



## Disaster Prevention and Management

Incorporating cultural competency skills in emergency management education

Claire Connolly Knox Brittany Haupt

### Article information:

To cite this document:

Claire Connolly Knox Brittany Haupt , (2015),"Incorporating cultural competency skills in emergency management education", Disaster Prevention and Management, Vol. 24 Iss 5 pp. 619 - 634

Permanent link to this document:

<http://dx.doi.org/10.1108/DPM-04-2015-0089>

Downloaded on: 15 November 2016, At: 22:58 (PT)

References: this document contains references to 48 other documents.

To copy this document: [permissions@emeraldinsight.com](mailto:permissions@emeraldinsight.com)

The fulltext of this document has been downloaded 400 times since 2015\*

### Users who downloaded this article also downloaded:

(2015),"Developing an evaluation tool for disaster risk messages", Disaster Prevention and Management: An International Journal, Vol. 24 Iss 5 pp. 570-582 <http://dx.doi.org/10.1108/DPM-11-2014-0224>

(2015),"Assessing displays for supporting strategic emergency management", Disaster Prevention and Management: An International Journal, Vol. 24 Iss 5 pp. 635-650 <http://dx.doi.org/10.1108/DPM-05-2015-0100>

Access to this document was granted through an Emerald subscription provided by emerald-srm:563821 []

### For Authors

If you would like to write for this, or any other Emerald publication, then please use our Emerald for Authors service information about how to choose which publication to write for and submission guidelines are available for all. Please visit [www.emeraldinsight.com/authors](http://www.emeraldinsight.com/authors) for more information.

### About Emerald [www.emeraldinsight.com](http://www.emeraldinsight.com)

Emerald is a global publisher linking research and practice to the benefit of society. The company manages a portfolio of more than 290 journals and over 2,350 books and book series volumes, as well as providing an extensive range of online products and additional customer resources and services.

Emerald is both COUNTER 4 and TRANSFER compliant. The organization is a partner of the Committee on Publication Ethics (COPE) and also works with Portico and the LOCKSS initiative for digital archive preservation.

\*Related content and download information correct at time of download.

# Incorporating cultural competency skills in emergency management education

Incorporating  
cultural  
competency  
skills

619

Claire Connolly Knox and Brittany Haupt  
*School of Public Administration, University of Central Florida,  
Orlando, Florida, USA*

Received 20 April 2015  
Revised 25 June 2015  
Accepted 2 August 2015

## Abstract

**Purpose** – The purpose of this paper is to incorporate a model of prejudice reduction and cultural identity development theory to assess: the implementation of a diversity case study in a disaster management course; and the cultural competency understanding among the students.

**Design/methodology/approach** – A diversity case study was implemented in an undergraduate Disaster Response and Recovery course (Fall 2013  $n=17$ ; Spring 2014  $n=21$ ; Fall 2014  $n=35$ ). The discussion encouraged students to contemplate how their biases, preconceived notions, and stereotypes affect their future role in emergency management.

**Findings** – Results from Likert scale pre/post tests showed a marked increase in knowledge and a positive change in attitudes ( $p < 0.05$ ). Open-responses denoted linkages to the prejudice reduction model and cultural identity development theory.

**Research limitations/implications** – Bias can be attributed to the instructor and facilitator, and contextual limitations including a lack of: previous conversations and courses on diversity-related topics and participation motivation.

**Practical implications** – By developing cultural competency, managers initiate intergroup contact reducing negative perceptions and increasing empathy for those deemed different. Integrating cultural competency into emergency management academic programs allows students to identify how their biases, stereotypes, and preconceived notions affect their performance.

**Originality/value** – This study contributes to the literature by focussing on implementing a diversity case study to explore cultural competency, which is lacking in emergency management higher education. The diversity case study and instructional design could be adopted in disaster management courses.

**Keywords** Higher education, Emergency management, Case study design, Cultural competencies

**Paper type** Research paper

## Introduction

Throughout the majority of the US's educational system history, diversity-related initiatives pertained mostly to legally protected classes vs the plethora of interpretive factors existing in today's society (Bailey, 2004). Within educational curricula, knowledge, skills, and abilities (KSAs) are a focus as faculty and staff develop cultural competencies and prepare students to interact with a diverse citizenry and workforce. However, the issue of how to incorporate cultural competency in the classroom has yet to be fully addressed as "specialists have the authority to name, and therefore to regulate, construction of the 'other'" (Infante and Matus, 2009, p. 440) without adequate space for students to reflect and dialogue. By acknowledging aspects of bias and prejudice, scholars believe cultural competency can be meaningfully integrated into educational curricula (e.g. Carrizales, 2010; Gaynor, 2014; Norman-Major and Gooden, 2012;

The authors express the appreciation for the valuable comments and feedback from the anonymous reviewers, Drs Frances Edwards and Tia Gaynor, and editors of *Disaster Prevention and Management*.



Disaster Prevention and  
Management

Vol. 24 No. 5, 2015  
pp. 619-634

© Emerald Group Publishing Limited  
0965-3562

DOI 10.1108/DPM-04-2015-0089

Rice, 2004; Rice and Mathews, 2012). This incorporation leads to managers who can intentionally initiate intergroup contact to reduce negative perceptions and increase empathy for those deemed the “other” (Dixon *et al.*, 2010; Paluck and Green, 2009).

This paper focusses on a subfield of public administration, emergency management, in which the changing demographics of society are increasing the need to include diversity and cultural competency into the curriculum. For instance, persons identifying as African American, Asian, and Latino will represent over half of the American population by 2060 (Gaynor, 2014). Additionally, the profession is shifting from an older, Caucasian, male dominated sector to one representative of all genders, age groups, and ethnicities (Alexander, 2012a). Therefore, practitioners must acknowledge diverse and ever changing needs of their community within each phase of emergency management (Edwards, 2012). In the USA, there are 242 emergency management academic programs: nine doctoral level, 41 masters level, 47 bachelors level, 48 associates level, and 97 certificates and minors (Federal Emergency Management Agency, 2015). These programs have consistently increased since 2001 and with it a growing literature debating the structure and content of the discipline and curriculum. scholars (i.e. Alexander, 2012a; Clement, 2011; Drabek, 1987; Donahue *et al.*, 2010; Kapucu, 2011; Kiltz, 2009; McCreight, 2009; Urby and McEntire, 2013; Waugh and Sadiq, 2011) outline various interpersonal and technical KSAs needed in a standardized curriculum for undergraduate and graduate emergency management programs. However, cultural competency-related KSAs are not explicitly stated in the evolving development of the curriculum. This paper discusses the existing literature from multiple disciplines, outlines a case study used in an undergraduate course, provides results and lessons learned from its implementation, and concludes with future research recommendations.

