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Determining Teacher Candidates' Attitudes Toward Global-Mindedness

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In a world characterized by interconnectedness and interdependence, it is essential that teachers are able to effectively teach with a global perspective. To that end, it is necessary for teacher education programs to understand how students view the world around them to be able to best prepare them to teach with this global teaching perspective. This study examines the global-mindedness of introductory-level teacher education candidates at a research university in the southeastern United States. The Global-mindedness Scale was used to survey 337 participants at the beginning of their first course related to education. Findings indicate that participants were moderately globally minded; however, participants took a neutral stance on more than one third of survey items suggesting a high-level of lack of awareness or indifference. Participants were particularly indifferent on items related to interconnectedness and globalcentrism. Additionally, we found participant responses varied according to some demographic characteristics such as planned teaching area, experience in and with individuals from other countries or cultures, and plans to study abroad.

INTRODUCTION

Television, film, the Internet, and the advances in international travel are just a few of the things that bring people from different cultures in constant contact with each other. As our world becomes increasingly interconnected it is important that individuals have the knowledge, skills, and attitudes necessary to live and work in a global society. However, it does not appear that young people are meeting the challenge of learning about and understanding the world beyond our national borders. A 2002 survey by the Asia Society noted American students lacked knowledge of world geography, history, and current events (Asia Society, 2002). Similarly, a 2006 National Geographic Literacy Study (National Geographic, 2006) found the majority of participants between age 18 and 24 (N = 510) had limited knowledge of the world outside the United States or how the United States fits into the larger world. According to this study, far too many young people "lack even the most basic skills for navigating the international economy or

understanding the relationships among people and places that provide critical context for world events" (National Geographic, 2006, p. 7).

To prepare students for the demands of living in a world characterized by interconnectedness and interdependence, it is essential they have teachers who can effectively teach with a global perspective. According to Merrill, Braskamp, and Braskamp (2012), a global perspective is the extent to which an individual is able to "perceive and know the people and cultures within their world," including an "individual's sense of people, nation, and world beyond themselves" (p. 356). The burden of ensuring teachers are able to meet this challenge lies largely within Teacher Education (TE) programs. If encouraging the development of a global teaching perspective is a goal for TE programs, it is then imperative to understand where students begin in terms of how they view the world around them. This study examines the global-mindedness of introductory level TE candidates at a research university in the southeastern United States.

The concept of global-mindedness is based on the work of Jane Hett (1993), who viewed *global-mindedness* as a "worldview" where individuals see themselves as part of a world community. We intentionally focused this work on the concept of attitude rather than knowledge. Although teacher knowledge is important, it is attitudes that "influence which knowledge is noticed, sought, and developed" (Parker, Glenn, Mizoue, Meriwether, & Gardner, 1997, p. 192). Given the conceptual similarities of *global perspective* and *global-mindedness*, we use these terms interchangeably throughout this article.

The purpose of this study is twofold. First, we sought to determine the level of global-mindedness of introductory level preservice teacher candidates at a research university in the southeastern United States, including any differences based on demographic characteristics. The second goal was to use the results of the survey to determine how and where global concepts could be integrated into the course of study for students in the TE program at our university. This article reports results from the first research goal and discusses possible implications and pathways to meet the second goal.

GLOBAL EDUCATION

The notion that individuals need to be cognizant of the world beyond their own national borders is a fundamental principle of the global education movement. But in an era marked by accountability and nearly daily news stories focusing on the failings of the American education system, what is the impetus for TE programs to include global education in their curricular program? First, the demographics of our schools are changing. Since 1970 The United States has experienced the largest wave of immigration since the early part of the 20th century. The ethnic, cultural, religious, and linguistic characteristics of immigrant students today are significantly different than those individuals who immigrated to the United States prior to the middle part of the last century (Pew Forum on Religion & Public Life, 2008). Second, the globalization of our economy has changed the nature of jobs students will get in the future. More than one fourth of all American jobs are now tied to international trade (Center for Global Development, 2006), and that number is expected to grow in the future as internationalizing trade agreements increase. Finally, most major issues including disease, global warming, terrorism, and the control and proliferation of nuclear, biological, and chemical weapons extend beyond national borders. These issues will rely on international agreements and cooperation to manage (Gutek, 2006). Simply put, American

schools and teachers face unprecedented changes that are global in nature, requiring schools and teachers to teach in a manner that will enable students to understand these global connections. As Bigelow and Peterson (2002) noted, "Everything is connected. You can't really understand what's going on in one part of the world without looking at how it's related to everything else" (p. 3).

