# Mid-Western Educational Researcher

Volume 35 | Issue 2 Article 3

December 2023

# Using Intercultural Sensitivity to Predict Culturally Responsive Classroom Management Self-Efficacy among Preservice **Teachers**

Christopher M. Estepp University of Arkansas, estepp@uark.edu

Jennifer G. Beasley University of Arkansas, jgbeasle@uark.edu

Stephen R. Burgin University of Arkansas, srburgin@uark.edu

Donald M. Johnson University of Arkansas, dmjohnso@uark.edu

Follow this and additional works at: https://scholarworks.bgsu.edu/mwer



Part of the Education Commons

How does access to this work benefit you? Let us know!

#### **Recommended Citation**

Estepp, Christopher M.; Beasley, Jennifer G.; Burgin, Stephen R.; and Johnson, Donald M. (2023) "Using Intercultural Sensitivity to Predict Culturally Responsive Classroom Management Self-Efficacy among Preservice Teachers," Mid-Western Educational Researcher. Vol. 35: Iss. 2, Article 3.

DOI: https://doi.org/10.25035/mwer.35.02.03

Available at: https://scholarworks.bgsu.edu/mwer/vol35/iss2/3

This Featured Article is brought to you for free and open access by the Journals at ScholarWorks@BGSU. It has been accepted for inclusion in Mid-Western Educational Researcher by an authorized editor of ScholarWorks@BGSU.

# **Using Intercultural Sensitivity to Predict Culturally Responsive Classroom Management Self-Efficacy among Preservice Teachers**

Christopher M. Estepp University of Arkansas

Jennifer G. Beasley University of Arkansas

Stephen R. Burgin University of Arkansas

**Donald M. Johnson University of Arkansas** 

 $oldsymbol{A}$ s student diversity increases, it is imperative that Educator Preparation Programs (EPPs) prepare preservice teachers to manage these classrooms. Educators are expected to possess the skillset, experience, and confidence necessary to engage diverse students from varying cultural backgrounds. Thus, intercultural sensitivity is an important affective trait for teachers, however, the connection between intercultural sensitivity and self-efficacy for culturally responsive classroom management has not been well documented in the preservice teacher literature. In this study, one mid-southern university examined the relationship between preservice teachers' perceptions of their intercultural sensitivity and their self-efficacy for tasks related to culturally responsive classroom management. Findings indicated that preservice teachers are confident in their ability to manage classrooms in a culturally responsive manner and that intercultural sensitivity significantly predicted and explained about a third of variance in culturally responsive classroom management self-efficacy. While EPPs could consider requiring coursework in cultural diversity and classroom management, the results of this study indicated that coursework alone was not enough to improve preservice teachers' self-efficacy.

Keywords: Intercultural Sensitivity, Preservice Teachers, Self-Efficacy, Culturally Responsive Classroom Management

#### Introduction

Cultural diversity can be defined by many identity markers, including race, ethnicity, socioeconomic status, gender, gender identity, sexual orientation, first language, religion, ability/disability, and national origin (University of Michigan, 2017). Accordingly, classroom teachers must consider multiple cultural factors simultaneously. However, elementary and secondary classrooms have shifted at an accelerated rate in terms of students' racial and ethnic demographics (Munniksma, et al., 2017). Irwin et al. (2021) reported that among current K-12 students enrolled in the United States, White student numbers have dropped to their lowest level

(47%), making them the majority-minority, while nationally, Hispanic student numbers have increased to 27% of all enrolled students. What is more, researchers projected that Black, Indigenous, and People of Color (BIPOC) student numbers will increase by as much as 225% by the year 2060 (Colby & Ortman, 2015). Yet, according to the National Center for Education Statistics (2022), the K-12 teacher population has continued to remain overwhelmingly White. Cultural shifts are expected to continue and present unique challenges for preservice teachers learning to navigate teaching and classroom management among diverse students (Schwarzenthal et al., 2019). Thus, helping preservice teachers develop their intercultural sensitivity, learn how to work with diverse individuals, and become proficient in Culturally Responsive Classroom Management (CRCM) are important considerations for teacher education programs. In this descriptive correlational (Gay et al., 2012) study, researchers sought to answer the question, "What are preservice teachers' perceived levels of intercultural sensitivity, and how does that predict their self-efficacy for culturally responsive classroom management?" Answers to this question might help teacher educators as they prepare preservice teachers to enter culturally diverse classrooms.

#### **Literature Review**

As the classroom landscape continues to shift, so must the preparation of preservice classroom teachers. While Educator Preparation Programs (EPPs) continually search for more effective ways to prepare and support preservice teachers entering the classroom, multiple studies have shown that one primary challenge faced by new teachers has been classroom management (Cruickshank, et al., 2006; Lew & Nelson, 2016). This issue has resulted in many teachers leaving the profession after only a few years (Kyriacou & Kunc, 2007; Lew & Nelson, 2016; Robertson, 2006). Unfortunately, classroom management issues can be exacerbated by teachers' lack of awareness of cultural differences (Siwatu et al., 2015). According to Madler et al. (2022), while preservice teachers felt confident in their ability to teach diverse students upon graduation, after one year in the classroom, they reported lower levels of confidence in their effectiveness at working with these students. Thus, it is imperative that EPPs ensure preservice teachers are wellprepared to manage and lead diverse groups of learners, as well as embrace the ethnic, racial, and cultural nuances associated with diverse individuals. Consequently, the purpose of this study was to examine relationships among preservice teachers' perceptions of their intercultural sensitivity and their self-efficacy for tasks related to CRCM in order to understand preservice teachers' needs in these areas.

