RESEARCH & PRACTICE IN ASSESSMENT •••••••

Abstract

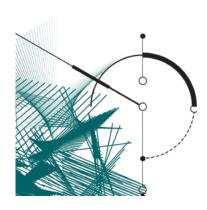
Student affairs, like all arms of academe, has taken up the mantle of assessing college student learning and development in their unique programs and experiences. Yet, cultures of assessment in student affairs organizations are rarely examined empirically. This study provides results from an exploratory factor analysis of data gathered using the *Student Affairs Survey of Assessment Culture*. The resulting factor model explained 58% of the variance and included four factors of hypothesized cultures of assessment in student affairs: a) Clear Commitment to Assessment, b) Assessment Communication, c) Connection to Change, and d) Fear of Assessment. Internal consistency estimates (Cronbach's α) were sufficient for each factor, exceeding .78, at minimum. Discussion about new means of theorizing about cultures of assessment efforts are offered.

An Empirical Model of Culture of Assessment in Student Affairs

Duchy, Segers, Gijbels, & Struyven, 2007; Haviland, 2014; Kuh, et al., 2015; Suskie, 2014) and student affairs contexts (University of Pittsburgh, 2012; Schuh, 2013). The concept of a "culture of assessment" has not only become commonplace parlance for presidents, provosts, and faculty; it is a term of considerable attention for vice presidents of student affairs, deans of students, and directors of student affairs departments as well.

Despite this attention, cultures of assessment in student affairs organizations are rarely examined empirically. This gap is considerably problematic since institutions purport to value the use of evidence to inform decision making. Without a functional, synthetic, datadriven foundation from which to theorize about cultures of assessment in higher education advancements in the practice of student affairs assessment will remain conjectural and relegated to the applications of current, trending best practices. As soon as a new assessment process comes into prominence, the community of student affairs practitioners will face decisions in redirecting and redefining the culture of their division. In contrast, divisions of student affairs practicing evidence-based approaches are purported to have sustainable, transformative, long-term cultures of assessment guiding them through many organizational challenges (Henning & Roberts, 2016; Schuh, 2013).

This study seeks to provide an empirical foundation for further research in student affairs organizations' cultures of assessment. The present analyses call upon empirical evidence to illustrate the foundations of the concept of cultures of assessment in student affairs contexts. Using the *Student Affairs Survey of Assessment Culture*, the researchers



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Email mfuller@shsu.edu examined the underlying factor structure inherent in the survey data. The *Student Affairs Survey* is an adaptation of the *Administrators Survey*, augmented for administration to mid-level student affairs leaders. The researchers explored the underlying structure using exploratory factor analysis (EFA) methods to determine if the *Student Affairs Survey* accurately measured hypothesized cultures of assessment. The results of this analysis may offer new abilities to theorize about cultures of assessment and offer practitioners opportunities to refine leadership of student affairs assessment. Discussion and theorization about future research and practice are offered after a comprehensive review of student affairs assessment literature, methods, and results.

Review of Relevant Literature on Cultures of Assessment in Student Affairs

Literature pertaining to assessment in student affairs is currently enjoying considerable attention in scholarly discourse. This growth in prominence is led by efforts of scholar-practitioners actively engaged in research and the conscious efforts of professional organizations such as the National Association of Student Personnel Administrators (NASPA), the American College Personnel Association (ACPA), and the Association for the Assessment of Learning in Higher Education (AALHE), among others. Moreover, the growth of staff members and departments whose sole purpose is the coordination or leadership of student affairs assessment efforts is also noteworthy (Roper, 2015).

Though assessment is now commonplace throughout many student affairs divisions and departments much remains to be done to examine how assessment becomes a foundational element of a student affairs division's culture. Long (2012) argued the necessity of a few unique characteristics for student affairs to be called a profession within higher education. Paramount in these defining characteristics is the presence of a number of graduate programs in student affairs and evaluation and assessment systems aimed at improving program effectiveness. Therefore, examining assessment's contribution to division-wide cultures of assessment is of critical importance and connects to larger discourses of the importance of student affairs in academe (Long, 2012).

Scholarship on assessment practices and their use in student affairs is a new phenomenon. As early as the 1980s and 1990s, scholars (Barr, 1993; Kuh & Banta, 2000) were recognizing that assessment methods most often employed in classrooms and academic programs held possibilities for assessment learning and development in co-curricular environments and programs. However, the developments throughout the 1990s and 2000s focused on enhancing the integration of academic and co-curricular efforts further heightened the importance of assessment in student affairs (Banta & Associates, 2002). Moreover, discourses critical of the importance of student affairs in modern academe have also contributed to the sense that student affairs must prove its worth and assessment has stood as the primary means through which this worth is proved (Kirschner, 2016).

