Survey of Assessment Culture – Administrators Scales

04/15/2020

This document provides a summary of the results of the Administrators Survey of Assessment Culture, focusing on the five separate scales derived from its items. In Fall 2019, survey administrators at Sam Houston State University invited 45 administrators from Southeast Community College to participate in the survey; 29 of them participated for a response rate of 64%. The scales were created and validated by Dr. Matthew Fuller and colleagues as described in Fuller, Skidmore, et al (2016)[1]. Each scale consists of multiple individual survey items.

The scales in the Administrators Survey of Assessment Culture survey were validated by Fuller et al (2016) using factor analysis. Factor analysis is a statistical technique for identifying underlying (unobserved / latent) characteristics that are difficult to measure (in this case 'assessment culture'). These analyses are achieved by grouping responses to multiple survey items that are correlated with each other. Fuller and colleagues identified five factors in the Administrators Survey of Assessment Culture. Those five factors, which are described later in the document, are:

- Compliance or Fear Motivators
- Faculty Perceptions
- Normative Purpose of Assessment
- Sharing of Data
- Use of Data

Respondents indicated how much they agree or disagree with each statement on a scale from 1 to 6 as shown in Table 1. Some items are stated in such a way that agreeing with the statement reflects a positive sentiment (e.g., I like chocolate), whereas agreeing with others indicates a negative sentiment (e.g., I dislike vanilla). The latter type of items were reverse coded in calculating the scale scores so high scores always correspond with positive sentiments (e.g., I do not dislike vanilla).

Table 1. Response set for survey

Value	*Text*
1	Strongly disagree
2	Disagree
3	Only slightly disagree
4	Only slightly agree
5	Agree
6	Strongly agree

Calculating the scale scores involved the following steps:

1. *Identify items* associated with each scale. The items included in each scale are detailed on the following pages.
2. *Reverse code* responses for specific items, as noted earlier. These items are denoted with an 'R' at the end of the variable name.
3. *Calculate the average* of the resulting scores for the items in the scale.
4. The resulting scale scores will range from 1.00 to 6.00 with higher scores representing a more positive sentiment for that factor.

[1] Fuller, Matthew B., Skidmore, Susan T., Bustamante, Rebecca M., Peggy C. Holzweiss. Empirically Exploring Higher Education Cultures of Assessment. The Review of Higher Education. Volume 39. Number 3. Spring 2016. pp. 395-429.

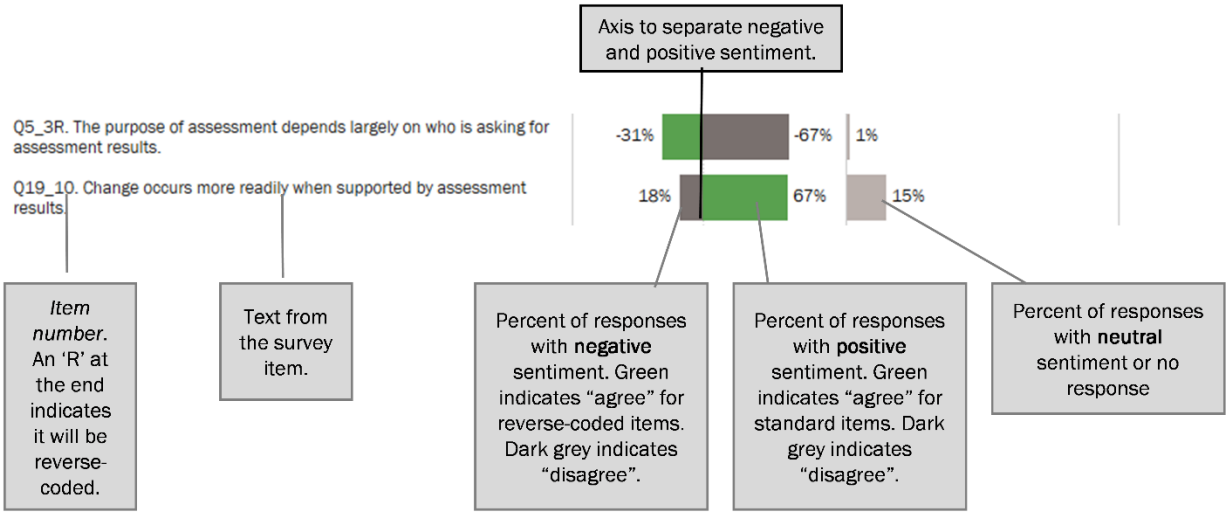
Single scale results

This section of the report provides results for each scale. For each scale, the following content is provided:

- Brief description of the scale provided by Fuller et al (2016).
- The distribution of scale scores with average (mean) score and standard deviation.
- The list of items included in the scale along with item-specific results.
- Notes about the results.