Classroom management has been described as teachers' effort and ability to simultaneously oversee multiple classroom activities, including learning, social interaction, and student behaviors (Cruickshank et al., 2006; Moore, 2015). Historically, issues with classroom management have been a leading cause of job dissatisfaction and attrition among teachers (Kyriacou & Kunc, 2007; Lew & Nelson, 2016; Siwatu et al., 2015). Nevertheless, when classroom teachers feel confident in their ability, they encourage student engagement, create high interest learning activities, and build a respectful learning community where students feel safe to learn. Also, positive associations between classroom management and student achievement have been found (Cruickshank et al.). Confidence in one's ability to perform specific tasks, or self-efficacy (Bandura, 1986), is a critical component of teachers' effectiveness and affects their general orientation toward the educational process (Woolfolk & Hoy, 1990).

Classroom managers who possess greater self-efficacy tend to encourage students' intrinsic motivation for academic achievement (Woolfolk & Hoy, 1990) and elicit greater student learning (Lazarides et al., 2020). Conversely, teachers with lower self-efficacy tend to favor a custodial management orientation focused more on classroom control (Cruickshank et al., 2006; Woolfolk & Hoy, 1990). This management approach focuses more on extrinsic rewards to motivate and engage students and can be detrimental to the teaching and learning process resulting in more classroom disruptions and nonacademic behaviors (Cruickshank et al., 2006; Woolfolk & Hoy, 1990). Bandura (1993) suggested that an individual's self-efficacy can be impacted by perceptions about the extent to which they can control their environment. For preservice teachers, however, much in the context of teaching can be interpreted as beyond their control. One common fear among preservice teachers has been anxiety about classroom management (Cruickshank et al., 2006). This, coupled with a lack of understanding of diverse cultures, can be debilitating to a preservice teacher's ability to effectively manage a classroom of diverse learners (Siwatu et al., 2015). However, as teachers put greater focus on gaining confidence in their ability to influence positive learning and behaviors, as well as interact with students from diverse cultures, they can become more successful at managing the diverse classroom (Siwatu et al., 2015; Woolfolk & Hoy, 1990).

#### **Culturally Responsive Classroom Management**

Milner IV (2019) described CRCM as the confluence of thoughtfulness about diversity and classroom management, which Weinstein et al. (2004) postulated, requires a teacher's commitment to culturally responsive practices and moving from a behaviorist teaching approach toward the more social-constructivist ideas of self-regulation, community building, and social decision-making. According to Weinstein et al. (2004), CRCM has five essential teacher components: (a) recognition of their biases and ethnocentrism; (b) understanding and knowledge of students' culture and backgrounds; (c) understanding of political, social, and economic factors within the educational system; (d) ability and willingness to apply culturally appropriate management strategies; and (e) commitment to creating caring classroom environments. However, these essential components can be manifested differently in each classroom depending upon the context of the classroom and the students present (Milner IV, 2019; Weinstein et al., 2004). Accordingly, Weinstein et al. suggested that CRCM is a "frame of mind, more than a set of strategies or practices that guides the management decisions that teachers make" (p. 27).

Additionally, numerous educators (e.g., Gay, 2000; Ladson-Billings, 1995) have called for culturally responsive teaching or culturally relevant pedagogy. Culturally Responsive Teaching is a pedagogy that recognizes the importance of including students' cultural references in all aspects of the classroom (Lew & Nelson, 2016). Ladson-Billings (1995) identified three dimensions of culturally relevant pedagogy: (a) holding high academic expectations while providing needed support; (b) reshaping curriculum and building on students' knowledge; and (c) establishing relationships with students and their homes. CRCM evolved from and has drawn upon this literature. However, as Weinstein et al. (2004) contended, CRCM goes beyond culturally responsive teaching because the latter has been more concerned with curriculum, content, and academic achievement, whereas CRCM has focused on building connectedness, community, and collaboration through culturally relevant classroom management.

## **Intercultural Sensitivity**

EPPs have been tasked with preparing preservice teachers to teach in and manage culturally diverse classrooms. This requires preservice teachers to develop intercultural competence, which has been signified by the ability of an individual to effectively interact and communicate with diverse groups (Balakrishnan, 2015). Three variables comprising intercultural competence are intercultural awareness, intercultural sensitivity, and intercultural adroitness. Intercultural awareness has been categorized as a cognitive factor typified by knowledge and understanding of cultural differences, whereas intercultural sensitivity has been described as the affective component embodying positive sentiments toward cultural diversity. Chen and Starosta (1997) defined intercultural sensitivity as "an individual's ability to develop a positive emotion towards understanding and appreciating cultural differences..." (p. 5). Lastly, intercultural adroitness was described as an individual's utilization of interculturally-informed behaviors (Chen & Starosta, 1996). However, Balakrishnan (2015) deemed that intercultural sensitivity was the central element within intercultural competence because, as Chen and Starosta (1997) explained, for one to fully demonstrate intercultural competence, positive affect toward cultural differences must be established before the link between knowledge of cultural differences and interculturally informed behaviors can be made.

Intercultural sensitivity is comprised of three separate constructs (Tamam, 2010), which align well with the CRCM components (Weinstein et al., 2004). The first construct, Interaction Attentiveness, and Respect, involves an individual's understanding of and regard for the cultural differences of others (Tamam, 2010). The second construct, Interaction Openness, describes the willingness of an individual to interact with culturally different others, while Interaction Confidence, the third construct, represents the level of confidence and enjoyment an individual derives through interactions with culturally different others (Tamam, 2010).

