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The extent and predictors of linguistically responsive teaching in Southwest China

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ABSTRACT

The study of multilingualism has gained prominence due to increases in linguistically diverse student populations. This paper aims to contribute to research on multilingualism by addressing schoolteachers' beliefs and practices related to linguistic diversity. A unique sample of 606 teachers across ten minority-dominant schools from Southwest China participated in the survey study. The results show that schoolteachers hold both monolingual and multilingual beliefs. Teachers' beliefs are mainly positive about multilingual education, and they favor supporting multilingual teachers. However, students' home languages are viewed as the barrier to the school success. Furthermore, many teachers rarely implement linguistically responsive teaching practices. A moderate correlation was found between teachers' beliefs and linguistically responsive teaching practices. Additionally, regression analyses show that teachers' linguistically responsive teaching practices can be predicted by age, gender, language background, travel experience, international news exposure, and culturally relevant teacher training. These findings indicate an urgent need for teachers to participate in professional development to become better equipped to advocate for multilingualism and effectively address the realities of language minority students.

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Multilingualism; schoolteachers; beliefs; linguistically responsive teaching; China

Introduction

Multilingualism has existed for centuries in some countries, yet multilingualism research did not flourish until recent decades, sparked by increased international migration waves that created linguistically diverse student populations. Although many language minority students do not speak the language of instruction at home, accommodations for their learning needs in schools are insufficient (Cummins 2007). Consequently, across many countries, a considerable achievement gap exists between language minority students and their native speaking peers (Agirdag and Vanlaar 2018; Kieffer 2008). Prior research has underlined the role of teachers who are inadequately prepared to teach language minority students in contributing to this achievement gap (Buxton, Lee, and Santau 2008). Teachers' positive attitudes regarding linguistically responsive teaching are critical to challenging school inequities (Lucas and Villegas 2013). Being linguistically responsive (LR) refers to valuing home languages and responding to the needs of language minority students (Lucas, Villegas, and Freedson-Gonzalez 2008). LR teachers understand the significance of language and culture for student learning and incorporate students' home languages and cultures into their teaching processes (Gay 2018). Against this background, exploring LR teaching is valuable for fostering inclusive school environments and promoting the success of language minority students.

Increasingly more studies have emerged that examine teachers' perspectives on LR teaching (Alisaari et al. 2019; Rodríguez-Izguierdo, Falcón, and Permisán 2020), but certain issues require further attention. Prior studies mainly focused on LR teaching in Western contexts, mostly involving White, middle class, and mainstream classroom monolingual teacher sample populations (Bernstein et al. 2018; Pulinx, Van Avermaet, and Agirdag 2017). Consequently, we know little about the extent of LR teaching in non-Western contexts characterized by distinctive sociocultural characteristics. Moreover, previous studies concentrated primarily on immigrant minorities, while the educational experiences of indigenous linguistic minorities remain less explored. Unlike immigrant minorities, indigenous linguistic minorities have more civil and cultural rights based on their historical settlement and critical role in maintaining national stability and are more aware of their group identity and claims for cultural and linguistic revitalization (Castellino 2017). Such differences could have implications for LR teaching practices. Further research is needed also because most related literature addresses teachers' pedagogical beliefs toward linguistic diversity, ignoring the interrelationship between dimensions of LR teaching, such as pedagogical beliefs and teaching practices (Pulinx, Van Avermaet, and Agirdag 2017). Teachers' pedagogical beliefs are important to elucidating their thought processes and may correlate to their instructional practices (Fang 1996); exploring the interactive relationship between these beliefs and practices can provide insights into improving the consistency between these two aspects of LR teaching. Finally, previous studies have minimally explored the predictors of LR teaching. Although the literature indicates teacher training and intercultural experiences may influence teachers' pedagogical beliefs toward linguistic diversity, the extent to which these factors predict teachers' LR instructional practices have rarely been studied. However, the identification of such variables is crucial to improving LR teaching practices (O'Dwyer, Russell, and Bebell 2004).

To address these gaps in multilingualism research, this study will (1) explore the extent to which LR teaching occurs in southwest China, a culturally and linguistically diverse region; (2) identify interrelationships between dimensions of LR teaching; and (3) investigate predictors of LR teaching practices.