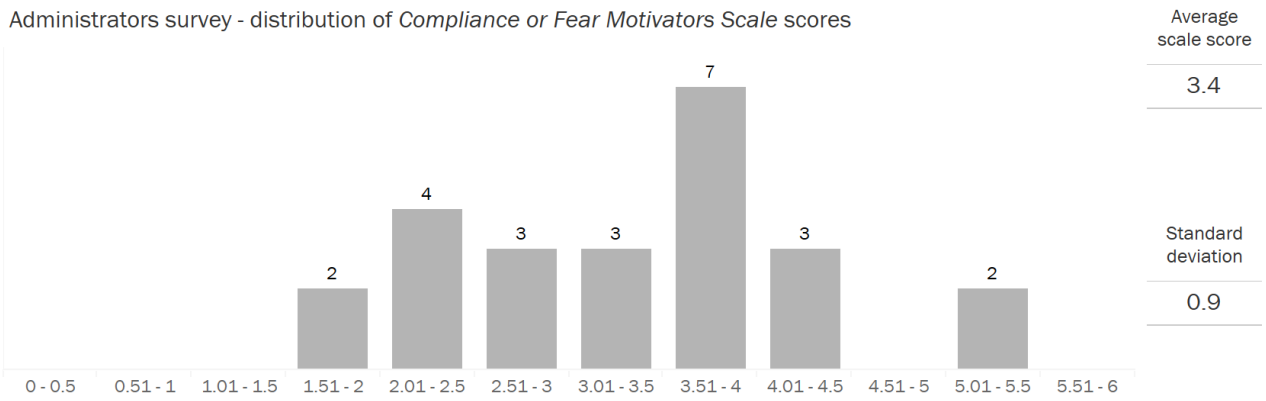
Because the item-specific results are complicated, the following provides an overview of what these charts include and how to understand them.

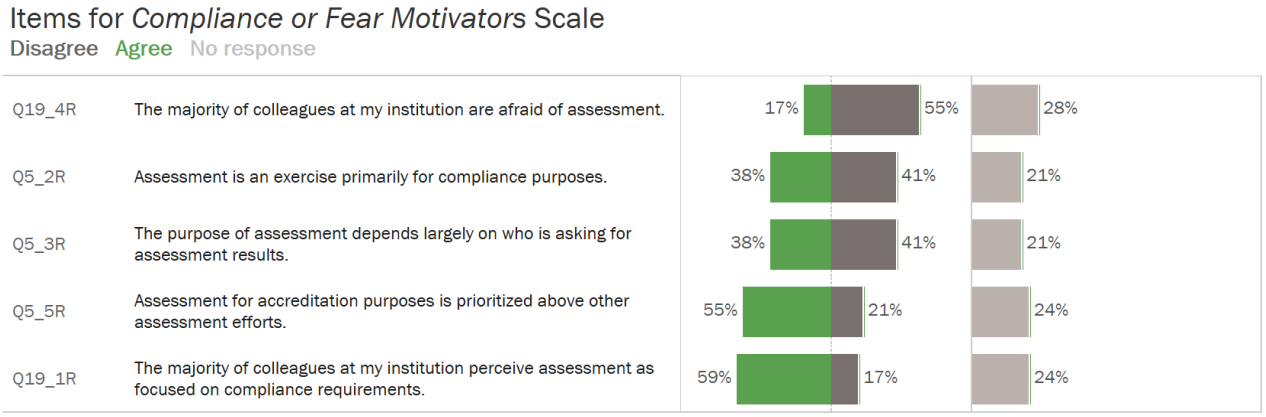
- These charts provide the items included in the scale presented in descending order of percent of positive sentiment.
- Three values are provided for each item: green bars indicate the percent who agreed with the statement; dark grey indicates the percent who disagreed; and light grey are those who either did not respond or neither agreed nor disagreed.
- The axis in the first column of results splits the positive sentiments (right of axis) from the negative sentiments (left of axis).
- Since some items are reverse-coded, agreeing is not necessarily a positive sentiment. The image below provides two examples.
    - For **Q5_3R**, 67% of respondents *disagreed* (indicated by dark grey) that "the purpose of assessment depends largely on who is asking for assessment results" and 31% *agreed* with the statement (indicated by green). Because this item is reverse-coded, disagreement is a positive sentiment so disagreement (dark grey) is displayed to the right of the axis and agreement (green) to the left.
    - For **Q19_10**, 67% of respondents *agreed* (green) that "change occurs more readily when supported by assessment results" and 18% *disagreed* (dark grey). Because the item is <u>not</u> reverse-coded, agreement is displayed to the right of the axis and disagreement is displayed to the left.



Compliance or Fear Motivators Scale

Compliance or Fear Motivators scale focuses on participants' level of agreement with items pertaining to motivations to participate in assessment activities.