### Literature review

Some disciplines use culture synonymously with diversity, multiculturalism, and/or social justice (Akombo, 2013; Gurin *et al.*, 2002; Rice, 2004). This study views culture as shared norms and values of a set of people through which they interpret, express, respond, and perceive their surrounding environment (Lederach, 1995). This leads to a cultural identity consisting of informal and formal ties leading to knowledge of behaviors, worldviews, values, expectations, beliefs, and symbols, along with an acceptance of these aspects in personally meaningful ways (Pedersen, 2000). Therefore, cultural competency “reflects specific actions or policies within an organization that enable it to more effectively serve it culturally diverse populations” (Carrizales, 2010, p. 594). Through understanding these actions and policies and incorporating cultural identity development theory, administrators open themselves to an awareness of the “backstage” cultural paradigms existing in institutions and recognize how their perspectives intersect with others (i.e. language and communication patterns, self- and group identities, and relationship interactions) (Moore-Thomas, 2010; Ryan, 2010; Riccucci, 2012). This theory is a complicated construct of psychosocial and cognitive layers viewing each individual as multi-dimensional in nature with coexisting identities influenced by certain phases or stages within their lifetime. Additionally, these identities are highly influenced by the environment, which affects how the individual defines whom they are, how they interact with others, their purpose in life, and their knowledge base and reflective judgment abilities (Moore-Thomas, 2010).

Generally, the identity development process, whether individual or group, begins with a sense of being different. They become an “other” or someone who is not like the rest (Infante and Matus, 2009). Once an individual acknowledges this difference, they

may find the need to surround themselves with those who are similar and/or may reject those who hold the same identity (Moore-Thomas, 2010). This individual is most likely to experience biases, stereotypes, and pre-conceived notions associated with the cultural identity they encounter (Keene, 2011). By increasing cultural competency KSAs, managers become more empathetic, credible, trustworthy, and relatable (Ahmed *et al.*, 2011; Guimond *et al.*, 2013) and lessens the chance for cultural encapsulation (i.e. the heightened risk of utilizing biases, stereotypes, and pre-conceived notions) (Keene, 2011; Moore-Thomas, 2010).

Although there is a lack of an overarching theory or model, Kress *et al.* (2005) promotes reflection as a method to developing cultural sensitivity. Moreover, reflection allows a manager to increase their awareness of sense of self, perception of experiences, and the systemic issues they and the community members may face (Brintnall, 2008; Carrizales, 2010; Riccucci, 2012; Villegas and Lucas, 2002).

### *Importance of diversity-related training*

Employing knowledgeable and experienced faculty and staff from diverse backgrounds is imperative when generating cultural competency-focussed learning outcomes, exercises, and assessments (Akombo, 2013; Brintnall, 2008; Carrizales, 2010; Rice, 2004). Learning is a dynamic process that must incorporate experiences (e.g. study abroad, internships, experiential learning) to break through formal boundaries to informal skills. Faculty and staff must be intentional in empowering and engaging open dialogue (Rice, 2004) and promoting cultural competency as a central outcome in the curriculum (Villegas and Lucas, 2002). Discussions need to incorporate a foundation of definitions, terminology, demographic data, societal disparities, discussions of social equity, and knowledge of policy and legal implications of cultural competency alongside rhetoric skills (Carrizales, 2010; Guimond *et al.*, 2013). Critical discourse on diversity and cultural identity allows the invisible and visible (i.e. internal and external acceptance and portrayal of one's cultural identity) to be recognized. With each identity, an individual may exhibit specific characteristics, which are debatably the individual's creation or a product of their environment (Keene, 2011; Moore-Thomas, 2010).

Cultural identity development theory incorporates aspects of diversity and cultural competence, which are not simply passive words to fulfill a requirement, but rather aspects to explore. The intersection of cultural identities has led to significant conflicts requiring educational institutions to create policies and practices. However, the promoted conversation on acknowledging diversity within each individual is limited in terms of the emergency management profession (Taylor, 2013).

### *Cultural competency in emergency management education*

The evolution and professionalization of emergency management has affected emergency management education (Kapucu, 2011; Kapucu and Knox, 2013), yet there remains a gap regarding cultural competency KSAs. The deficiency of professionalism among some emergency managers can lead to communities being more vulnerable to hazards, especially socially vulnerable populations living in hazard prone areas (McEntire, 2004; Nguyen and Salvesen, 2014). Marginalized and socially vulnerable populations suffer a greater incident of political, sociocultural, economic, and physical obstacles during a disaster (Nguyen and Salvesen, 2014; Seidenberg, 2005). For example, the lack of preparation and response efforts for Hurricane Katrina provided many lessons regarding the importance of cultural competencies by the emergency management community (Adams *et al.*, 2011; Nguyen and Salvesen, 2014;

Seidenberg, 2005; Urby and McEntire, 2013). Since then, federal policy changes have focussed on capacity building for local governments and incorporating the whole community approach throughout all phases of emergency management (Hu *et al.*, 2014). This knowledge leads to culturally competent managers and institutional policies (Norman-Major and Gooden, 2012), which could translate into more culturally appropriate emergency management plans.

According to the International Association of Emergency Managers' Code of Ethics and Professional Conduct (2015), practitioners commit to developing their KSAs to respectfully and professionally serve their communities. By building and maintaining the trust and confidence of their citizenry, managers are better able to assist multiethnic societies (Brintnall, 2008). This increased awareness allows administrators to understand the connection between policies and demographic change (Diem and Frankenburg, 2013).

