

*Community College Survey Data:
The Impact of Quantity and Quality on Informed Decision-Making*

Executive Summary

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(QQPC Survey Model© Scott, Watson-Stone, & Johnson, 2012)



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Overview

While there have been many studies on survey response rates and factors that impact these rates, little research has been conducted into the interdependency between response rates and the quality within those returns. This study investigated that relationship by using two survey instruments to assess both the quality and quantity aspect of survey methods. The questionnaires were presented to two groups: Group 1, Administrators, Faculty Members, and Staff; Group 2, IR Offices or Officers. The objective of the study was to examine the perceptions and practices of these two groups, specifically targeting their respective impact on data-driven informed decision-making as an outcome of quality and quantity survey responses. The interdependency of quality and quantity survey data has both a direct and indirect influence on decision-making in conjunction with other sources of feedback and information.

The argument of this research is that return rates should represent the constituency as broadly as possible and that this representation is the result of a motivated employee base; correspondingly, while improved return rates are vitally important, the quality of those responses is equally—if not more so—important than a healthy rate of return. As noted by one IR office in the study, “I am willing to take less data to get better quality data; the problem is that some of our more troubled student populations are generally the first to quit participating.”

Consequently, what is the inflection point at which the quantity and quality of survey responses correlate into interdependency so that data-driven informed decision-making is maximized? Noting various types of information gathering processes, surveys are used to collect various types of data and input to improve institutional decisions that will benefit the employees,

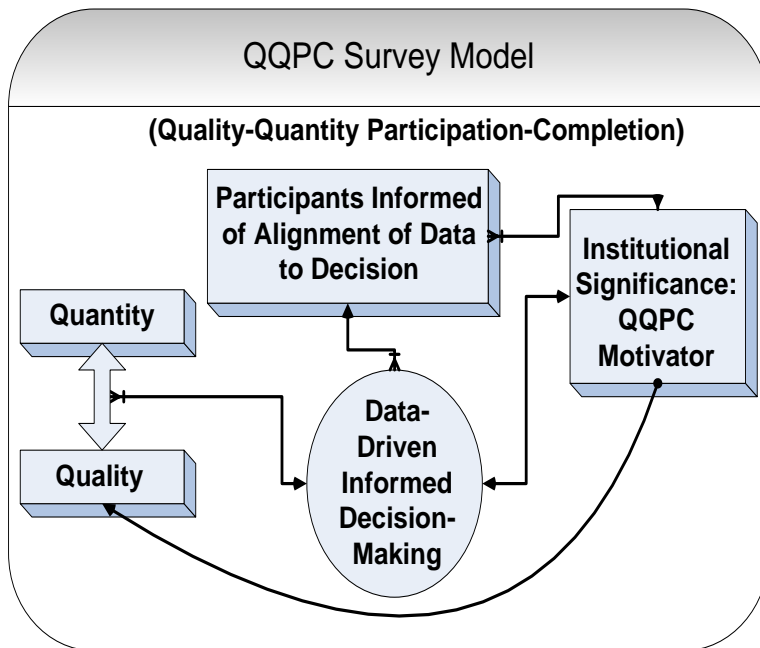
stakeholders, and the institution itself. If return rates are trending downwards, what is the corresponding quality of the returns that are reported? Are those responses a better quality of feedback on the topics being researched? Do those responses provide the type of quality that result in viable and positive change in the organization? Or, have both the quantity and quality of responses become status quo with a majority of respondents only participating as a rote exercise in futility? These are some of the questions that this study addressed.

From Group 1, the feedback sought was specific to practices and perceptions in regards to surveys; the intent of analyzing data from Group 2 was to better understand how IR offices might counter the lower return rates or the quality of the survey content. The outcome of the feedback from the AFS group and the IR group was to inform individuals who conduct survey-based research as to the current practices of both groups so that survey development might be improved to increase the quality and quantity of survey returns.

Underlying Model of the Study

The QQPC Survey Model (see Figure 1), designed by the researchers in this study, provides a logical approach to the process of how survey data has the potential to impact informed decision-making. While there are many forms of gathering information to make decisions, when survey data is an influential part of the decision, the data should be based on validity and reliability (QQPC) to make the best informed decisions possible. A major component of the QQPC model is that when both quality and quantity reach “maximum benefit”, the data-driven decision has the best opportunity to promote institutional significance to influence of cause effect in the organization, including serving as a motivator for future survey practices. The overarching goal of the QQPC model is that survey participants will not only

participate at an increased rate, but that they will participate in such a manner that their responses are a true reflection of their perceptions or practices on a topic with sincere commentary that will influence the organization in significant ways (positively or suggesting corrective outcomes).