Literature review

Sociocultural context

This study was conducted in the People's Republic of China (hereinafter 'China'). China, with 56 officially recognized indigenous ethnic groups, has been multilingual for centuries (Liu, Çolak, and Agirdag 2020). The Han majority, which accounts for 91.6% of China's population, speaks Mandarin Chinese and various Han dialects, while the remaining 55 minority groups (approximately 112 million people) speak various ethnic languages, except the Hui and Manchu, who speak Mandarin Chinese (NBSC 2010). Such linguistic diversity has presented significant challenges for the Chinese government and language education policy-making (Shen and Gao 2019). Ethnic language educational policies in China mainly address two positions. First, the government views Mandarin Chinese as the common national language that should be taught in all public schools (Gao and Ren 2019). Second, the government supports bilingual education activities for language minority students, as the use of students' home languages in teaching and learning has been encouraged through educational policies. The Compulsory Educational Law of China explicitly states that schools predominantly attended by minority students use ethnic minority language for instruction (Wan and Jun 2008). In practice, diverse bilingual education programs aim to develop language minority students' bilingual literacy in Mandarin Chinese and their home language. Through such practices, language minority students are expected not only to be integrated into mainstream society but also to maintain their linguistic and cultural identities (Gao and Ren 2019; Shen and Gao 2019). However, these bilingual education programs are limited in their outreach and adopt a deficit3024 👄 Q. LIU ET AL.

based approach to linguistic diversity. For instance, the bilingual program has primarily been implemented in areas where one ethnic minority group predominates, such as Tibet and Xinjiang (Zhang and Tsung 2019; Zhang and Yang 2021). Bilingual education development in areas inhabited by large mixed ethnic groups is rarely addressed in policy discourse or scholarly literature. Also, research indicates that bilingual education policies and practices in China essentially adopt a linguistic assimilation approach that foregrounds Mandarin Chinese and the Han-based curriculum (i.e. a deficit-based approach) that leaves little room for minority languages and cultures (Ding 2019).

This study was conducted in a multiethnic autonomous county in Yunnan, a frontier province in Southwest China well-known for its ethnic, linguistic, and cultural diversity, home to 25 officially identified ethnic minority groups. Other than the largest Han population, members of the ethnic minorities constitute 34% of the provincial population, speak 26 languages, and use 22 scripts (Wang 2016). The county sampled in this study has 22 ethnic minority groups, primarily Dai, Lahu, and Wa. As ethnic minority groups account for 86.4% of this county's population, the linguistically diverse student population has presented major obstacles to local educational development. However, knowledge is limited regarding how schoolteachers perceive and approach linguistic diversity in predominantly minority schools. Hence, the first research question of this study is: To what extent does LR teaching occur in Southwest China?

LR teaching

Previous research has stressed the importance of students' home languages to their personal and educational development (Baker 2014; Cummins 2001). Learning content in both home and instructional languages motivates language minority students to actively participate in class, which has positive cognitive effects on their academic outcomes (Baker 2014). Cummins (2001) argued that home languages are cultural, linguistic, and intellectual capital that support not only dominant language learning but also ethnic identity development and positive schooling experiences. Thus, language minority students' home languages are valuable for learning, despite being problematized as a barrier to their success (Cummins 2000).

Scholars have proposed various theoretical frameworks in discussing pedagogical approaches to students' home languages in educational contexts (Lucas and Villegas 2013). One of the most influential is the *LR teaching* framework introduced by Lucas, Villegas, and Freedson-Gonzalez (2008), which encompasses teachers' beliefs and practices. LR teachers believe languages are associated with the power structures in their socio-political contexts and that exposure to diverse home languages improves their relationships with language minority students and promotes those students' active engagement in school work. Moreover, LR teachers expect schools and teachers to create inclusive, friendly learning environments to improve language minority students' schooling experiences. The literature shows that teachers' supportive beliefs about linguistic diversity are positively correlated to their instructional language choices (García and Hesson 2015). Viewing all languages as assets for literacy and learning also affirms language minority students' identity, strengthens their feelings of belonging, and engages them more actively in literacy activities (Cummins et al. 2005).

Addressing teacher practices, Lucas and Villegas (2013) noted LR teachers should develop the pedagogical knowledge and skills for successfully teaching language minority students. Linguistic responsiveness indicates that school teachers are familiar with their students' linguistic and academic abilities and can present curriculum content so it relates to students' prior knowledge and cultural experiences. Moreover, LR teachers can recognize and positively respond to learning challenges that language minority students encounter (Lucas and Villegas 2013). Teacher beliefs and practices are different yet interrelated dimensions of LR teaching. Unless teachers adopt relevant professional practices, LR teaching is incomplete and students' home languages remain marginalized. Thus, the second research question is: What is the interrelationship between teachers' beliefs and practices regarding LR teaching?

