Results from a Survey Gauging Emergency Management Higher Education Community Consensus on Key Points related to Research Standards for the Discipline of Emergency Management

INTRODUCTION AND METHODS

The FEMA Higher Education Program sponsored two working groups in the last two years to support the higher education community's efforts to explore how contributions of new knowledge would be recognized within the academic discipline of emergency management. The work product of these groups—two reports regarding the working group's discussions and draft research standards—is available at: https://training.fema.gov/emiweb/edu/emTheoryResearch.asp.

Too few individuals representing few institutions were able to participate in the working groups. Yet, there was a commitment to expanding the conversation on these topics to include a broader array of individuals and institutions and explore whether, and to what extent, consensus around the points of consensus emerging from the working groups exists. Thus, a survey effort was undertaken to explore this issue.

A master list of institutions was compiled from the Federal Emergency Management Agency's Higher Education Program website College List links for doctoral level; masters level; masters certificate, specialization, concentration or track; bachelor degrees; bachelor-level concentrations and minors; associate level; standalone certificate programs; and, emergency/disaster management programs in other countries. Compilation resulted in a population of 166 institutions. Contact information for the person responsible for the institution's emergency management program(s) could be found for 161 of the identified institutions.

The initial invitation with the request to first discuss the survey with their faculty and complete it when they had reached consensus on their opinions was sent to the person responsible for the institution's emergency management program(s) on March 28, 2014 with personal reminder emails sent on April 10, April 23, and May 12 of 2014 (a .pdf copy of the survey was provided as an attachment for their reference).

The survey was comprised of a series of statements related to the Standards. Respondents were asked to rate the extent of agreement of their faculty with each of them using 5 point Likert scales. Multiple opportunities for open-ended feedback were provided. Ratings of 4 or 5 on the Likert scale would indicate faculty consensus surrounding the statement they were rating. During data analysis, statements with mean values at or above 4, standard deviations below 1, and negative, high skew would be interpreted as consensus across the faculty associated with responding institutions.

When the survey closed on May 16, 2014, representatives of 67 institution's emergency management program(s)—42% of those contacted—had participated. Twenty-six of the responding institution's department name had emergency management or some variation (e.g., disaster management, humanitarian) in the name while forty-one did not. 20 of the responding institutions offered less than a 4 year degree, i.e., an associate's degree, minor, certificate, or specialization; and, forty-seven of the institutions offer one or more degrees above the associate's level. Thirty-four of the responding institutions serve undergraduate students only; fifteen serve both undergraduates and graduate students; and, eighteen only serve graduate students. Twenty-nine of the institutions responding offer most of the emergency management curriculum online, nineteen primarily face-to-face, fourteen blended, and 5 other. See Appendix A for a list of participating institutions.

FINDINGS

There appears to be some consensus surrounding the draft research standards. While the consensus observed was not as high as that surrounding the disciplinary identity or role of higher education points of consensus explored in the same survey[i], responses to the open-ended comments and crosstab analysis revealed that if one or two issues were addressed the consensus would have been far stronger. See Table 1 for the distribution of statement ratings of faculty agreement with the Standards.

There was some consensus around the idea that having a set of standards is valuable for the developing discipline and would help facilitate the conduct and dissemination of high quality research as measured by mean values at 4 or above, standard deviations at or below 1, and negative skew. There was less support, however, for the Draft Standards document

itself or each of the three sections therein (i.e., preface, standards for the conduct of emergency management research, standards for the dissemination of emergency management research). Means hovered around 4, standard deviations were about 1, and negative skew was consistently evidenced; yet, these values were not as strong in their affirmation of the Standards as those associated with the value and helpfulness of having standards.

Table 1. Opinions of the draft research standards.

	Mean	SD	Skew	Kurtosis
Set of emergency management research standards is valuable for developing discipline	4.17	1.009	-1.240	1.359
Standards helpful in facilitating high quality research by those who use the standards	4.00	.861	-.626	.658
Overall support for the draft research standards	3.82	1.066	-.490	-.267
Approve of the statements made in the Preface to the standards	3.87	.999	-.778	.566
Approve of the standards outlined in II. Standards for Conducting Emergency Management Research	3.97	1.050	-.948	.540
Approve of the standards outlined in III. Standards for Publishing Emergency Management Research	3.76	1.031	-.783	.298

Possible explanations for the extent of consensus observed was explored by examining the data from the open-ended spaces provided and use of crosstab analysis.

The survey gave respondents the opportunity to provide specific feedback related to each of the sections within each of the 3 parts of the standards document (i.e., preface, standards for the conduct of emergency management research, standards for the dissemination of emergency management research). An open-ended space for any general comments was provided at the end of the survey as well. Very few comments related to the standards were provided and some respondents were responsible for more than one comment; nevertheless, two themes emerged in those comments.

