**

**College Reputation Orientation** - measures the degree to which students value academic reputation and future career potential as a reason for choosing this college.

Hope College	Total			Men/Trans men			Women/Trans women			Genderqueer*		
	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2
Total (n)	483	1,860	3,887	164	677	1,423	291	1,060	2,176	21	100	228
High College Reputation Orientation	37.3%	28.5%	25.1%	30.5%	26.0%	22.0%	41.6%	30.7%	27.6%	33.3%	25.0%	22.8%
Average College Reputation Orientation	42.9%	44.5%	41.3%	50.6%	45.6%	40.3%	37.5%	43.5%	41.6%	47.6%	49.0%	43.9%
Low College Reputation Orientation	19.9%	26.9%	33.7%	18.9%	28.4%	37.7%	21.0%	25.8%	30.8%	19.0%	26.0%	33.3%
Significance (based on High score group)	-	*	***	-			-	*	**	-		

Note: Significance \* p<.05, \*\* p<.01, \*\*\* p<.001

\* Includes non-binary, genderqueer, gender non-conforming, identity not listed



**Survey items and estimation "weights":**

**How important was each reason in your decision to come here?**

\* This college's graduates get good jobs (4.90)

\* This college's graduates gain admission to top graduate/professional schools (2.10)

\* This college has a very good academic reputation (1.48)

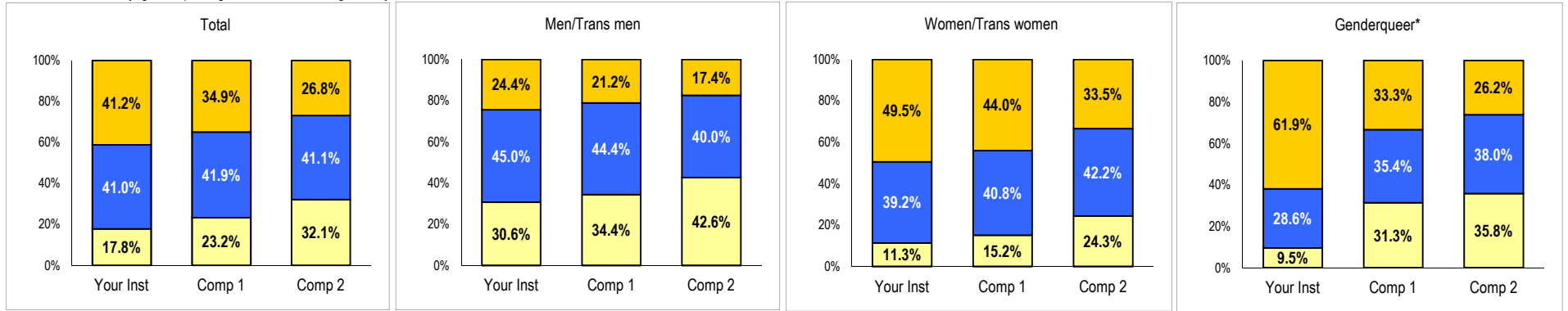
**2020 CIRP Freshman Survey**  
**First-time, Full-time Freshmen**  
**Likelihood of College Involvement**  
**CIRP Construct Percentage Report**

**Likelihood of College Involvement** - is a unified measure of students' expectations about their involvement in college life generally.

Hope College	Total			Men/Trans men			Women/Trans women			Genderqueer*		
	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2
Total (n)	478	1,842	3,853	160	666	1,403	291	1,056	2,161	21	99	229
High Likelihood of College Involvement	41.2%	34.9%	26.8%	24.4%	21.2%	17.4%	49.5%	44.0%	33.5%	61.9%	33.3%	26.2%
Average Likelihood of College Involvement	41.0%	41.9%	41.1%	45.0%	44.4%	40.0%	39.2%	40.8%	42.2%	28.6%	35.4%	38.0%
Low Likelihood of College Involvement	17.8%	23.2%	32.1%	30.6%	34.4%	42.6%	11.3%	15.2%	24.3%	9.5%	31.3%	35.8%
Significance (based on High score group)	-		***	-			-		***	-		*

Note: Significance \* p<.05, \*\* p<.01, \*\*\* p<.001

\* Includes non-binary, genderqueer, gender non-conforming, identity not listed



**Survey items and estimation "weights":**

**What is your best guess as to the chances that you will:**

\* Participate in a study abroad program (1.28)

\* Participate in volunteer or community service work (1.51)

\* Participate in student government (0.79)

\* Participate in student clubs/groups (3.39)

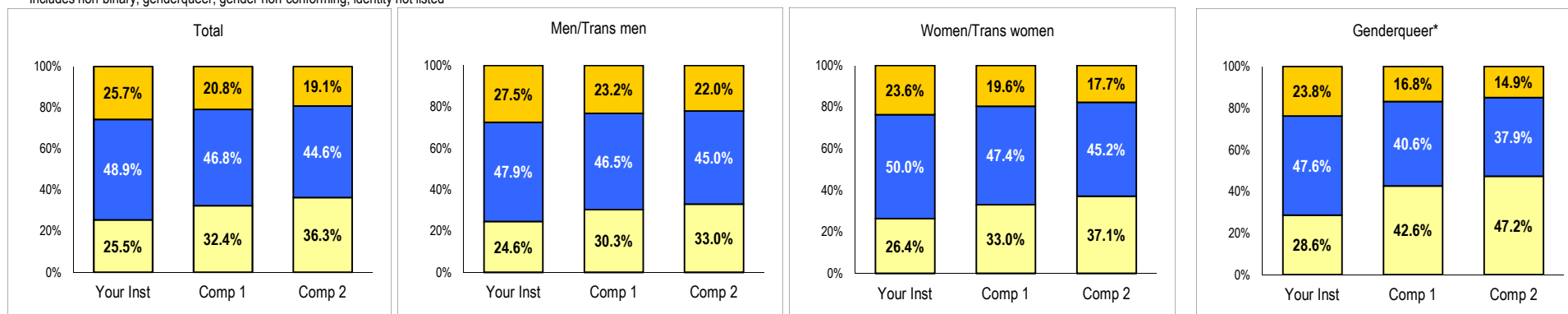
**2020 CIRP Freshman Survey  
First-time, Full-time Freshmen  
Science Self-Efficacy  
CIRP Construct Percentage Report**