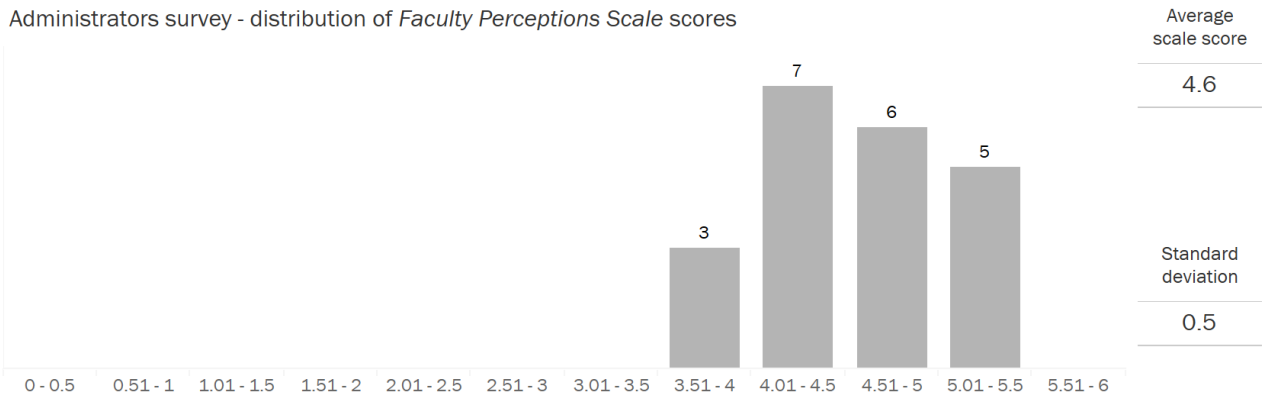


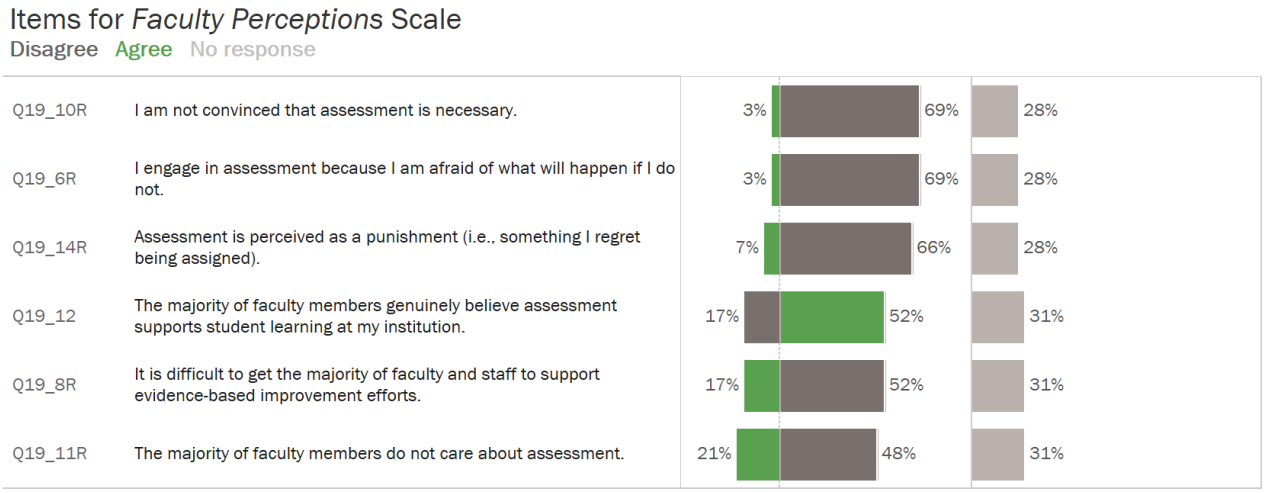
Some notes about these data:

- The *Compliance or Fear Motivators Scale* had the lowest mean score of all five scales, which indicates that education about the purpose of assessment at SCC would be valuable.
- As a whole, the scale focuses on compliance and fear motivators, but these results suggest that respondents believe SCC's assessment efforts are more motivated by compliance than by fear. The items with the highest levels of agreement (Q5_5R, Q19_1R) specifically ask about compliance, while the item with the lowest level of agreement (Q19_4R) focuses on fear.
- At least 20% of respondents did not provide a response to any item. This pattern is consistent with all items in the survey, which could reflect either that they do not have enough information to respond or that they were not engaged in the survey process.

Faculty Perceptions Scale

Faculty Perceptions scale was composed of six items measuring faculty perceptions of how administrators felt about assessment.