Recent calls for additional literature have seen a shift in discourses of student affairs assessment from a scholarship of assessment practice to scholarship on cultures of assessment. Whereas prior literature (Bingham & Bureau, 2015; Bresciani, Zelna, & Anderson, 2004; University of Pittsburgh, 2012) has outlined best practices in assessment of student learning and development, many practitioners and scholars (Bresciani et al., 2004; Douchy et al., 2007; Haviland, 2014; Baas et al., 2016) recognize the need to begin studying assessment as a unique facet of the student affairs profession. Calls for this enhanced scholarship on cultures of assessment include the need to examine how divisions of student affairs' cultures support or hinder the use of evidence in decision-making (Schuh, 2013). According to Schuh (2013), such examinations are the next frontier of scholarship in student affairs assessment.

Scholarship on student affairs cultures of assessment is limited, in part, due to a dearth of empirical evidence on cultures of assessment in student affairs. This lack of evidence and a synthetic theory of assessment culture has been noted in scholarship of assessment in academic settings (Long, 2012). To date, no literature calling for the empirical examination of cultures of assessment in student affairs has been published. However, many scholars (Bingham & Bureau, 2015; Bresciani et al., 2004;) have argued that the development of student

Though assessment is now commonplace throughout many student affairs divisions and departments much remains to be done to examine how assessment becomes a foundational element of a student affairs division's culture. affairs cultures of assessment may be beneficial to practice and the advancement of student affairs as a profession. Therefore, the present study sought to fill this void by offering an initial examination of cultures of assessment through the perspective of mid-manager and higherlevel staff in student affairs.

Method

Sample

The modified version of the Administrators Survey emerged in 2013 as part of an effort to focus on the unique contexts of student affairs assessment. Rather than focusing on institutional cultures of assessment as the Administrators and Faculty Surveys do, wording was augmented to focus on division-wide cultures of assessment. The sample was drawn from volunteers willing to submit a listing of student affairs staff at the mid-manager and higher level of employment within their college or university for participation in this study. In the summer 2016 semester a nation-wide call for participation in the study was sent to 4,129 chief student affairs officers (CSAO). The Higher Education Directory, a nationwide directory of higher education leaders' contact information, was used to gather email addresses for CSAOs. These contacts were then invited to participate in the study by providing the lead researcher with the e-mail addresses for student affairs practitioners the CSAO deemed to be at the mid-manager level or higher. Most CSAOs were able to easily identify a list of mid-managers for inclusion in the study. Only e-mail addresses were submitted to the lead researcher using a contact file template. This allowed for the e-mail addresses to be entered into an online surveying system without an overt intrusion on individuals' privacy and identity.

Instrument

The *Student Affairs Survey* was used to measure student affairs administrator attitudes toward institutional assessment culture. Assessment culture is defined in the *Student Affairs Survey* as the overarching institutional ethos that is both an artifact of the way in which assessment is conducted and, simultaneously, a factor influencing and augmenting assessment practice (Fuller, 2011). The *Student Affairs Survey* parallels other *Surveys of Assessment Culture*, namely the *Administrators Survey* and the *Faculty Survey*. The *Administrators Survey* contains 48 items measured on a six-point Likert scale (1 = *Strongly Disagree*; 6 = *Strongly Agree*) and was first piloted in 2011 to a nationwide stratified, random sample of institutional research and assessment directors. An exploratory factor analysis (EFA) of the data from this sample suggested a five-factor model of the data: (a) Faculty Perceptions, (b) Use of Data, (c) Sharing, (d) Compliance or Fear Motivators, and (e) Normative Purposes for Assessment (Fuller, Skidmore, Bustamante, & Holzweiss, 2016). Reliability coefficients for each factor measured are reported to range between .792–.922 (Fuller & Skidmore, 2014; Fuller et al., 2016).

The modified version of the Administrators Survey emerged in 2013 as part of an effort to focus on the unique contexts of student affairs assessment. Rather than focusing on institutional cultures of assessment as the Administrators and Faculty Surveys do, wording was augmented to focus on division-wide cultures of assessment. This modified instrument was piloted in 2014 to an advisory panel of 12 experts drawn from student affairs units across the United States. Additional revisions were made, though most revisions could be categorized as slight wording revisions. The resulting instrument, the Student Affairs Survey of Assessment Culture, was administered in the present study to examine cultures of assessment in student affairs organizations.