Accepting the premise that K-12 students need to be prepared to live in a globalized world and therefore need teachers who can prepare them to do so, we turn to a discussion of global education as it relates to teacher preparation. Although, no clear, concise, definition has been agreed upon by scholars (Kirkwood, 2001), the foundation of global education is often attributed to the work of Robert Hanvey (1979). Hanvey proposed the following five dimensions as being essential to the development of a global perspective:

Perspective consciousness: Recognition or awareness on the part of the individual that he or she has a view of the world that is not universally shared

State-of-the-planet awareness: Awareness of prevailing world conditions and development, including emergent conditions and trends

Cross-cultural awareness: Awareness of the diversity of ideas and practices to be found in human societies around the world

Knowledge of global dynamics: Some modest comprehension of key traits and mechanisms of the world system, with emphasis on theories and concepts that may increase intelligent consciousness of global change

Awareness of human choices: Some awareness of the problems of choice confronting individuals, nations, and the human species as consciousness and knowledge of the global system expands.

A number of scholars have built upon this work (Case, 1993; Kirkwood, 2001; Lamy, 1987; Merryfield, 1997; Merryfield & Subedi, 2001). Most notably, Merryfield (2001) offered a framework for global education, which includes (1) multiple perspectives, (2) global interconnectedness, (3) global issues, and (4) cross-cultural experiences. Additionally, Merryfield (2001) added the legacy of imperialism and those whose voices are often limited in traditional academic realms be included in global education.

The extent to which TE programs are effectively training preservice teacher candidates in global education concepts is unclear. Within the context of academic preparation, Heyl and McCarthy (2005) analyzed the academic transcripts of 609 TE candidates from three universities and noted an overall lack of coursework that included global elements. They found preservice candidates had few courses that reflected a global focus with only 24% taking any college-level foreign language courses and even fewer participating in study abroad programs (1%, 2.9%, and 6% at each of the three research sites). They attributed this lack of focus to coursework taken at community colleges and strict curricular/licensure requirements in the TE programs.

A number of studies highlight the notion that though teachers feel teaching about global concepts and with a global perspective are important, they often feel unprepared or uncomfortable to do so in a classroom setting. Gallavan (2008) surveyed 92 TE candidates during their student teaching semester and found that though the majority of the participants wanted to teach their students to be world citizens, they felt ill prepared by their TE programs or field placements to do so. Similarly, Brown and Kysilka (1994) explored the manner in which elementary education student teachers incorporated global education concepts in their classes. They found though students

(n = 54) rated themselves as "almost always" or "frequently" applying global education concepts in their classes, only one student was actually applying these concepts in practice in follow-up classroom observations (n = 6).

Ukpokodu (2006) explored the effect the events of 9/11 had on preservice teacher candidates' perspectives regarding global issues. She surveyed 83 preservice teacher candidates in social studies methods courses over a 3-year period regarding their level of awareness and perceptions of importance regarding global issues, as well as their dispositions and proclivities regarding teaching about global concerns. Survey results indicated that though students' awareness increased in some areas (terrorism, hunger, human rights abuse, threats of nuclear weapons and war, depleting resources, trade and economy, and gap between developed and developing countries), other issues (environmental degradation, AIDS, poverty, drug trafficking, overpopulation, and slave labor) were unaffected. Results also indicated that though preservice candidates increased their inclination toward a global-perspective pedagogy, they expressed "fears and inadequacies" (p. 191) regarding teaching about global issues. Ukpokodu concluded that teacher educators should not assume students are aware of global issues, and TE preparation programs should therefore be structured in a manner that support the study and discussion of global issues.

The overwhelming conclusion we came to after reviewing these studies is though preservice teacher candidates feel it is important for their students to learn about the world around them and feel a sense of responsibility to teach from a global perspective, they do not feel they have the knowledge and skills to do so.

Measuring Global Education Outcomes

In the last 60 years a number of instruments have been used to measure outcomes broadly associated with global education. These instruments take into account cognitive and attitudinal conceptions of these outcomes. In this section we review four measures and provide a rational for using The Global-Mindedness Survey (GMS) (Hett, 1993), the instrument used for this study. We selected these instruments to review as they all have been used with college-age students similar to the participants in this study. To determine which instrument would be most beneficial for our purposes we looked at the following criteria: (1) instrument length, (2) instrument constructs, (3) previous research conducted with the instrument, and (4) relevancy to modern issues and participants. Because we ultimately decided to use the GMS, we include a more detailed summary of the psychometric properties associated with the scale.