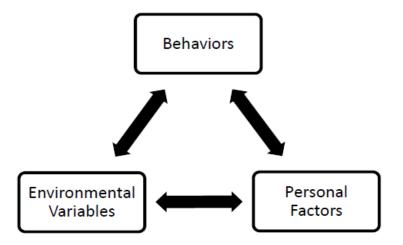
#### **Conceptual Framework**

This study utilized two conceptual frameworks: The Developmental Model of Intercultural Sensitivity (DMIS; Bennett, 1986; 2017) and Bandura's (1986) Social Cognitive Theory. Bennett's (1986; 2017) Developmental Model of Intercultural Sensitivity is a continuum-based model that codifies the complex cognitive structures individuals use to view diversity. His model described six developmental stages delineated by increases in sensitivity to cultural differences: (a) denial, (b) defense, (c) minimization, (d) acceptance, (e) adaptation, and (f) integration. As individuals increase the complexity of their intercultural experiences and views toward diversity, they develop more intercultural sensitivity and become more aware of their biases (Van Hook, 2000). Depending upon a student's developmental stage, strategies for increasing intercultural sensitivity can include learning about cultural differences and focusing on commonalities, concentrating on equity instead of equality, and engaging in intercultural experiences, particularly immersive and service-learning experiences (Rampold et al., 2020; Van Hook, 2000; Wiersma-Mosley & Garrison, 2022).

Individuals can be classified as either ethnocentric or ethnorelative, whereby ethnocentric individuals are characterized as possessing lower levels of intercultural sensitivity (Chen, 2010) and tend to view their culture as "central to reality," while ethnorelative individuals consider "all cultures as alternative ways of organizing reality" (p. 3). Ethnocentrism has been associated with social dominance and possessing a strong allegiance to the in-group (Balakrishnan, 2015), which can cause individuals to deny the relevance of other cultures, adopt an "us" versus "them" mentality, and minimize cultural differences (Bennett, 2017). Bennett (2017) posited that, as an individual increases their intercultural sensitivity, they migrate from ethnocentric developmental stages toward ethnorelativism.

Teachers with increased intercultural sensitivity are adept at utilizing CRCM strategies (Spinthourakis et al., 2009); however, preservice teachers are not consistently in tune with their views and biases regarding cultural differences, thus, it can be inferred that they are also unaware of the influence their specific biases have on classroom management (Kim & Connelly, 2019). Gaining awareness of their intercultural development has been shown to prompt preservice teachers to progress in their intercultural sensitivity growth (Kim & Connelly, 2019; Van Hook, 2000). Teachers higher in intercultural sensitivity should be able to appreciate, understand, and better engage with culturally diverse students.

The second framework used in this study was Social Cognitive Theory (Bandura, 1986), which postulated that learning occurs within a social context where individuals cognitively self-regulate through goal setting, anticipating expected outcomes, evaluating progress, assessing their confidence, and controlling their behaviors and affect (Schunk, 2004). One key assumption of Social Cognitive Theory (Schunk, 2004) has been triadic reciprocality, which supposes that bidirectional interactions among personal factors, environmental variables, and behaviors lead to personal agency (Figure 1). Bandura (1986) posited that these interactions can vary in strength and do not have to occur simultaneously. In Bandura's model, personal factors consist of physiological, cognitive, and affective factors, including affect, emotions, self-efficacy, expectations, beliefs, goals, and thoughts.



Triadic Reciprocality Model (Bandura, 1986)

One personal factor important to an individual's performance has been self-efficacy (Bandura, 1986). Self-efficacy refers to an individual's perceptions of their competence to perform specific tasks (Pajares, 1996). Social Cognitive Theory hypothesized that self-efficacy can be developed as a result of mastery experiences, vicarious experiences, or positive messages from others (Schunk, 2004). Thus, teachers who possess more experience working with culturally diverse students should, theoretically, have higher levels of intercultural sensitivity and self-efficacy for working with these students. However, for preservice teachers who lack experience, their efficacy to interact with culturally diverse students in a classroom setting will be lower.

#### **Purpose**

As classrooms become more diverse, EPPs must ensure that preservice teachers have the skills, experience, and confidence necessary to engage students from varying backgrounds. Important considerations are preservice teachers' intercultural sensitivity and their ability to manage a classroom in a culturally responsive manner. Potentially, as individuals become more interculturally sensitive, they might become more confident in their ability for CRCM, which could translate into increased student learning. While recognized intuitively, the connection between intercultural sensitivity and CRCM has not been well-documented in the literature. This study sought to find connections among these variables in order to provide EPPs information regarding the preparation of preservice teachers for diverse classrooms. Thus, the purpose of this study was to examine relationships among preservice teachers' perceptions of their intercultural sensitivity and their self-efficacy for tasks related to CRCM. The specific objectives guiding this study were:

- 1. Describe preservice teachers' perceived intercultural sensitivity and their self-efficacy for CRCM,
- 2. Examine the relationships among preservice teachers' perceived intercultural sensitivity, demographic variables, and self-efficacy for CRCM,

3. Determine if intercultural sensitivity subscale score and/or respondent demographic variables explain a significant (p < .05) portion of the variance in self-efficacy for CRCM.

#### **Methods**

### **Participants**

The population of interest for this descriptive correlational (Gay et al., 2012) study was all preservice teachers in the education program at [University]. The sampling frame was comprised of all students (N = 297) enrolled in two upper-level special education courses. These two courses were chosen because all preservice teachers are required to complete one of these courses for their program of study. This study was approved and deemed exempt by the [University] Institutional Review Board. Invitation emails were sent to students during fall 2020 and spring 2021, and the survey instrument was administered electronically via Qualtrics; email reminders were sent according to conventions set forward by Dillman et al. (2014). This yielded a response rate of 54.2% (n = 161).

