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DOI

10.1080/13540602.2021.1987878

Publication date 2021

Document Version Final published version

Published in Teachers and teaching: Theory and practice

License Article 25fa Dutch Copyright Act

Link to publication

Citation for published version (APA):

Liu, Q., Çolak, F. Z., & Agirdag, O. (2021). Teachers' beliefs and practices in culturally diverse schools: an empirical study in Southwest China. *Teachers and teaching: Theory and practice*, *27*(7), 672-695. https://doi.org/10.1080/13540602.2021.1987878

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Teachers' beliefs and practices in culturally diverse schools: an empirical study in Southwest China

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ABSTRACT

This study examines teachers' cultural diversity beliefs and culturally relevant practices, and the predictors of those beliefs and practices. A sample of 606 primary school teachers from southwest China participated in the study. The findings reveal that teachers' beliefs are not necessarily reflected in their teaching practices as they are marginally correlated. Regression analyses show that the teachers are more likely to implement culturally relevant practices if they are Han majority, are older, interact frequently with culturally diverse people, are competent in speaking three or more languages, and regularly watch, read, or listen to international news.

ARTICLE HISTORY

Received 14 October 2020 Accepted 28 September 2021

KEYWORDS

Cultural diversity; primary school teacher; multiethnic county; China

Introduction

Diversity is conceptualised as a frame to understand and reflect on the existence and the implications of a range of various elements and different characteristics in a group of people (Randolph, 2015). Accordingly, cultural diversity can be understood as the existence of differences among individuals based on their ethnic origins, language, and cultural values.

Over the past decades, the study of cultural diversity in education has gained prominence given the changing demographics in student population (Civitillo et al., 2017). Cultural diversity in the educational discourse mostly refers to the reality of minority students with diverse cultural backgrounds (Parla, 1994). Increasing cultural diversity in schools demands that teachers adapt themselves to meet students' distinct learning needs and promote their academic motivation. In response to this challenge, a wide range of pedagogical approaches (e.g., culturally responsive teaching and culturally relevant pedagogy) has emerged to transform teachers' beliefs and practices so that they can accommodate students' cultural background and promote educational equity (Au & Jordan, 1981; Banks, 1993; Cazden & Leggett, 1981; Gay, 2002; Ladson-Billings, 1992). As crucial actors in educational contexts, teachers play a critical role in challenging inequities and reversing underachievement among culturally diverse students' cultural

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characteristics and prior experiences into their teaching process (Ladson-Billings, 1995). Furthermore, teachers should use students' cultures and experiences to create an inclusive classroom climate and build positive relations with their students (Gay, 2018).

In recent decades, research has widely examined teachers' beliefs and practices about cultural diversity in educational contexts. Nevertheless, there are multiple limitations in the literature that deserve further investigation. First, previous studies have produced mixed conclusions on the interaction between teachers' cultural diversity beliefs and pedagogical practices (Civitillo et al., 2019; Fang, 1996). Numerous researchers have argued that teachers' beliefs shape and act as effective predictors of the nature of their culturally relevant practices (e.g., Castro, 2010; Gay, 2018). However, others have indicated a mismatch between teachers' cultural diversity beliefs and practices (Debnam et al., 2015; Kuppens et al., 2019). For instance, Debnam et al. (2015) have found that teachers sampled in the United States reported low involvement in culturally responsive teaching even though they held positive beliefs about cultural diversity. Similarly, Kuppens et al. (2019) have found that teachers in Kenya expressed positive beliefs about multicultural education whereas they implemented multicultural teaching strategies to a lesser extent. Consequently, conclusions on the relationship between cultural diversity beliefs and practices remain inconsistent and therefore deserve further attention. Thus, the first objective of this study is to explore whether teachers' beliefs about cultural diversity are correlated to their culturally relevant practices.

Second, most research on teachers' cultural diversity beliefs and practices have focused on White teachers and immigrant minority students in Western nations (Agirdag et al., 2016). Little attention has been paid to studying teachers and students with indigenous minority backgrounds and exploring cultural diversity in education beyond the Western context (Ruales et al., 2020). Unlike immigrant minorities, indigenous minorities have more civil and cultural rights based on their historical settlement and critical role in maintaining national stability (Castellino, 2017) and are more aware of their distinct identity and claims for cultural revitalisation (Rahman, 2010; Sanders, 1999). Such differences could have implications for multicultural education practices. Although multicultural education originated from theories, research, and practices developed in Western countries, it has become an increasingly important educational paradigm across the world (Hirasawa, 2009; Hong, 2010; Okubo, 2013). The second objective of this study, therefore, is to examine the cultural diversity beliefs and practices of teachers who teach indigenous minority students in the People's Republic of China (hereafter referred to as China).

Third, a majority of the empirical studies on teachers' cultural diversity beliefs and practices has used qualitative research methods (Agirdag et al., 2016). These qualitative studies have uncovered teachers' beliefs and practices through in-depth interactions, but they have limited generalisability and comparative potential (Agirdag et al., 2016). In contrast, a quantitative research perspective with a larger sample may allow considering the implications of a variety of demographic and sociocultural characteristics. For example, age, gender, and ethnicity are likely to predict how teachers build their beliefs about cultural diversity and may explain differences in instructional behaviours. The third objective of the present study, therefore, is to examine to what extent the demographic and sociocultural characteristics of teachers predict their beliefs and culturally relevant practices.

Literature review

Teachers' beliefs

Beliefs have received substantial attention in teacher research in recent decades (Biesta et al., 2015; Pajares, 1992; Richardson, 1996). A large body of research has shown that teachers consciously and unconsciously hold various stable and dynamic beliefs that lead to differences in classroom instruction (Fives & Buehl, 2012). Bryan and Atwater (2002) have contended that teachers' beliefs describe the content and structure of teacher thinking and predict pedagogical actions. Similarly, Fives and Buehl (2012) have indicated that the beliefs teachers hold perform different functions: filtering knowledge, shaping how teachers frame problems and tasks and guiding teaching actions in classrooms.