The *QQPC Survey Model* relates the value and importance to both quality and quantity input from surveys used in conducting research. When the dataset has both sufficient quantity and a high-level of quality of the responses, the data-driven informed decision-making is more likely to be the consensus of the individuals within the organization. If the data input has both quantity and quality, the outcome is more aligned with the potential for an organization to reach institutional significance—that is, likely to have influence or effect on outcomes within the organization and the service area. Consequently, if the organization has reached significance, the QQPC will have functioned as a potential motivator for further input via survey methodologies – concurrent with other data collection & decision-making methods.

Figure 1. *Survey QQPC (Quality-Quantity Participation-Completion) Model*

Methods and Outcomes

To evaluate the QQPC model constructs, Table 1 indicates the variables that were under investigation. Of the four research questions to be investigated as summarized in Table 1, the two groups were given opportunity to reveal their perceptions and practices in order that the results might be used by survey designers to construct a better survey or establish an improved survey process at respective institutions. Of the 36 IR offices responding, the majority of these offices reported that they perceived that response rates have declined and that the quality of the responses has also been less than desired. (see Table 1, Figure 2, and Figure 3)

Table 1: Major components of quality and quantity on informed decision-making.

Construct	Descriptors
Current practices in responding to surveys	Specific actions taken by individuals to participate or consciously refrain from participation; measurable outcomes such as “as soon as I see a survey, I delete the email” or I am very selective in which surveys I participate...
Perceive the importance of responding to surveys	How does the respondent logically and systematically determine if the survey is important to him/her; can this perception of importance be modified by external means; how does importance (or value) correlate to quality and quantity in survey return rates...
Survey response rates perceived and influenced by institutional research	How do IR Departments perceive response rates, the quality of the responses, and what are they doing to motivate and inspire employees (and students) to participate in surveys and do so with quality as a primary tenet of their responses; what innovative methods are being considered and implemented to increase quantity/quality in survey responses...
Quantity and quality of datasets perceived as impacting informed institutional decision-making	Do return rates and/or the quality of those returns impact and inform the reviewers and users of the dataset to be fully aware of the influence these datasets have on informed decision-making; how do respondents and IR Departments view this construct, from a positive, negative, and neutral reporting outcome; do lower response rates and lower quality responses, in fact, influence informed decision-making...

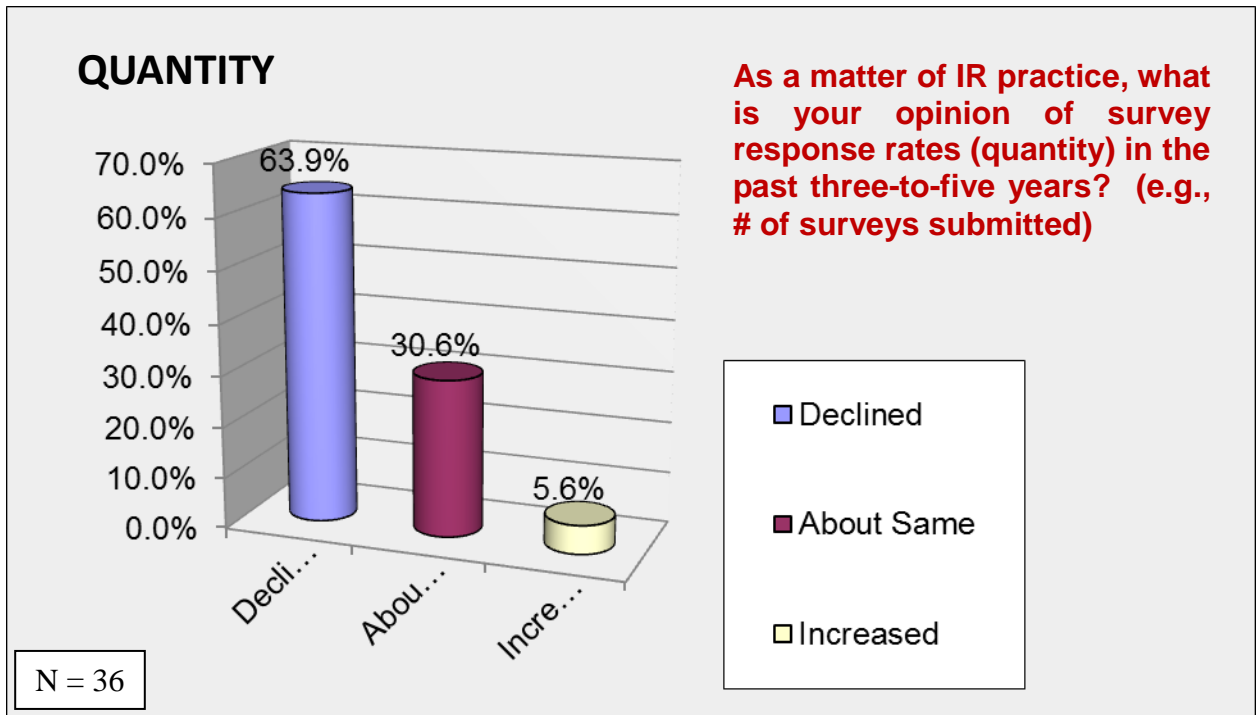


Figure 2. Survey Response Rates (Quantity) as Reported by IR (IR sample from Alabama, Georgia, North Carolina, Michigan, Missouri, Ohio, Texas, and Wisconsin)