The typical respondent (n = 161) was a junior (60.2%) elementary education major (55.2%) who identified as female (92.5%), had a median age of 21.0 years, was White (80.7%) and from a metropolitan community (75.0%). The majority reported that they had completed at least one course in cultural diversity (62.7%) and classroom management (56.2%). Approximately three-fourths (74.5%) of respondents indicated they planned to enter the teaching profession upon degree completion.

#### Instrumentation

The instrument included three sections: (a) the Intercultural Sensitivity Scale (ISS; Chen & Starosta, 2000; Tamam, 2010), (b) the CRCM Self-Efficacy Scale (Siwatu et al., 2015), and (c) demographic items. The ISS and CRCM Self-Efficacy Scale have previously been deemed valid and reliable instruments (Siwatu et al., 2015; Tamam, 2010), but for this study, post-hoc reliabilities were calculated using Cronbach's alpha for each construct or subscale. The ISS, as modified by Tamam (2010), was comprised of 20 items measuring three subscales: Interaction Attentiveness and Respect (7 items; a = .75), Interaction Openness (8 items; a = .82), and Interaction Confidence (5 items; a = .71). The CRCM Self-Efficacy Scale (Siwatu et al., 2015) contained 35 items measuring preservice teachers' self-efficacy for tasks related to CRCM (a = .96). The demographics section consisted of 9 items including age, gender identity, racial/ethnic minority status, year classification, major, home community description, intent to teach, and if the student had taken a diversity course and a classroom management course. Major was coded as Elementary Education major or not, and the home community was coded as rural or metropolitan. Major was dichotomized since the numbers of individuals in specific secondary education degree programs was too small for analysis, and home community was dichotomized as rural or metropolitan, as Arkansas is a highly rural state. According to Miller and Wheeler (2021), 41% of Arkansans live in rural counties, which is higher than the national average and has been for over a century. Reliability for this section was not calculated since, according to Salant and Dillman (1994), "asking about many personal attributes and behaviors produces very

little measurement error" (p. 87). Sample items from the ISS and CRCM Self-Efficacy scales have been provided in Table 1.

Table 1
Sample Items from the Intercultural Sensitivity Scale and CRCM Self-Efficacy Scale

Construct/Subscale	Sample Item
Interaction Attentiveness & Respect <sup>a</sup>	I am very observant when interacting with people from different cultures.
Interaction Openness <sup>b</sup>	I would not accept the opinions of people from different cultures.
Interaction Confidence <sup>c</sup>	I am pretty sure of myself when interacting with people from different cultures.
CRCM Self-Efficacy <sup>d</sup>	Use culturally responsive discipline practices to alter the behavior of a student who is being defiant.

 $^{a,b,c}$ Measured on a 1 to 5 Likert scale where  $1 = Strongly \, Disagree$  and  $5 = Strongly \, Agree$ ;  $^{b}$ All Interaction Openness items were negatively worded and had to be reverse coded;  $^{d}$ Measured on a 1 to 5 Likert scale where  $1 = No \, Confidence \, at \, All \, and \, 5 = Completely \, Confident.$ 

Raw data were exported to Microsoft Excel to be organized, and all negatively worded items were reverse coded. The data were imported into SAS v.9.4 for analysis. Error checking was accomplished using SAS's proc print command, and the output was checked for values outside the coding limits and by checking the printed output from SAS against selected individual survey responses. No coding or response errors were identified.

#### **Data Analysis**

Data for objective one, to describe preservice teachers' perceived intercultural sensitivity and their self-efficacy for CRCM, were analyzed by calculating the mean and standard deviation for each Intercultural Sensitivity subscale and the CRCM Self-Efficacy scale. To interpret means, the following real limits, based on Colwell and Carter (2012), were used; strongly disagree (1.0 -1.49), disagree (1.50 -2.49), neutral (2.50 - 3.49), agree (3.50 - 4.49), and strongly agree (4.50 -5.0). To achieve objective two, examining the relationships among preservice teachers' perceived intercultural sensitivity, demographic variables, and self-efficacy for CRCM, data were analyzed by calculating biserial or Pearson correlations, as appropriate, between Intercultural Sensitivity subscale scores, respondent demographic variables, and scores on the CRCM Self-Efficacy scale. Conventions set forth by Davis (1971) were used to categorize the magnitude of correlations. Finally, for the third objective, ordinary least squares multiple regression was used to determine if a single or linear combination of student demographic variables and Intercultural Sensitivity subscale scores could explain a significant (p < .05) portion of the variance in CRCM Self-Efficacy scores. According to Freund and Wilson (1993), multiple regression is "a statistical method that uses a relationship between two or more variables so that one variable can be predicted or explained by using information on the other [variables]" (p. 263). Complete case multiple regression analysis was used, with complete data available for 148 of 161 (91.9%) respondents.

Prior to multiple regression analysis, the data were examined for outliers, and the assumptions of normality of residuals, linearity, collinearity of predictors, and homoscedasticity were tested (Field & Miles, 2012). Two outliers (standardized residuals > |3.0|) were identified and deleted prior to regression analysis. Linearity of the predictors and criterion was confirmed by evaluation of bivariate scatterplots. Variance inflation factors were all less than 1.5, indicating collinearity was not a threat (Field & Miles, 2012). Finally, the results of White's test,  $\chi^2$  (26) = 23.80, p = .47, indicated that the assumption of homoscedasticity was met.