The Global Citizenship Scale (Morais & Ogden, 2011) is a 30-item, 5-point Likert-type scale instrument intended to measure student attitudes regarding global citizenship. The researchers identified social responsibility, global competence, and global civic engagement as dimensions of global citizenship, arguing each is an essential and necessary component of global citizenship. This instrument has been field tested in university classes taught abroad and similar university classes taught domestically. The overall intent of this scale was to measure global citizenship as the result of education abroad experiences. Although the scale could be used as a general measure of global citizenship, we felt the instrument items were more suited to populations with more diverse experiences than our focus sample.

Braskamp, Trautvetter, and Ward (2006) developed The Global Proficiency Inventory to measure global perspectives. The instrument was intended to "portray markers in a life-long journey

in which people of all ages are constantly asking questions about how they think, feel, and relate to others" (Braskamp, Braskamp, Merrill, & Engberg, 2013, p. 3). The 40-item, 5-point Likert-type scale instrument includes measures of cognitive, interpersonal, and intrapersonal dimensions with noted differences based on demographic factors (gender, class status, faculty/staff or student status, institution type, and participation in study abroad). Since its inception, the inventory has administered to more than 100,000 students, faculty, and staff to measure global perspectives (Braskamp et al., 2013). We found this instrument useful; however, the cost associated with administering the instrument led us to explore other options.

A widely used instrument is the World-Mindedness Scale developed by Sampson and Smith (1957). World mindedness, according to Sampson and Smith is a "frame of reference or value orientation favoring a world view of the problems of humanity, with mankind, rather than the nationals of a particular country, as the primary reference group" (p. 105). The 32-item, 6-point Likert-type scale instrument measures world-mindedness across the following eight dimensions: religion, immigration, government, economics, patriotism, race, education, and war. This instrument has been used (portions of the instrument in some cases) by a number of researchers since the mid-1950s (Douglas & Jones-Rikkers, 2008; Hazeltine & Rezvanian, 2010; Nijssen & Douglas, 2008; Parker et al., 1997). Although initially administered to college-age students, the scale has been used in other disciplines (education, tourism, business). Despite its long history of use, the scale is not without criticism. Since the instrument was developed in the post-WWII era, many of the items reflect the international and political issues of the time. For example, one pro-worldmindeness item states, "It would be a good idea if all the races were to intermarry until there was only one race in the world." By modern standards that statement would seem not only ethnocentric but perhaps would have racist connotations. The extent to which the survey would be considered outdated and therefore not reliable limited its use in this context.

Finding the term and definition of *world mindedness* limited, Hett (1993) expanded on the ideas of Sampson and Smith (1957) and suggested the term *global-mindedness* as more representative of the new constraints and complexities in today's global world. Hett developed the Global-Mindedness Scale (GMS), defining global-mindedness as a "world view in which one sees oneself as connected to the world community and feels a sense of responsibility for its members. This commitment is reflected in attitudes, beliefs, and behaviors" (p. 143). The GMS is a 30-item, 5-point Likert-type scale instrument and measures global-mindedness across the following five dimensions: responsibility, cultural pluralism, efficacy, globalcentrism, and interconnectedness.

The GMS was specially designed to measure global-mindedness of college-age students and was ultimately the subject of Hett's (1993) doctoral research. Cronbach's coefficient alpha for the entire scale was .90 with alphas for each of the subscales ranging from .65 to .80. Based on her study of 396 participants at The University of California, San Diego, Hett found female students to be more globally minded than male students. She also found students that participated in a program with an international curricular focus, took five or more globally-focused courses, participated in internationally focused programs, or had two or more friends from cultures or countries other than their own scored significantly higher on the overall scale.

A number of researchers have used this scale to determine the level of global-mindedness of different population groups. Kehl and Morris (2007) used the GMS to assess the differences in college students who had studied abroad for 8 weeks or fewer and those students who studied abroad for a semester. Average total scores on the scale were 112.57 for those students who

studied abroad for 8 weeks or fewer (n=144), compared to 118.5 for those students who had completed a semester-long study abroad experience (n=193). Based on the total GMS score, the researchers found participants who had studied abroad for a semester or more exhibited higher levels of global-mindedness than those individuals who studied abroad for 8 weeks or fewer. This finding led the researchers to question the value of short-term study abroad programs compared to semester-long programs. Smith, Moore, Jayaratne, Kistler, and Smith (2009) used the GMS to determine the level of global-mindedness of Agricultural Extension Agents (n=292). Average overall scores on the scale ranged from 70 to 148 with an average score of 108. The research team noted global-mindedness varied with age, gender, and level of education. They also found a correlation between international experiences and global-mindedness.