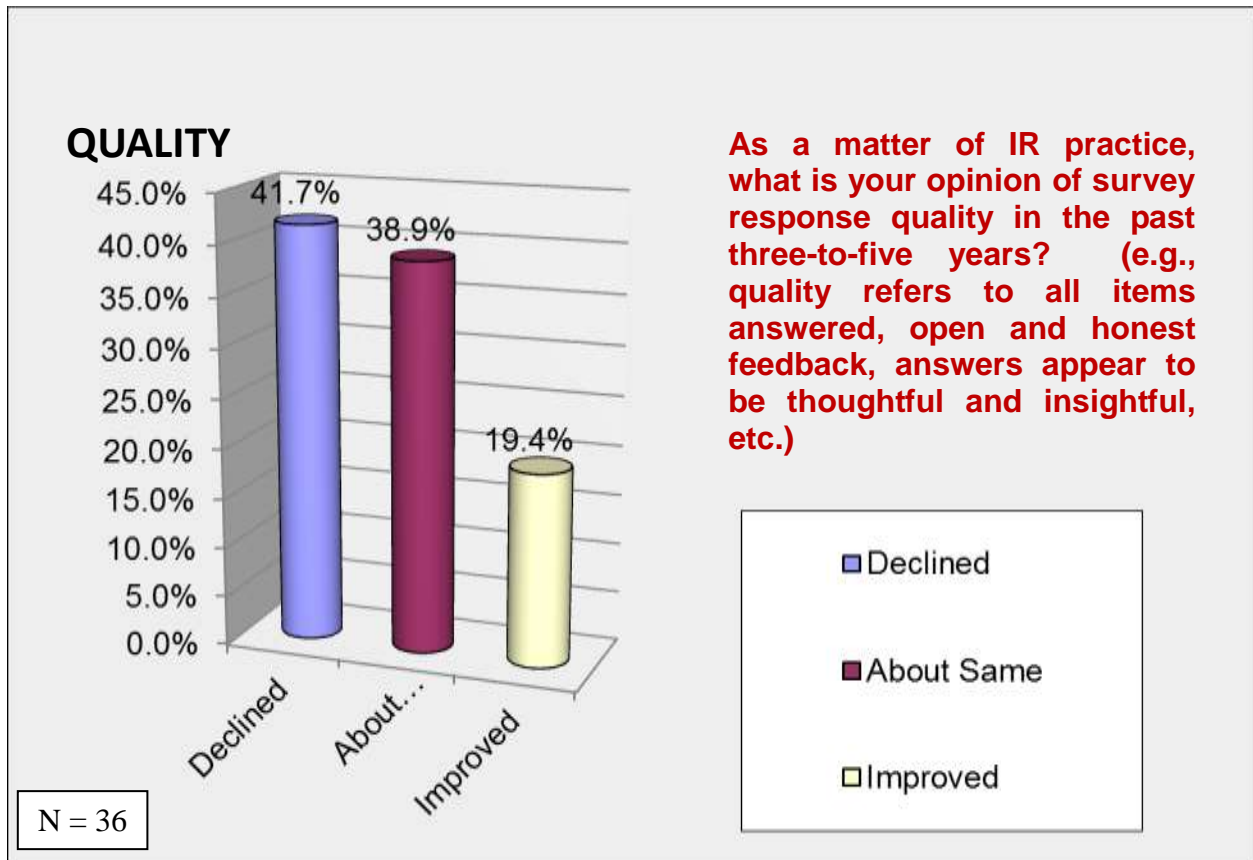


Figure 3. *Survey Response Rates (Quality) as Reported by IR*

For the AFS group (Administrators, Faculty Members, and Staff), they were asked to respond to the number of surveys that they had received and responded to in the past twelve months, to rate their motivation to respond to future surveys in terms of quantity and quality, and to respond to the survey questions specific to their perceptions and practices for survey design practices and improvement. The questions with statistical significance are indicated in Table 2 as well as the means so that the reader might better understand how the identified survey factors may be used in future survey design. The results of those data input are found in Figure 4 and Figure 5, with the survey data results indicated in Table 2.