In addition to the role of teachers' beliefs, the interaction between beliefs and practices have also been broadly discussed in the literature. For instance, in a review, Buehl and Beck (2015) have summarised four perspectives interpreting the relationship between teachers' beliefs and practices. First, beliefs influence teaching practices when they are reflected in instructional practices (Buehl & Beck, 2015). Second, practices influence teachers' beliefs (Buehl & Beck, 2015). This perspective is mostly based on research findings suggesting that teachers' professional development and prospective teachers' teaching field experiences change their beliefs (e.g., Lumpe et al., 2012; Tschannen-Moran & McMaster, 2009). The third perspective holds that beliefs and practices are disconnected based on a number of studies reporting inconsistencies between teachers' beliefs and educational practices (Jorgensen et al., 2010; Lim & Chai, 2008; Liu, 2011). Fourth, beliefs and practices influence each other and exist in complicated, reciprocal, dynamic relationships (Buehl & Beck, 2015). Building on this perspective, Buehl and Beck (2015) have created a systematic belief-practice interaction model with variations across factors. It includes internal factors attributed to teachers, including other types of beliefs, knowledge, experiences, self-reflection, and self-awareness. The model also incorporates various external factors, including classroom, school, national, state, and district factors. This model provides a comprehensive framework for continued research examining teachers' beliefs and practices in dynamic contexts and taking a variety of predictors into consideration. Inspired by this model, the current study aims to explore the interactions between teachers' cultural diversity beliefs and practices and the ways in which sociocultural and demographic factors support or hinder these beliefs and practices.

Teachers' beliefs about cultural diversity

Over the last decade researchers have increasingly studied teachers' pedagogical beliefs about cultural diversity (Aragona-Young & Sawyer, 2018; Civitillo et al., 2018; Coronel & Gómez-Hurtado, 2015; Gay, 2010). Teachers' positive awareness of cultural diversity is viewed as integral to multicultural teaching competency (Liang & Zhang, 2009). Spanierman et al. (2011) have indicated that teachers' multicultural teaching competency is an iterative process: teachers continuously (1) explore their attitudes and beliefs about multicultural issues; (2) increase their understanding of specific populations; (3) examine the impact that this awareness and knowledge have on what and how they teach and the

ways in which they interact with students. Awareness of one's personal biases and prejudices towards other cultures is a prerequisite for teachers to achieve multicultural teaching knowledge and skills. For instance, the literature has shown that teachers' pedagogical beliefs about cultural diversity influence to what extent they incorporate students' cultural experiences into instructional behaviours (Gay, 2018). Positive awareness of cultural diversity may lead to higher trust in students, greater acceptance of students' home cultures, and more culturally responsive teaching (Gay, 2018). However, teachers with low cultural consciousness are likely to show insufficient respect to their students' cultural experiences and home culture identities, which can hinder the school success of culturally diverse students (Gay, 2018).

Researchers interpret teachers' beliefs about cultural diversity differently. Some scholars have referred to it as a multi-layered construct (Civitillo et al., 2017; Dee & Henkin, 2002; Hachfeld et al., 2011). For instance, Hachfeld et al. (2011) have pointed out that teachers' cultural diversity beliefs indicate teachers' different approaches to culturally diverse students. Namely, teachers' cultural diversity beliefs comprise multicultural beliefs and equality beliefs. Teachers may endorse one kind of beliefs or combine elements of both beliefs (Civitillo et al., 2017; Hachfeld et al., 2011). Dee and Henkin (2002) have suggested that teachers' beliefs about cultural diversity consist of five elements: diversity practice, equity in education, comfort with diversity, the social value of diversity, and assimilation. However, others have viewed teachers' beliefs about cultural diversity as teachers' perceptions about a wide range of particular topics (Cardona, 2005; Pettus & Allain, 1999; Pohan & Aguilar, 2001). For instance, Pohan and Aguilar (2001) have investigated pre-service teachers' cultural diversity beliefs related to social class, gender, disability, language, and sexual orientation. Silverman (2010) has examined pre-service teachers' various identities associated with diversity, including efficacy in multicultural instruction, a sense of responsibility to teach about diverse people, and advocacy for oppressed groups. Gay (2015a) has further called for future research to detail the specific aspects of cultural diversity because teachers may perceive the components of cultural diversity differently.

In the current study, the ethnic minority students, teachers, and parents in China refer to indigenous minority population having a historical and cultural continuity with the certain parts of the country. Teachers' beliefs about cultural diversity in the present study highlights teachers' perceptions towards teaching ethnic minority students. More specifically, teachers' beliefs about cultural diversity include their beliefs regarding equality in education, ethnic minority students' cultural backgrounds, teaching and learning about multicultural topics, as well as interaction with ethnic minority parents (Civitillo et al., 2017).

Teachers' culturally relevant practices

With an increase in the number of culturally diverse students, teachers are expected to incorporate these students' home cultures and prior experiences into their instruction (Ladson-Billings, 1995). Accordingly, a number of scholars have proposed theoretical principles elaborating how teachers may implement culturally based educational practices (Banks, 1991; Bennett, 1986; Gay, 2018; Howard, 2003; Kreitzer, 2012; Ladson-Billings, 1995). However, it is noticeable that various scholars focus on different aspects

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of culturally based education (Banks, 2008; Bennett, 1986; Gay, 2018; Ladson-Billings, 1995, 2006; Nieto, 1992). Some multicultural education theorists pay more attention to the entire schooling process, including educational ideology, curriculum change, student assessment, teaching materials, and instructional aspects (Banks, 2008; Bennett, 1986). Others specifically address teachers and their teaching strategies so that they can teach culturally diverse students more effectively (Davidman & Davidman, 1994; Gay, 2015b, 2018; Ladson-Billings, 1995, 2006; Tiedt et al., 1986). Studying teachers' perspectives in this study, we will review two most far-reaching culturally based teaching theories: culturally responsive teaching and culturally relevant pedagogy (Aronson & Laughter, 2016). First, culturally responsive teaching, developed in the work of Gay (2018), interprets teaching as a practice that 'uses the cultural knowledge, prior experiences, frames of reference, and performance styles of ethnically diverse students to make learning encounters more relevant to and effective for them'. Culturally responsive teaching advocates argue that teachers' beliefs about cultural diversity determine their instructional behaviours and culture influences how and what teachers teach (Gay, 2015b). As such, teachers' multicultural competency is critical to meeting the learning needs of diverse students. Second, culturally relevant pedagogy, proposed by Ladson-Billings (1995), is defined as a pedagogical practice that 'not only addresses student achievement but also helps students to accept and affirm their cultural identity while developing critical perspectives that challenge inequities in schools (and other institutions)'. Despite their slightly different focus on teaching and pedagogy, these two theories agree on the essence and significance of cultural responsiveness in education (Gay, 2018). For this study, we use the inclusive term culturally relevant practices to refer to teachers' culturally responsive teaching and teachers' behaviours while communicating with parents.