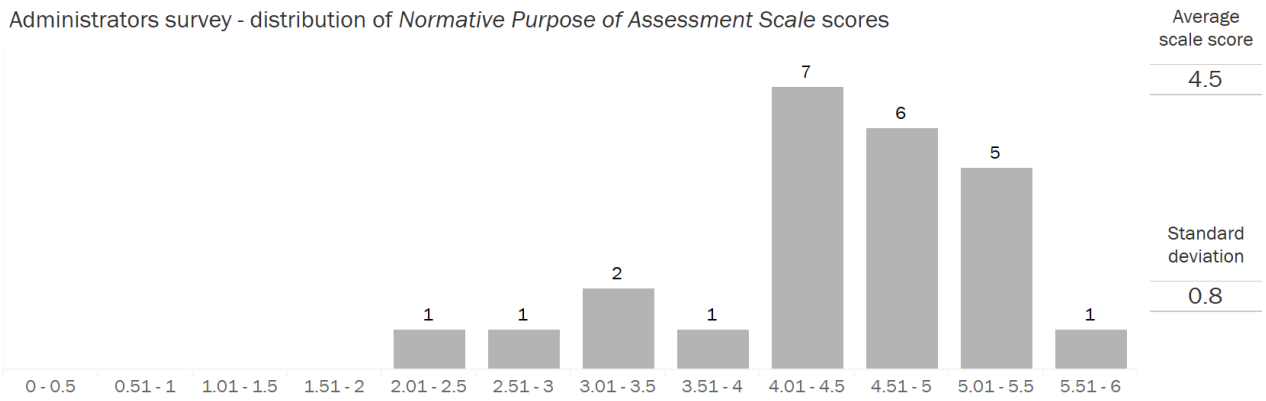


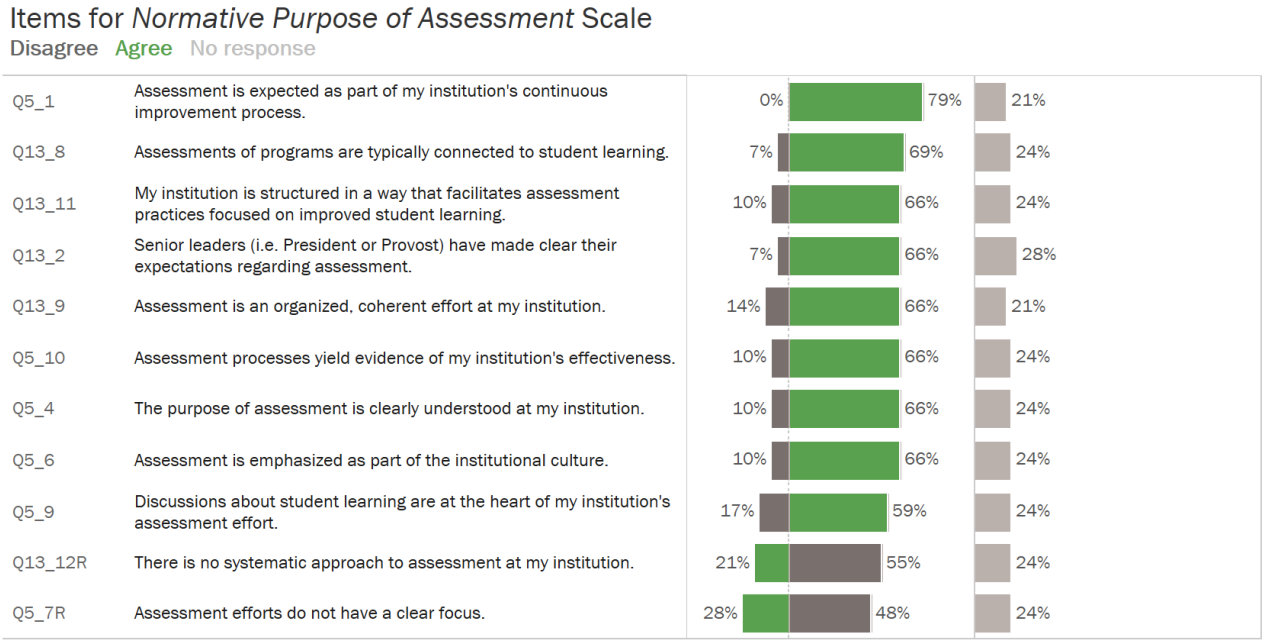
Some notes about these data:

- *Faculty Perceptions Scale* has the highest mean score and the lowest standard deviation, which indicates overall positive sentiment and that scale scores are densely centered near the mean.
- These results indicate that administrators participate in assessment to improve student learning, but also that administrators believe that faculty members care about assessment and participate to increase student learning.
- More than one-quarter of respondents did not provide a response to any item. This pattern is consistent with all items in the survey, which could reflect either that they do not have enough information to respond or that they were not engaged in the survey process.

Normative Purpose of Assessment Scale

Normative Purpose of Assessment explored the perceived organizational approach to assessment efforts within the institution.



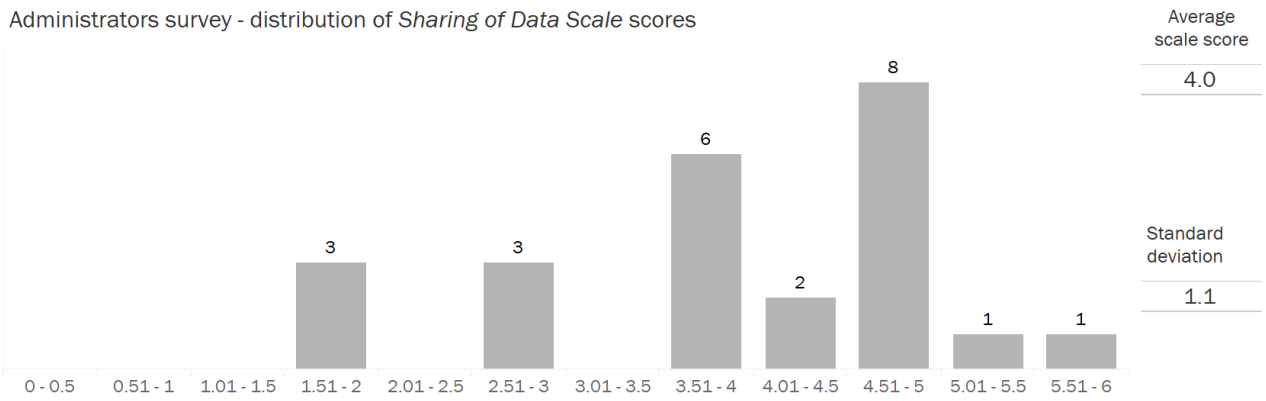


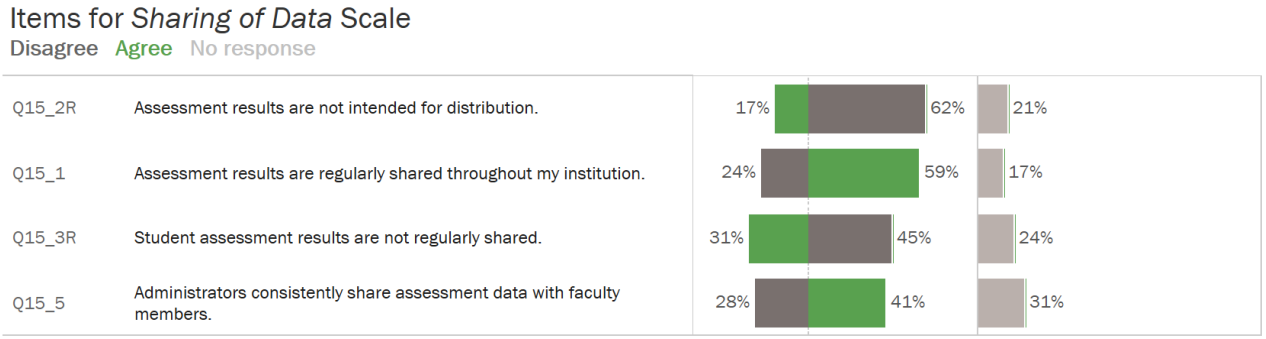
Some notes about these data:

- The *Normative Purpose of Assessment Scale* has the second highest mean score of all five scales indicating positive general sentiment
- The histogram shows moderate negative skew, in this case because positive scores are densely packed close to the mean, while negative scores are more widely distributed (wider left tail).
- Most of the individual items that make up the *Normative Purpose of Assessment Scale* have generally positive sentiment, most scoring at 60% positive or higher.
- The two items with the most negative sentiment indicate that many administrators believe assessment efforts do not have a clear focus and lack a systematic approach, which may be an area for intervention.
- At least 20% of respondents did not provide a response to any item. This pattern is consistent with all items in the survey, which could reflect either that they do not have enough information to respond or that they were not engaged in the survey process.