**Science Self-Efficacy** - is a measure of students' confidence in their ability to conduct scientific research

Hope College	Total			Men/Trans men			Women/Trans women			Genderqueer*		
	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2
Total (n)	491	1,894	3,962	167	690	1,449	296	1,079	2,214	21	101	235
High Science Self-Efficacy	25.7%	20.8%	19.1%	27.5%	23.2%	22.0%	23.6%	19.6%	17.7%	23.8%	16.8%	14.9%
Average Science Self-Efficacy	48.9%	46.8%	44.6%	47.9%	46.5%	45.0%	50.0%	47.4%	45.2%	47.6%	40.6%	37.9%
Low Science Self-Efficacy	25.5%	32.4%	36.3%	24.6%	30.3%	33.0%	26.4%	33.0%	37.1%	28.6%	42.6%	47.2%
Significance (based on High score group)	-	-	-	-	-	-	-	-	-	-	-	-

Note: Significance \* p<.05, \*\* p<.01, \*\*\* p<.001

\* Includes non-binary, genderqueer, gender non-conforming, identity not listed



**Survey items and estimation "weights":**

**How confident are you that you can:**

\* Use technical science skills (use of tools, instruments, and/or techniques) (1.49)

\* Generate an answerable research question (2.33)

\* Determine how to collect appropriate data (2.82)

\* Explain the results of a study (2.87)

\* Use scientific literature to guide research (2.70)

\* Integrate results from multiple studies (2.79)

\* Ask relevant questions (1.73)

\* Identify what is known and not known about a problem (1.95)

\* Understand scientific concepts (2.40)

\* See connections between different areas of science and mathematics (1.90)

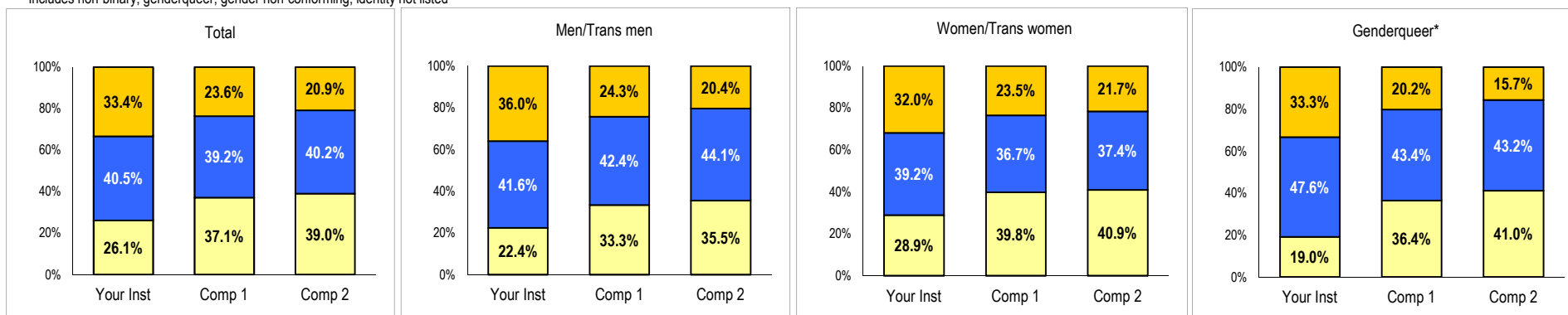
**2020 CIRP Freshman Survey**  
**First-time, Full-time Freshmen**  
**Science Identity**  
**CIRP Construct Percentage Report**

**Science Identity** - measures the extent to which students conceive of themselves as scientists.

Hope College	Total			Men/Trans men			Women/Trans women			Genderqueer*		
	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2	Your Inst	Comp 1	Comp 2
Total (n)	479	1,844	3,856	161	670	1,407	291	1,054	2,160	21	99	229
High Science Identity	33.4%	23.6%	20.9%	36.0%	24.3%	20.4%	32.0%	23.5%	21.7%	33.3%	20.2%	15.7%
Average Science Identity	40.5%	39.2%	40.2%	41.6%	42.4%	44.1%	39.2%	36.7%	37.4%	47.6%	43.4%	43.2%
Low Science Identity	26.1%	37.1%	39.0%	22.4%	33.3%	35.5%	28.9%	39.8%	40.9%	19.0%	36.4%	41.0%
Significance (based on High score group)	-	*	***	-		*	-		*	-		

Note: Significance \* p<.05, \*\* p<.01, \*\*\* p<.001

\* Includes non-binary, genderqueer, gender non-conforming, identity not listed



**Survey items and estimation "weights":**

To what extent are the following statements true of you:

\* I have a strong sense of belonging to a community of scientists (3.52)

\* I derive great personal satisfaction from working on a team that is doing important research (1.78)

\* I think of myself as a scientist (5.54)

\* I feel like I belong in the field of science (4.43)