While experts create training materials and exercises for emergency management professionals to increase their cultural competency skills, we argue for the experience to begin in the classroom. Cultural competencies must be meaningfully incorporated into the curriculum as emergency management higher education moves toward accreditation. The literature contains limited information of best practices; however, there were consistent themes. First, cultural competency is gained through cross-cultural dialogue and reflection exercises (Ahmed *et al.*, 2011; Carrizales, 2010; Ensari *et al.*, 2012; Gaynor, 2014; Gurin *et al.*, 2002; Moore-Thomas, 2010; Norman-Major and Gooden, 2012; Rice, 2004). Second, guidelines can utilize overarching connections to KSAs to help standardize or streamline implementation and assessment processes (Ahmed *et al.*, 2011; Carrizales, 2010; Rice, 2004), and are contingent upon knowledgeable staff and faculty (Carrizales, 2010; Gaynor, 2014).

### **The case study and implementation**

The case study occurred each semester, from Fall 2013 to Fall 2014, within an undergraduate Disaster Response and Recovery course[1] at a US southeastern state university. The professor has five years of emergency management experience[2], while the facilitator has seven years of identity development, communication, and conflict presentation experience in university settings. The case study subject matter aligns the need for cultural competence in emergency managers with the goal to begin conversations regarding bias, stereotypes, and preconceived notions (hereinafter defined terminology) during disaster response. Learning outcomes were: participants demonstrating greater understanding of the defined terminology by engaging in-group and self-reflection of the case study; and participants demonstrating comprehension of how the aforementioned terms influence their role as an emergency manager. Students completed a pretest to capture demographic information, assess understanding of terminology, and establish a baseline of attitudes prior to the exercise[3]. Following the group discussions, students completed a posttest, which included an open-ended statement "I used to think \_\_\_\_, but now I think \_\_\_\_."

#### *Designing the case study*

The pedagogical background incorporates a model of prejudice reduction, which historically focussed on disadvantaged groups and how socially advantaged groups affect them (Keene, 2011; Moore-Thomas, 2010; Paluck and Green, 2009). This model attempts to reduce negative intergroup conflict and acts of discrimination through

intergroup contact (Paluck and Green, 2009). The psychological processes incorporate stereotype reduction, increased positive affect, and decreased salience of group identities and boundaries. Cultural identity development theory became part of the foundation to highlight the multitude of discourses (e.g. race, ability, ethnicity, religion) concerning invisible and visible identities in the historical and hierarchical environment (Robinson-Wood and Howard-Hamilton, 2008).

In addition to the model, a case study structure was utilized to perpetuate critical thinking skills (Alexander, 2012b; Keen, 2011; Kiltz, 2009). The scenario is in a futuristic, fictitious setting to alleviate obvious correlations to current societal issues. Similar to a real-life incident, students were provided with limited information leaving them only a brief period to respond and assist citizens. A list of challenges and obstacles (i.e. transportation limitations, vulnerable areas, and time-sensitive tasks) accompanied the scenario for students to utilize their KSAs to critically think and analyze potential action items (Alexander, 2012b; Kiltz, 2009).

### *Group discussions*

As detailed in Figure 1, the definitions and ground rules provide a foundational framework for discussion. The preliminary group discussion is meant to be an opening for critical discourse for students to contemplate how their own ideals and beliefs could affect their role as emergency managers (Ahmed *et al.*, 2011; Carrizales, 2010; Ensari *et al.*, 2012; Gaynor, 2014; Gurin *et al.*, 2002; Moore-Thomas, 2010; Norman-Major and Gooden, 2012; Paluck and Green, 2009; Rice, 2004). Moreover, the activity helped students understand limitations of the field in regards to the different types of assistance and needs specific to various cultural groups. For each individual, the facilitator and professor attempted to connect comments to personal experiences and then to the broader role and responsibility of an emergency manager in disaster response. Each activity and dialogue builds a foundation and opens a space for individuals to articulate how their perspective positively or negatively affects those with whom they come into contact (Brintnall, 2008; Diem and Frankenburg, 2013; Dixon *et al.*, 2010; Keene, 2011; Norman-Major and Gooden, 2012).

### **Results and discussion**

After each semester, the professor and facilitator modified the implementation to increase the learning outcome results. Group 1 (Fall 2013), the most informal facilitation, was analyzed through responses to an open-ended question. Groups 2 and 3 completed a more formalized pre- and posttest. The majority of Group 2 and 3 students were public administration majors (62 percent and 36.1 percent). Group 2 (Spring 2014) was primarily female (52.4 percent), while Group 3 (Fall 2014) was primarily male (69.4 percent).

Pre and posttest averaged results show an increase in understanding diversity-related terminologies: bias (Group 2 by 14 percentage points; Group 3 by 66 percentage points), preconceived notion (Group 2 by 10 percentage points; Group 3 by 41 percentage points), and stereotypes (Group 2 by 10 percentage points; Group 3 by 54 percentage points). The increase could be attributed to attention on and reiteration of the defined terminology, as memory recollection and connecting the concepts into each lesson can provide a foundation for the case study and present additional dialogue opportunities. Another notable shift was in the attitudes regarding diversity-related terminologies in emergency management for Groups 2 and 3 participants (Figures 2 and 3). Strongly agree and agree answers to the ten statements increased by an average of 36 percentage points for Group 2 and 39 percentage points for Group 3.

## ABOUT THE ACTIVITY

The goal of the exercise is to discuss diversity-related issues through a fictional case study. In attempting to relate the fictional setting to the real world, this extreme situation aids in uncovering biases, stereotypes, and preconceived notions, which will influence the decision making process. *Word of Caution:* Participant responses will vary and range from superficial responses, refrain from self-reflection, and divulge private information about their identity. This activity presents an opportunity for critical dialogue; facilitators must be aware and guide the exercise with sensitivity.

## LEARNING OUTCOMES

- Participants will demonstrate greater understanding of the terms *bias*, *stereotypes*, and *preconceived notions* via pre- and post-tests.
- Participants will demonstrate comprehension of how the terms influence their role as an emergency manager via pre- and post-tests.

## DEFINITIONS (Keene, 2011)

- **Bias:** individual or group of individuals judging another individual or group of individuals prior to obtaining factual knowledge of the individual or group.
- **Stereotypes:** the application of an individual's own thoughts, beliefs, and expectations onto other individuals without first obtaining factual knowledge about the individual(s).
- **Preconceived Notions:** reaction to another individual or group of individuals based on predetermined ideas about the individual or group.