#### Results

The goal of objective one was to describe preservice teachers' perceived intercultural sensitivity and self-efficacy for CRCM; descriptive statistics for student responses on each subscale of the Intercultural Sensitivity Scale (Tamam, 2010) and the CRCM Self-Efficacy Scale (Siwatu et al., 2015) are presented in Table 2. Mean scores for interaction attentiveness and respect (M = 4.44, SD = 0.42), interaction openness (M = 4.35, SD = 0.51), and interaction confidence subscales (M = 3.87, SD = 0.52) showed that respondents agreed (Colwell & Carter, 2012) with the corresponding statements; thus, they reported positive perceived levels of intercultural sensitivity for each of the three subscales. However, the mean for interaction confidence was lower than the other two intercultural sensitivity subscales. Regarding self-efficacy for CRCM, the mean score on the summated 1 to 5 Likert scale (1 = Not confident at all; 5 = Very confident) was 4.15 (SD = 0.54). The results indicated that students generally agreed they were confident in their ability to perform tasks related to managing a classroom in a culturally responsive manner.

Table 2
Descriptive Statistics for Intercultural Sensitivity Subscales and CRCM Self-Efficacy Scale

Scale/Subscale	n	M	SD
Interaction Attentiveness & Respect	160	4.44	0.42
Interaction Openness	161	4.35	0.51
Interaction Confidence	161	3.87	0.52
CRCM Self-Efficacy	161	4.15	0.54
Interaction Openness Interaction Confidence	161 161	4.35 3.87	0.

*Note.* Measured on a 1 to 5 Likert scale where 1 = Strongly Disagree and 5 = Strongly Agree.

The aim of objective two was to examine relationships among all variables. Students' intent to teach, completion of a cultural diversity course, minority status, and completion of a classroom management course were the only student characteristics significantly (p < .05) correlated with any of the three intercultural sensitivity subscales or with CRCM self-efficacy (Table 3). Intent to teach was positively correlated (r = .18) with scores on the interaction openness subscale. Completing a classroom management course had a significant, positive correlation with interaction attentiveness (r = .17), while completing a cultural diversity course had a significant correlation with interaction attentiveness (r = .22) and with CRCM self-efficacy (r = .20). Students' status as a minority was also had a significant, positive correlation with interaction attentiveness (r = .19) and interaction openness (r = .19). All correlations were considered low (Davis, 1971), explaining less than 5% of the variance in CRCM self-efficacy.

Table 3
Intercorrelations among Demographics Intercultural Sensitivity Subscales, and CRCM Self-Efficacy

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Age	1.0	21**	.22**	.06	.16*	.02	06	.03	.03	.03	.13	.14	.00
2. Gender <sup>a</sup>		1.0	.01	.28***	12	.00	.16*	06	.12	.06	13	08	.02
3. Minority <sup>b</sup>			1.0	.05	.02	.00	.10	.08	.05	.19**	.14	.19**	.04
4. Classification <sup>c</sup>				1.0	.12	.07	05	.18*	.20*	05	11	.08	.02
5. Elem. Ed. Major <sup>d</sup>					1.0	.12	.30***	.17*	10	01	11	02	.05
6. Intend to teach <sup>d</sup>						1.0	.03	.01	.05	.07	.18*	.07	.05
7. Community <sup>e</sup>							1.0	07	.03	.05	.06	.13	.13
8. Class Mgt. course <sup>d</sup>								1.0	.36***	.17*	.12	.01	.05
9. Diversity course <sup>d</sup>									1.0	.22**	.02	.19*	.20*
10. Int. attentiveness <sup>f</sup>										1.0	.36***	.47***	.45***
11. Int. openness <sup>f</sup>											1.0	.42***	.30***
12. Int. confidence <sup>f</sup>												1.0	.39***
13. CRCM Self-Eff. <sup>f</sup>													1.0

 $<sup>{}^</sup>a$ Coded as 0 = male and 1 = female.  ${}^b$ Coded as 0 = non-Minority and 1 = Minority.  ${}^c$ Coded as 0 = freshman or sophomore and 1 = junior to masters.  ${}^d$ Coded as 0 = No and 1 = Yes.  ${}^e$ Coded as 0 = rural and 1 = metropolitan.  ${}^f$ Measured on a 1 - 5 Likert scale.  ${}^*p < .05$ .  ${}^{**}p < .01$ .  ${}^{***}p < .001$ .

As expected, significant (p < .05) positive correlations existed among the three intercultural sensitivity subscales and CRCM self-efficacy. The intercorrelations among the intercultural sensitivity subscales ranged from .36 to .42, and the correlations between the intercultural sensitivity subscales and CRCM self-efficacy ranged from .30 (interaction openness) to .45 (interaction attentiveness).

In accordance with objective three, CRCM self-efficacy scores were regressed on minority status, intent to teach, cultural diversity course completion, classroom management course completion, and the three intercultural sensitivity subscales to determine if a single or linear combination of predictor variables could explain a significant portion of the variance in CRCM self-efficacy. The regression model was statistically significant, F(6, 139) = 12.43, p < .001, and explained 34.9% of the variance in CRCM self-efficacy scores. The results of the regression analysis are presented in Table 4.