Promoting LR teaching practices

Teacher beliefs may predict practices (Fang 1996). However, those beliefs may be steered by factors that influence both beliefs and practices. Previous research shows teacher-level factors may positively or negatively influence teachers' educational beliefs about diversity (Flores and Smith 2009; Garmon 2005). For instance, some studies indicate teachers' *culturally relevant training* predicts their beliefs toward diversity (Flores and Smith 2009). Culturally relevant in-service training explicitly addresses issues concerning diversity and multiculturalism (Kahn, Lindstrom, and Murray 2014). Flores and Smith (2009) asserted teachers with diversity training hold more supportive views on teaching culturally and linguistically diverse students.

Scholars have suggested teachers' intercultural experiences predict their professional beliefs about diversity (Garmon 2005; Pohan and Aguilar 2001). Intercultural experiences refer to individuals' exposure to culturally diverse environments (Garmon 2005). Aytug, Kern, and Dilchert (2018) divided intercultural experiences into interactions with foreign people and exposure to foreign cultures (e.g. media, languages). The literature has shown teachers' intercultural interactions with students, friends, and colleagues positively influence their beliefs about cultural and linguistic diversity (Agirdag, Merry, and Van Houtte 2016); that is, teachers with more exposure to individuals from different cultural backgrounds are more inclined to hold favorable beliefs about multilingualism and multiculturalism. Additionally, direct contact with diverse cultures (e.g. travailing, studying, and teaching abroad) was found to affect teachers' beliefs about diversity (Youngs and Youngs 2001). Such contact effectively fosters awareness of cultural and linguistic differences (McMurray 2007). Also, the extent of news exposure has been correlated with stereotypical perceptions of individuals (Dixon 2008): teachers with greater exposure to international news will likely implement more LR teaching. Moreover, research revealed teachers' multilingual background predicted their perceptions of diversity (Flores and Smith 2009; Szecsi, Szilagyi, and Giambo 2015); Szecsi, Szilagyi, and Giambo (2015) found the ability to speak more than one language predicts teacher candidates' positive beliefs about minority students' home languages.

While research has examined factors possibly correlated to teachers' multilingual beliefs, little is known about methods for promoting teachers' culturally and LR teaching practices. Lee and Anderson (2009) revealed that teachers with positive beliefs about diversity may not be prepared to teach language minority students, illustrating that factors that correlate to teachers' LR teaching practices require exploration. In this study, we hypothesize that *culturally relevant training* and *intercultural experiences* (i.e. intercultural interactions, travel experiences, international news exposure, multilingual background) support LR teaching practices. Hence, the third research question is: What are the predictors of LR teaching practices?

Method

Participants

An ethnically diverse sample was recruited, mirroring Yunnan's teaching force. We asked the teachers to choose their ethnicity from China's 56 officially recognized ethnic groups. Given the unbalanced responses, we recoded this variable into two categories: the Han majority (43.6%) and the Ethnic minority (56.4%). Notably, fewer ethnic minority teachers are from the sampled county's three largest ethnic groups (Dai, Lahu, and Wa) than from the Yi and Hani groups. In addition, the sample comprised 403 women (66.5%) and 203 men (33.5%). The vast majority of the participants (n = 568, 93.7%) had completed a university or college degree. We also distinguished three age groups (see Table 1). The mean of teachers' years of teaching experience was 16.28 (SD = 10.02).

Measures

LR teaching beliefs scale

To assess the degree to which the teachers endorsed LR teaching, we adapted existing items for measuring teachers' beliefs about the language used in education (Pulinx, Van Avermaet, and

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Table 1. Descriptive statistics.

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Variable	N teachers	<i>M</i> or %	SD	Alpha	
Beliefs: multilingual education	574	3.4	0.68	0.71	
Beliefs: students' home languages	574	2.8	0.44	0.63	
Beliefs: multilingual teachers	574	3.8	0.66	0.71	
LR teaching practices	573	2.03	0.65	0.88	
Gender	606				
Female	403	66.5%			
Male (ref.)	203	33.5%			
Age	606				
18–34 (ref.)	219	36.1%			
35–44	217	35.8%			
45≥	170	28.1%			
Ethnicity	606				
Han majority	264	43.6%			
Ethnic minorities (ref.)	342	56.4%			
Culturally relevant training	606				
No (ref.)	457	75.4%			
Yes	149	24.6%			
Intercultural interactions	584				
Non-frequently (ref.)	186	31.8%			
Frequently	398	68.2%			
International travel	584				
No (ref.)	481	82.4%			
Yes	103	17.6%			
Domestic travel	584				
No (ref.)	154	26.4%			
Yes	430	73.6%			
Multilingual background	587				
One (ref.)	295	50.3%			
Two	214	36.5%			
Three≥	78	13.3%			
International news exposure	584				
Never	67	11.5%			
Sometimes	422	72.3%			
Often (ref.)	95	16.3%			

Notes: N teachers = frequency; M or % = mean for interval variables/percentage for categorical variables; SD = standard deviation; and Alpha = Cronbach's alpha for scales.