## BREAKDOWN

- ✓ Divide into groups of four to five people
- ✓ Discuss the Ground Rules to set the tone
- ✓ Review the scenario and the group's discussion questions
- ✓ Allow ample time for discussion (approximately 45 minutes)
- ✓ Facilitate group dialogue about responses to questions
- ✓ Utilize supplemental questions if needed

## GROUND RULES (Gorski, 2015)

1. Listen actively—respect others when they are talking.
2. Speak from your own experience instead of generalizing (“I” instead of “they,” “we,” and “you”).
3. Do not be afraid to respectfully challenge one another by asking questions, but refrain from personal attacks—focus on ideas.
4. Participate to the fullest of your ability—community growth depends on the inclusion of every individual voice.
5. Instead of invalidating somebody else's story with your own spin on her or his experience, share your own story and experience.
6. The goal is not to agree—it is to gain a deeper understanding.
7. Be conscious of body language and nonverbal responses—they can be as disrespectful as words.

## SUPPLEMENTAL QUESTIONS

1. What are your first thoughts about this scenario? Did you have any emotional reactions to this scenario? If yes, why? If no, why?
2. Was there anything thought provoking about how your fellow peers reacted to this exercise? (Please use generalizations and do not target others)
3. What would your reaction to this exercise be if you a member in one of the groups?
4. How do you think this scenario relates to emergency management?

Breaking News: Disaster in Greenton

## THE SITUATION

*At 2:30 am on September 25, 2045, the Head Responder contacts you concerning a tragedy that occurred within the rural area of Greenton. A fire erupted on the Northern border and has been spreading quickly due to dry brush. Approximately 300 citizens have been marked as casualties as teams hurry to contain the flame. With the wind direction, the fire is predicted to hit the downtown area in two hours. Within downtown is a scientific research center testing radioactive chemicals and natural gases that are extremely dangerous and could wipe out a 50-mile area if detonated. The city alarm systems have sounded calling for evacuation of the nearby rural areas and citizens of downtown.*

**Figure 1.**  
Diversity case study

(continued)

**THE CITIZENS**

Scientists: working to discover cures to diseases that have killed off 55% of the world's population,  
 Greenies: hold positions of power within the leading body and hold residence mainly in the downtown and suburban area,  
 Burners: have limited resources and are mainly found in the rural areas, and  
 Hailers: have no resources and wander around the city requesting aid.

**THINGS TO KNOW**

- Greenton has approximately 1,000,000 citizens within its borders.
- The alarm systems do not extend throughout all rural areas within the impact zone.
- Within the downtown area live a number of scientists knowledgeable in the research occurring at the plant who predict finding the cure to the numerous diseases killing off the world's population.
- The Crisis Response Team only has transportation vehicles able to hold 10,000 citizens.
- A large population of Hailers within the downtown area has no transportation.
- Greenies have been steadily making their way out of the area; however, there are numerous reports of car crashes blocking the roads.
- Burners number approximately 20,000 and transportation is limited due to low-income levels.
- The Chief of the city has requested citizens in the suburban area be evacuated first as they house the highest number of children. Children are a rarity.
- The Crisis Response Team only has access to shelters able to house up to 8,000 citizens.
- The Leader of the continent has sent their condolences and cannot send any assistance.
- Riots have begun in the downtown area.
- The Crisis Response Team has access to approximately 100 emergency responders, of which 45 are battling the fire and 20 refuse to assist the Hailers or Burners.

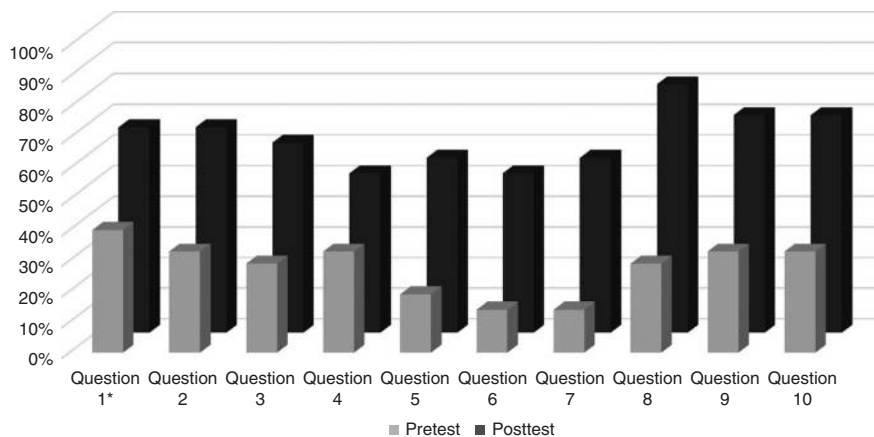
**YOUR ROLE**

You are a member of the Crisis Response Team and have gathered with the rest of the group to discuss an evacuation strategy for the community.

**QUESTIONS FOR DISCUSSION**

1. Who do you assist first? Who do you assist next?
2. How do you divide your resources?
3. What are tasks you need to accomplish?
4. Who are your stakeholders?

**Figure 1.**



**Note:** \*One test did not provide responses for this section

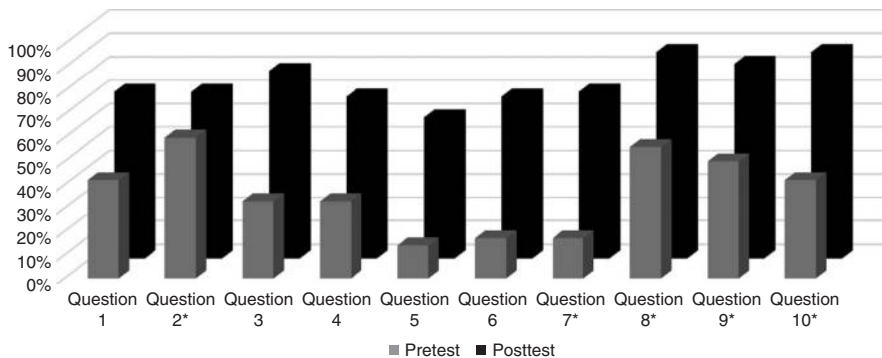
**Figure 2.**  
Attitudinal scale results – Group 2



DPM  
24,5

626

**Figure 3.**  
Attitudinal scale  
results – Group 3



**Note:** \*One respondent did not provide an answer for those questions

The largest shift for Group 2 occurred in statements 7 (I understand how my biases will influence my role in the emergency management field) and 8 (I have adequate knowledge of how stereotypes influence emergency management staff). Some of the open-ended questions provide insight into this change: “I used to think of biases on strictly a racial and economic line, but now I think of them on a broader perspective” and “I used to think personal beliefs had minimal effect on my decisions, but now I think they have a major influence.” As for Group 3, the greatest shift was seen for statements 6 (I have adequate knowledge of how preconceived notions influence emergency management staff) and 7 (I understand how my biases will influence my role in the emergency management field).