Table 4
Summary of Regression Analysis Predicting Culturally Competent Classroom Management Self-Efficacy

Variable	В	SE	t	$\Delta R^2$
Intercept	0.61	0.43	1.45	_
Minority status	-0.03	0.09	-0.28	_
Intend to teach	-0.06	0.08	-0.69	_
Completed classroom management course	0.02	0.08	0.24	-
Completed cultural diversity course	0.11	0.08	1.43	-
Interaction openness	0.18	0.08	2.31*	.025*
Interaction attentiveness	0.41	0.10	4.20***	.000***
Interaction confidence	0.23	0.08	2.79**	.006**

Note. Adjusted  $R^2 = .32. p < .05. p < .01. p < .001.$ 

The only significant (p < .05) predictors to enter the regression model were scores on the three subscales of the Intercultural Sensitivity Scale. Regression coefficients for each of the three subscale scores were statistically significant (p < .05) and positive, indicating higher scores on each subscale were associated with higher CRCM self-efficacy. Intent to teach and completion of a classroom management course or a cultural diversity course were not significant (p < .05) in predicting CRCM self-efficacy.

Squared semi-partial correlation coefficients ( $\Delta R^2$ ) were calculated to assess the unique variance in CRCM self-efficacy accounted for by scores on each subscale when controlling for the effects of the other predictors (O'Rourke et al., 2005). These results were consistent with the regression coefficients and indicated that interaction attentiveness explained 8.3% of the unique variance,

followed by interaction confidence at 3.6%, and interaction openness at 2.5%. Thus, interaction attentiveness was the most robust unique predictor of CRCM self-efficacy.

#### **Conclusions, Discussion, Recommendations**

Results of this study allowed us to draw several conclusions, but the limitations of the study must first be addressed. The sample for this study was derived from students enrolled in one of two upper-level special education courses. However, probability sampling techniques were not utilized, therefore, the results of this study may not be generalizable beyond the participants. While caution may be needed in extrapolating the results, Johnson and Shoulders (2017, p. 310-311) expressed that "Studies yielding valid results of interest to the profession from a specific groups [sic] of respondents, regardless of their generalizability, can add to the body of knowledge and assist researchers as they design and conduct research." Another limitation is that this study sought to examine the variables of interest among all preservice teachers, but the majority of respondents were elementary education majors. This could potentially skew the results as preservice teachers majoring in other disciplines might report different levels of intercultural sensitivity and self-efficacy for CRCM.

The majority of the sample were White females majoring in elementary education coming from primarily metropolitan backgrounds who possessed rather high levels of intercultural sensitivity, agreeing with statements pertaining to their interaction confidence and strongly agreeing with statements relating to their interaction openness and attentiveness. Similar to Madler et al. (2022), respondents were confident in their ability to perform tasks related to managing a classroom in a culturally responsive manner; all three intercultural sensitivity subscales significantly predicted students' self-efficacy. Just over half of the respondents had participated in cultural diversity and classroom management courses; however, neither variable significantly predicted their self-efficacy for CRCM.

As posited, the constructs of intercultural sensitivity significantly predicted and explained about a third of the variance in CRCM self-efficacy. So, as students' intercultural sensitivity increases, their confidence level for managing culturally diverse classrooms increases. Consequently, EPPs should examine ways to increase preservice teachers' intercultural sensitivity. One consideration could be implementing more coursework in cultural diversity, but the results of this study indicated that coursework alone was not enough to improve preservice teachers' perceptions of their intercultural sensitivity or self-efficacy for using CRCM.

The lack of significance regarding course completion was surprising and might suggest the need to examine course objectives, content, and instructional methods. Perhaps, instruction in cultural diversity courses increased students' cognitive knowledge of cultural diversity without increasing the corresponding affective domain. The positive relationships between completing a diversity course and interaction attentiveness help illustrate this notion of cognitive learning, as interaction attentiveness is characterized by knowledge of and regard for culturally diverse others (Tamam, 2010). As intercultural sensitivity is the affective portion of intercultural competence (Chen & Starosta, 1996), it stands to reason that instruction increasing affective learning could increase intercultural sensitivity. Learning experiences, including immersion or service-learning,

possess affective domain components and have been shown to effectively facilitate intercultural sensitivity growth (Rampold et al., 2020; Van Hook, 2000; Wiersma-Mosley & Garrison, 2022). Accordingly, we recommend that instructors in cultural diversity courses incorporate learning experiences such as observations and service-learning at culturally diverse K-12 campuses for preservice teachers.

While learning in the affective domain can affect preservice teachers' intercultural sensitivity growth (Chen & Starosta, 1996), their self-efficacy can be increased through mastery experiences, vicarious experiences, and social persuasion (Schunk, 2004). Consequently, the prioritization of mastery experiences relating to high-impact, culturally responsive pedagogies (Wiersma-Mosley, 2021), such as the aforementioned immersion and service-learning experiences, should become a greater focus of the content and instruction within cultural diversity and pedagogy courses. These experiences could provide preservice teachers with mastery experiences helping to improve their self-efficacy for CRCM (Bandura, 1986). Furthermore, we recommend that instructors in EPPs receive professional development related to implementing these high-impact immersion and service-learning experiences into the curriculum; it is plausible that many instructors have little training in these areas.

We were curious if differences in perceived intercultural sensitivity and self-efficacy for CRCM existed among preservice teacher candidates in the various secondary-level disciplines. For example, do preservice secondary math teachers display different perceptions at the end of their teacher preparation program versus preservice secondary career and technical education teachers? However, we were not able to determine this for this study. The sample for this study consisted mostly of elementary education majors; consequently, the sample size for the other individual secondary programs was too small to make comparisons. Perhaps, replication of this study with various cohorts of preservice teachers and the use of longitudinal data collection and analysis could help to answer this and other related questions.