Agirdag 2017) and added several items that reflected the sociocultural context in China (Wang and Gou 2013). All items were translated into Chinese by the first author and one Chinese researcher majoring in English literature. The items in Chinese are available online as part of the supplementary materials. The survey contained 10 items scored using a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree; see Table 2). Items 1, 2, 6, and 8 were reverse coded. The principal component analysis (PCA) produced three factors with eigenvalues greater than 1, accounting for 55.4% of the item variance. When rotated (varimax) to simple structure, the PCA yielded moderate to high item loadings (ranging from .56 to .86) on the designated factors and no substantial cross loadings. The reliability for the three factors was assessed using Cronbach's alpha (see Table 1). Based on their characteristics, we labeled three factors (see Table 1). Each was measured based on the mean scores of the relevant items, resulting in possible 1–5 scores. The higher scores indicated that the teachers held positive beliefs.

LR teaching practices scale

Teachers' LR teaching practices were measured using items adapted from the existing literature (Strobbe et al. 2017; Wang and Gou 2013). The LR teaching practices scale in the present study was translated into Chinese by the same author and researcher noted previously. It contained eight items with three response options (see Table 3). The PCA indicated no dimensions. Therefore, the scale was measured based on the mean scores of the eight items, resulting in possible scores of 1–3, with higher scores indicating the teachers implemented more LR teaching practices. This scale had a Cronbach's alpha of 0.85 (see Table 1).

Factors	ltem	М	SD	(Strongly) Disagree (%)	(Strongly) Agree (%)
F1	 School bulletin boards and slogans should present information in students' ethnic languages. 	3.22	1.002	32.1	53.3
	5. Ethnic minority students should be offered opportunity to learn home language in school.	3.22	1.002	16.2	72.1
	 School/classroom libraries should include books in students' ethnic languages. 	3.68	.832	12.2	75.5
	 Ethnic minority students should be offered regular subjects in home language. 	3.17	.991	33.4	51.7
F2	 Speaking home language in school hinders ethnic minority students from learning Mandarin Chinese sufficiently. 	3.11	1.08	38.6	49.3
	2. Ethnic minority students' academic failure is caused mostly by insufficient proficiency in Mandarin Chinese.	3.21	1.05	30.7	51.6
	1. Ethnic minority students should be forbidden from speaking home language in school.	2.77	1.09	53.4	36.4
	8. It is more important that ethnic minority students obtain high proficiency in Mandarin Chinese than in home language.	3.54	.93	19	68.1
F3	1. Speaking ethnic minority language is convenient for communicating with parents.	3.91	.702	6.1	87.8
	10. Students tend to be satisfied with teachers who speak ethnic minority language.	3.72	.800	10.8	78.4

Table 2. Teachers' LR teaching beliefs.

Culturally relevant training

Culturally relevant training was measured based on the responses to two following items. The first item is 'Have you attended any cultural and ethnic diversity training during your teaching careers?' (see Table 1). The teachers were then asked to reflect on the training content. Training content responses were classified into 3 categories: ethnic minorities' history, arts (e.g. songs, dances), behaviors, and customs to learn about respect and support for ethnic cultures (32 teachers); Mandarin Chinese and ethnic minority languages from the Dai, Lahu, and Wa groups to improve teaching in linguistically diverse classrooms (37 teachers); and varied pedagogy-related training on teaching students from ethnic minority groups, managing ethnically diverse classrooms, and communicating with ethnic minority students (80 teachers).