Predictors of teachers' cultural diversity beliefs and practices

The literature has demonstrated that a variety of factors may positively and negatively influence teachers' beliefs and practices related to cultural diversity (Agirdag et al., 2016; Case et al., 1989; Diller & Moule, 2005; Pajares, 1992; Téllez, 2008). Some studies have shown that female teachers report higher levels of multicultural attitudes and competences than male teachers (McAllister & Irvine, 2000; Youngs & Youngs, 2001). Earlier findings also have reported that older teachers are more likely to tolerate diverse cultures (e.g., Munroe & Pearson, 2006). Moreover, teachers' ethnicities have been found to play an important role in their attitudes towards cultural diversity. For instance, Agirdag et al. (2016) have shown that ethnic minority backgrounds of teachers are positively correlated to the level of multicultural teaching.

In addition, numerous studies have indicated that teachers' experiences are likely to predict their cultural diversity beliefs and practices (Garmon, 2004, 2005; Pohan, 1996). First, the literature has shown that teachers' intercultural interactions with students, friends, and colleagues positively influence their cultural diversity beliefs and practices (Agirdag et al., 2016; Dedeoglu & Lamme, 2011). In other words, teachers who have greater exposure to individuals from different cultural backgrounds are inclined to hold more favourable beliefs about cultural diversity and implement multicultural teaching more than their colleagues without intercultural interactions (Agirdag et al., 2016;

Cockrell et al., 1999; Dedeoglu & Lamme, 2011; Garmon, 2004; Pohan, 1996; Smith et al., 1997; Youngs & Youngs, 2001). Second, some studies have concluded that prior education experiences (e.g., teacher preparation programs and the influence of teachers and colleagues) affect how teachers perceive cultural diversity (Garmon, 2004, 2005; Smith et al., 1997; Youngs & Youngs, 2001). For instance, Youngs and Youngs (2001) have found that teachers who took foreign languages and multicultural education courses in high schools and colleges reported significantly more positive attitudes towards cultural diversity than their counterparts who did not take such courses during their education.

The third experience that might predict teachers' cultural diversity beliefs and practices are teachers' in-service multicultural training (Banks, 1991; Byrnes et al., 1997; Flores & Smith, 2009). For example, Banks (1991) suggested that multicultural training enables teachers to acquire culturally relevant pedagogical skills and confidently work with a diverse group of students. Fourth, abundant research has showed that direct contact with diverse cultures (e.g., travelling, studying, and teaching abroad) affects teachers' beliefs and practices (Garmon, 2004, 2005; Youngs & Youngs, 2001). Such contact is viewed as an effective means of fostering awareness of cultural differences. Fifth, a small group of studies has viewed multilingual ability as a predictor of teachers' perceptions on cultural diversity (Flores & Smith, 2009; Lee & Oxelson, 2006; Szecsi et al., 2015; Youngs & Youngs, 2001). For instance, a study by Szecsi et al. (2015) has shown that the ability to speak more than one language predicts teacher candidates' attitudes about minority students' home languages.

Although the literature has examined a variety of predictors related to teachers' cultural diversity beliefs and practices, the conclusions remain uncertain. For example, Byrnes et al. (1997) reported no relationship between teachers' ethnicity and attitudes. Youngs and Youngs (2001) have argued that age does not make a difference in teachers' attitudes towards linguistic diversity. The present study, therefore, examines predictors potentially related to teachers' beliefs and practices in the research context selected by addressing the following research questions: (1) To what extent do school teachers hold positive beliefs about cultural diversity? (2) To what extent do school teachers act upon culturally relevant practices? (3) Is there a correlation between school teacher' beliefs and practices? (4) Do demographic characteristics, culturally relevant training, and intercultural experiences predict school teachers' cultural diversity beliefs and culturally relevant practices?

Research context

China is composed of 56 officially recognised ethnic groups (Lin, 1997; Zhou, 2001). The Han majority accounts for 91.6% of the total population, while 55 ethnic minority groups constitute the remaining 8.4% of the population (approximately 112 million people) (NBSC, 2010). While these ethnic minorities share about 60% of China's land and more than 90% of its border regions, they are concentrated in peripheral regions markedly poorer than those inhabited by the Han majority (Lin, 1997; Postiglione et al., 1995). Consequently, the average level of educational attainment in ethnic minority regions lags behind other districts in China (Liu et al., 2020; Postiglione, 1992; Yang & Wu, 2009). In response to the gap between the achievement levels of minority and majority students, the Chinese government has issued many preferential policies to promote ethnic cultural

revival in schools and to increase the enrolment rates of ethnic minority students in compulsory education and higher education (Postiglione, 2009; Yang & Wu, 2009). Nonetheless, research has shown that access to educational resources remains limited for ethnic minority students and the state schooling system is dominated by the Han majority language and culture (Johnson & Chhetri, 2000; Postiglione, 1992; Yuan, 2017). Against this background, the purpose of the current study is to explore the beliefs that school teachers in ethnic minority areas hold about culturally diverse students and to assess to what degree their practices reflect their cultural diversity beliefs. The results of the study will offer recommendations for teachers and policymakers to support culturally relevant education in school contexts.