To further the analysis, a *t*-test was conducted for the assessment results; the researchers compared the difference in the pre and post-test mean scores within Groups 2 and 3 to determine statistical significance at  $p < 0.05$ . Statistical significant relationships were discovered for the influence of bias and preconceived notions on the emergency management role, and ability to interact with communities and the field (Table I). In addition, there was significance determined for the influence of the individuals’ bias, preconceived notions, and stereotypes on their role in Group 2. For Group 3, the statistically significant relationships were seen in how bias and stereotypes influence the emergency management role, and ability to interact with community and the field (Table II). In contrast to Group 2, Group 3 focussed more on bias and stereotypes vs bias and preconceived notions.

When evaluating the open-ended statement and in-class discussions, the responses highlighted connections to the development of cultural identity along with aspects of prejudice reduction (Table III). More specifically, students personalized the conversation, which adds to intergroup dialogue and occurs when the individual undergoes processes of individuation, self-other comparison, decategorization, self-disclosure, and empathy (Ensari *et al.*, 2012). For example:

I used to think emergency responders would have a somewhat simplistic process on how to deal with a scenario like this. But now I think it is a very difficult and sad process to have to determine how to deal with this situation.

I used to think stereotypes and preconceived notions would be of no issue in current emergency management, but now I think that it may be a present threat I must learn to deal with.

Moreover, the case study provided an opportunity for students to reflect on their conception of diversity and its interaction with the field of emergency management. For some,

Survey item	Pre	Post	<i>p</i> -value
Definition of bias	1.38	1.30	0.773
Definition of preconceived notions	0.67	0.55	0.648
Definition of stereotypes	0.95	1.15	0.289
I believe bias influence the roles of emergency management staff	2.90	2.24	0.042
I believe preconceived notions influence the roles of emergency management staff	2.81	2.24	0.036
I believe stereotypes influence the roles of emergency management staff	2.85	2.38	0.103
I have adequate knowledge of the diverse communities aided by emergency management staff	3.29	2.62	0.063
I have adequate knowledge of how biases influence emergency management staff	3.43	2.48	0.007
I have adequate knowledge of how preconceived notions influence emergency management staff	3.52	2.52	0.004
I have adequate knowledge of how stereotypes influence emergency management staff	3.52	2.43	0.001
I understand how my biases will influence my role in the emergency management field	2.86	2.00	0.003
I understand how my preconceived notions will influence my role in the emergency management field	2.86	2.10	0.011
I understand how my stereotypes will influence my role in the emergency management field	2.90	2.10	0.012

**Notes:**  $n = 21$ . Survey responses ranged from 1 = strongly agree; 3 = neither agree nor disagree; and 5 = strongly disagree.  $p < 0.05$

**Table I.**  
Independent samples  
test for Group 2  
pre and post-test

Survey item	Pre	Post	<i>p</i> -value
Definition of bias	1.00	1.06	0.740
Definition of preconceived notions	1.06	0.40	0.002
Definition of stereotypes	0.94	1.54	0.001
I believe bias influence the roles of emergency management staff	2.83	2.20	0.012
I believe preconceived notions influence the roles of emergency management staff	2.54	2.23	0.202
I believe stereotypes influence the roles of emergency management staff	2.94	2.06	0.000
I have adequate knowledge of the diverse communities aided by emergency management staff	3.00	2.31	0.008
I have adequate knowledge of how biases influence emergency management staff	3.47	2.34	0.000
I have adequate knowledge of how preconceived notions influence emergency management staff	3.39	2.29	0.000
I have adequate knowledge of how biases influence emergency management staff	3.37	2.26	0.000
I understand how my biases will influence my role in the emergency management field	3.31	1.91	0.125
I understand how my preconceived notions will influence my role in the emergency management field	2.58	1.91	0.003
I understand how my stereotypes will influence my role in the emergency management field	2.56	1.88	0.003

**Notes:**  $n = 36$ . Survey responses ranged from 1 = strongly agree; 3 = neither agree nor disagree; and 5 = strongly disagree.  $p < 0.05$

**Table II.**  
Independent samples  
test for Group 3  
pre- and post-test

Group	Quote	Cultural identity development theory	Prejudice reduction model
1	"I used to think I had to stay quiet, but now I think I can be opinionated and be heard"	Psychosocial	Positive affect
	"Before doing this diversity case study, I used to think it was easy to communicate with everyone about how to distribute resources and who to evacuate first. But now I think, it's not easy at all"	Psychosocial	Decreased salience
	"I used to think emergency responders would have a somewhat simplistic process on how to deal with a scenario like this. But now I think it is a very difficult and sad process to have to determine how to deal with this situation"	Cognitive	Positive affect
	"I used to think that diversity was only race, religion, and a couple other things. But now I think that because of this exercise there is a lot more to it"	Cognitive	Decreased salience
2	"I used to think personal beliefs had minimal effect on my decisions, but now I think they have a major influence"	Psychosocial	Decreased salience
	"I used to think that all scientists are capable of helping themselves, but now I think they can be just as vulnerable as non-scientists"	Psychosocial	Stereotype reduction
	"I used to think of biases on strictly a racial and economic line, but now I think of them on a broader perspective"	Psychosocial	Stereotype reduction
	"I used to think that emergency management simply entailed responding to various disasters, but now I think emergency management is intricately interwoven with all aspects of the human condition"	Cognitive	Positive affect
3	"I used to think impartiality didn't exist, but now I think no matter what happens everyone's experiences mold what actions to take"	Psychosocial	Positive affect
	"I do not believe that emergency managers knowingly use bias, preconceived notions, or stereotypes during emergency situations"	Psychosocial	Positive affect
	"I used to think bias, stereotypes and preconceived notions did not play a part in emergency management, now I believe that it may play a vital role in how resources are administered"	Cognitive	Decreased salience
	"I used to think stereotypes and preconceived notions would be of no issue in current emergency management, but now I think that it may be a present threat I must learn to deal with"	Cognitive	Positive affect

**Table III.**  
Cultural identity connections and key words related to theory and the prejudice-reduction model

the exercise caused an increase in their sense of awareness and unveiled the multiple layers of cultural competence (Moore-Thomas, 2010; Riccucci, 2012). Furthermore, the students were able to connect their identities to their future role as emergency management professionals and understand a connection does exist between the two (Rice, 2004; Taylor, 2013; Villegas and Lucas, 2002). For instance:

Before doing this diversity case study, I used to think it was easy to communicate with everyone about how to distribute resources and who to evacuate first. But now I think, it's not easy at all.