Intercultural experiences

Drawing on the literature, participants' intercultural experiences were measured using five indicators. Teachers were asked to rate, on a 1–3 scale (1-never; 2-sometimes; and 3-often), the frequency of their exposure to/involvement in four activities: (1) *intercultural interactions* ('How often do you interact with people whose ethnic culture or ethnicity is different from yours?'); (2) *domestic travel* ('How often do you travel to different regions in China?'); (3) *international travel* ('How often do

	M SD			Responses	
ltem			Never (%)	Sometimes (%)	Often (%)
allow students to use ethnic minority language during peer classroom discussions.	2.23	.94	34.9	7.7	57.4
I translate words when students do not understand information.	2.10	.93	38.9	12.4	48.7
I present topics and activities that reflect society's linguistic diversity.	2.46	.83	22.3	9.8	67.9
I use bilingual course materials.	1.91	.95	49.7	9.2	41
I teach in different ethnic languages.	1.78	.95	58.5	5.4	36.1
I reflect on my handling of different ethnic languages in class.	2.13	.94	38.7	9.4	51.8
I speak the ethnic minority language in class.	1.75	.95	61.3	3	35.8
I speak the ethnic minority language with parents from diverse ethnic backgrounds.	1.92	.96	50.4	7.3	42.2

Table 3. Teachers' LR teaching practices.

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you travel outside China?'); (4) *international news exposure* ('How often do you watch, read, or listen to international news?'). The fifth indicator for measuring teachers' intercultural experiences was *multilingual background*. The survey question is 'How many languages do you speak, including your native language?'. Participants were asked to report using one of three response options (see Table 1). Some answer options produced response rates too low to justify separate categories, so we recoded intercultural interactions into two categories: non-frequently and frequently. In addition, domestic travel and international travel were recoded into yes and no categories (see Table 1).

Procedures

Data were collected during the 2018–2019 academic year in Yunnan Province of China. Convenient sampling was applied because the first researcher had access to the educational bureau of the multiethnic autonomous county included in the current study. This autonomous county is one of the 29 officially recognized autonomous counties in Yunnan, and represents the rich ethnic, linguistic, and cultural diversity of China. Ethnic minority students accounted for more than 80% of the student population in each school in the selected county. In addition, convenient sampling served as an efficient method to mirror the ethnic diversity of teaching force and student population in Yunnan. The selected county has two urban primary schools mainly serving students from higher socio-economic backgrounds, and 30 rural primary schools from villages and townships mainly serving lower socio-economic backgrounds. In total, two urban and eight rural schools were chosen based on their easy accessibility for the researcher. In this study, convenient accessibility to data sources was required for two reasons. Firstly, strict censorship from local educational bureau limited extensive data collection. Secondly, the poor quality of transport structure restricted the researcher's access to many other rural primary schools on the mountains.

Before beginning the research process, the survey used in this study was field-tested with several schoolteachers and then revised. After receiving the educational bureau's approval, the researcher visited the ten schools selected, at which time she explained to each school's principal the importance of the research project and obtained his or her informed consent to implement the survey. Officials at each school helped distribute the survey link to teachers' online chat groups and encouraged all available teachers to participate. Survey questions were written in simplified Chinese. Informed voluntary consent was obtained from each teacher who participated. Forty teachers, especially old teachers, reported that they had difficulty in reading the survey questions on the mobile phone. Therefore, the researcher let them fill in the printed survey. A total of 606 teachers submitted the survey between February and March 2019.

Data analyses

Data from the 606 responses were entered into SPSS for analysis. Missing data were handled by excluding cases listwise. First, we conducted descriptive analyses to examine the extent of LR teaching beliefs and practices. Second, we carried out Pearson's correlation analyses to assess the interrelationship between beliefs and practices. As an effect size measure, correlations of .10, .30, and .50 are considered weak, moderate, and strong, respectively (Funder and Ozer 2019). Third, we performed multivariable regression analyses with different models to examine whether culturally relevant training and intercultural experiences increased teachers' LR teaching practices. More specifically, in the first model, we included variables to test the relationship between teachers' demographic characteristics and LR teaching practices. Culturally relevant training was added in the second model. The third model considered variables that measured teachers' intercultural experiences, and teachers' beliefs were added to the fourth to examine the relationship between teachers' beliefs and practices.

Results

Teachers' LR teaching beliefs

To answer the first research question, we examined teachers' responses to the items of the three subscales. The percentages of teachers who responded to the questions by choosing 'agree' or 'disagree' are shown in Table 2. Teachers demonstrated favorable beliefs about multilingual education and fostering LR school environments for ethnic minority students. Results indicate most participants supported multilingual education initiatives for ethnic minority students. Most (75.5%) believed school/ classroom libraries should be equipped with books in the different ethnic languages of students, and 72.1% agreed ethnic minority students should be offered education in their mother tongue.