The present study was carried out in a multiethnic autonomous county in Yunnan Province in Mainland China. Yunnan is a frontier province in Southwest China, wellknown for its ethnocultural diversity (Yuan, 2017). It is home to 25 ethnic minority groups, which constitute 34% of the provincial population (Wang, 2016). To protect the rights and interests of the ethnic minorities, the Chinese government has established eight autonomous prefectures and 29 autonomous counties in Yunnan. The selected autonomous county in the current study has 22 ethnic minority groups, primarily Dai, Lahu, and Wa. The ethnic minority groups account for 86.4% of this county's total population. As a result, schools are faced with challenges in meeting the needs of an ethnically diverse student population. Therefore, it is important to identify teachers' perceptions and behaviours regarding cultural diversity in schools which are predominantly composed of ethnic minority students. Moreover, this study is important to the Chinese context because of the multiethnic nature of society and the differences in the achievement levels of students from different ethnic backgrounds. To ensure educational equity in China, research needs to address issues that impact on the academic performance of ethnic minority students. The findings of this study can also be relevant in other societal contexts experiencing an increase in diversity in education and working on promoting culturally relevant practices in schools.

Method

Participants and procedures

Data were collected during the 2018–2019 academic year in China. Convenient sampling was applied because it is an effective tool that facilitated mirroring the ethnic diversity of teaching force and student population in Yunnan. The multiethnic autonomous county in this study was selected from 29 autonomous counties in Yunnan. Ten primary schools from this county were selected based on their easy accessibility to the researcher. Two schools were in urban areas, while eight were in rural locations. ethnic minority students accounted for more than 80% of the total student population of each school selected.

Before the first author went to the research site, the survey was field tested with several school teachers and then revised before data collection. After receiving an approval letter from the county-level educational bureau, the researcher was allowed to visit ten primary schools in different villages and townships of the county. During the visit, the researcher explained to the principal of each school the importance of the research project and obtained the principal's informed consent to implement the research survey. In each

school, school officials helped the researcher send the Qualtrics survey link to the teachers' online chat groups and encouraged all the available teachers to fill it in. The survey questions were prepared in simplified Chinese. The teachers' participation in this study was voluntary and based on the informed consent of all the respondents. In the schools where the teachers could not actively participate in the survey, the principals repeatedly stressed the importance of the research to all the teachers during their regular breaks. Moreover, the researcher offered the teachers who were not familiar with using a mobile phone the option to fill in printed surveys and collected them later. A total of 606 primary school teachers completed the survey during February and March 2019.

Of 606 teachers, 403 (66.5%) are women, 264 (43.6%) self-reported as belonging to the Han majority group, and 568 (93.7%) have university or college diplomas. In addition, the mean length of teaching experience was 16.28 years when the study was conducted (SD = 10.02; see Table 1 for the descriptive statistics).

Measures

Cultural diversity beliefs

To assess the degree to which the teachers endorse cultural diversity in their schools, we adapted the scale developed by Hachfeld et al. (2011), and we added several new items based on the ethnic context in China (Wang & Gou, 2013). The scale by Hachfeld et al. (2011) has showed two-dimensional structure. The Cronbach's reliabilities for multiculturalism subscale ($\alpha = .75$) and egalitarianism ($\alpha = .75$) subscale are satisfactory. The Cultural Diversity Beliefs scale in the present study showed no dimensions. Cronbach's alpha for the scale was .949 (mean = 4.02, SD = 0.60; see Table 1 for the descriptive statistics). It was translated into Chinese by the first author and one Chinese researcher majoring in English literature. This Cultural Diversity Beliefs scale has nine items scored using a 5-point Likert-type scale ranging from 'strongly disagree' (1) to 'strongly agree' (5). The following statements are three sample items: (1) 'In the classroom, it is important to be responsive to the differences between ethnic cultures.' (2) 'It is important for students to learn that people from other ethnic cultures can have different values and traditions.' (3) 'Getting to know ethnic cultures helps teachers get along with students of different ethnic groups.' The overall scale was measured based on the mean scores of the nine items, resulting in possible scores of 1 to 5, with higher scores indicating that the teachers have positive beliefs about cultural diversity.

Culturally relevant practices

Teachers' culturally relevant practices were measured using the Culturally Relevant Practices scale. This scale has eight items with three answer categories ranging from 'never' (1) to 'often' (3). The scale was adapted from the existing literature (Spanierman et al., 2011; Wang & Gou, 2013). The scale developed by Spanierman et al. (2011) consists of two factors: multicultural teaching skill ($\alpha = .80$) and multicultural teaching knowledge ($\alpha = .78$). Wang and Gou (2013) have measured Chinese teachers' multicultural teaching competency. Although they have not indicated the reliability and factor structure, their scale provides insights on how to make survey items appropriate in the contemporary Chinese context. The Culturally Relevant Practices scale in the present study showed no dimensions. It had a Cronbach's alpha of 0.82 (mean = 2.41,

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Table 1	Descriptive	statistics.
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Variable	N teachers	Min.	Max.	Mean or %	SD	Alpha
Beliefs about cultural diversity	579	1	5	4.02	0.60	0.95
Culturally relevant practices	577	1	3	2.41	0.35	0.82
Gender	606					
Female	403	0	1	66.5%		
Male (ref.)	203	0	1	33.5%		
Age	606					
18–34 years old (ref.)	219	0	1	36.1%		
35–44 years old	217	0	1	35.8%		
45 years or older	170	0	1	28.1%		
Ethnicity	606					
Han majority	264	0	1	43.6%		
Ethnic minorities (ref.)	342	0	1	56.4%		
Yi	84			13.9%		
Hani	71			11.7%		
Dai	64			10.6%		
Lahu	51			8.4%		
Wa	39			6.4%		
Other	33			5.4%		
Teaching experience	606	0	39	16.28	10.02	
Level of education	606					
University or college degree	568	0	1	93.7%		
Without university or college degree	38	0	1	6.3%		
Culturally relevant training	606					
No (ref.)	457	0	1	75.4%		
Yes	149	0	1	24.6%		
Intercultural interactions	584					
Frequently	398	0	1	68.2%		
Non-frequently (ref.)	186	0	1	31.8%		
International travel experience	584					
No (ref.)	481	0	1	82.4%		
Yes	103	0	1	17.6%		
Domestic travel experience	584					
No (ref.)	154	0	1	26.4%		
Yes	430	0	1	73.6%		
Multilingual background	587					
One (ref.)	295	0	1	50.3%		
Two	214	0	1	36.5%		
Three or more	78	0	1	13.3%		
News exposure	584	-				
Never	67	0	1	11.5%		
Sometimes	422	0	1	72.3%		
Often (ref.)	95	0	1	16.3%		

frequency (N teachers), minimum score (Min.), maximum score (Max.), mean (for interval variables), percentage (for categorical variables), standard deviation (SD), and Cronbach's alpha for scales (Alpha).