Procedures

An anonymously recorded, electronic version of the *Student Affairs Survey* was sent to identified participants during the summer 2016 term. A total of 2,234 mid-manager or higher-level leaders were invited to participate from 59 institutions¹ across the United States.

¹Study included 9 community college systems, which are accredited as a single institution at the system-level. These systems, if broken down into their sub-institutions, would increase the total number of institutions to 141 institutions. However, most of these institutions only volunteered 3 or 4 staff members to the study, making a system-wide comparison more appropriate.

Institutions volunteering to participate in the study were found in all six regional accreditation regions in the United States and from a variety of institutional sizes. The smallest participating institution reported only two mid-managers or above which constituted the entire professional staff at this institution. In contrast, several large, research-intensive universities opted to participate in the study, with the largest offering 309 staff as participants in the study.

Though limitations exist in the dispersion of institutions across the nation and institutional types, as well as the voluntary nature of participation in the study, the researchers were satisfied that a respectable number and mixture of institutions were represented in the study to warrant an exploration of this nature. Of the total 1,624 student affairs practitioners invited to participate in the study, 771 responded to the survey, offering a response rate of 47.5 percent.

Data Analysis

Although the *Student Affairs Survey of Assessment Culture* was designed with the intent of paralleling other Surveys of Assessment Culture, the specific survey items and wording of these items varied slightly across the surveys and there was no empirical evidence to support any common factor structure. As such, data from student affairs administrators were examined through an exploratory factor analysis (EFA). Exploratory factor analysis is a less restricted approach grounded in the same common factor model and allows for greater flexibility in the rotational strategies used for factor extraction (Flora & Flake, 2017).

Although there is some debate in the literature regarding the most appropriate method of extraction (Henson & Roberts, 2006), principal axis factoring was used as the extraction method given that the purpose of this study was to identify latent constructs. Factors were obliquely rotated using Promax criteria and a delta of zero given the relationship between factors reported in Fuller and Skidmore (2014). Because the Kaiser-Guttman rule (i.e., Eigenvalues > 1) and scree test can result in the over extraction of factors (Zwick & Velicer, 1986), parallel analysis (O'Conner, 2000) was also used in determining the number of factors to retain. Both the factor pattern matrix and structure matrix were considered in the interpretation of factors (Henson & Roberts, 2006).

Results

Nine factors were initially extracted using the Kaiser-Guttman rule (Eigenvalue >1) and these factors explained approximately 62% of the variance in the items. Examination of the scree plot suggested three or four possible factors within the data. Parallel analysis (O'Connor, 2000) indicated that five factors should be extracted using the 95th percentile of randomly generated eigenvalue means. Because prior research identified five factors among a sample of university administrators and faculty under a different version of this instrument, and because parallel analysis tends to be more accurate than both the EV >1 rule and the scree plot (Henson & Roberts, 2006; Keiffer, 1999; O'Connor, 2000; Zwick & Velicer, 1986), a second iteration of the analysis was performed specifying only five factors be extracted from the data.

The five-factor model explained 52% of the variance in the items but there were several concerns with this model. Three items (2B, 5R, 33) resulted in pattern, structure, and communality coefficients that were considered to be low based on guidance from the literature (Fabrigar, Wegener, MacCallum, & Strahan, 1999). Moderate levels of communality (e.g., .40–.70) are typically necessary to produce accurate estimates of the population parameters for sample sizes such as those used in this study (Fabrigar et al., 1999). When these items were removed from the analysis, one of the five factors contained only three items with factor pattern and structure coefficients \geq .40. This was considered too few items to represent the factor (Fabrigar et al., 1999). It was decided that the remaining 45 items were best examined using a four-factor model.

The four-factor model with 45 items explained approximately 51% of variance in the items but several of these items (U3, 22, 29, 30R, 50R 50R) were identified as having both low pattern and structure coefficients (< .40). The variance explained by the factors improved to 55% when these items were removed. Internal consistency was then examined for each of the four factors using alpha coefficient. Alpha was not acceptable for two of the factors

Although the Student Affairs Survey of Assessment Culture was designed with the intent of paralleling other Surveys of Assessment Culture, the specific survey items and wording of these items varied slightly across the surveys and there was no empirical evidence to support any common factor structure. (α < .80). Reliability analysis suggested that alpha could be improved for these two factors if items were removed from the data. Because one of these items had a low communality (h^2 = .299) and the other had the lowest pattern coefficient on factor 4 (-.313) both items were removed from the analysis.