In regards to this case study, I used to think disaster situations were simply a matter of evacuation and mitigation. But now I think that there are newly infinite factors that contribute to decisions that are made in merely a few minutes.

A visible moment of realization occurred within Group 3 when the facilitator questioned information the students added to the scenario. For example, some students spoke of the societal responses to previous disasters, such as Hurricane Katrina and the terrorist attacks on September 11, 2001, and assigned value to the fictional citizen groups through assumed educational achievement levels or socioeconomic status. This observation supported the facilitator's connection between the defined terminology and the student's responses. This realization also supports researchers who deemed reflection and intergroup dialogue as a critical in developing cultural competency (Ahmed *et al.*, 2011; Carrizales, 2010; Ensari *et al.*, 2012; Gaynor, 2014; Gurin *et al.*, 2002; Kress *et al.*, 2005; Moore-Thomas, 2010; Norman-Major and Gooden, 2012; Rice, 2004).

### Conclusion and recommendations

The process for becoming a culturally competent emergency manager is a dynamic relationship influenced by the knowledge of evolving demographics and the needs and demands of society. Practitioners must equip themselves with the appropriate KSAs to purposefully reduce negative perceptions and increase empathy for those considered different within their community (Dixon *et al.*, 2010; Paluck and Green, 2009). Furthermore, there is a critical need to incorporate a set of baseline standards and competencies to support positive societal impacts. Although implementation of cultural competency is a challenge, the benefits are too valuable. By becoming relatable, empathetic, representative change agents, emergency management practitioners will not only hold a better understanding of their own cultural identities, but they will also understand the interaction with their community to hopefully ensure the rights of their citizenry, equal service distribution, and full inclusiveness. Therefore, we recommend incorporating and adopting cultural competency-related KSAs into programmatic learning objectives for emergency management higher education standards, such as the Network of Schools of Public Policy, Affairs, and Administration's universal required competency "to communicate and interact productively with a diverse and changing workforce and citizenry" (Network, 2015, p. 7).

We based the creation and implementation of the diversity-related case study on multiple literatures and the professor and facilitator's previous experience. Results from three semesters of implementation showed a marked increase in knowledge, as well as a change in attitudes, regarding this terminology in emergency management. We encourage faculty to implement the case study with detailed learning objectives, ground rules, and discussion questions (see Figure 1) in a related undergraduate or graduate course. While the professor had practical emergency management experience, she had limited knowledge in leading diversity discussions. In situations like this, we recommend collaborating with a university or community diversity center to assist in facilitating the case study and discussions. A trained facilitator will connect nuisances in student responses with the rich cultural competency literature, which can lead to meaningful discussions.

With any attempt to increase awareness of bias, prejudice, and preconceived notions, limitations to the process always exist. For instance, we could attribute bias to the professor and facilitator, who wanted students to be active participants and utilize

self-reflection to understand the intention of their comments vs the impact of them. In addition, there are contextual limitations, such as a lack of: previous conversations and courses on diversity-related topics in emergency management; willingness to participate; and support from the program curriculum design.

Moreover, the professor and facilitator increasingly formalized the case study process with each group dialogue. Group 1 experienced the most informal facilitation and Group 3 underwent the most formal. For example, the facilitator not only presented with the case study handout to Group 3, but also included a PowerPoint presentation for the discussion segment, which displayed the defined terminology, case study information, and guiding questions. This instructional modification was statistically significantly as highlighted in Table II.

For future facilitations, researchers propose utilizing practitioners for the case study to continue decreasing the chance of bias (Silenas *et al.*, 2008), and include required and recommended readings prior to the class session (e.g. Adams *et al.*, 2011). In addition, emergency management curriculum, as a whole, should incorporate diversity case studies in all the core courses so students approach and apply the concept/topic from multiple perspectives (Edwards, 2012). For future research, the following areas would be beneficial to investigate: the perception of cultural competency by current emergency management practitioners' vs educators; the level of cultural competence-related trainings for emergency management practitioners verses educators; and variations in methods used by emergency management educators to teach cultural competency.

### Notes

1. Course description: This course is the study of disaster response and recovery processes, programs, and problems through learning modules, readings, discussions, videos, field study, and case studies. We will study individual, group, organizational, and community behavior and recovery from disasters. Service delivery strategies are highlighted and complex dynamics of the recovery process are emphasized.

Two of the six core competencies in the emergency management academic program align with cultural competency principles: ability to demonstrate environmental and community-sensitive practices, and ability to utilize an interdisciplinary approach to problem solving.

2. Dr Claire Connolly Knox is a passionate facilitator of engaging, reality based learning that challenges a student's paradigm. She has taught this course since January 2013 and, as seen in the course description, incorporates various teaching pedagogies. While completing a doctorate in public administration, Dr Knox worked five years in the emergency management field. Therefore, she stresses bridging theory with practice when designing each assignment, and has published related work in the *Journal of Public Affairs Education*.
3. This study received IRB approval (SBE-14-10511) and the statement below was read to the students prior to beginning the diversity case study.

You are being invited to take part in a research study. Participation in the research activity is voluntary and it will not affect your course grade in any way:

- The study's purpose is to capture undergraduate students' understanding of cultural competency (i.e., bias, stereotypes, and preconceived notions) in an emergency management case study. The study is being conducting in the Disaster Response and Recovery course. The goal of this study is to: contribute to the emergency management

literature by providing a detailed case study; and enhance the ongoing discussion at the federal level about the potential for this discipline's accreditation and the corresponding competencies needed at the undergraduate and graduate levels.