Teachers' beliefs about students' home languages include their perceptions of students' home languages in relation to the instruction language. Results indicate participants' beliefs about students' home languages were negative concerning the relation between the instruction language (i.e. Mandarin Chinese) and students' academic performance. Mandarin Chinese proficiency of ethnic minority students was viewed as highly important by 68.1% of the teachers and 51.6% of the teachers attributed ethnic minority students' academic failure to the lack of such proficiency. According to 49.3% of the teachers, ethnic minority students failed to learn Mandarin Chinese sufficiently due to speaking their home language in school, and one-third said students' home languages should be forbidden in school.

However, participants were highly positive about the role of multilingual teachers. Most (87.8%) stated speaking ethnic minority languages is convenient for communicating with ethnic minority parents, and 78.4% recounted that students get along well with teachers who speak an ethnic minority language.

Teachers' LR teaching practices

The second research question explored the frequency of LR teaching practices reported by schoolteachers. Most teachers chose either the 1-never or 3-often response option, which resulted in a mean score around 2, as depicted in Table 3, in which we present the results of the teachers' responses. Teachers most frequently (67.9%) reported routinely engaging in topics and activities that reflect their society's linguistic diversity. Additionally, 57.4% of teachers reported often allowing students to use their home languages during classroom discussions with peers. Approximately half (48.7%) stated they regularly translate words when students have difficulty understanding information. Teachers less frequently reported speaking ethnic minority languages in class (35.8%) and teaching in different ethnic languages (36.1%).

Correlations between beliefs and practices

The third research question examined the relationship between teachers' LR teaching beliefs and practice. The results indicate a relatively strong and positive correlation between beliefs about multilingual education and beliefs about multilingual teachers. Still, very weak correlations were revealed between beliefs about students' home languages and both beliefs about multilingual education and beliefs about multilingual teachers. Table 4 illustrates the moderate and positive correlation between practices and beliefs about multilingual education and the weak correlation between practices and beliefs about multilingual teachers found. Beliefs about students' home languages were not significantly correlated with teachers' practices.

Factors that correlate to LR teaching practices

The fourth research question investigated the relationships between multiple factors and the extent to which LR teaching practices are employed. In the first model of multivariable regression analysis

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	Beliefs about multilingual education	Beliefs about students' home languages	Beliefs about multilingual teachers	LR teaching practices
Beliefs about multilingual education	_	17**	.42**	.29**
Beliefs about students' home languages		-	16**	.06
Beliefs about multilingual teachers			-	.15**
LR teaching practices				-
Notes: $**n < 0.01$				

Notes: ***p* < 0.01.

(Table 5, Model 1), variables were included to test the relationships between teachers' demographic characteristics and LR teaching practice usage. Demographic predictors contributed 8% of the variance for teachers' LR teaching practices ($R^2 = 0.080$, p < .001). The results show that teachers 45 and

Table 5. Predictors of teachers' LR teaching practices usage (N = 535).

Model 1	Model 2	Model 3	Model 4
.045	.045	.073	.096
(.064)	(.064)	(.061)	(.059)
.150*	.150*	.143*	.176**
(.071)	(.070)	(.068)	(.066)
			325***
(.060)	(.060)	(.058)	(.056)
021	042	045	.047
(.055)	(.055)	(.055)	(.053)
	190**	170*	.105
			(.059)
	(.005)	(.001)	(.055)
		.320***	.294***
			(.056)
		.445***	.400***
		(.086)	(.084)
			. ,
		264 *	190
		(.104)	(.102)
		021	.030
		(.074)	(.072)
			.037
		(.057)	(.056)
			027
		(.069)	(.067)
			.127*
		(.063)	(.061)
			220***
			.220 *** (.041)
			(.041) 011
			(.036)
			.026
			(.043)
2 222***	2 172***	1 892***	1.034***
			.245
11.489		10.008	.275
	.045 (.064) .150 *	.045 .045 (.064) .150* .150* .150* (.071) (.070) 345**** 333**** (.060) (.060) 031 043 (.055) (.055) .189*** (.063)	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

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

older implemented LR teaching practices more frequently than their colleagues aged 18–34 (b = .150, p < .05). Female teachers reported implementing fewer LR teaching practices than males (b = -.345, p < .001), and Han majority teachers reported using fewer LR teaching practices than their ethnic minority colleagues. However, this effect was not significant.

The second model (Table 5, Model 2) demonstrated culturally relevant training was significantly associated with use of LR teaching practices (b = .189, p < .01), indicating teachers with culturally relevant training implemented more LR teaching practices. The culturally relevant training, along with demographic predictors, contributed around 10% of the variance for teachers' LR teaching practices ($R^2 = 0.95$, p < .001).