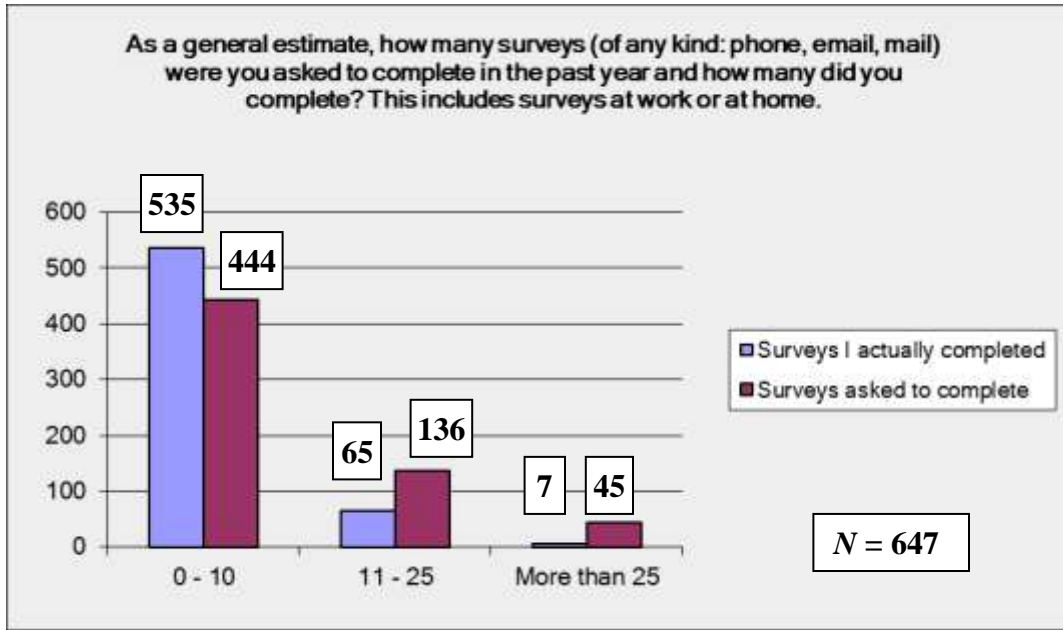


Figure 4. Surveys received compared to surveys completed.

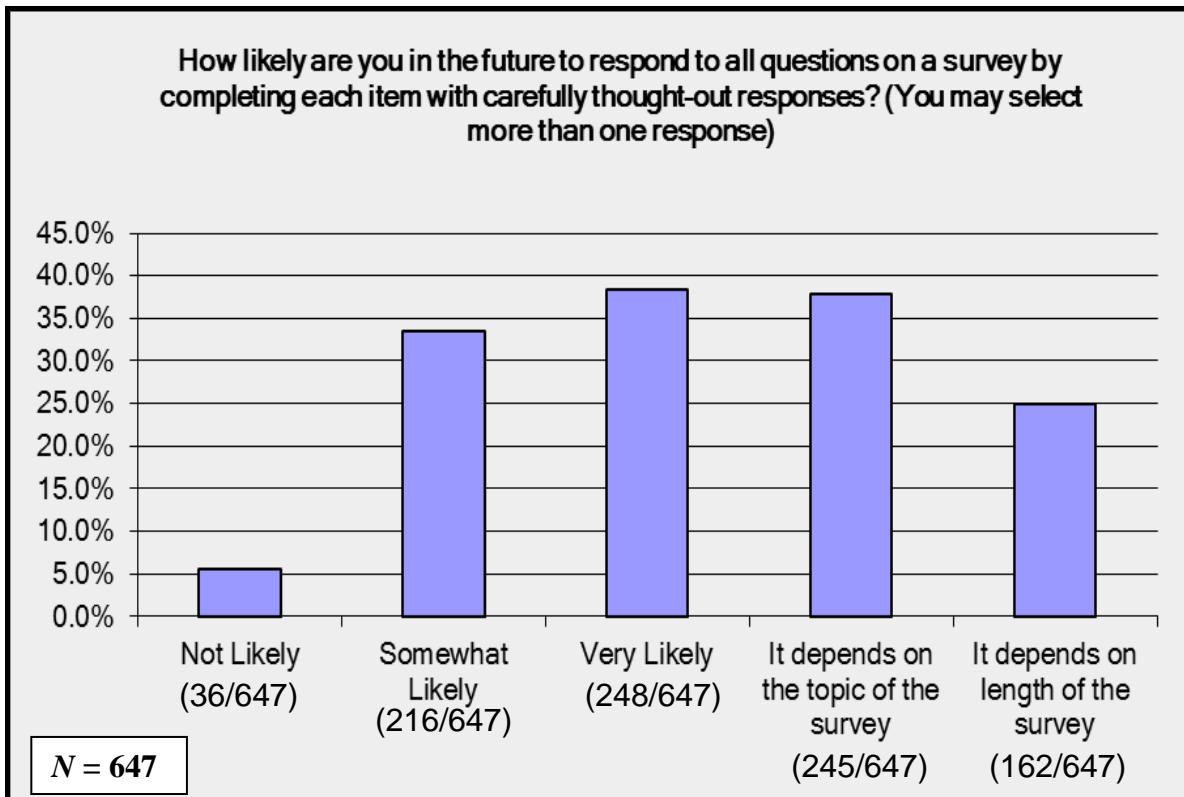


Figure 5. Likeliness of Responding to Surveys and the Level of Response.