- In the regular classroom setting, students will have the option to complete a pre-test, anonymously, prior to breaking up into groups. Each group will review and discuss the case study with guiding questions, and then confer with the class about recommendations for action in the scenario. After the facilitation, each student will have the option to complete a post-test anonymously.
- The pre and post-test take approximately ten minutes each to complete. The case study instructions and review of the Summary Explanation for Exempt Research will take approximately ten minutes. Lastly, the facilitated case study will take approximately 60 minutes to complete. The total amount of the scheduled class time will be 90 minutes.

## References

- Adams, T., Anderson, L., Turner, M. and Armstrong, J. (2011), "Coping through a disaster: lessons from Hurricane Katrina", *Journal of Homeland Security and Emergency Management*, Vol. 8 No. 1.
- Ahmed, S., Wilson, K.B., Henriksen, R. and Jones, J. (2011), "What does it mean to be a culturally-competent counselor", *Journal for Social Action in Counseling and Psychology*, Vol. 3 No. 1, pp. 17-28.
- Akombo, D.O. (2013), "Scholarship and diversity in higher education", *Journal of Cultural Diversity*, Vol. 20 No. 1, pp. 3-6.
- Alexander, D. (2012a), "Approaches to emergency management teaching at the master's level", *Journal of Emergency Management*, Vol. 11 No. 1, pp. 59-72.
- Alexander, D. (2012b), "Scenario methodology for teaching principles of emergency management", *Disaster Prevention and Management: An International Journal*, Vol. 9 No. 2, pp. 89-97.
- Bailey, M. (2004), "Representative bureaucracy: understanding its past to address its future", *Public Administration Review*, Vol. 64 No. 2, pp. 246-249.
- Brintnall, M. (2008), "Preparing the public service for working in multiethnic democracies: an assessment and ideas for action", *Journal of Public Affairs Education*, Vol. 14 No. 1, pp. 39-50.
- Carrizales, T. (2010), "Exploring cultural competency within the public affairs curriculum", *Journal of Public Affairs Education*, Vol. 16 No. 4, pp. 593-606.
- Clement, K.E. (2011), "The essentials of emergency management and homeland security graduate education programs: design, development, and future", *Journal of Homeland Security and Emergency Management*, Vol. 8 No. 2.
- Diem, S. and Frankenburg, E. (2013), "The politics of diversity: integration in an era of political and legal uncertainty", *Teachers College Record*, Vol. 115 No. 11, pp. 1-30.
- Dixon, J., Tropp, L.R., Durrheim, K. and Tredoux, C. (2010), "'Let them eat harmony' prejudice-reduction strategies and attitudes of historically disadvantaged groups", *Current Directions in Psychological Science*, Vol. 19 No. 2, pp. 76-80.
- Donahue, D.A., Cunnion, S.A., Balaban, C.D. and Sochats, K. (2010), "Meeting educational challenges in homeland security and emergency management", *Journal of Homeland Security and Emergency Management*, Vol. 7 No. 1.

- Drabek, T.E. (1987), *The Professional Emergency Manager: Structures and Strategies for Success*, Institute of Behavioral Science, University of Colorado, Boulder, CO, pp. 274.
- Edwards, F.L. (2012), "Cultural competency in disasters", in Norman-Major, K.A. and Gooden, S.T. (Eds), *Cultural Competency for Public Administrators*, Routledge, New York, NY, pp. 197-218.
- Ensari, N., Christian, J., Kuriyama, D.M. and Miller, N. (2012), "The personalization model revisited: an experimental investigation of the role of five personalization-based strategies on prejudice reduction", *Group Processes & Intergroup Relations*, Vol. 15 No. 4, pp. 503-522.
- Federal Emergency Management Agency (2015), "Emergency management institute: the college list" available at: [www.training.fema.gov/emiweb/edu/collegelist/](http://www.training.fema.gov/emiweb/edu/collegelist/) (accessed January 5, 2015).
- Gaynor, T.S. (2014), "Through the wire: training culturally competent leaders for a new era", *Journal of Public Affairs Education*, Vol. 20 No. 3, pp. 369-392.
- Gorski, P.C. (2015), "Guide for setting ground rules", available at: [www.edchange.org/multicultural/activities/groundrules.htm](http://www.edchange.org/multicultural/activities/groundrules.htm) (accessed January 9, 2015).
- Guimond, S., Crisp, R.J., De Oliveira, P., Kamiejski, R., Kteily, N., Kuepper, B. and Lalonde, P.R. (2013), "Diversity policy, social dominance, and intergroup relations: predicting prejudice in changing social and political contexts", *Journal of Personality and Social Psychology*, Vol. 104 No. 6, pp. 941-958.
- Gurin, P., Dey, E.L., Hurtado, S. and Gurin, G. (2002), "Diversity and higher education: theory and impact on educational outcomes", *Harvard Educational Review*, Vol. 72 No. 3, pp. 330-367.
- Hu, Q., Knox, C.C. and Kapucu, N. (2014), "What have we learned since September 11, 2001? a network study of the Boston marathon bombings response", *Public Administration Review*, Vol. 74 No. 6, pp. 698-712.
- Infante, M.D. and Matus, C. (2009), "Policies and practices of diversity: reimagining possibilities for new discourses", *Disability & Society*, Vol. 24 No. 4, pp. 437-445.
- Kapucu, N. (2011), "Developing competency-based emergency management degree programs in public affairs and administration", *Journal of Public Affairs Education*, Vol. 17 No. 4, pp. 501-521.
- Kapucu, N. and Knox, C.C. (2013), "Utilization of service learning in emergency management programs in the United States", *Journal of Public Affairs Education*, Vol. 19 No. 1, pp. 31-51.
- Kiltz, L. (2009), "Developing critical thinking skills in homeland security and emergency management courses", *Journal of Homeland Security and Emergency Management*, Vol. 6 No. 1.
- Keene, S. (2011), "Social bias: prejudice, stereotyping, and discrimination", *The Journal of Law Enforcement*, Vol. 1 No. 3, available at: <http://jghcs.info/index.php/l/article/view/62/63>
- Kress, V.E.W., Eriksen, K.P., Rayle, A.P. and Ford, S.J.W. (2005), "The DSM-IV-TR and culture: considerations for counselors", *Journal of Counseling & Development*, Vol. 83 No. 1, pp. 97-104.
- Lederach, J.P. (1995), *Preparing for Peace: Conflict Transformation Across Cultures*, Syracuse University Press, Syracuse, NY.
- McCreight, R. (2009), "Educational challenges in homeland security and emergency management", *Journal of Homeland Security and Emergency Management*, Vol. 6 No. 1.