The model developed in the present study may offer new insights into cultures of assessment among student affairs professionals. Previously, this scholarship has remained largely conjectural; scholars and practitioners hypothesize about the importance or nature of an organizational culture of assessment yet they operated from a dearth of empirical evidence on the topic.

The final model consisted of 38 items and four factors that explained 56% of the variance within items (Table 1). Factor 1 contained 15 items (3, 6, 8, 9R, 12, 13, 18, 21, 23, 25, 26R, 31, 36, 49, U2) and was labeled Clear Commitment to Assessment. Sample questions from this component included "Assessment is expected as a part of my division's continuous improvement process," or "Upper Student Affairs Administrators have made clear their expectations regarding assessment." Factor 2 consisted of 11 items (48, 49, 51R, 52, 53, 54, 55, 58, 66, 4H, U5) and was labeled Assessment Communication. Sample questions in this component included "Communication of assessment results has been effective," or "Assessment results are regularly shared throughout my division." Factor 3 contained 11 items (7R, 8, 13, 56R, 58, 60, 61, 66, 67, 3J, U2) and was labeled Connection to Change. Items indicative of this component included "Change occurs more readily when supported by assessment results," or "Assessment results are used for improvement." Factor 4 consisted of 8 items (4R, 7R, 10R, 11R, 57R, 62R, 64R, 65R) and was labeled Fear of Assessment. Items in this component included, but were not limited to, "Assessment results are used to scare student affairs staff into compliance with what the administration wants," or "Administrators use assessment to punish student affairs staff members." The Pearson r correlation coefficients between factors are provided in Table 2.

A total of 14 of the 52 items were removed from the analyses due to having communalities less than 0.40, through comparison of factor pattern weights for each factor, or to improve factor reliability. Table 3 provides a listing of items removed from the analyses and the reasoning behind their removal. Though none of the items removed represent a significant number of items so as to constitute additional factors the researchers did engage in iterative rounds of analyses to reduce the model to its current parsimonious form.

As such, future analyses with similar or different populations may reveal different results and these items could be suggestive of directions for future research or interpretation of results. In particular, similarly worded items which were removed could be suggestive of additional, latent constructs for future consideration or higher-order factors. For example, three of the items (Q5, Q33R, Q4R) logically relate to the purpose of assessment. Such a construct has been noted in studies focusing on faculty and administrative populations (Fuller et al., 2016; Fuller & Skidmore, 2014). Conceivably, factor 1 [Clear Commitment to Assessment] offers similar concepts as a purpose of assessment factor in that one should have a clear understanding of the purpose of assessment in order to be committed to it. Similarly, Ouestions O53, O50, O54, and OS3L could conceivably relate to a factor pertaining to the use of assessment data. Fuller et al. (2016) and Fuller (2016) noted the importance of the use of data in creating and sustaining an institutional culture of assessment. These removed items could relate to the third factor in the current study, Connection to Change, in that the use of data could be the vehicle through which data are used for change purposes. Finally, a number of removed items (Q2B, Q22, Q33R, QU3, Q23) relate to clarifying who is responsible for assessment within the student affairs division. Fuller et al. (2016) argued that officially delegating the responsibility for assessment to a specific person, office, or collection of offices is an important leadership tactic for supporting a culture of assessment. These items, though removed, may relate to other factors pertaining to responsibility for assessment or support structures for assessment. While it is important to note that these items do appear to offer some logical similarities these items were removed from the present analyses through analytical iterations and with sound justification for doing so. Their inclusion in future studies may be beneficial to the scholarship on culture of assessment and could generate unique results.

Table 1

Item Means, Standard Deviations, Factor Pattern Coefficients (P), Structure Coefficients (r), and Communalitites (h²)