Sharing of Data Scale

Sharing of Data explored participants' perceptions regarding how data were shared with faculty and within the institution in general.



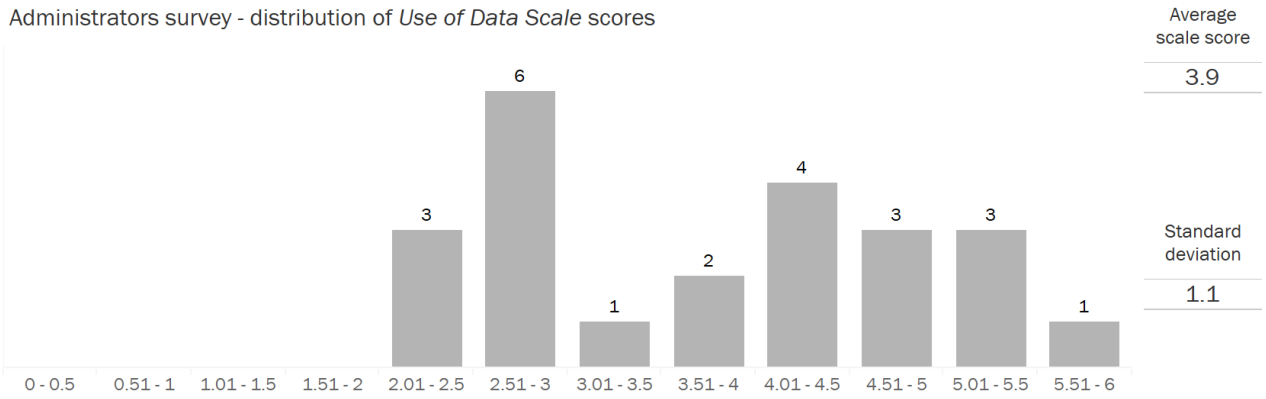


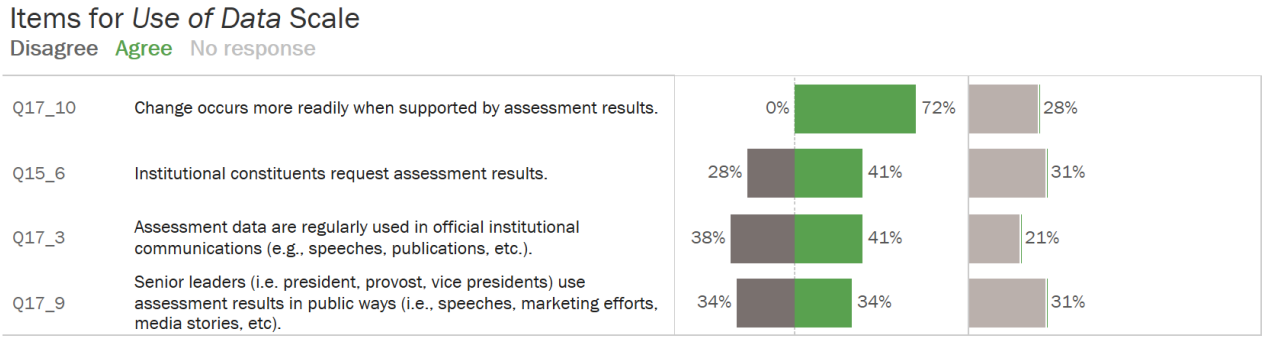
Some notes about these data:

- The *Sharing of Data Scale* has a mean score of 4.0 and the standard deviation has the largest standard deviation of the five scales. This pattern is evident in how spread out the histogram is and the wide range of outcomes.
- The majority of administrators indicated positive overall sentiment, however, one quarter of the scale scores are less than or equal to 3, suggesting some negative perceptions of how assessment data gets shared.
- At least 17% of respondents did not provide a response to any item. This pattern is consistent with all items in the survey, which could reflect either that they do not have enough information to respond or that they were not engaged in the survey process.

Use of Data Scale

Use of Data pertained to participants' perceptions of how data were used at their respective institutions





Some notes about these data:

- The *Use of Data* scale has the second lowest mean score and the second highest standard deviation. The histogram shows positive scores are widely distributed, however negative scores are densely distributed around the 2.5 – 3.0 range.
- The combination of a low mean scale score and a wide variety of outcomes suggests that this area has room to make substantial improvements.
- At least 20% of respondents did not provide a response to any item. This pattern is consistent with all items in the survey, which could reflect either that they do not have enough information to respond or that they were not engaged in the survey process.