Table 2: Experiences, perceptions, or practices in responding to surveys (AFS Group)

	Values shown are percentages.	SD	D	N	A	SA	M	Sig. * AFS	Sig. * M/F
1	When presented with a survey, I make every effort to respond	1.7	7.3	19.0	54.5	17.4	3.81	.626	.037*
2	When answering a survey, I give each item careful consideration	1.6	2.6	9.3	66.7	19.8	4.02	.909	.165
3	Responding to surveys is my responsibility as an employee	3.1	17.1	22.9	43.1	13.8	3.50	.055	.024*
4	I am more likely to complete a survey if an incentive is offered	8.0	24.9	28.5	21.2	17.4	3.15	.435	.558
5	If I'm busy when a survey arrives, I seldom complete it at a later time	6.6	41.1	19.6	27.1	5.6	2.83	.043*	.054
6	I don't want to be identified if I submit legitimate negative feedback	4.7	12.1	22.6	34.5	26.2	3.64	.425	.144
7	The results of survey data are to influence informed decision-making	3.0	4.9	15.3	53.1	23.8	3.89	.586	.942
8	If my schedule is full, even short surveys are likely to go unanswered	8.0	40.5	15.8	30.1	5.5	2.83	.191	.049*
9	I've responded to surveys before without understanding their purpose	7.3	26.6	13.8	44.4	7.9	3.23	.443	.114
10	In general, I think people don't take surveys seriously anymore	1.6	10.9	23.8	49.4	14.3	3.66	.037*	.029*
11	Without a culture of trust in the organization, I will not "open up" on surveys	2.8	20.5	16.0	40.8	19.9	3.54	.024*	.430
12	Survey data MUST be used to guide professional development	2.5	12.1	27.3	41.3	16.7	3.60	.545	.620
13	Regardless of workload, I respond to a survey from the President	2.4	5.6	14.0	42.6	35.5	4.03	.242	.002*
14	If I don't perceive the survey as important, I will not participate	5.2	26.4	21.7	39.7	7.0	3.16	.101	.074
15	I am prone to click any answer to a question if I don't understand it	20.9	52.2	12.3	12.0	2.5	2.25	.700	.960
16	I assign importance to a survey if the topic is of interest to me	3.8	10.5	11.7	53.7	20.3	3.77	.108	.230
17	I don't actively encourage colleagues to participate in surveys	7.2	22.2	31.6	35.0	4.0	3.06	.531	.013
18	I am simply too busy these days for surveys	6.5	38.4	31.1	20.6	3.5	2.75	.854	.818
19	More often than not, the time I could devote to completing a survey is more important to me for other purposes than the issue the survey is measuring	4.3	27.3	31.7	31.5	5.2	3.07	.053	.683
20	College administrators are responsible for promoting the positive practice of survey participation to achieve continuous improvement at the college	1.6	10.7	25.2	51.1	11.5	3.61	.620	.161
21	My experience has been that survey results have changed very little at my institution	1.6	17.4	37.6	28.1	15.3	3.37	.479	.275
22	I prefer a survey that has options for me to voice my opinion, not just multiple choice options	3.0	20.0	30.1	37.1	9.8	3.30	.709	.031*
23	Surveys have the very real potential to influence ethical, political, and/or economic consequences	2.9	14.5	27.8	45.9	8.9	3.44	.900	.988
24	I would volunteer to serve on a committee that develops institutional surveys	17.0	30.1	22.3	24.0	6.5	2.71	.148	.270
25	Self-motivation is a huge factor in my responding to surveys	2.4	8.4	19.4	57.3	12.5	3.68	.030*	.395

N = 647; (1) SD: Strongly Disagree; (2) D: Disagree; (3) N: Neutral; (4) A: Agree; (5) SA: Strongly Agree; p value; M = Mean

As noted in Table 3, Table 4, and Table 5, the data reported by the IR departments are descriptively indicated below to offer a view of how the most experienced users and collectors of data perceive the survey process. Within this data, the researchers sought to better understand how IR offices might view the current status of quality and quantity response rates; moreover, it was the intent of the study to gain valuable insight into how the IR experts might approach the lack of responses and the lower quality of the responses submitted. It is the contention of this investigation that to improve response rates and the quality therein, the input from the AFS group and the IR group need to be collected, processed, and correlated in order to discover suggested threads of outcome to not only understand the present state-of-survey-affairs, but more importantly, to improve the process collectively.