SD = 0.35; see Table 1 for the descriptive statistics). Three sample items were as follows: (1) 'I integrate the cultural values and lifestyles of ethnic groups into my teaching.' (2) 'I communicate effectively with students' parents who have diverse ethnic backgrounds.' (3) 'I consider the ethnic characteristics of students when preparing lessons.' The overall scale was measured based on the mean scores of the eight items, resulting in possible scores of 1–3, with higher scores indicating that the teachers implement culturally relevant practices.

Gender

Regarding gender in the sample, 66.5% (n = 403) of the teachers is female, and 33.5% (n = 203) is male.

Age

We distinguished three age groups: (1) 18-34 years old (36.1%); (2) 35-44 years old (35.8%); and (3) 45 years and older (28.1%).

Teaching experience

The teaching experience was measured by asking teachers to report how many years they had taught (M = 16.28, SD = 10.022). A high positive correlation was found between the teachers' age and their teaching experience (r = 0.913, p < 0.01), so teaching experience was excluded from the data analysis.

Ethnicity

To measure ethnicity, the teachers were asked to choose their ethnicity from 56 officially recognised ethnic groups. The sizes of the main ethnic groups are shown in Table 1. Given the unbalanced responses, we recoded this variable into two categories: the Han majority group (43.6%) and the ethnic minority groups (56.4%). Within the ethnic minority groups, teachers from the three largest ethnic groups (i.e., Dai, Lahu, and Wa) are less than those from the Yi and Hani groups.

Level of education

To measure the teachers' level of education, they were asked about the highest level of formal education they had completed: junior middle school, technical high school, general high school, university or college, postgraduate degree, and others. We found that the responses were unevenly distributed because 94.2% of the participants had university or college degrees, so we dropped this variable from the data analysis.

Culturally relevant training

Culturally relevant training was defined as in-service training courses that explicitly teach issues concerning diversity and multiculturalism (Kahn et al., 2014). It was measured with two questions. First, the teachers were asked to report whether they had attended any training related to ethnicity and culture during their teaching careers (see Table 1 for the descriptive statistics). Of the teachers, 149 (24.6%) reported that they had attended teaching training related to cultural diversity. Second, these teachers were further asked to reflect on the main contents of the training.

The variety of training contents mainly covered three categories. First, 32 teachers had received training related to ethnic minorities' histories, ethnic arts (e.g., songs, dances), behaviours, and customs to learn about, respect, and propagate ethnic cultures. Second, 37 teachers were trained in Mandarin Chinese and ethnic minority languages from the Dai, Lahu, and Wa groups to improve teaching and learning in ethnically diverse class-rooms. Third, 80 teachers reported that they had received various pedagogy-related training on how to teach students from ethnic minority groups, manage ethnically diverse classrooms, and communicate with ethnic minority students.

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Intercultural experiences

Intercultural experiences refer to individuals' exposure to culturally diverse environments (Garmon, 2005). Based on the literature, this construct was measured with five indicators. First, the teachers were asked to rate their intercultural interactions ('How often do you interact with people whose culture or ethnicity is different from yours?'). Second, the teachers were asked to rate their domestic travel experience ('How often do you travel to different regions in China?'). Third, the teachers reported their international travel experience ('How often do you travel outside China?'). Fourth, we asked the teachers to report their news exposure ('How often do you watch, read, or listen to international news?'). These four questions had three responses ranging from 'never' (1) to 'often' (3). The fifth indicator measuring intercultural experiences was having a multilingual background based on the number of languages the teachers spoke well, including their home language. This question had three responses: 'one, only my mother tongue' (1); 'two' (2); and 'three or more' (3) (see Table 1 for the descriptive statistics).

Some answer options had response rates too low to be separate categories, so we recoded intercultural interaction into non-frequently ('never' and 'sometimes') and frequently ('often') categories. In addition, domestic travel experience and international travel experience were recoded into yes ('sometimes' and 'often') and no ('never') categories (see Table 1 for the descriptive statistics).

Data analysis

After 606 responses were gathered, the data were entered into SPSS (Statistical Package for Social Sciences) for analysis. First, we calculated the teachers' responses to each item on the teachers' Cultural Diversity Belief scale and the Culturally Relevant Practices scale to examine to what extent they endorse and practice cultural diversity. Second, we carried out Pearson's correlation analysis to assess whether there is a correlation between the teachers' cultural diversity beliefs and practices. Third, we performed multiple regression analysis to examine whether demographic factors, multicultural teaching training, and intercultural experiences predict the teachers' cultural diversity beliefs and practices. Missing data were handled by excluding cases listwise.