Comparison of all scales

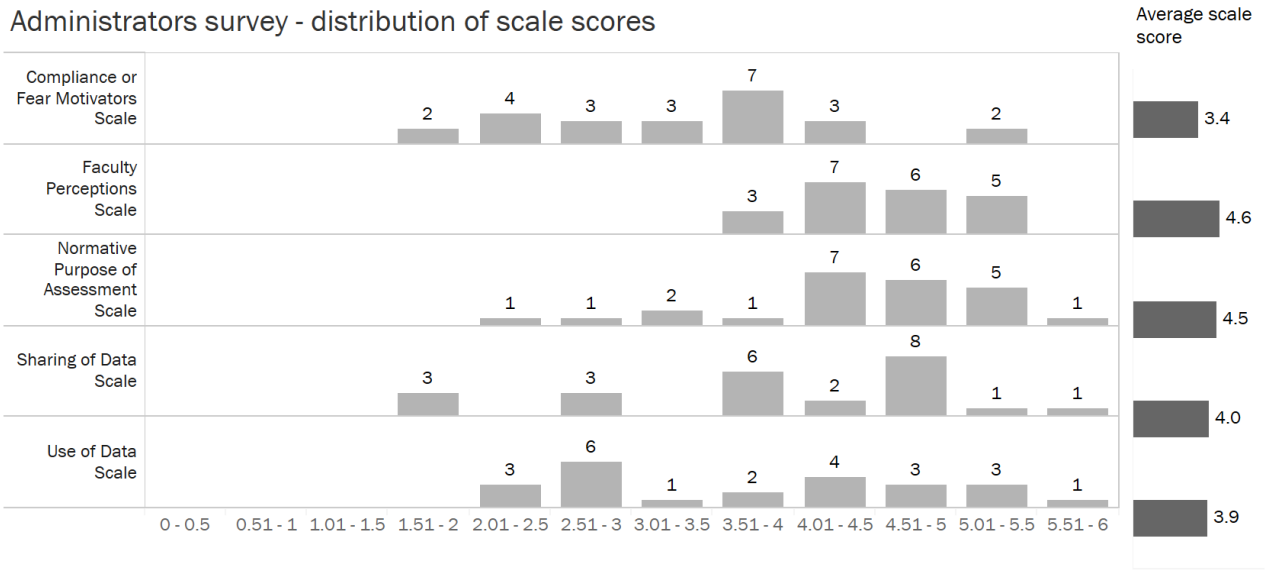
This section provides an overview of all five scales and how they compare. When evaluating these results, it is important to pay attention to both the average (i.e., mean) scale score as well as the shape and relative symmetry of the distribution of scale scores with the average as the midpoint. In short:

- *Compliance or Fear Motivators* has the lowest scale mean and likely has the greatest potential for improvement.
- *Faculty Perceptions* has the highest scale mean and the lowest standard deviation, which suggests there are very consistent results among administrators.
- *Normative Purpose of Assessment* has the second highest scale mean and the second lowest standard deviation. This indicates consistent, positive results.
- *Sharing of Data* has the largest standard distribution of the five scales, which indicates a wide range of responses.

Use of Data has the second lowest scale mean and has following chart shows the distribution of scale scores as a histogram (light grey) and the overall average scale score (dark grey). The histograms show the number of respondents within the stated range for the individual scale scores.

When evaluating these results, it is important to pay attention to both the average (i.e., mean) scale score as well as the shape and relative symmetry of the distribution of scale scores with the average as the midpoint. In short:

- *Compliance or Fear Motivators* has the lowest scale mean and likely has the greatest potential for improvement.
- *Faculty Perceptions* has the highest scale mean and the lowest standard deviation, which suggests there are very consistent results among administrators.
- *Normative Purpose of Assessment* has the second highest scale mean and the second lowest standard deviation. This indicates consistent, positive results.
- *Sharing of Data* has the largest standard distribution of the five scales, which indicates a wide range of responses.
- *Use of Data* has the second lowest scale mean and has the second highest standard deviation among the five scales.