- McEntire, D.A. (2004), *The Status of Emergency Management Theory: Issues, Barriers, and Recommendations for Improved Scholarship*, Department of Public Administration, Emergency Administration and Planning, University of North Texas, available at: <https://training.fema.gov/hiedu/downloads/david%20mcentire%20-%20%20status%20of%20emergency%20management%20theory.pdf>
- Moore-Thomas, C. (2010), "Cultural identity development", in Hays, D.G. and Erford, B.T. (Eds), *Developing Multicultural Counseling Competence: A Systems Approach*, Pearson Merrill Prentice Hall, Upper Saddle River, NJ, pp. 32-52.
- Network of Schools of Public Policy, Affairs, and Administration (2015), "Accreditation standards for master's degree programs", available at <https://naspaaccreditation.files.wordpress.com/2015/02/naspaaccreditation-standards.pdf> (accessed June 24, 2015).
- Nguyen, M.T. and Salvesen, D. (2014), "Disaster recovery among multi-ethnic immigrants: a case study of southeast Asians in Bayou La Batre (AL) after Hurricane Katrina", *Journal of the American Planning Association*, Vol. 80 No. 4, pp. 385-396.
- Norman-Major, K.A. and Gooden, S.A. (2012), *Cultural Competency for Public Administrators*, Routledge, New York, NY.
- Paluck, E.L. and Green, D.P. (2009), "Prejudice reduction: what works? A review and assessment of research and practice", *Annual Review of Psychology*, Vol. 60, pp. 339-367. doi: 10.1146/annurev.psych.60.110707.163607.
- Pedersen, P. (2000), *A Handbook for Developing Multicultural Awareness*, American Counseling Association, Alexandria, VA.
- Rice, M.F. (2004), "Organizational culture, social equity, and diversity: teaching public administration education in the postmodern era", *Journal of Public Affairs Education*, Vol. 10 No. 2, pp. 143-154.
- Rice, M.F. and Mathews, A. (2012), "A new kind of public service professional: possessing cultural competency awareness, knowledge, and skills", in Norman-Major, K.A. and Gooden, S.T. (Eds), *Cultural Competency for Public Administrators*, Routledge, New York, NY, pp. 19-31.
- Riccucci, N. (2012), *Public Personnel Management: Current Concerns, Future Challenges*, Longman, New York, NY.
- Ryan, S.E. (2010), "Let's get them out of the country! Reflecting on the value of international immersion experiences for MPA students", *Journal of Public Affairs Education*, Vol. 16 No. 2, pp. 307-312.
- Seidenberg, J. (2005), "Cultural competency in disaster recovery: lessons learned from the Hurricane Katrina experience for better serving marginalized communities", available at: [www.e-education.psu.edu/drupal6/files/sgam/HT\\_Seidenberg.pdf](http://www.e-education.psu.edu/drupal6/files/sgam/HT_Seidenberg.pdf) (accessed February 25, 2015).
- Silenas, R., Akins, R., Parrish, A.R. and Edwards, J.C. (2008), "Developing disaster preparedness competence: an experiential learning exercise for multiprofessional education", *Teaching and Learning in Medicine*, Vol. 20 No. 1, pp. 62-68.
- Taylor, Y. (2013), "Compelling diversities, educational intersections: policy, practice, parity", *Gender and Education*, Vol. 25 No. 3, pp. 243-250.
- Urby, H. and McEntire, D.A. (2013), "Applying public administration in emergency management: the importance of integrating management into disaster education", *Journal of Homeland Security and Emergency Management*, Vol. 11 No. 1, pp. 39-60.
- Villegas, A.M. and Lucas, T. (2002), "Preparing culturally responsive teachers: rethinking the curriculum", *Journal of Teacher Education*, Vol. 53 No. 1, pp. 20-32.
- Waugh, W.L. Jr and Sadiq, A.A. (2011), "Professional education for emergency managers", *Journal of Homeland Security and Emergency Management*, Vol. 2 No. 9.



**Further reading**

International Association of Emergency Managers (2015), "Global administrative policies and procedures", available at: [www.iaem.com/page.cfm?p=about/code-of-ethics](http://www.iaem.com/page.cfm?p=about/code-of-ethics) (accessed January 5, 2015).

Robinson-Wood, T.L. and Howard-Hamilton, M.F. (2000), *The Convergence of Race, Ethnicity, and Gender: Multiple Identities in Counseling*, Merrill, Upper Saddle River, NJ.

**About the authors**

Dr Claire Connolly Knox is an Assistant Professor and the Emergency Management and Homeland Security Program Director in the School of Public Administration at the University of Central Florida. Her research interests include environmental vulnerability and disaster response, environmental policy and management, and critical theory. Dr Knox has published in *Public Administration Review*, *Journal of Environmental Policy and Planning*, *Journal of Emergency Management, Administration and Society*, *Foundation Review*, and *Journal of Public Affairs Education*. She teaches Disaster Response and Recovery, Managing Emergencies and Crises, Environmental Planning and Policy, and Environmental Management courses. Dr Claire Connolly Knox is the corresponding author and can be contacted at: [claire.knox@ucf.edu](mailto:claire.knox@ucf.edu)

Brittany Haupt, MEd in Counselor Education, is a Doctoral Student at the University of Central Florida in the Public Affairs Program emphasis in Public Administration. Her research interests include cultural competency, social change, diversity education, and competency-based education in public administration. She has presented at the American Society of Public Administration Conference and has a book review published in *Public Administration Review*.

---

For instructions on how to order reprints of this article, please visit our website:

[www.emeraldgrouppublishing.com/licensing/reprints.htm](http://www.emeraldgrouppublishing.com/licensing/reprints.htm)

Or contact us for further details: [permissions@emeraldinsight.com](mailto:permissions@emeraldinsight.com)