Just as global educators have struggled to definitely define global education as a field, measuring outcomes associated with global education is equally difficult. In our review of possible instruments to measure these outcomes, we found a large number of terms (*global citizenship*, *global perspective*, *world-mindedness*, global-mindedness), which relate to similar concepts, used interchangeably in the literature. We also found differing views regarding the extent to which a global teaching perspective focused on awareness and knowledge versus a commitment to social action. Additionally, it appears the nature of these competencies is, at least minimally, a reflection of the current geopolitical status of the world. We determined the GMS to be the most appropriate based on our focus population, the relevancy of the instrument constructs as they pertain to future teachers, and open-access availability of the instrument.

METHOD

We utilized a survey design by administering an instrument based on the previously validated GMS (Hett, 1993) to introductory-level preservice teacher candidates in the fall of 2011 and the 2012 to 2013 academic year. This study attempts to answer the following research questions:

- 1. What is the perceived level of global-mindedness of students beginning an undergraduate program in Teacher Education?
- 2. Are there differences in global-mindedness based on demographic factors?

Global-Mindedness Scale

As stated previously, Hett (1993) maintains the five dimensions of global-mindedness are

Responsibility: a deep personal concern for people in all part of the world

Cultural pluralism: an appreciation of the diversity of world cultures

Efficacy: a belief that one's actions can make a difference

Globalcentrism: thinking in terms of what is positive for the global community

Interconnectedness: an awareness and appreciation of the interrelatedness of all peoples and nations in the world.

These dimensions form the basis of the GMS used in this study. This scale includes 30 survey items written on a 5-point Likert-type scale ($1 = strongly\ disagree$, $2 = somewhat\ disagree$, $3 = no\ opinion$, $4 = somewhat\ agree$, $5 = strongly\ agree$). Small adjustments were made to some

of the survey items to better reflect world events in the 21st century. For instance, the original statement, "The fact that a flood can kill 50,000 people in India is very depressing to me" was changed to "The fact that a natural disaster can kill 50,000 people is very depressing to me." We changed this item to reflect the notion that natural disasters occur in all parts of the world, noting recent disasters in Japan, New Zealand, and Haiti. In addition to the 30 items on the GMS, the research team included 12 demographic items in the survey.

Data Collection

For the purposes of this study, we converted the survey to an electronic format on www.survey monkey.com and administered it to students enrolled in an Introduction to Education class at a research university in the southeastern United States. We worked with the instructors of record for the sections of this course by having them distribute the link to the survey to their students. We asked the instructors to explain to students that we were attempting to measure thoughts and perceptions regarding "global issues" of college students and their participation would be helpful. Following the initial e-mail distribution, the instructors of record sent two reminder e-mails to complete the survey.

Participants

Approximately 400 students were recruited for this study. The students enrolled in the class represented students from a variety of undergraduate TE programs at this university, as well as a small number of students pursuing a non-certification-based education minor. A total of 337 participants (84% response rate) completed the survey and were included in the data analysis. Participation in the study was voluntary, however, participants received extra credit for completing the survey. Participation only, not individual scores or responses, was shared with the course instructors. A large majority of participants in the study were White females (85% female and 87.5% White), a demographic occurrence that somewhat mirrors the teaching profession in general. Participant demographic information is included in Table 1.

RESULTS

In this study, we sought to determine the perceived level of global-mindedness of students in an Introduction to Education class. The following sections report on the overall instrument properties, as well as the extent to which participants agreed or disagreed with individual survey items and constructs. We also include differences based on demographic information as it relates to overall global-mindedness and each of the survey constructs.

Data Analysis and Reliability

Reliability for the Likert-type scale was estimated by computing the Cronbach's alpha (0.89). This coefficient demonstrated high reliability for the scale and was similar to the value noted in the original scale (.90). Further, an examination of "Cronbach's alpha if item deleted," did

TABLE 1
Participant Demographic Information

Demographic Characteristic	Number	Percentage of Sample
Gender		
Male	51	15
Female	289	85
Academic Status		
Freshman/sophomore	310	88.3
Junior/senior	28	8
Area of certification		
Early childhood	56	16
Elementary	85	24.2
Special education	48	14.2
Secondary/K-12	134	39.2
Other	14	4.2
Race		
African American	31	8.8
White	307	87.5
Other	1	.3
Friends from countries/cultures other than own		
No friends or acquaintances	38	10.8
1 or 2 friends or acquaintances	119	33.9
More than 2 friends or acquaintances	182	51.9
Experience outside of local community		
No travel more than 200–300 miles from local community	76	21.8
1–2 brief trips inside United States/abroad	212	60.9
Extensive travel outside United States for more than 8 weeks including having lived or attended school	32	9.2
Study abroad plans		
Planning to study abroad	114	33.8
Unsure or not planning to study abroad	223	64.1

N = 337.

not suggest any significant changes to the scale if items were removed from analysis. A factor analysis was performed on the 30 survey items. We found 29 of 30 items aligned with five factors using a .35 minimum loading (consistent with the factor analysis in the original scale). One item, "I feel an obligation to speak out when I see our government doing something I consider wrong," did not align with any factor. These factors accounted for approximately 52% of the variance. Table 2 notes the mean and standard deviation for each survey item as well as each of the five global-mindedness constructs. The survey items are organized by construct. Items that were reverse coded are noted in the table.