			Factor 1		Factor 2		Factor 3		Factor 4	
Item	M	SD	Р	r_s	Р	r_s	Р	r_s	Р	r_s
Q18	4.48	1.51	.84	.85	02	.65	20	.55	.03	35
Q21	4.28	1.36	<u>.83</u>	.80	.11	.62	18	.56	.05	30
Q36	3.97	1.41	.77	.78	.12	.57	.00	.40	.02	28
Q25	4.63	1.19	.71	.75	.09	.58	.09	.56	.07	34
Q3	5.20	0.93	<u>.67</u>	.73	17	.54	.17	.58	01	28
Q31	4.12	1.28	<u>.63</u>	.70	01	.67	.22	.51	.07	28
Q6	4.20	1.26	<u>.63</u>	.68	.07	.43	.12	.30	.00	25
Q26R	3.20	1.53	58	.66	18	.40	.13	.49	.08	30
Q12	4.37	1.26	<u>.49</u>	66	.01	53	.28	38	.02	.34
Q8	4.43	1.11	<u>.45</u>	.66	16	.51	<u>.40</u>	.58	.08	30
Q49	3.92	1.37	<u>.45</u>	63	<u>.36</u>	50	.03	52	.04	.47
Q23	4.05	1.64	<u>.41</u>	.56	.27	.38	18	.56	04	21
Q9R	3.16	1.36	<u>40</u>	.50	07	.46	14	.26	.23	23
Q53	3.22	1.32	.03	.64	<u>.82</u>	.83	06	.54	.03	33
Q51R	3.44	1.40	.04	.64	<u>75</u>	.82	.02	.55	.14	31
Q4H	3.41	1.31	.09	.56	.74	.80	.01	.46	05	22
Q52	3.76	1.39	.10	.57	<u>.71</u>	.76	03	.46	.03	23
Q48	3.64	1.46	.12	54	.71	76	.03	47	02	.36
QU5	3.52	1.46	03	.57	.59	.74	.22	.60	11	37
Q55	3.38	1.27	.17	.51	.56	.64	05	.39	.03	20
Q66	4.14	1.23	14	.41	.49	.58	<u>.36</u>	.58	.19	03
Q54	4.27	1.14	.08	.34	<u>.39</u>	.55	.09	.49	12	04
Q67	4.57	1.14	27	.47	.15	.54	<u>.74</u>	.43	13	32
Q61	4.53	1.09	.13	.61	.00	.54	.69	.81	10	42
Q3J	4.83	1.13	08	.60	09	.55	.68	.79	14	37
Q56R	4.33	1.16	.13	.62	.05	.58	.66	.72	05	19
Q60	4.05	1.27	.28	.36	.11	.46	.54	.72	.17	34
Q58	3.88	1.26	08	.70	.44	.61	.45	.71	.24	32
QU2	4.10	1.29	<u>.37</u>	.65	.10	.50	.43	.65	.04	42
Q13	4.49	1.15	<u>.38</u>	.35	04	.32	<u>.39</u>	.63	12	33
Q57R	2.30	1.16	07	33	.00	22	.08	23	<u>.72</u>	.72
Q62R	1.84	0.97	08	28	.13	14	02	23	<u>.64</u>	.64
Q10R	2.94	1.49	.25	40	12	27	03	25	<u>.57</u>	.61
Q65R	2.73	1.39	23	56	.01	43	.10	49	<u>.55</u>	.59
Q7R	2.41	1.22	.26	42	.06	38	<u>36</u>	32	<u>.48</u>	.56
Q64R	3.23	1.42	13	10	16	14	.04	16	<u>.46</u>	.51
Q4R	3.18	1.38	.07	14	.00	14	14	35	<u>.46</u>	.49
<u>Q11R</u>	2.95	1.43	29	21	01	18	15	27	.40	.48
Initial Eigenvalues			14.78		2.73		1.94		1.68	
			12.26		11.13		10.00		5.47	
% Variance Explained			32.26		29.29		26.32		14.39	

^aThe total variance explained reflects the initial eigenvalues. Trace values cannot be added to obtain total variance explained after rotation because factors were correlated.

Note. Factor pattern coefficients greater than 1.301 are bolded, underlined, and were retained for that component. Percentage variance is post-rotation; percentage of variance is trace divided by 38 (# of items) times 100. The eigenvalue of the fifth, non-retained factor was 1.17. h^2 = communality coefficient.

Table 2

Factor Correlation Matrix

Factor	М	SD	1	2	3	4
1	4.16	0.70				
2	3.69	0.80	.70			
3	4.16	0.74	.63	.61		
4	2.68	0.84	43	32	38	
α	.84		.82	.83	.85	.79