Results

To what extent do the teachers in predominantly ethnic minority schools hold positive beliefs about cultural diversity? To answer this question, we examined the overall mean of the Cultural Diversity Belief scale and the teachers' responses to the scale items. The overall mean of 4.02 (see Table 1) shows that the average of the teachers' response was between 'agree' and 'strongly agree.' Table 2 presents the percentages of the teachers who answered with 'agree' or 'completely agree.' These figures indicate that the majority of the teachers in the study support schools in promoting ethnocultural diversity. Of the teachers, 91.5% agreed that getting to know ethnic cultures helps teachers to get along with students of different ethnic groups (item 7). This shows teachers' awareness of the critical role of learning ethnic cultures in creating positive relationships with their students. In addition, 91.1% of the teachers stated that teachers should make culturally

ltem	Description	Mean	Standard deviation	(Completely) agree
1	In the classroom, it is important to be responsive to the differences between ethnic cultures.	3.92	0.762	87.1%
2	It is important for students to learn that people from other ethnic cultures can have different values and traditions.	3.94	0.731	87.3%
3	Respecting other ethnic cultures is something that students should learn as early as possible.	4.01	0.707	89.8%
4	In counselling parents who have diverse cultural backgrounds, teachers should try to be considerate of cultural particulars.	3.99	0.701	89.1%
5	Teachers should understand the learning characteristics of students from different ethnic groups.	4.04	0.676	90.7%
6	Teachers should make students feel equally treated in the classroom.	4.14	0.769	91.1%
7	Getting to know ethnic cultures helps teachers get along with students of different ethnic groups.	4.07	0.677	91.5%
8	As long as the teaching methods are appropriate, ethnic minority students can achieve good results.	4.00	0.728	86.1%
9	Dealing with cultural diversity should be taught in teacher training courses.	4.09	0.675	90.9%

Table 2. Agreement with items on the cultural diversity beliefs scale.

diverse students feel equally treated in the classroom (item 6). Important to note is that 90.9% of the teachers in our sample believe that teacher training courses should offer training on cultural diversity (see item 9). In contrast, the statement 'As long as the teaching methods are appropriate, ethnic minority students can achieve good results' received the lowest support from teachers (86.1%). This suggests that teachers place less emphasis on their teaching methods when it comes to the school performance of ethnic minority students.

So far, we have demonstrated that the teachers are in favour of cultural diversity in education. Next, we explore to what degree these teachers act upon culturally relevant practices in their schools. In Table 3, we present the results of the teachers' responses to the items on the Culturally Relevant Practices scale. First, the majority of the teachers generally implement the culturally relevant practices listed on the scale as the response rate for 'never' was relatively low. Second, more than half of the teachers reported that

			Responses			Standard
ltem	Description	Never	Sometimes	Often	Mean	deviation
1	l integrate the cultural values and lifestyles of ethnic groups into my teaching.	2.3%	72.1%	25.6%	2.23	0.474
2	I plan activities to celebrate diverse cultural practices in my classroom.	5.2%	72.6%	22.2%	2.17	0.495
3	I plan events to increase students' knowledge about the cultural experiences of the various ethnic groups in my classroom.	4.5%	63.3%	32.2%	2.28	0.539
4	I use teaching strategies that affirm the ethnic identities of all students.	2.8%	51.8%	45.4%	2.43	0.548
5	I use the historical experiences of various ethnic groups to improve students' learning.	4.5%	57.9%	37.6%	2.33	0.559
6	I solve the conflicts between students from different ethnic groups.	1.0%	36.6%	62.4%	2.61	0.508
7	I communicate effectively with students' parents who have diverse ethnic backgrounds.	1.2%	32.2%	66.6%	2.65	0.501
8	I consider students' ethnic characteristics when preparing lessons.	2.4%	38.5%	59.1%	2.57	0.543

Table 3. Agreement with items on the culturally relevant practices scale.

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Table 4. Correlations between teachers' beliefs and practices.

.103*
.014

* p < 0.05.

they sometimes consider multicultural elements in their teaching practices to promote cultural diversity, ethnic identity, and student learning (5 items; for example, 'I integrate the cultural values and lifestyles of ethnic groups into my teaching'). Third, the most frequent practice that the teachers reported is effective communication with ethnically diverse parents. Hence, teachers believe that they are able to establish strong and supportive relationships with students' parents.

Is there a correlation between school teacher' beliefs and practices? Regarding the third research question, the results in Table 4Table 5 indicate a weak positive correlation between school teachers' cultural diversity beliefs and culturally relevant practices (r = 0.103, p = 0.014).

· · · ·	C	Culturally relevant practices			
Variable	β	SE	Р		
Intercept	2.33	0.07	0.00***		
Age					
35–44 years old	0.09	0.03	0.007**		
45 years or older	0.11	0.04	0.003**		
18–34 years old (ref.)					
Gender					
Female	0.02	0.03	0.46		
Male (ref.)					
Ethnicity					
Han	0.08	0.03	0.01**		
Ethnic minorities (ref.)					
Culturally relevant training					
Yes	0.06	0.03	0.07		
No (ref.)					
Intercultural interactions					
Frequently	0.11	0.03	0.001**		
Non-frequently (ref.)					
International travel experience					
Yes	01	0.034	0.81		
No (ref.)					
Domestic travel experience					
Yes	0.03	0.04	0.48		
No (ref.)					
News exposure	0.00	0.07	0.000***		
Never	-0.29	0.06	0.000***		
Sometimes	-0.18	0.04	0.000***		
Often (ref.)					
Multilingual background Two	-0.01	0.03	0.75		
	0.16	0.03	0.75 0.001**		
Three or more	0.10	0.05	0.001		
One (ref.) R ²	0.14				
к F	0.14 7.18				
Г	/.10				

 Table 5. Multiple regression analysis.

*p < 0.05; **p < 0.01; ***p < 0.001.

Do demographic characteristics, culturally relevant training, and intercultural experiences predict school teachers' cultural diversity beliefs and culturally relevant practices? For the fourth research question, we excluded the cultural diversity beliefs from the multiple regression models because this dependent variable was highly right skewed, and all the predictors accounted for only 4% of the variance in the cultural diversity beliefs scores. Consequently, we only present the results for the culturally relevant practices. Our results show that all the predictors contributed approximately 15% of the variance, and the overall regression equation was significant ($R^2 = 0.14$, F (12,525) = 7.18, p < .001). With respect to age, teachers aged 45 and older implemented significantly higher levels of culturally relevant practices than their colleagues in the 18-34-year-old age group (b = 0.11, p = 0.003). Similarly, the teachers in the 35–44-year-old age group showed higher levels of culturally relevant practices than younger teacher group (b = 0.09, p = 0.007). Ethnicity had a significant association with the level of culturally relevant practices. We also found that the ethnic minority teachers reported significantly lower levels of culturally relevant practices than their Han majority colleagues (b = -0.08, p = 0.008). However, gender was not found to significantly affect the teachers' practices (b = 0.02, p = 0.46).