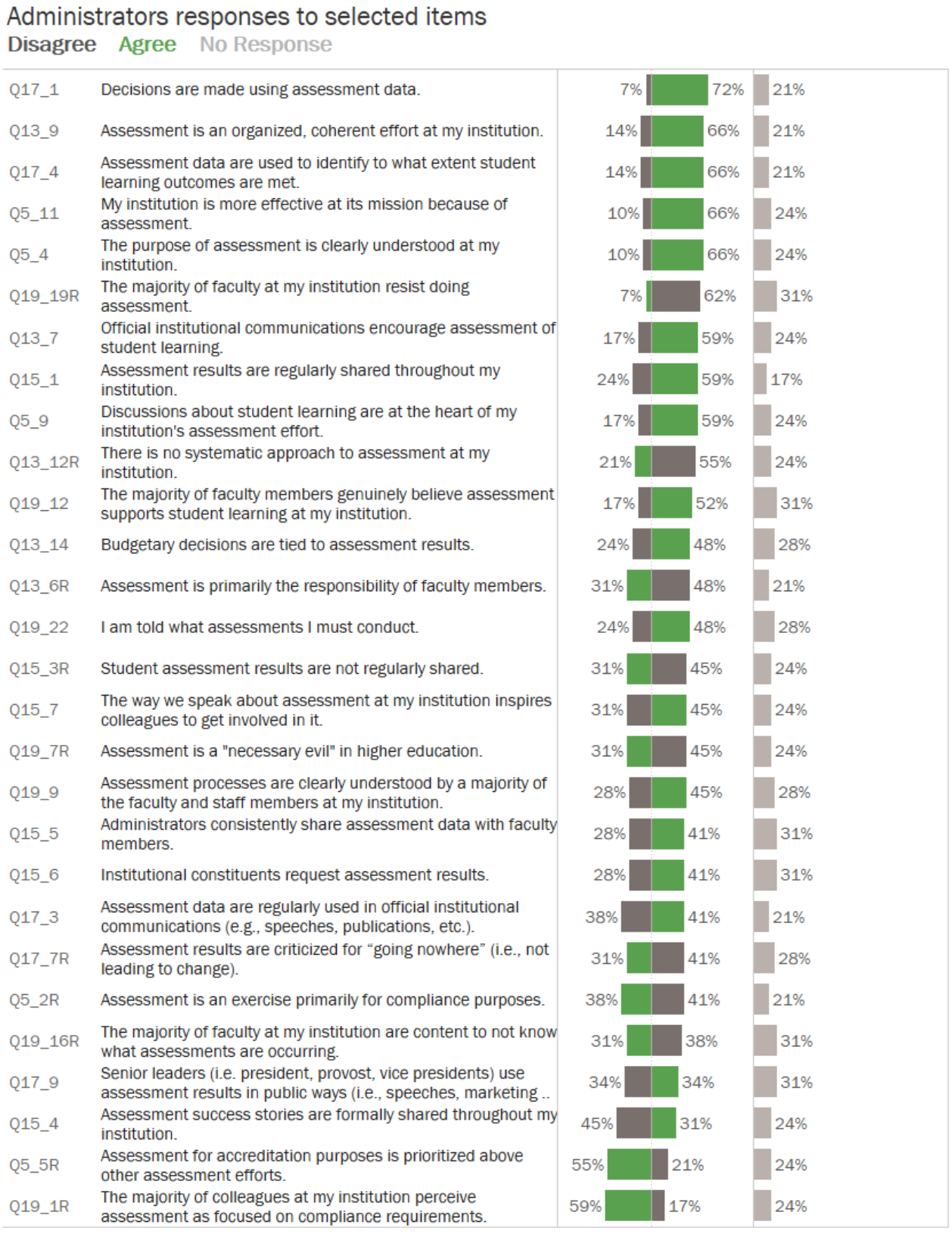


Some implications for these results include:

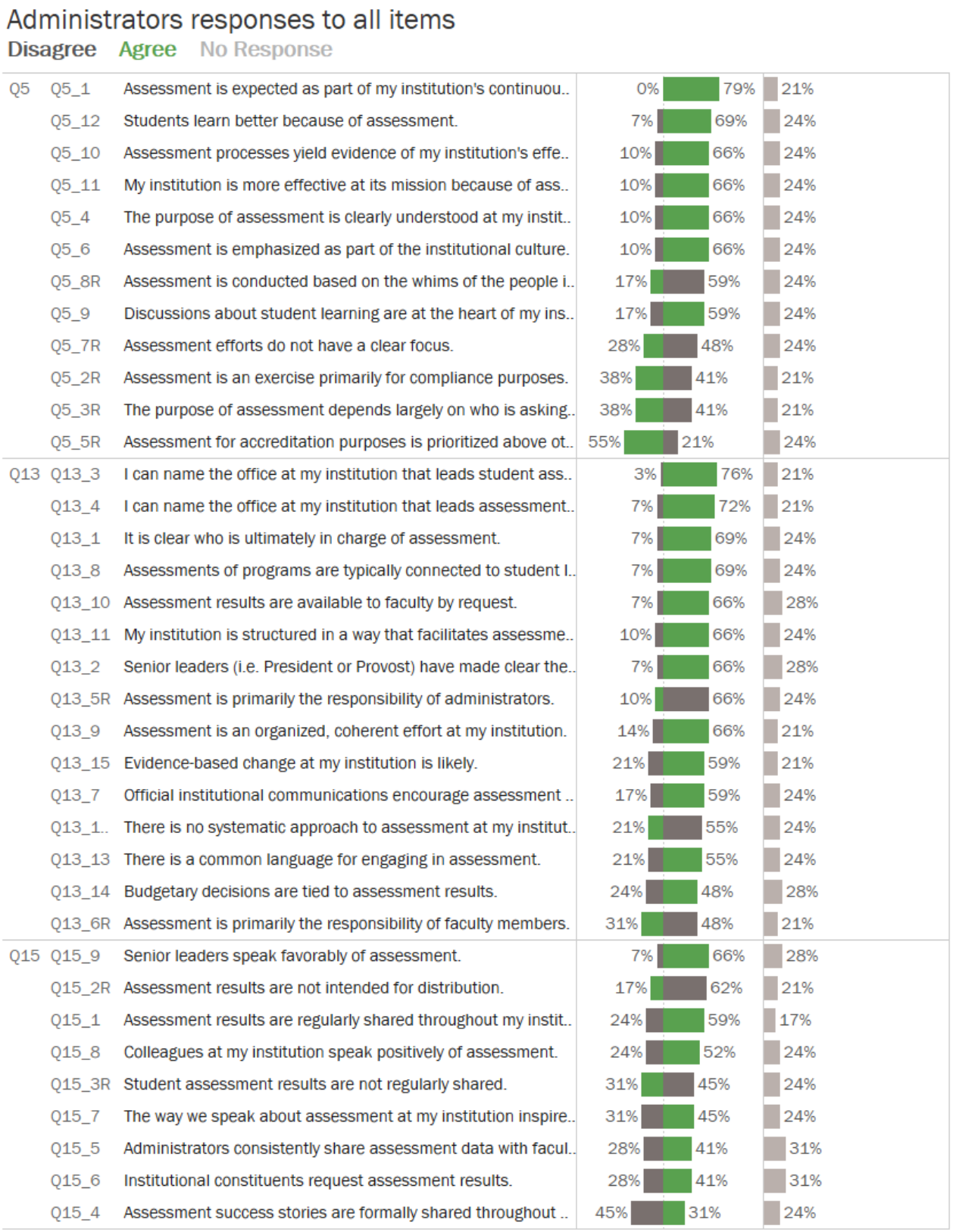
- The areas of relative strength, as indicated by their higher average scores, are *Faculty Perceptions* (mean=4.6) and *Normative Purpose of Assessment* (mean=4.5).
- The combination of a low average scale score and a distribution that skews even lower for *Compliance or Fear Motivators* suggest that this area would be ideal for intervention.
- For the remaining two scales *Sharing of Data* and *Use of Data*, the majority of administrators report generally positive sentiment, however there is also a sizable minority of administrators whose scale scores fall at or below 3.0 (25% for *Sharing of Data*; 39% for *Use of Data*).