Table 3

Removed	Items
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Item	Question	Reason for Removal
Q5R	The purpose of assessment depends largely on who	Factor pattern weight less
	is asking for assessment results.	than 0.40. One of 2 lowest
		loading items on Factor 4
Q33R	Assessment for accreditation purposes is prioritized	Lower communality then
	above other assessment efforts.	Q5R. One of 2 lowest
		loading items on Factor 4
Q4R	Assessment is an exercise primarily for compliance	Factor pattern weight less
	purposes.	than 0.40.
Q2B	Faculty are in charge of assessment at my	Factor pattern weight less
	institution.	than 0.40.
Q22	I can name the office at my institution that leads	Factor pattern weight less
	assessment efforts for accreditation purposes.	than 0.40.
Q30R	Assessment is primarily the responsibility of	Factor pattern weight less
	student affairs staff.	than 0.40.
Q53L	Student affairs staff consistently receive assessment	Factor pattern weight less
	data from administrators.	than 0.40.
Q50R	Assessment results are NOT intended for	Factor pattern weight less
	distribution.	than 0.40.
Q54	Assessment results are available from	Factor pattern weight less
	administrators by request.	than 0.40.
Q29	Assessment is primarily the responsibility of	Factor pattern weight less
	faculty members.	than 0.40.
QU3	Assessment is primarily the responsibility of upper	Factor pattern weight less
	student affairs administrators.	than 0.40.
Q23	I can name the office at my institution that leads	Factor pattern weight less
	assessment efforts for student learning.	than 0.40.
QU4	Upper student affairs administrators are supportive	Factor pattern weight less
	of making changes.	than 0.40.
QS3L	Assessment results have no impact on resource	Improve α for Factor 4
	allocations.	-

Discussion

The model developed in the present study may offer new insights into cultures of assessment among student affairs professionals. Previously, this scholarship has remained largely conjectural; scholars and practitioners hypothesize about the importance or nature of an organizational culture of assessment yet they operated from a dearth of empirical evidence on the topic. The aforementioned model is suggestive of factors of a division-wide culture of assessment in student affairs. These factors offer opportunities to consider cultures of assessment in the student affairs context anew. For example, the factors pertaining to the clarity of assessment's purpose and communication about assessment offer opportunities for student affairs leaders to reflect upon the regularity and clarity with which they talk about assessment with student affairs staff. Offering clear comments on assessment's purpose, providing regular "success stories" as exemplars, or sharing assessment results with staff in a public manner are just a few practices that advance or sustain an organizational culture of assessment in student affairs. Participants were asked to respond to an open-ended, qualitative question in the Student Affairs Survey that asked how they prefer to receive communication about assessment results. Though further analyses of these data are needed an overwhelming majority of respondents indicated they preferred to receive e-mail notifications about assessment results from the CSAO or the CSAO's assessment designee.

The results from this study suggest that student affairs staff may approach assessment with far greater nuance than administrators and faculty—yet also with some notable similarities between the groups. For example, in studies of the factor structure inherent in the *Administrators Survey* (Fuller & Skidmore, 2014), the factors listed included a) Clear Commitment, b) Connection to Change, and c) Vital to Institution. Factors such as Clear Commitment to Assessment and Connection to Change closely align to corresponding factors

The results from this study suggest that student affairs staff may approach assessment with far greater nuance than administrators and faculty—yet also with some notable similarities between the groups. found in Fuller and Skidmore's (2014) study of administrators' perspectives. However, items related to a sense of vitality to their institution's future did not coalesce into a similar factor in the present study. Similarly, in examining data collected from the *Faculty Survey* (Fuller et al., 2016), a) Faculty Perceptions, b) Use of Data, c) Sharing, d) Compliance or Fear Motivators, and e) Normative Purposes for Assessment were found to form the underlying factors of faculty perceptions of institutional cultures of assessment. Here, a notable similarity between student affairs and faculty populations includes a factor related to fear of assessment. Indeed, student affairs staff may approach division assessment efforts with some trepidation or skepticism. In the present study participants were asked to agree or disagree with the statement "The majority of student affairs staff in my division are afraid of assessment (69R)." Nearly half—49.7%—of respondents indicated that to some extent they agreed with this statement. For many student affairs leaders assessment has remained a fearful endeavor—a regulatory mechanism that significantly reduces their time on core functions or a punishment received at the whim of an institutional leader.