TABLE 2
Descriptive Statistics Global-Mindedness Survey

	M	SD
Responsibility	26.9	3.39
1. The fact that a natural disaster can kill 50,000 people in another country is very depressing to me.	4.4	.78
2. I feel very concerned about the lives of people who live in politically repressive regimes.	3.94	.79
3. When I hear that thousands of people are starving in another country, I feel very frustrated.	4.3	.76
 When I see the conditions some people in the world live under, I feel a responsibility to do something about it. 	3.7	.8
5. I sometimes try to imagine how a person who is always hungry must feel.	3.83	.66
6. Americans have a moral obligation to share their wealth with the less fortunate people of the world.	3.36	.78
7. I feel an obligation to speak out when I see our government doing something I consider wrong.	3.32	.87
Cultural pluralism	32	3.96
8. Americans can learn something of value from all different cultures.	4.51	.65
9. It is important that we educate people to understand the impact that current policies might have on future generations.	4.41	.69
10. The United States is enriched by the fact that it is comprised of many people from different cultures and countries.	4.25	.78
11. It is important that American universities and colleges provide programs designed to promote	4.2	.81
understanding among students of different ethnic and cultural backgrounds.		
12. I enjoy trying to understand people's behavior in the context of their culture.	4.05	.77
13. I generally find it stimulating to spend an evening talking with people from another culture.	3.86	.93
14. My opinions about national policies are based on how those policies might affect the rest of the world as well as the United States.	3.53	.79
15. I have very little in common with people in underdeveloped nations. ^a	3.15	.87
Efficacy	18.36	2.84
16. It is very important to me to choose a career in which I can have a positive effect on quality of life for future generations.	4.25	.81
17. I think my behavior can impact people in other countries.	3.4	.8
18. I am able to affect what happens on a global level by what I do in my own community.	3.4	.83
19. Really, there is nothing I can do about the problems of the world. ^a	3.66	.88
20. Generally, an individual's actions are too small to have a significant effect on the ecosystem. ^a	3.62	.93
Interconnectedness	18.17	2.65
21. I often think about the kind of world we are creating for future generations.	3.9	.86
22. I think of myself, not only as a citizen of my country, but also as a citizen of the world.	3.59	.86
23. In the long run, America will probably benefit from the fact that the world is becoming more interconnected.	3.97	.79
24. I feel a strong kinship with the worldwide human family.	3.1	.73
25. It is not really important to me to consider myself as a member of the global community. ^a	3.6	.81
Globalcentrism	15.29	3.12
26. The needs of the United States must continue to be our highest priority over the needs of other countries. ^a	2.56	.94
27. I sometimes feel irritated with people from other countries because they don't understand how we do things here. ^a	3.2	.92
28. The present distribution of the world's wealth and resources should be maintained because it promotes survival of the fittest. ^a	3.19	.87
29. American values are probably the best. ^a	3.21	.92
30. Americans should be permitted to pursue the standard of living they can afford if it only has a slight negative impact on the environment. ^a	3.13	.78
Total	110.6	11.91

Note: N = 337.

a. Items were reverse coded.

Perceptions of Global-Mindedness

The GMS scores for students in this study ranged from 79 to 148 (out of a possible range of 30 to 150) with a mean score of 110.61. Because of the nature of the data and the original intent of the study, we conducted individual t tests to determine levels of participant agreement on each survey item. Using 3 as a test value, individual t-tests indicated students agreed with all survey items except the following: "The needs of the United States must continue to be our highest priority over the needs of other countries." We also conducted t tests to determine levels of participant agreement on five constructs previously identified in validation studies (Hett, 1993). We added scores of items to determine overall construct scores. Using the midpoint on each construct as a test value, we found students agreed on four of five constructs, scoring highest on cultural pluralism. The globalcentrism construct was not found to be statistically significant.