Appendix

I. Selected Items

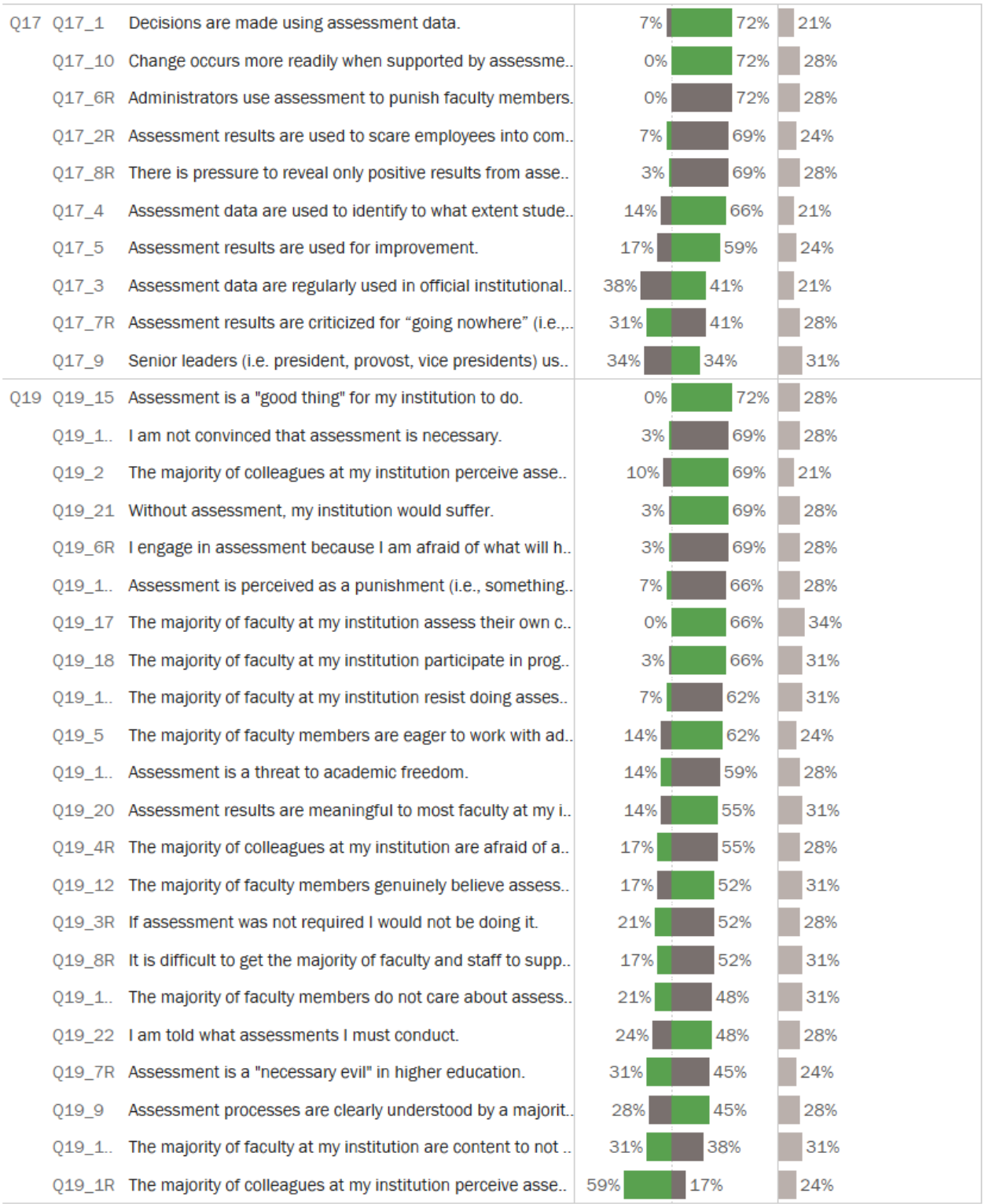


II. All survey items



Administrators responses to all items

Disagree **Agree** No Response



III. Additional Scale Descriptive Statistics

The table below displays descriptive statistics for each of the administrator scales. Standard deviation is a measure of how widely dispersed the scores are. A low standard deviation indicates that scores are densely distributed close to the mean. A large standard deviation indicates that scores are dispersed at a wider range. Because not every administrator completed the survey, the results here are based on a sample. We then use sample results to estimate the population mean. The confidence intervals are estimates of the range of the population mean.

	Average score	Scale standard deviation	Lower bound (95% confidence)	Upper bound (95% confidence)
Compliance or Fear Motivators Scale	3.4	0.9	3.0	3.8
Faculty Perceptions Scale	4.6	0.5	4.4	4.8
Normative Purpose of Assessment Scale	4.5	0.8	4.1	4.8
Sharing of Data Scale	4.0	1.1	3.6	4.5
Use of Data Scale	3.9	1.1	3.5	4.4

IV. Analysis of missing data

There were 29 administrators who began the survey. The number of missing values for survey items ranged from 5 – 10. Due to the small number of survey respondents, missing data can represent a substantial proportion of the outcome (10 missing values out of 29 respondents is 34.5%). Because this survey has a small number of respondents and relatively high proportion of missing values, it is important to use caution when making inferences about the population of administrators at SCC.