Though student affairs staff approach assessment differently from other administrators and faculty on campus, fear may be a tremendous unifying force in a struggle against assessment-in solidarity with their faculty colleagues. Chief student affairs officers and assessment leaders may find it useful to redefine discourses of fear of assessment by engaging key student affairs staff in dialogue about their assessment fears, hopes for their units, and fundamental perspectives on student learning. Assessment, as a process aimed at transformation, is often fearful for many higher-education leaders (Bresciani et al., 2010). Student affairs assessment leaders can do much to support their colleagues through such transformations. Useful leadership tactics in this support phase include, among others, listening to staff members' needs and concerns, managing or staggering tasks due to avoid a sense of overwhelm, and initiating discussions about assessment that are contextualized by staff members' fundamental perspectives on student learning (i.e., not using assessment to tell staff their fundamental perspectives on student learning are flawed but instead using it as a means to talk about student learning in general; Fuller & Skidmore, 2014). Student affairs assessment leaders may find it useful to heighten or reconceptualize their division's fundamental discourses about student learning (Henning & Roberts, 2016). Assessment is often viewed by student affairs staff as a construct that supports accountability or other externally motivated discourses (Henning & Roberts, 2016; Suskie, 2014). Instead, it could serve as an evidence-based means of reflecting upon the nature and purpose of student learning and development. The present study offers student affairs leaders opportunities to reflect upon their practice and develop new ways of talking about and engaging in assessment in their division such that assessment is a framework focused on supporting or advancing student learning and development.

The four-factor solution emerging in the present study, along with the refinement away from a nine-factor solution associated with other versions of the survey, suggest the need for continued refinement and revision of the Student Affairs Survey of Assessment Culture. After consideration by a panel of student affairs experts, the Council of Scholars, the current instrument was developed by making modifications to the Administrators Survey of Assessment Culture. However, differences in the conceptualization of assessment culture between student affairs staff, administrators, and faculty are best answered through other statistical approaches (e.g., chi-square test of fit, RMSEA, etc.). Empirically testing those differences was beyond the scope of this study but would be required to understand the specific ways in which assessment culture varies between these groups. Additional studies will focus on the comparison of conceptualizations of cultures of assessment across administrative, faculty, and student affairs groups. The present analyses, however, offer a foundation for such future studies by providing the psychometric properties of the Student Affairs Survey of Assessment Culture. Moreover, the instrument appears to offer a sound, refined approach to empirically examining cultures of assessment in student affairs contexts. As such, additional revisions to the instrument are not expected in the immediate future and ongoing studies will be conducted to further explore this complex topic.

Though student affairs staff approach assessment differently from other administrators and faculty on campus, fear may be a tremendous unifying force in a struggle against assessment in solidarity with their faculty colleagues. Lastly, though student affairs assessment literature was reviewed in the development of this instrument it was not the only scholarship reviewed, offering opportunities to focus on student affairs contexts in future revisions. Moreover, additional scholarship (Bingham & Bureau, 2015; Henning & Roberts, 2016; Schuh et al., 2016)—including many works focusing on student affairs assessment—have been authored since the *Administrators Survey* was crafted and even some have been published following the summer 2016 administration of the *Student Affairs Survey of Assessment Culture*. These additional works may highlight nuanced approaches to student affairs assessment worth exploring through future studies.

Conclusion

Student affairs leaders have been asked to operate and lead their units with a dearth of empirical evidence about cultures of assessment in student affairs. This gap in the literature is made all the more problematic by the fact that assessment, as a function of modern academe, is a process aimed at the inclusion and use of evidence in decision-making processes. The present study calls upon data from the Student Affairs Survey to examine fundamental concepts undergirding how student affairs practitioners conceptualized their division's culture of assessment. The model offered through the exploratory factor analysis provides an initial conceptualization of assessment cultures in student affairs contexts. Further theorization and analyses will reveal new considerations and augment practice through evidence-based scholarship.