Level of neutrality. As noted earlier, the GSM includes a neutral "no opinion" response. Students selected "no opinion" for 36% of all items on the survey. The number of neutral responses varied by survey item and construct. More than one half of participants selected a neutral response for seven survey items (Items 6, 7, 15, 24, 28, & 29); however, 10% or fewer neutral responses were recorded for four survey items (Items 1, 3, 8, & 10). Neutral responses were particularly high in the globalcentrism (51%), efficacy (44%), and interconnectedness (41%) subscales but lowest in the cultural pluralism (26%) subscale.

Differences in Global-Mindedness

We also examined differences in levels of agreement according to the demographic information gathered in the survey. We conducted a series of ANOVA tests to determine the relationship between demographic characteristics and levels of global-mindedness. Scores on the five subscales, as well as the overall total score on the GMS, varied according to a number of variables. With the exception of differences related to academic major or teaching area, we found the majority of the differences in levels of global-mindedness related to the demographic and personal characteristics of our participants. We found no statistical differences related to race, ethnicity, gender, or academic status. Given the homogeneous nature of our participants (mostly White, female, and freshman/sophomore), it is difficult to assume that the lack of differences related to those factors is universal. With a more diverse sample size, it is certainly possible that one would be able to state with a greater level of certainty the extent to which any of those factors is correlated with global-mindedness.

Responsibility. The overall mean on the responsibility subscale was 26.9 (15–35 range) out of possible range of 7 to 35. Scores on the Responsibility subscale varied based on participant experiences outside their local communities, F(2, 315) = 3.9, p = .02 and their intended field of study, F(4, 326) = 3.54, p < .01. The Tukey post hoc tests noted students with significant experiences living and/or attending school outside of the United States exhibited higher levels of responsibility than those students who had never traveled more than 200 to 300 miles away from their hometowns. Similarly, those students pursuing special education certification exhibited higher levels of responsibility than those students pursuing secondary certification. We also found participants who were planning to study abroad exhibited slightly higher scores on the

Responsibility subscale than those participants who were unsure or not planning to study abroad, F(1, 332) = p < .057. We have included this finding here because the significance level was only slightly higher than the standard .05 level.

Cultural pluralism. The overall mean on the Cultural Pluralism subscale was 32 (20–40 range), out of a possible range of 8 to 40. Levels of cultural pluralism varied based on the number of friends or acquaintances participants had from cultures or countries different than their own, F(2, 332) = 11.71, p < .00, and their intended field of study, F(4, 326) = 3.54, p < .01. The Tukey post hoc tests indicated participants with more than two friends or acquaintances from cultures or countries other than their own exhibited higher levels of cultural pluralism than participants who had no friends or only one or two acquaintances from cultures or countries other than their own. Post hoc analysis also indicated participants pursing early childhood, elementary, and secondary certifications exhibited higher levels of cultural pluralism than those individuals pursuing a noncertification education minor.

Efficacy. The overall mean for the efficacy subscale was 18.36 (10-25 range) out of a possible range of 5 to 25. Levels of efficacy varied based on the number of acquaintances and friends participants had from cultures or countries different than their own, F(2, 331) = 7.22, p < .001, and participants' plans to study abroad, F(1, 333), 8.87, p = .003. Participants who had more than two acquaintances or friends from countries or cultures other than their own exhibited higher levels of efficacy than those participants who had no acquaintances or friends from countries or cultures different than their own. Similarly, those participants who planned to study abroad exhibited higher levels of efficacy than students who were either unsure or were not planning to study abroad.

Globalcentrism. The overall mean for the Globalcentrism subscale was 15.29 (5–25 range) with a possible range of 5 to 25. Levels of globalcentrism varied based on the number of friends participants had from cultures or countries different than their own, F(2, 331) = 9.67, p < .00. The Tukey post hoc tests indicated participants with more than two acquaintances or friends exhibited higher levels of globalcentrism than those participants with no acquaintances or friends from cultures or countries different than their own.

Interconnectedness. The overall mean for the Interconnectedness subscale was 18.17 (11–25 range) out of a possible range of 5 to 25. There were no significant variations based on demographic factors related to this subscale.

Total score. As noted earlier the overall mean on the total scale was 110.6 (79–148 range) out of possible range of 30 to 150. The overall total global-mindedness scores varied according to the number of acquaintances or friends from cultures or countries different than their own, F(2, 326) = 10.69, p < .00; experience outside the United States, F(2, 311) = 3.97, p = .02; and participant plans to study abroad, F(1, 328) = 4.96, p < .00. The Tukey post hoc tests indicated participants with two or more acquaintances or friends from cultures different than their own exhibited higher levels of overall global-mindedness than those participants with either no acquaintances or friends or only one or two acquaintances or friends from countries or cultures different than their own. The post hoc test also indicated participants who had significant experiences outside the United States, including having lived or attended school, exhibited higher levels of overall global-mindedness than those individuals who had never traveled more than

200 to 300 miles from their local communities. Similarly, participants who were planning to study abroad exhibited overall total scores higher than those individuals who were unsure or not planning study abroad.