Table 3: Variables Negatively Impacting Quality/Quantity of Survey Participation & Comments

	Not Important	Somewhat Important	Important	Very Important
Lack of motivation to complete 'another survey'	0%	11%	44%	44 %
Busy schedules limiting time for survey completion	3%	19%	56%	22%
Survey participant identification	25%	19%	39%	17%
Responses being used 'against' participants	37%	17%	31%	14%
Skepticism surveys actually result in change	0%	17%	31%	56%
A lack of trust between employees and administration	11%	31%	36%	22%
The lack of incentives to promote participation	26%	31%	26%	17%

N = 36

IR comments on other "negative" factors:

1. Some people will not respond to a survey if they do not know the person/department administering the survey. Others may not respond simply out of apathy;
2. Too many questions on the survey;
3. I have found that surveys are usually designed to obtain the surveyor's desired answers. I don't feel that the input is particularly meaningfully used;
4. Lengthy, badly designed surveys;
5. Paranoia;
6. Too many surveys and ease at "deleting" surveys;
7. Amount of surveys has increased. Respondents may be getting burnt out.

Table 4: Group IR (Group I Questions) Survey Data Integrity and Informed Decision-Making

	Values shown are percentages.	SD	D	N	A	SA	M	Sig. * Exp.	Sig. * M/F
1	I seldom use validated surveys from other sources	11.8	29.4	17.6	32.4	8.8	3.03	.842	.032
2	I expect collected data to be used for decision-making	2.9	0.0	5.7	48.6	42.9	4.33	.645	.042
3	My perception is that employees trust the IR department	5.7	5.7	25.7	42.9	20.0	3.63	.315	.606
4	The quality of a dataset is seldom discussed in IR	17.1	40.0	17.1	25.7	0.0	2.54	.741	.874
5	I can easily recall decisions based on survey data	8.6	22.9	14.3	45.7	8.6	3.24	.442	.894
6	Only positive survey comments should influence decision-making	62.9	31.4	5.7	0.0	0.0	1.45	.204	.380
7	Only negative survey comments should influence decision-making	57.1	28.6	11.4	2.9	0.0	1.63	.858	.775
8	I personally use data to make informed decisions	2.9	0.0	8.6	62.9	25.7	4.03	.554	.530
9	Low return rates negatively impact data-driven decisions	2.9	17.1	20.0	34.3	25.7	3.60	.110	.767
10	The culture of the institution impacts response rates	0.0	11.4	2.9	45.7	40.0	4.09	.463	.670
11	My administrators rely on survey data to make informed decisions	2.9	25.7	17.1	45.7	8.6	3.36	.974	.632
12	The culture of the institution impacts data quality	0.0	2.9	11.8	44.1	41.2	4.18	.354	.368
13	A mixed-methods survey improves data quality	2.9	5.9	38.2	34.3	17.6	3.56	.621	.148
14	The overuse of surveys has a highly negative impact on return rates	2.9	5.7	11.4	37.1	42.9	4.06	.479	.563
15	Qualitative responses are consistently used in institutional decisions	5.7	14.3	37.1	42.9	0.0	3.15	.620	.833
16	I often help administrators interpret data for decision-making	5.7	5.7	14.3	57.1	17.1	3.72	.937	.537
17	Employee survey data is used for continuous improvement	5.7	25.7	28.6	25.7	14.3	3.15	.542	.432
18	Respondents are more likely to thoughtfully respond to shorter surveys	0.0	2.9	5.7	51.4	40.0	4.27	.930	.371
19	My perception is that 'survey fatigue' impacts survey quality and response rates	0.0	0.0	5.7	45.7	48.6	4.39	.454	.518
20	Shorter surveys tend to improve quality and response rates	0.0	5.7	2.9	57.1	34.3	4.18	.297	.169

N = 36; Dataset significant at $p < .001$; (1) SD: Strongly Disagree; (2) D: Disagree; (3) N: Neutral; (4) A: Agree; (5) SA: Strongly Agree; *p* value; *M* = Mean; Exp: Experience across 0-5, 6-10, > 10 years.

AFS Respondent #33: You can give all the surveys you want to give, and you can have people answering them in any fashion they choose to do so. It's all pointless rhetoric and a wasteful game of smoke and mirrors until someone establishes a means by which CONSTANT flow of perspective, opinion, or ideas (by way of surveys, regular open meetings, discussion boards, blogs, etc.) becomes an integral part of college life. Everyone is so buried in meetings (administrators), paperwork (faculty/staff), and homework/tests (students), that few seldom even take time to consider how they feel about anything...We yearn to simply finish tasks as they pop up and stumble to some sort of respite beyond the walls of education. Communication is a two-way street: surveys seldom serve as a true medium of communication.