The finding of the three intercultural sensitivity subscale scores significantly predicting CRCM self-efficacy not only advances the literature but also speaks to the importance of assessing and understanding preservice teachers' intercultural sensitivity. Administrators of EPP programs should evaluate preservice teachers for their intercultural sensitivity to provide a baseline for understanding preservice teachers' growth in all three subscales. Assessment of intercultural sensitivity can take place at multiple junctures; however, the interview and application process for admitting students into the EPP provides an excellent starting point to determine which students possess higher levels of intercultural sensitivity and might be more likely to become effective classroom managers in diverse classrooms. Future research should examine preservice teachers' growth in intercultural sensitivity to determine how EPPs can better prepare them to interact with, manage, and engage a culturally diverse classroom audience, as intercultural sensitivity provides a valuable tool to ascertain preservice teachers' self-efficacy to provide a culturally relevant classroom.

#### **Author Notes**

*Christopher M. Estepp* is an Associate Professor of Agricultural Education in the Agricultural Education, Communications, and Technology Department at the University of Arkansas. His research interests include building human capital to address the complex issues faced by the agricultural industry, agriculture teacher preparation, faculty teaching development in colleges of agriculture, and motivation and engagement of college of agriculture students.

Jennifer G. Beasley has more than 25 years of experience in education as an elementary school teacher, gifted facilitator, and university professor. After receiving an M.A. in Education Administration and Gifted Education, Jennifer completed her doctoral work in Educational Psychology at the University of Virginia. She is currently an Associate Teaching Faculty member at the University of Arkansas and works preparing teacher candidates for today's classrooms. She received the 2012 College of Education and Health Professions Innovative Teaching Award for her work at the University of Arkansas. In 2021 Dr. Beasley was inducted into the University of Arkansas Teaching Academy.

**Stephen R. Burgin** is an Associate Professor of Science Education in the Department of Curriculum and Instruction at the University of Arkansas. Dr. Burgin teaches courses to preservice secondary teachers. His research focuses on the impact of participation in authentic scientific research on the learning of science.

**Donald M. Johnson** is a University Professor in the Department of Agricultural Education, Communications and Technology at the University of Arkansas, where he teaches courses in agricultural systems technology and data analysis. A former co-director of the University's Wally Cordes Teaching and Faculty Support Center, his research focuses on applied technology and teaching and learning in higher education.

Correspondence concerning this article should be addressed to Christopher M. Estepp at estepp@uark.edu

#### References

- Balakrishnan, A. (2015). Asking the right questions: Insights into assessing intercultural sensitivity (Publication No. 2863). [Master's thesis, The University of Western Ontario]. Electronic Thesis and Dissertation Repository.
- Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Prentice-Hall.
- Bandura, A (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, 28(2), 117-148.
- Bennett, M. (1986). A developmental approach to training intercultural sensitivity. *International Journal of Intercultural Relations*, 10(2), 179-186.
- Bennett, M.J. (2017). Developmental model of intercultural sensitivity. In Y. Kim (Ed.), *The international encyclopedia of intercultural communication* (pp. 1–10). Wiley. <a href="https://doi.org/10.1002/9781118783665.ieicc0182">https://doi.org/10.1002/9781118783665.ieicc0182</a>
- Chen, G.M. (2010). The impact of intercultural sensitivity on ethnocentrism and intercultural communication apprehension. *Intercultural Communication Studies*, 19(1), 1-9.
- Chen, G.M., & Starosta, W.J. (1996). *Intercultural communication competence: A synthesis*. In B.R. Burleson (Ed.), Communication Yearbook 19, (pp. 353-384). Sage.
- Chen, G.M., & Starosta, W.J. (1997). A review of the concept of intercultural sensitivity. *Human Communication*, *1*, 1-16.
- Chen, G.M., & Starosta, W.J. (2000). The development and validation of the intercultural sensitivity scale. *Human Communication*, *3*(1), 2-14.
- Colby, S.L., & Ortman, J.M. (2015). *Projections of the size and composition of the U.S. population:* 2014 to 2060 population estimates and projections. United State Census Bureau. <a href="https://files.eric.ed.gov/fulltext/ED578934.pdf">https://files.eric.ed.gov/fulltext/ED578934.pdf</a>
- Colwell, S., & Carter, E. (2012). *Introduction to statistics for social sciences*. McGraw-Hill.
- Cruickshank, D.R., Jenkins, D.B., & Metcalf, K.K. (2006). *The act of teaching* (4th ed.). McGraw-Hill.
- Davis, J.A. (1971). Elementary survey analysis. Prentice-Hall.
- Dillman, D.A., Smyth, J.D., & Christian, L.M. (2014). *Internet, phone, mail, and mixed-mode surveys: The tailored design method* (4th ed.). Wiley.