DISCUSSION: GLOBAL MINDEDNESS

Attitudes regarding global awareness are important for future teachers as they will not only live and work in an ever-changing world, but their attitudes and dispositions will have a significant influence on those of the students they will teach. When teachers incorporate global perspectives into their classroom they are more likely to encourage their students to think and act as global citizens. With an increased sense of awareness and action there is greater potential for teachers and students to positively influence global inequity and social, political, and cultural tension. We began this study with the intent of determining the level of global-mindedness of TE candidates at the beginning of their professional study. The results of this study are similar to those in previous studies using this scale. The overall mean score of 110.61 was similar to the mean scores (112–118) noted by Kehl and Morris (2007) and the mean score (108) noted by Smith et al. (2010). With this survey, we feel we have provided baseline data for students' global-mindedness at one research university in the southeastern United States.

Neutral Responses

Although overall we found participants in this study to be moderately globally minded, we were concerned with the large number of "neutral" responses (36%) of the survey items. Although it is reasonable to expect that students may be undecided on world issues and over time assume that they will develop stronger convictions, it is equally important to note that these students were at least age 18 years at the time of the survey. Given that they are old enough to vote, serve in the military, and be considered legal adults, the level of neutrality might be cause for concern. Participants were the most indecisive on items related to globalcentrism (51%), efficacy (44%), and interconnectedness (41%). High levels of indecisiveness on these three constructs is of particular concern suggesting participants lack a developed position on issues of first world privilege, global inequity, and their ability to affect change. Are they uninterested or simply uninformed? How might a high level of indecisiveness affect their future practice as teachers? How can we, as teacher educators, prepare our students to be more globally minded?

Although this study focused on dispositions, our findings are in line with similar work by Holm and Farber (2002) who explored geopolitical knowledge and global awareness of teacher candidates shortly after the events of 9/11. The researchers found teacher candidates lacked a basic level of geography, awareness of major international leaders, and geopolitics. For example, 54% of the participants in their study could not name any of the independent states of the former Soviet Union, whereas 19% were only able to list one, and more than one half of participants were unable to locate China, Saudi Arabia, or India on a map. The researchers found the majority of their participants also lacked basic cultural knowledge related to nations and regions. For instance, when asked to list the most common religions in five major regions, only 35% of participants correctly listed Hinduism in India, whereas only 14% listed Islam for Indonesia. Participant responses, correct and reflective of "utter guesswork" (p.140), indicated participants

were more "attuned" (p. 140) with Europe or the West. Overall the researchers characterized participants' responses as exhibiting a "high degree of inattention, insularity, and lack of awareness" (p. 129) regarding global issues and current events.

Holm and Farber (2002) asked similar questions as we the ones we asked regarding their findings. How within 6 weeks of U.S. military engagement in Afghanistan is it possible that 39% of the participants in their study could not correctly identify the Taliban as the Afghanistan's ruling regime or, despite his significant presence in the news at the time, only 7% of participants were able to correctly identify Kofi Anna as then United Nations Secretary General? Like Holm and Farber (2002) we are left to wonder how teachers can prepare young people to live in a global world if they themselves are uninformed or unaware of global issues? These findings lead us to agree with other research by Ukpokodu (2006) who noted TE instructors should not assume students are knowledgeable or interested in global issues or that future teachers will therefore include them in their classes. It is incumbent upon TE instructors to highlight these issues in education classes and encourage critical discussion of their relevance.

Suggestions

Our second goal in this study was to use results of the survey to make suggestions regarding how and where global concepts could be included or integrated into a TE program. As our survey indicated, teacher candidates may have limited knowledge or interest in global issues. Below we outline several areas where teacher educators can advocate for increasing exposure relating to global issues. Although these attempts would likely be more successful if they were implemented systemically in all areas of the university, we have focused our attention on options specifically aimed at TE programs.

Academic initiatives. A course of study should be reflective of the goals and objectives of the university and individual academic unit. As such, including academic coursework focused on global topics and issues seems quite logical and a good place to begin. Although it is certainly reasonable to assume that coursework may result in increasing knowledge, this effort may be limited if the coursework focuses only on factual information. Instead, coursework that presents students with real-world situations and requires them to explore multiple perspectives on issues, combined with activities that are relevant to students' lives, may be more likely to result in attitude change. Other limitations in relying solely on university coursework are the licensure and accreditation requirements at the university level and in TE programs. University administration should, in conjunction with academic units and licensing entities, explore options for coursework that offers students the opportunity to take meaningful academic courses on globalization, or integrating global issues while meeting those regulations.