Table 5: Group IR (Group II Questions) Survey Data Integrity and Informed Decision-Making

	Values shown are percentages.	SD	D	N	A	SA	M	Sig. * Exp.	Sig. * M/F
1	Employees are skeptical about being identified in surveys	0.0	5.7	0.0	48.6	45.7	4.42	.591	.892
2	Lower response rates reduce dataset reliability	0.0	5.7	14.3	57.1	22.9	3.96	.004	.550
3	It is more important to have quality responses than all survey questions answered	2.9	5.7	17.1	54.3	20.0	3.78	.676	.093
4	Employees are encouraged to complete surveys from any location of their choosing, even access from home	0.0	5.7	11.4	62.9	20.0	3.93	.815	.489
5	I believe that employees trust reports generated from surveys	2.9	25.7	28.6	37.1	5.7	3.18	.452	.758
6	The more surveys I administer, the more the data will help the institution solve its respective problems	5.7	42.9	28.6	14.3	8.6	2.81	.399	.268
7	There is no relationship between survey quality and informed decision-making	20.0	54.3	14.3	8.6	2.9	2.24	.479	.871
8	Survey data is one of the most important elements in informed decision-making	5.7	22.9	20.0	42.9	8.6	3.27	.910	.806
9	An executive summary of all data collected is provided to employees	8.8	26.5	20.6	32.4	11.8	3.03	.070	.921
10	With current fiscal constraints, surveys should be discontinued	26.5	58.8	11.8	0.0	2.9	1.93	.853	.217
11	Trust between administration and faculty/staff is the most important element in survey quality and quantity	0.0	14.3	31.4	45.7	8.6	3.45	.720	.292
12	Decision-making bias is more likely without survey data	0.0	2.9	40.0	40.0	17.1	3.69	.183	.147
13	Employee perceptions of institutional practices strongly influence survey quality	5.9	0.0	8.8	64.7	20.6	3.93	.949	.806
14	Survey data provides a critical input function into accreditation standards and core requirements	0.0	11.4	14.3	40.0	34.3	4.00	.592	.230
15	The IR department is satisfied with its survey methodologies	5.7	42.9	25.7	17.1	8.6	2.84	.530	.607
16	The IR department has plans to create innovative survey methodologies to improve survey response quality/quantity	2.9	14.3	25.7	51.4	5.7	3.51	.211	.357
17	External datasets collected are made available to employees	2.9	32.4	17.6	35.3	11.8	3.18	.855	.088
18	Innovative survey methodologies will not improve survey return rates	8.6	48.6	28.6	11.4	2.9	2.57	.164	.469
19	Student survey data quality is as important as faculty survey data quality	2.9	2.9	14.3	37.1	42.9	4.15	.780	.845
20	Focus groups should replace survey collection practices	14.7	38.2	32.4	14.7	0.0	2.43	.664	.162

N = 36; Dataset significant at $p < .001$; (1) SD: Strongly Disagree; (2) D: Disagree; (3) N: Neutral; (4) A: Agree; (5) SA: Strongly Agree; *p* value; *M* = Mean; Exp: Experience across 0-5, 6-10, > 10 years.

IR Respondent #27: Lack of trust can be a real issue. Also, lack of using the results to make improvements creates an attitude that their opinion doesn't matter. Need to look at the hard numbers and ask questions?? Then use it!!; **IR Respondent #19:** My experience is that faculty and administration fail to use data because they don't understand the ins and outs of it. They also don't have a bunch of time to interact with the data so they tend to make decisions from their own experience and look for data to back up their experience. My staff is much more interested in looking at data and then making decisions. Faculty/staff are comfortable with taking surveys generated by the IR office because they trust us to keep them anonymous. They are not so trusting of surveys generated by other offices.

The following comments were provided by both IR and AFS respondents when asked how survey response rates and quality might be improved, what they might suggest to improve their respective participation, or what general suggestions they would offer on how to improve the overall survey process at their institution:

IR10: Response rates are traditionally low and average around 30% for most of the surveys we distribute unless online. The paper-based surveys we conduct have a much higher response rate.

IR22: This is indicative of both online and mail in surveys.

IR17: Using online assessment tools has actually reduced the number of student participants and yet increased for staff.

IR34: Amount of surveys has increased. Respondents may be getting burnt out.

IR25: My answer is an educated guess.

IR11: We find it hard to get faculty and students particularly to complete surveys.

IR29: I think most surveyors are not putting enough attention into getting a favorable return rate. I don't think they go after their audience well enough, usually.

IR3: I do the survey analysis for our institution, trend rates have remained about the same, within 1-2% over the past 3 years.