References

- Baas, L., Rhoads, J. C., & Thomas, D. (2016). Are quests for a "culture of assessment" mired in a "culture war" over assessment? A Q-methodological inquiry. Sage Open, 1–17. doi:10.1177/2158244015623591
- Banta, T. (2002). Building a scholarship of assessment . San Francisco: Jossey-Bass.
- Barr, M. J. (1993). *The handbook of student affairs administration*. The Jossey-Bass higher and adult education series. Jossey-Bass Publishers, San Francisco, CA.
- Bingham, R. P., & Bureau, D. (2015). Tenet one: Understand the "why" of assessment. In R. P. Bingham, D. Bureau, &
 A. G. Duncan (Eds.), *Leading assessment for student success: Ten tenets that change culture and practice in student affairs* (pp. 9–21). Sterling, Virginia: Stylus Publishing, LLC.
- Bresciani, M. J., Zelna, C. L., & Anderson, J. A. (2004). *Techniques for assessing student learning and development: A handbook for practitioners*. Washington, D.C.: National Association of Student Personel Administrators.
- Bresciani, M. J., Gardner, M. M., Hickmott, J. (2010). Demonstrating student success: A practical guide to outcomesbased assessment of learning and development in student affairs. Sterling, VA: Stylus Publishing.
- Douchy, F., Segers, M., Gijbels, D., & Struyven, K. (2007). Assessment engineering: breaking down barriers between teaching and learning, and assessment. In D. Boud, & N. Falchicov (Eds.), *Rethinking assessment in higher education: Learning for the longer term* (pp. 87–100). New York, NY: Routledge.
- Fabrigar, L. R., Wegener, D. T., MacCallum, R. C., & Strahan, E. J. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological Methods*, 4(3), 272.
- Flora, D. B., & Flake, J. K. (2017). The purpose and practice of exploratory and confirmatory factor analysis in psychological research: Decisions for scale development and validation. *Canadian Journal of Behavioral Science*, 49(2), 78–88.
- Fuller, M. B. (2011). Conceptual framework for the Survey of Assessment Culture. Montgomery, TX: Fuller Educational Consulting.
- Fuller, M. B. (2016). Nation-wide results from the Faculty Survey of Assessment Culture. Huntsville: Sam Houston State University. Retrieved from www.shsu.edu/assessmentculture
- Fuller, M. B., & Skidmore, S. (2014). An exploration of factors influencing institutional cultures of assessment. International Journal of Educational Research, 65(1), 9–21.

- Fuller, M., Skidmore, S., Bustamante, R., & Holzweiss, P. (2016). Empirically exploring higher education cultures of assessment. *The Review of Higher Education*, 39(3), 395–429. doi:10.1353/rhe.2016.0022
- Haviland, D. (2014). Beyond compliance: How organizational theory can help leaders unleash the potential of assessment. Community College Journal of Research and Practice, 38(9), 755–765. doi:0.1080/10668926.2012.711144
- Henson, R. K., & Roberts, J. K. (2006). Use of exploratory factor analysis in published research. Educational and *Psychological Measurement*, 66, 393–416.
- Henning, G., & Roberts, D. (2016). Student affairs assessment: Theory to practice. Sterling, VA: Stylus Publishing.
- Kieffer, K. M. (1999). An introductory primer on the appropriate use of exploratory and confirmatory factor analysis. *Research in the Schools*, 6(2), 75–92.
- Kirschner, J. (2016, Jan. 25). Proving our worth in student affairs: Identifying and addressing critical needs in higher education. Retrieved from NASPA Blog: https://www.naspa.org/about/blog/proving-our-worth-in-student-affairs
- Kuh, G. D., & Banta, T. W. (2000). Faculty-Student Affairs Collaboration on Assessment-Lessons from the Field. About Campus, 4(6), 4–11.
- Kuh, G. D., Ikenberry, S. O., Jankowski , N. A., Cain, T. R., Ewell, P. T., Hutchings, P. T., & Kinzie, J. (2015). Using evidence of student learning to improve higher education. San Francisco, CA: Jossey-Bass.
- Long, D. (2012). The foundations of student affairs assessment: A guide to the profession. In L. J. Hinchliffe, & M. A. Wong (Eds.), Environments for student groth and development: Librarians and student affairs in collaboration (pp. 1–39). Chicago, IL: Assocation of College and Research Libraries.
- O'Connor, B. P. (2000). SPSS and SAS programs for determining the number of components using parallel analysis and Velicer's MAP test. *Behavior Research Methods, Instrumentation, and Computers, 32*, 396–402.
- Roper, L. D. (2015). Student affairs assessment: Observations of the journey, hope for the future. *Journal of Student Affairs Inquiry*, 1–15.
- Schuh, J. H. (2013). Developing a culture of assessment in student affairs. In J. H. Schuh, New Directions for Student Services (Vol. 142, pp. 89–98). San Francisco, CA.
- Schuh, J. H., Biddix, J. P., Dean, L. A., & Kinzie, J. (2016). Assessment in Student Affairs. San Francisco: Jossey Bass Pub. Co.
- Suskie, L. C. (2014). *Five dimensions of quality: A common sense guide to accreditation and accountability.* San Francisco, CA: Jossey-Bass.
- University of Pittsburgh. (2012). *Developing a culture of assessment: Student affairs model*. Retrieved from Culture of assessment: http://www.middlestates.pitt.edu/node/625
- Zwick, W. R., & Velicer, W. F. (1986). Factors influencing five rules for determining the number of components to retain. *Psychological Bulletin, 99*, 432–442