TE programs should also explore their own courses of study to see where requirements can be modified to reflect more opportunities likely to result in these changes. One way to accomplish this would be to include information on global issues and globalizing forces within the existing academic program. Individual teacher educators may find resources such as Oxfam's (1997) global citizenship curriculum or Bigelow and Peterson's (2002) book *Rethinking Globalization*, helpful when introducing global perspectives into coursework. This approach may also help students see the connections between these concepts and their future practice.

Study abroad. Increasing study abroad opportunities is a common approach used at colleges and universities to increase international activities. Unfortunately, TE students tend to study abroad in lesser numbers than students in other fields of study (Heyl & McCarthy, 2005, Institute of International Education, 2012), ultimately limiting their cross-cultural experiences beyond their home universities. In this study, we asked participants if they planned to study abroad and found nearly 33% of participants said they planned to study abroad, whereas just over 64% reported they were unsure or not planning to study abroad. Literature related to study abroad outcomes is somewhat mixed. Although there is substantial literature that links study abroad with increased aspects of intercultural competence and global-mindedness (Clark, Flaherty, Wright, & McMullen, 2009; Cushner & Mahon, 2002, Hadis, 2005; Kehl & Morris, 2007), other studies suggest study abroad may not always translate into global competence, but rather in a more superficial engagement and understanding of global issues (Salisbury, An, & Pascarella, 2013; Sutton & Rubin, 2004). Still other studies (Gordon, 2010; Talburt & Stewart, 1999; Tusting, Crawshaw, & Callen, 2002; Wilkinson, 1998) indicate study abroad programs may actually reinforce and exacerbate negative stereotypes rather than reduce them.

Although we are strong supporters of international and cross-cultural experiences, we acknowledge at the very least, participation in a study abroad program does not automatically translate in the growth of global dispositions such as the ones measured in this study. Our findings indicate students have limited understanding of globalizing forces and overall interconnectedness. As such, study abroad programs, which include opportunities for students to engage in critical reflection of human interactions and globalizing forces, challenge official (often Western) views, and gain an appreciation of diversity, are likely to result in positive gains associated with global-mindedness. Our findings also indicate friendships and relationships with individuals from different countries and cultures are associated with higher levels of global-mindedness. It is therefore important that study abroad programs are designed to encourage participants to interact with people from the local country rather than being separated and isolated in an "island-based program" (Kehl & Morris, 2007).

Additionally, we understand that not all students have an interest in or the financial means to study abroad. Our participants reported cost, study abroad location, ability to fit the experience in to their course of study, and the scope of the program as factors that would influence their decision to study abroad. This finding needs to be further developed with a larger sample of students but leads us to recommend that universities ensure study abroad programs are cost-effective, well organized, and integrated into students' course of study. Because our findings suggest students who are planning to study abroad may already have higher levels of global-mindedness, these efforts may increase the likelihood students will participate in study abroad and other international programs including those students that initially may not intend to participate.

Campus activities. As we noted earlier, our survey findings indicate that individuals with more friends or acquaintances from countries and cultures different than their own have a higher level of global-mindedness. Increasing exposure to campus events that focus on global initiatives is another approach universities can use help to increase global-mindedness among students. Wilson (1993) reported on a campus cross-cultural experience in which TE candidates participated as conversation partners with international and English as a Second Language students. She noted this program was successful in promoting intercultural understanding and communication. Most universities also have programs specifically focused on international/multicultural

efforts. Building relationships with these offices may also offer opportunities for TE candidates to connect with international students, faculty, and community resources.

Limitations and Future Research

This study is limited in a number of ways. First, the sample only includes participants from one university. Given the relative small sample size and homogeneity of our sample population, is it unclear if these findings are generalizable. A larger sample, including participants from other universities, or from different parts of the country, would allow us to make further comparisons across geographic regions and planned teaching areas. Additionally, comparing our findings to students in other majors would add valuable information regarding the global-mindedness of college-age students.

Finally, if one of our goals in TE programs is to help increase a sense of global-mindedness among our students, it is important for us to be cognizant of students' attitudes when they begin a program of study to determine the extent to which our efforts have any significant changes on those attitudes. Following up with these students as they progress through their course of study to note changes in attitudes, what processes influence those changes, and how students will take these attitudes and translate them into their own practice would provide TE programs with information useful in making curricular decisions that will positively influence attitudes related to global awareness.

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