AFS135: Open ended questions like this are difficult for me, time consuming, and tells me (as having completed my doctorate already) that you need to have clear choices for data analysis. Open-ended questions are good for you to learn more and tweak your instrument, but I would not allow you to have data analysis from a lot of open-ended questions such as these if I were on your committee. Also, a lot of open-ended questions attract nuts (such as me -you are thinking) and it makes the survey too long. I take it back after completing the survey - you do have a decent instrument - good luck.

AFS169: I am receptive to surveys that address important topics where I feel I can provide important information. If I don't feel I can contribute, or the topic is trivial I don't feel compelled to answer.

AFS275: Evaluations are absolutely crucial to help gather data to refine and readjust problem areas; without closing the critical feedback loop, how would effective changes be addressed and implemented?

AFS110: Too long and not informed in advance how long the survey will take. Repeatedly asking the same question, but wording it in a different way.

AFS62: The only reason I would fail to complete a survey is if some immediate need of my work was considered by me to be of a higher priority.

AFS15: I usually do not answer most surveys because I do not have a connection with the subject of the survey and I regard phone surveys as a waste of my limited time and an invasion of my privacy.

AFS80: I have some measure of hope that my perspective is helping to improve things in some small way by giving my superiors my honest appraisal of things.

AFS156: The primary reason I do not finish a survey is because a student comes in and I get started helping them and just never finish the survey. It is my job to service students.

AFS98: Receive a nasty email saying I have not completed the survey. My name will be added to the "BAD" faculty "list."

AFS50: The information provided may be valuable to whoever is doing the survey and may provide information that will help them better serve the public.

AFS166: I have only stopped one survey part way through, and that was because the survey was very poorly designed and not collecting the proper information on that topic. I had to repeatedly answer questions that did not address the topic of the survey, and I was forced to provide information about subjects that either did not apply to me or my area of knowledge.

AFS223: Too time consuming and asking the same question several times with just different wording. Also, knowing my opinion really doesn't matter.

AFS317: The survey is too long or too complicated. Also, I am unsure how often those who give surveys actually use the information.

AFS373: Start because they are required or provoke my interest, don't finish because they ask for too much detail or too many questions.

AFS411: Too many repetitions of identical questions for different items, aspects, combinations, etc., or poor survey design, such as requiring an answer for a question you've previously indicated doesn't apply to you, e.g. required follow up questions about an item I've already indicated I don't own. Another example of poor survey design would be vague questions such as "Please provide the following student/employee demographic information." Is that the number of students/employees at the college where I work, the number with which I personally interact (extremely hard to quantify since I do not teach classes), or the number currently in existence anywhere? Since there is very little indication of the purpose of this survey, I can't infer meaning from context.

AFS198: I start and then there's something I need to take care of right away, and it takes precedence over the survey.

AFS356: I believe that surveys for certain topics are extremely important in research on how a product or situation affects different genders, races, personalities. It also impresses me that I am considered important enough to be included in a survey, especially surveys regarding student and instructor needs at the college in which I am an instructor.

AFS392: Many people do not trust the anonymity of electronic surveys because they know IP addresses can be tracked. Nothing delivered and returned via the internet is/can be guaranteed to be anonymous. This is why many surveys do not collect true, useful feedback. If an employee feels insecure in his work environment, no amount of assurance of anonymity will convince him/her to answer an electronic survey with honest, but negative responses.

IR#21: Participation and quality of responses are negatively impacted by the culture at my institution. Students are afraid of faculty and faculty members fear their academic dean. Even though survey responses are anonymous and only reported in aggregate, I have difficulty overcoming this perception. Also, there is a strong tendency here to ignore results that do not fit with how certain admins want to view the institution.

- Note: These comments constitute a sample from the 1,800 AFS comments and the 62 IR comments.

Summary

“Will you share the results of this survey?” was one of the most poignant questions or responses posed by the aggregate of participants. To capitalize on the underlying and immense absolute construct in this question is to summarize all survey rationale. If a survey is to serve any purpose in the annals of research, data collection, or decision-making, the use of the reported data must become a baseline from which institutional outcomes are derived. Just as focus groups provide information, or casual conversations result in idea generation, or committees analyze data, synthesize the input, and apply information-based decisions—so surveys must also become a decision-making asset of an organization, inclusive of feedback to participants.

To improve on survey process outcomes, this study has reported scaled results as well as extensive commentary on the perceptions and practices of administrators, faculty members, staff, and IR departments. Within the total dataset and feedback of this research, the study suggested that to improve data-driven decision-making, the quantity and quality of survey data must each be a critical component of survey methodologies and outcomes.

For a copy of the Executive Summary, Full Report, output of the dataset, or the poster, contact Dr. Ken Scott at kscott@trenholmstate.edu or 334.420.4392.