In the third model (Table 5, Model 3), which included variables measuring teachers' intercultural experiences, results indicate 19% of the variance for teachers' LR teaching practice usage can be explained when teachers' intercultural experiences are considered ($R^2 = 0.187$, p < .001). Specifically, domestic travel experience marginally correlated to teachers' LR teaching practice usage (b = .133, p < .05). Furthermore, the results show that teachers who spoke three or more languages (b = .445, p < .001) and two languages (b = .320, p < .001) reported more frequently employing LR teaching practices than their monolingual colleagues. The results also revealed a significant association between the frequency of international news exposure and implementation of LR teaching practices (b = .264, p < 0.05).

The fourth model (Table 5, Model 4) included teachers' beliefs to examine the relationship between teachers' beliefs and practices. The results indicate that about 25% of the variance for teachers' LR teaching practices was explained by including teachers' beliefs ($R^2 = 0.245$, p < .001). Teachers' multilingual education beliefs were positively correlated with the extent of their LR teaching practices usage (b = .220, p < .001). The effects of culturally relevant training and international news exposure were no longer significant after adding teachers' beliefs to the model (see Table 5). To test whether the mediating effect of teachers' beliefs existed, we used the PROCESS macro approach (Hayes 2017). No significance was found in the mediation models.

Discussion

This study contributes to the LR teaching literature by (1) exploring the extent to which LR teaching occurs in a culturally and linguistically diverse region in China; (2) studying interrelationships between dimensions of LR teaching, and (3) investigating predictors of teaching practices.

Firstly, the results indicate teachers' beliefs about LR teaching were generally positive. However, the teachers displayed mixed views on the use of students' home languages. On one hand, they support multilingual initiatives, which may be partly explained by their positive beliefs about language preservation (Rehamo and Harrell 2020). Ethnic minority teachers especially are emotionally attached to minority languages and, therefore, want students' home languages allowed in school and promoted through instructional practices (Conteh 2007). Moreover, they believe schools should offer spaces where ethnic minority students receive education in their home languages, which could contribute to overall ethnic and cultural survival (Bahry 2012). Such beliefs are also supported by the national policy stating that schools predominantly attended by minority students are allowed to use ethnic minority languages for instruction (Wan and Jun 2008). On the other hand, teachers encouraged Mandarin Chinese proficiency among ethnic minority students and conveyed negative beliefs about speaking home languages in schools. This could be partly explained by the Han-dominated curriculum and assessment system (Rehamo and Harrell 2020). LR teachers might be aware of the fact that languages are associated with the power structures in a socio-political context, and thus, the minority languages are not inherently inferior to the languages of dominant group (Lucas and Villegas 2013). However, such sociolinguistic consciousness may not be enough to stop teachers from constraining ethnic minority students' home languages in schools as they want to prepare their students for Han-dominated examinations and career markets (Zhang and Yang 2021). These results are in line with previous studies on ethnic 3032 👄 Q. LIU ET AL.

minority education in China. For instance, Bahry (2012) and Wang (2011) found that teachers, ethnic minority teachers in particular, widely support linguistic and cultural pluralism in schools. However, a large number of teachers agreed that Chinese language learning and teaching must remain a priority due to its vital role in supporting students' school performance and socioeconomic mobility. The findings are also roughly in line with Western Europe research, where teachers have strong mono-lingual beliefs and perceive linguistic diversity as a barrier to school success (Alisaari et al. 2019; Rodríguez-Izquierdo, Falcón, and Permisán 2020).

Secondly, the findings highlight that participants implemented LR teaching to various extents. Many teachers allowed home languages to support ethnic minority students' learning and help them connect with the dominant language curriculum. Still, around 50% of the teachers were against students speaking home languages in schools and viewed it as a barrier to students' academic success. About 60% of the teachers reported never speaking an ethnic minority language in class. This could suggest that LR teaching mainly serves as a supportive tool for teaching the content in Chinese (Rehamo and Harrell 2020). This finding confirms previous research suggesting that teachers adopt local ethnic languages to clarify concepts and help students improve their Chinese proficiency (Zhang and Yang 2021). At the same time, this may also indicate that ethnic minority teachers themselves are not necessarily capable of speaking the language of their own ethnic group. This could be another challenge to promoting LR teaching in China.

Thirdly, the results suggest that teachers' pro-multilingual beliefs were negatively associated with their beliefs about students' home languages. As explained above, the teachers surveyed held deficit beliefs about the effect of home languages on instruction language learning and students' academic performance. Teachers who held pro-multilingual beliefs more frequently implemented LR teaching practices. These findings confirm previous studies showing that teachers' beliefs could correlate to their classroom practices (Buehl and Beck 2015). Other findings on bilingual education in China also support the idea that teachers' positive perceptions of bilingual education may positively influence their interest in learning and teaching ethnic minority languages (Bahry 2012; Wang 2015).