The first issue raised by more than one respondent on behalf of their faculty was that the standards document states that the standards apply to an inappropriately wide range of individuals. More than one respondent made the point that not all individuals associated with higher education emergency management programs would self-identify as belonging to emergency management (e.g., faculty teaching have doctoral degrees in other fields). In addition, individuals who identify with other academic disciplines that have a long research tradition and standards, however formal or informal, explicitly stated or implied, do not believe standards are required to guide their work or that of their students. Others stated, that there is no value in suggesting that the standards apply to practitioners and consultants when they would not know of them and there would be no mechanism to hold them to the standards. The specific statement that seems to be the source of concern is as follows,

> The standards apply to the research efforts of emergency management students, faculty in emergency management higher education programs, scholars who associate themselves with the discipline of emergency management, and emergency management practitioners and consultants conducting research. (Draft Standards, p. 1).

There had been significant discussion and it took some time to reach consensus within each of the groups regarding to whom the standards would apply. In fact, the scope of those to whom the standards would apply had actually widened from one working group to the next in order to achieve consensus. Thus, it was not surprising that concerns were expressed about this statement by the emergency management faculty at the institutions represented in the survey.

The results of crosstab analysis using Eta as a measure of association ($p<.05$) suggests that this issue extends beyond those who left written comments. Crosstab analysis was conducted to examine whether there was any difference of opinion on the research standards between the type of students served by the institution's emergency management programs (i.e., only undergraduate students, only graduate students, or a mixed student body); whether the institution offered only certificates/specializations or one or more degrees, whether the majority of the emergency management curriculum is offered face-to-face, online, blended, or other; institutions in the United States or outside of the United States; the status of the person who completed the survey on behalf of the faculty (i.e., faculty, program coordinator/director, department

head/chair, other); and, whether "emergency management" or a variation was in the department name provided by the respondent or not.

There was a striking pattern—the only pattern—in the difference in the extent of affirmative consensus between those departments that had "emergency management" in the department name and those that did not.

Table 2. Crosstab analysis of difference of opinion between departments with "emergency management" or variation in title and not using Eta as a measure of association.

	p	Amount of support among those with EM in Title vs. Not
Overall support for the draft research standards	.012	More
Set of emergency management research standards is valuable for developing discipline	.032	More
Standards helpful in facilitating high quality research by those who use the standards	.000	More
Approve of the statements made in the Preface to the standards	.048	More
Approve of the standards outlined in II. Standards for Conducting Emergency Management Research	.015	More
Approve of the standards outlined in III. Standards for Publishing Emergency Management Research	.028	More

This issue seems, at least on the surface, easy to address—change the statement to read as follows, "The standards apply to the research efforts of emergency management students and scholars who associate themselves with the discipline of emergency management".

This change is not just easy it is also defensible. The primary reason for the working group efforts was to provide standards for those who will *self-identify* as emergency management scholars in the future and those who do so now. It is these individuals who may not identify solely or uniquely with standards of other specific academic disciplines and would most value articulation of the standards for producing new knowledge within this emerging discipline—emergency management—even while the standards themselves would not necessarily differ from broadly accepted standards for research in the social sciences. Many, if not most, of these individuals are likely to be those who are earning or hold a doctoral degree in emergency management (although the exact title of the degree will vary). And, it was for these individuals—and others who would self-identify as belonging to this emerging discipline—that this work was undertaken and the draft standards produced.

Long-standing academic disciplines tend not to have a document such as the one set forth for consideration by the working groups. Those disciplines, however, have had a long period of time over which to develop theoretical frameworks and a research tradition and to engage in discussion and debate about what constitutes new knowledge in their respective disciplines. Yet, current and up-and-coming emergency management scholars, particularly those interested in building an academic discipline of emergency management, do not have the benefit of drawing on *a* discipline for those things and they have already and are currently doing research. Thus, there seems to be value in having a set of standards, though perhaps not for as broad an array of people as the 2013 Draft Standards stated.

The second issue raised seems related to the first. More than one comment was made that the list of preferred journals was too restrictive. Comments referred to the more appropriate nature of other outlets given the disciplinary orientation of the faculty (i.e., faculty from other academic disciplines than emergency management) and their work. Yet, if the statement regarding to whom the standards apply were narrowed, then the journal list may no longer be an issue. Moreover, a variety of defenses for the journal list could be offered that may be convincing to those voicing the concern (assuming the aforementioned change did not resolve it).

It is not clear that these two issues fully explain why the mean values on the standards statements were not higher. Due to the lack of specific feedback, however, it is impossible to ascertain what other factors may have contributed to the

relatively low consensus. Regardless, it is important to also keep in mind that the support for the standards was not actually low.

The extent to which institutions were willing to take a series of actions to support the Standards is evidence of this fact. Most institutions agreed (i.e., value of 4 or higher on the 5 point Likert scales) that they would be willing to take the actions identified in the survey. While there was significant distribution of the ratings of most of the actions identified (i.e., distribution across the values of 3, 4, and 5), there was nevertheless significant and negative skew observed in most cases. See Table 3 for a list of the actions and the distribution of ratings of those actions.