- Gay, G. (2000), *Culturally responsive teaching: Theory, research, and practice*. Teachers College Press.
- Gay, L.R., Mills, G.E., & Airasian, P. (2012). *Educational research: Competencies for analysis and application* (10th ed.). Pearson.
- Field, A., & Miles, J. (2012). Discovering statistics using SAS. Sage Publications, Ltd.
- Freund, R. J., & Wilson, W. J. (1993). Statistical methods. Academic Press.
- Irwin, V., Zhang, J., Wang, X., Hein, S., Wang, K., Roberts, A., York, C., Barmer, A., Bullock Mann, F., Dilig, R., and Parker, S. (2021). *Report on the Condition of Education 2021* (NCES 2021-144). U.S. Department of Education, National Center for Education Statistics. https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2021144.
- Kim, H., & Connelly, J. (2019). Preservice teachers' multicultural attitudes, intercultural sensitivity, and their multicultural teaching efficacy. *Educational Research Quarterly*, 42(4), 3-20.
- Kyriacou, C., & Kunc, R. (2007). Beginning teachers' expectations of teaching. *Teaching and Teacher Education*, 23(8), 1246-1257.
- Ladson-Billings, Gloria. (1995). Toward a Theory of Culturally Relevant Pedagogy. *American Educational Research Journal*, 32, 465-491.
- Lazarides, R., Watt, H.M.G., & Richardson, P.W. (2020). Teachers' classroom management self-efficacy, perceived classroom management and teaching contexts from beginning until mid-career. *Learning and Instruction*, 69, 1-14. <a href="https://doi.org/10.1016/j.learninstruc.2020.101346">https://doi.org/10.1016/j.learninstruc.2020.101346</a>
- Lew, M.M., & Nelson, R.F. (2016). New teachers' challenges: How culturally responsive teaching, classroom management, & assessment literacy are intertwined. *Multicultural Education*, 23 (3-4), 7-13.
- Madler, A.M., Anderson, S.K., LeMire, S.D., & Smith, K. (2022). Perceptions of teacher preparation for classroom diversity. *Mid-Western Educational Researcher*, *34*(1). 42-68.
- Miller, W., & Wheeler, E. (2021). 2021 rural profile of Arkansas: Social and economic trends affecting rural Arkansas. University of Arkansas Division of Agriculture.
- Milner IV, H.R. (2019). Culturally responsive classroom management. In *Oxford Research Encyclopedia of Education*. Retrieved July 19, 2022, from <a href="https://oxfordre.com/education/view/10.1093/acrefore/9780190264093.001.0001/acrefore-9780190264093-e-782">https://oxfordre.com/education/view/10.1093/acrefore/9780190264093.001.0001/acrefore-9780190264093-e-782</a>.
- Moore, K.D. (2015). Effective instructional strategies: From theory to practice (4th ed.). SAGE.

- Munniksma, A., Scheepers, P., Stark, T.H., & Tolsma, J. (2017). The impact of adolescents' classroom and neighborhood ethnic diversity on same- and cross-ethnic friendships within classrooms. *Journal of Research on Adolescence*, 27(1), 109-121.
- National Center for Education Statistics. (2022). *Condition of education: Characteristics of public school teachers*. U.S. Department of Education, Institute of Education Sciences. <a href="https://nces.ed.gov/programs/coe/indicator/clr">https://nces.ed.gov/programs/coe/indicator/clr</a>.
- O'Rourke, N., Hatcher, L., & Stepanski, E.J. (2005). *Using SAS for univariate and multivariate statistics* (2nd ed.). SAS Institute, Inc.
- Pajares, F. (1996). Self-efficacy beliefs in achievement settings. *Review of Educational Research*, 66, 543-578.
- Rampold, S., Coleman, B., Bunch, J., & Roberts, R. (2020). Exploring students' cultural competence development during a short-term international experience: A Q-sort study, *Advancements in Agricultural Development*, 1(2), 65-78. <a href="https://doi.org/10.37433/aad.v1i2.45">https://doi.org/10.37433/aad.v1i2.45</a>
- Robertson, M. (2006). Why novice teachers leave. *Principal Leadership*, 6(8), 33-36.
- Salant, P., & Dillman, D.A. (1994). How to conduct your own survey. John Wiley & Sons, Inc.
- Schunk, D.H. (2004). *Learning theories: An educational perspective* (4th ed.). Pearson Prentice-Hall.
- Schwarzenthal, M., Juang, L.P., Schachner, M.K., & van de Viyver, F.J.R. (2019). A multimodal measure of cultural intelligence for adolescents growing up in culturally diverse societies. *International Journal of Intercultural Relations*, 72, 109-121.
- Siwatu, K.O., Putman, S.M., Starker-Glass, T.V., & Lewis, C.W. (2017). The culturally responsive classroom management self-efficacy scale: Development and initial validation. *Urban Education*, *52*(7), 862-888. https://doi.org/10.1177/0042085915602534
- Spinthourakis, J.A., Karatzia-Stavlioti, E., & Roussakis, Y. (2009). Pre-service teacher intercultural sensitivity assessment as a basis for addressing multiculturalism. *Intercultural Education*, 20(3), 267-276. https://doi.org/10.1080/14675980903138624
- Tamam, E. (2010). Examining Chen and Starosta's model of intercultural sensitivity in a multiracial collectivistic country. *Journal of Intercultural Communication Research*, 39(3), 173-183. <a href="https://doi.org/10.1080/17475759.2010.534860">https://doi.org/10.1080/17475759.2010.534860</a>
- University of Michigan. (2017). *Social identity wheel*. <a href="https://sites.lsa.umich.edu/inclusive-teaching/2017/08/16/social-identity-wheel/">https://sites.lsa.umich.edu/inclusive-teaching/2017/08/16/social-identity-wheel/</a>

- Van Hook, C.W. (2000). Preparing teachers for the diverse classroom: A developmental model of intercultural sensitivity. *Proceedings of the Lilian Katz Symposium*. 67-72. http://ericeece.org/pubs/books/ katzsym/vanhook.pdf.
- Weinstein, C.S., Tomlinson-Clarke, S., & Curran, M. (2004). Toward a conception of culturally responsive classroom management. *Journal of Teacher Education*, 55(1), 25-38.
- Wiersma-Mosley, J.D. (2021). Creating culturally competent family scholars. *Family Focus*, *NCFR Report*.
- Wiersma-Mosley, J.D., & Garrison, M.E.B. (2022). Developing intercultural competence among students in family science: The importance of service learning experiences. *Family Relations*, 1-14. https://doi.org/10.1111/fare.12766
- Woolfolk, A. E., & Hoy, W. K. (1990). Prospective teachers' sense of efficacy and beliefs about control. *Journal of educational Psychology*, 82(1), 81.