The analysis results indicate that culturally relevant training did not predict the teachers' culturally relevant practices (b = .06, p = 0.068). Intercultural interactions were found to be important to the extent that the teachers implemented culturally relevant practices. The teachers who frequently interacted with people from different cultural backgrounds generally reported more culturally relevant practices than their colleagues who engaged in fewer intercultural interactions (b = 0.11, p = 0.001). We found a significant association between the frequency of international news exposure and the level of culturally relevant practices. The teachers who regularly watched, read, and listened to news about other countries showed significantly higher levels of culturally relevant practices than their colleagues who were not interested (b = -0.29, p < 0.001) or were less interested in international news (b = 0.18, p < 0.001). In other words, the more frequently the teachers watched, read, and listened to news about other countries, the more likely they were to implement culturally relevant practices when the other variables remained constant. Multilingual background significantly influenced the teachers' practices. The results indicate that the teachers speaking three or more languages reported significantly more culturally relevant practices than their monolingual colleagues (b = 0.16, p = 0.001).

Discussion

To fill the gaps in research, four research questions were addressed in the present study: (1) To what extent do school teachers hold positive beliefs about cultural diversity? (2) To what extent do school teachers act upon culturally relevant practices? (3) Is there a correlation between school teacher' beliefs and practices? (4) Do demographic characteristics, culturally relevant training, and intercultural experiences predict school teachers' cultural diversity beliefs and culturally relevant practices?

Based on the findings, an overwhelming majority of the sampled teachers have highly favourable attitudes towards cultural diversity in their schools. In other words, the teachers in this study are aware that different ethnic cultures have their standards and values. Moreover, the teachers generally acknowledged that students' home cultures and experiences should be appreciated and integrated into classroom instruction. However, these results must be interpreted carefully because social desirability might have affected the teachers' responses. In addition, the teachers reported a moderate frequency of culturally relevant practices, indicating that their positive beliefs are not necessarily translated into their educational practices. Thus, there remains a gap between teachers' beliefs and practices. Pearson's correlation analysis further suggests a marginal, weak relationship between teachers' cultural diversity beliefs and culturally relevant practices. These findings confirm previous research showing that teachers have strong cultural diversity beliefs while they don't necessarily act positively upon it (Chen, 2008; Fang, 1996; Raymond, 1997).

Looking at the predictors of teachers' culturally relevant practices, some of our results confirm previous research, while other findings expand our knowledge about teachers' cultural diversity beliefs and culturally relevant practices. Regarding demographic factors, we found that Han majority teachers are more likely to engage in culturally relevant practices than their ethnic minority colleagues. This finding is not consistent with previous research in other sociocultural contexts arguing that ethnic minority teachers are more involved in multicultural teaching (Agirdag et al., 2016; Vervaet et al., 2018). Over the past decades, a number of Western researchers have suggested that the increased representation of ethnic minority teachers could promote the implementation of culturally relevant practices given the shared experiences between teachers and ethnic minority students (Jackson, 1986; Searle & Stibbs, 1989; Valencia & Aburto, 1991; Villegas et al., 2012). However, the empirical evidence in this study shows that the teachers from the same ethnic minority group as the students do not necessarily act upon culturally relevant practices more than ethnic majority teachers. This might be partly because ethnic minority teachers have a higher awareness of the challenges faced by minority groups in society, and therefore desire to promote the social mobility and social participation of ethnic minority students through assimilating them into the mainstream culture. The study in Belgian context has also shown that White majority teachers try to assimilate their ethnic minority students into the dominant culture to protect students against discrimination in society (Van Praag et al., 2016). Our findings suggest that older, experienced teachers are more likely to implement culturally relevant practices than their younger colleagues. This finding is not in line with previous research showing that teachers' age is not associated with their pedagogical behaviours (Agirdag et al., 2016; Vervaet et al., 2018). Our results indicate that gender does not significantly affect the teachers' culturally relevant practices, confirming earlier findings that gender is not related to the extent of multicultural teaching (Vervaet et al., 2018; Youngs & Youngs, 2001). However, the literature has shown that women have more favourable attitudes towards cultural diversity (McAllister & Irvine, 2000; Munroe & Pearson, 2006). As such, the varying effects of demographic factors on teachers' practices and beliefs require more attention in the future.

Regarding culturally relevant training, it was found that teachers' participation in a training does not affect their involvement in culturally relevant practices, similar to earlier findings on teachers' multicultural attitudes (Youngs & Youngs, 2001). This

finding suggests that either the existing teacher training programs in China are not sufficient or teachers in culturally diverse schools are not ready to transfer the training contents into their pedagogical behaviours.

Regarding intercultural experiences, our study first highlights the importance of contact with culturally diverse people in shaping teachers' culturally relevant practices, consistent with prior research on teachers' beliefs (Garmon, 2004; Kahn et al., 2014). The contact hypothesis in psychology and other social sciences suggests that intergroup contacts under appropriate conditions can effectively reduce prejudice and negative attitudes between majority and minority group members (Allport, 1954). Consequently, meaningful interactions among culturally diverse groups which share equal status might positively affect teachers' practices. Second, our results indicate that travel experiences do not make a difference in teachers' educational behaviours. Previous studies have also generated mixed results about the effects of cross-cultural experiences (e.g., travelling, living, and working abroad) on teachers' cultural diversity attitudes (Garmon, 2004, 2005; Kahn et al., 2014; Youngs & Youngs, 2001). We, therefore, argue that contact with culturally diverse people matters more than the exposure to diverse cultures in shaping teachers' culturally relevant practices. Third, exposure to international news positively influences the teachers' culturally relevant practices, which is rarely examined in the literature. More specifically, the teachers interested in watching, reading, and listening to news about other countries implement more culturally relevant practices. Fourth, the results suggest that the teachers' multilingual background affects their level of culturally relevant practices, consistent with the literature demonstrating that teachers' language ability is a stronger predictor of positive beliefs about working with culturally diverse students (Flores & Smith, 2009).