Table 3. Willingness to take action in support of the Standards

	Mean	SD	Skew	Kurtosis
Appear as a signatory program(s} in an appendix to the Standards	3.96	1.240	-1.248	.778
Commit to the conduct and publishing of student research in keeping with the Standards	3.95	1.216	-.884	-.193
Commit to the conduct and publishing of faculty research in keeping with the Standards	3.95	1.262	-.983	-.072
Educate students regarding how to evaluate the quality of research based on the Standards	4.39	.867	-1.739	3.603
Educate students regarding what constitutes a contribution of new knowledge in our discipline using the Standards	4.40	.904	-1.658	2.782
Post a statement of commitment to the standards and a link to the standards document on program website(s)	3.91	1.116	-.957	.490
Willingness index	4.07	.979	-1.278	1.470

The final area explored in the survey was the extent to which the faculty in participating institutions agreed that a number of tools would be helpful in implementing the standards. There appears to be some agreement that these tools would be helpful, and, again, while there was significant distribution of ratings across the values of 3, 4, and 5 on the Likert scales, the skewness was again high and negative. See Table 4 for the distribution of ratings regarding the extent to which the identified tools would support implementation of the Standards in their institution.

Table 4. Extent to which the identified tools would support implementation of the Standards.

	Mean	SD	Skew	Kurtosis
A research guide for where to find scholarship and research related to the discipline's purview that is organized in keeping with the draft Standards	4.08	.988	-.811	.080
A revised and updated FEMA Higher Education Program research textbook (last update 1999) made available to programs	4.08	1.005	-1.086	1.098
A research methods textbook published through a recognized book publisher	3.93	1.078	-1.104	.923
A guide for students on how to critically read a research article	4.22	1.043	-1.659	2.705
An Interactive, web-based independent study research course regarding research methods to support those programs that do not have the resources to offer a methods course	4.15	1.030	-1.251	1.285
A guide for degree programs as to how to integrate the Standards into coursework	3.90	1.012	-.896	.664
A document with examples of how the Standards have been successfully integrated in degree programs	3.92	.996	-.785	.605
Examples, in an accessible form, forum, of research that meet the Standards (i.e., theses, dissertations, journal articles, book chapters/books)	4.03	1.016	-1.349	2.036

Crosstab analysis using Eta as a measure of association and the aforementioned variables in conjunction with each of these tools did not reveal any statistically significant differences in the extent of consensus regarding the helpfulness of these tools. Open-ended comment space was provided for respondents to include suggestions for what other tools may be helpful. A total of 9 comments were made but there was no pattern or theme to the comments.

APPENDIX A. PARTICIPATING INSTITUTIONS

This report reflects the participation of the person responsible for the institutions' emergency management higher education program(s), or a designated alternative, at the following 67 institutions.

Adler School
Arkansas Tech University
Auckland University of Technology
Australian Emergency Management Institute
Barry University
Bellevue University
Brandon University
California State University Long Beach
Centennial College, Toronto, Canada
Central Georgia Technical College
Clackamas Community College
Coastline Community College
Columbia College
Columbia Southern University
Community College of Vermont
Concordia University
Durham Technical Community College
Eastern New Mexico University
Edmonds Community College
Erie Community College
Fairleigh Dickinson University
Florida State University
George Mason University
Georgia Perimeter College
Georgia State University
Guilford Technical Community College
Hesston College
Indiana University-Purdue University Indianapolis
Jackson State University
Jacksonville State University
Justice Institute of British Columbia
Louisiana State University
Meridian Community College
Millersville University
Missouri State University
Montgomery College
Montgomery County Community College
North Dakota State University
Northern Alberta Institute of Technology
Northwest Missouri State University
Oklahoma State University
Onondaga Community College
Philadelphia University
Portland Community College
Pikes Peak Community College
Royal Roads University
Saint Louis University
San Antonio College
St Petersburg College
SUNY Canton
University of Maryland Baltimore County
University of North Carolina Charlotte
University of Akron
University of Central Missouri
University of Delaware
University of Florida
University of Hawaii-West Oahu
University of Maryland University College
University of North Carolina - Pembroke
University of North Texas
University of South Florida
University of Southern Mississippi
University of Washington
Utah Valley University
Voorhees College
Wayne Community College
Western Illinois University

This snapshot of the results report and the survey leading to it were done by Jessica Jensen. Please direct comments or inquiries related to the focus group/report to her at ja.jensen@ndsu.edu or 701-219-4293.

[i] See Jensen, J. (2014). Snapshot of the results from a survey gauging emergency management higher education community consensus on key points related to emergency management's disciplinary identity. Available at: http://training.fema.gov/EMIWeb/edu/emTheoryResearch.asp.