The fourth main finding of this study is that teachers' LR practices are predicted by culturally relevant training and intercultural experiences. Teachers who attended culturally relevant training engaged more often in LR teaching practices, supporting earlier findings on teachers' multilingual attitudes (e.g. Flores and Smith 2009). Additionally, our study highlights the importance of domestic travel in shaping LR teaching practices, consistent with prior research focusing on teachers' beliefs (Youngs and Youngs 2001). The results also demonstrate exposure to international news positively influenced the teachers' LR teaching practices, a topic rarely examined in the literature. Teachers interested in watching, reading, and listening to news about other countries were more likely to implement LR teaching practices. The results also suggest having a multilingual background affects use of LR teaching practices. This agrees with previous research demonstrating teachers' language ability is a strong predictor of their positive orientations toward working with culturally and linguistically diverse students (Flores and Smith 2009). Teachers' beliefs about multilingual education are positively associated with the use of LR teaching practices, which confirms the results from the previous bivariate correlation analysis. The current results also show that older, experienced, and male teachers implemented LR teaching practices more frequently than their younger, less experienced, and female colleagues. This is consistent with previous research in other sociocultural contexts indicating educators' teaching experiences are associated with their behaviors (Podolsky, Kini, and Darling-Hammond 2019). However, it does not support findings that male teachers expressed more monolingual attitudes than female teachers (Pulinx, Van Avermaet, and Agirdag 2017). Interestingly, the ethnicity of teachers did not make a significant difference in the extent of LR teaching practices usage. This implies sharing ethnicity backgrounds with students is not sufficient to support ethnic minority teachers' ability to teach in linguistically diverse classrooms (Brock, Moore, and Parks 2007).

This study is not without limitations. Teachers' LR teaching practices were measured using a questionnaire but did not incorporate classroom observation data. This may have limited a deeper look into underlying dimensions accounting for teachers' teaching practices. Also not incorporated were school leaders and students' perceptions of LR teaching, which may have helped explain teaching beliefs and practices. Additionally, the collective impacts of the predictor model, although significant and substantial, still left 75.5% of the variance in teachers' practices unexplained. Finally, social desirability among the teachers may have increased the bias in the survey outcomes. This study serves as a significant starting point for further research. Future studies could adopt in-depth qualitative research methods to offer further insights into the underlying processes that might explain the relationship between teachers' LR teaching beliefs and practices. Future research might also investigate school leaders' and students' perceptions of LR teaching beliefs and practices. 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 linguistic diversity.

Conclusion

Previous research has stressed the importance of students' home languages for positive schooling experiences and educational success (Baker 2014). This study shows that teachers hold generally positive beliefs about LR teaching. However, LR teaching practices in ethnic minority regions mainly support the dominant language learning while minority students' home languages remain problematized as a barrier to future success and social mobility.

The findings in this study have implications for policy-makers and teacher education. The current language policy for ethnic minority students in China appears to be controversial. Although the use of students' home languages in teaching and learning is encouraged through policy, Mandarin Chinese is mandatory in all public schools (Gao and Ren 2019). Furthermore, schooling is organized on the premise that Mandarin Chinese proficiency is a condition for academic success. This controversy in education policy reflects the multiple dimensions of teachers' beliefs about LR teaching Therefore, policy-makers should not only legally recognize the positive role of home languages in schooling but also enable their inclusion in learning evaluation systems. Without changing assessment practices, schoolteachers will be less likely to acknowledge and value students' home languages as educational rights.

The findings of the study are especially timely given that the newest Action Plan for Promoting Teachers in Yunnan Province (2020–2022) does not address LR teachers in ethnic minority regions. That is, upcoming teacher education reforms will likely fail in integrating LR teaching beliefs and practices into pre- and in-service teacher training. However, our study suggests that teacher training has a significant influence on teachers' pedagogical practices. Therefore, teacher training programs and schools must cooperate to support teachers' multilingual responsiveness and recognize multilingualism critical for academic success (Alisaari et al. 2019). Moreover, this study highlights the importance of teachers' intercultural experiences, multilingual abilities, and exposure to international news for their professional development. Thus, teacher development programs should encourage meaningful intercultural experiences and incorporate minority language training into their curriculum. Finally, they must challenge deficit notions about linguistic diversity and advocate for LR teaching.

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