Despite the significance of our findings in promoting educational equity in schools in China, this study is not without limitations. First, we could not examine the relationships between the predictors and the teachers' cultural diversity beliefs due to the slight variance in the responses to the Cultural Diversity Beliefs scale. Second, the study used cross-sectional data, which prevented determining causality in the relationships among the demographic characteristics, culturally relevant training, intercultural experiences, and the involvement with culturally relevant practices. Third, this study took a broad measurement of the teachers' cultural diversity beliefs and practices, which might have prevented the capturing of the underlying dimensions of their beliefs and practices. For instance, Banks (1993) highlighted that multicultural education practices include content integration, knowledge construction, prejudice reduction, equity pedagogy, and empowering school culture. Other scales or measurements of teachers' beliefs and practices might have led to different results. Fourth, the collective impacts of the predictor model, although significant and substantial (14%), still left 86% of the variance in teachers' practices unexplained. Fifth, in the data collection process, we did not explicitly define each experiential predictor such as intercultural interactions and travel experiences, which might have been interpreted differently by the respondents. Sixthly, convenient sampling might limit the generalisability of the survey results to other multiethnic regions in China (Etikan et al., 2016). Finally, social desirability among the teachers may have increased the bias in the survey outcomes (Krumpal, 2013).

This study serves as an important starting point for further research, given that this area remains understudied in the non-Western contexts. Future studies could adopt indepth qualitative research methods (e.g., teaching journals, interviews, and classroom observation), which can give further insights into the underlying processes that might explain the relationships between teachers' cultural diversity beliefs, culturally relevant practices, and potential predictors (Civitillo et al., 2019; Hyland, 2009). For instance, drawing on the framework of culturally relevant pedagogy, Hyland (2009)'s work used interviews, teaching journals, and participant observation to examine a White teacher's beliefs towards teaching Black students and the various struggles she experienced while implementing the culturally relevant teaching. As such, studies adopting qualitative research methods could provide a deeper look into the processes that shape teacher beliefs and practices in culturally diverse classrooms. Future research might also investigate school leaders' and students' perceptions of culturally relevant practices employed by teachers. In other words, it is important to look not only at what teachers say they do in schools but also on how outsiders interpret teachers' responses to cultural diversity (Agirdag, 2010; Fine-Davis & Faas, 2014; Howard, 2001; Moffitt et al., 2019). For example, in a study conducted by Agirdag (2010), the interviews with Turkish-bilingual and native-monolingual students suggest that Dutch monolingualism is imposed on students by the school staff and teachers. Therefore, foregrounding the perspectives of students might help to facilitative culturally relevant practices in schools.

Finally, a natural extension of this research would be to investigate additional predictors to better understand teachers' pedagogical practices. Our research examined teachers' demographic characteristics, culturally relevant training, and intercultural experiences, but the study did not consider other internal and external predictors (Buehl & Beck, 2015; Garmon, 2004, 2005; Stevens & Görgöz, 2010; Thomas et al., 2009). For example, Garmon (2004) has found that the dispositional factors (i.e., openness to diversity, self-awareness, and commitment to social justice) play a critical role in teachers' positive multicultural awareness. Also, Stevens and Görgöz (2010) have suggested the importance of nationally specific educational contexts and school characteristics on teachers' teaching beliefs and practices towards Turkish minority students. Although outside the study scope, these variables might offer further explanation for the variance in teachers' culturally relevant practices.

Conclusions

Studies on multicultural education and cultural responsiveness in education have yielded mixed conclusions on the correlations and determinants of teachers' cultural diversity beliefs and pedagogical practices. Besides, these studies have mainly focused on the beliefs and practices of ethnic majority teachers in Western contexts. The current study is unique in two ways. First, it has investigated ethnic minority teachers as well as Han majority teachers from a multiethnic region of China. Second, the study has explored school teachers' cultural diversity beliefs and practices and the associations among demographic characteristics, culturally relevant training, intercultural experiences, and the level of involvement with culturally relevant practices. We found that both majority and ethnic minority teachers have highly favourable beliefs about cultural diversity in their schools. However, teachers' beliefs are not necessarily reflected in their teaching practices as they are marginally correlated. We also found that the teachers' gender, culturally relevant training, and travel experiences are not associated with the extent of their culturally relevant practices. The results suggest that the teachers are more likely to implement culturally relevant practices if they belong to Han majority, are older (or have longer teaching experience), frequently interact with people from culturally diverse backgrounds, are competent in speaking three or more languages, and regularly watch, read, and listen to international news.

Some recommendations can be made for practitioners and policymakers based on the findings. The study results show that teachers' engagement with culturally relevant practices is limited. This means, more investment is needed into improving teacher training programs in China. Previous studies conducted in the US and across European countries have underlined the importance of developing teachers' cultural knowledge and competence so that they can effectively address the needs of students and facilitate inclusion in classrooms (Fine-Davis & Faas, 2014; Milner, 2011). Such training programs can also encourage (prospective) teachers to build intercultural experiences. As indicated by the findings of this study, supporting teachers to engage in positive intercultural interactions and international news exposure, and build on their multilingual abilities can help them develop culturally relevant practices. For instance, research has shown that engaging in contact with African American students helped White teachers to develop positive attitudes and intercultural competences (Kerssen-Griep & Eifler, 2008). Similarly, encouraging teachers to learn a new language to an intermediate level as part of their teacher training programs can help them address better the needs of their multilingual students from ethnic minority backgrounds (Calafato, 2019).

Acknowledgments

The authors thank all participating teachers who gave their supports, and Professor Jian Zhang, Mr. Luo, Ms. Liu, and Ms. Yan for their help in the fieldwork. The authors also thank Mr. Vanermen and the anonymous reviewers for their helpful comments.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

This work was supported by the China Scholarship Council [201706990026].

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