Self-efficacy and quality of classroom interactions of EFL teachers in Niger

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This study explores the relationships between self-efficacy and observed quality of classroom interactions of EFL teachers in Niger and how they compare to their American counterparts. We collected and analyzed self-efficacy data from 609 EFL teachers using the Teachers' Sense of Self-efficacy Scale (TSES). In addition, classroom interaction data were collected from 53 Nigerien EFL teachers using the Classroom Assessment Scoring System (CLASS). All the self-efficacy subscales were significantly correlated with the CLASS Instructional Support domain. When we compared the self-efficacy and classroom interactions scores of Nigerien teachers with those of American teachers, a significant difference was only identified in the classroom management scale of TSES. In terms of the CLASS score difference, Nigerien teachers showed significantly higher scores on the Negative Climate and Analysis and Problem-Solving subscales. These findings suggest both teachers' self-efficacy and the classroom interaction quality may need to be assessed in different ways across the two cultures.

Keywords: self-efficacy; classroom interactions; English as a Foreign Language (EFL); Niger; teacher education

INTRODUCTION

In recent years, there has been increasing interest in ways to measure effective teaching practices around the world (e.g., Hamre et al., 2013). Effective teaching practices can be broadly defined to include teacher knowledge, practices and beliefs as well as student type (Bell, Gitomer, McCaffrey, Hamre, & Pianta, 2011). In this article, we focus on teacher-student interactions within the classroom because of the relationship between such interactions and student learning (Hamre et al., 2013; Hamre & Pianta, 2007). Based on the assumption that daily interactions between students and teachers promote student learning and development (Bronfenbrenner & Morris, 1998), the Classroom Assessment Scoring System (CLASS) (Pianta, LaParo, & Hamre, 2008) was developed and has been widely used in research. Student learning is also significantly influenced by a teacher's belief system. Teacher self-efficacy— teacher's perceived confidence on their specific teaching ability—is known to be one of the

most important aspects of the overall teacher belief system because it is directly linked to their implementation of effective instruction (e.g., Guo, Piasta, Justice, & Kaderavek, 2010).

Though much research has verified the impact of teacher-student relationships and teacher self-efficacy in Western countries on student learning, little research has been carried out to test the relationships in economically disadvantaged countries in West Africa. In this study, we focus on Niger, one of the most impoverished countries in the world according to Human Development Report by the United Nations Development Programme (UNDP) (2018). Similar to other West African countries, there are increasing needs for high quality teachers in Niger, but the reality is that many teachers in Niger are temporarily employed and do not have official teacher certification (Kielland, 2016). An additional challenge for Nigerien teachers is that they are expected to implement the national curriculum by using uniform textbooks and assessment systems despite inconsistent training and support, which may lead to limited teacher self-efficacy in the classroom—particularly regarding instructional planning (Nabi, 2010). In this educational setting, teachers' self-efficacy and interactions among teachers and students may show different patterns and trends from those in Western countries. This study aims to contribute to enhancing understanding of what counts as effective in economically disadvantaged West African countries like Niger by situating it in local cultures and contexts.

For the purpose of the study, we operationally define quality of classroom interactions as the nature and characteristics of interactions between teachers and students in the classroom; such interactions have three observable domains: emotional support, classroom organization, and instructional support (Pianta, La Paro, & Hamre, 2008). Each domain will be explained below in the section named Classroom Observation as Teaching Effectiveness. Using this definition of classroom interactions, this study examines the relationship between Nigerien EFL teachers' self-efficacy and the quality of classroom interactions in the Nigerien EFL context, in which US-based texts are used within the classroom. We believe that the findings of this study will contribute to a better understanding of EFL teachers in developing countries and provide useful information for the systematic improvement of their teaching practices.

The following research questions underpin the study:

1. To what extent are the Teachers' Senses of Efficacy Scale (TSES) and Classroom Assessment Scoring System (CLASS), developed to assess US teachers, transferable to the Niger EFL context?
2. To what extent are Nigerien EFL teachers' self-efficacy consistent with their observed quality of classroom interactions?
3. What are descriptive patterns identified in terms of self-efficacy and quality of classroom interactions of EFL teachers in Niger compared with those of American teachers?

RELEVANT LITERATURE

Teachers' self-efficacy (TSE)

Definition and perspective. TSE often refers to a teacher's self-perception of their teaching competence. It is a future-oriented belief about the capabilities one expects to display in a given situation (Bandura, 1997). TSE does not only refer to a teacher's sense of their own capabilities as a teacher but also their self-assessment of external resources and constraints to accomplish

a specific teaching task in a particular context (Tschannen-Moran, Woolfolk-Hoy, & Hoy, 1998). It is important to study teacher self-efficacy because it is related to such varied educational outcomes as student achievement, motivation, teachers' planning and organization abilities, commitment, and instructional behaviour (Allinder, 1994; Chacón, 2005; Johnson, 1992; Mojavezi & Tamiz, 2012; Thoonen, Sleegers, Peetsma, & Oort, 2011; Tournaki & Podell, 2005). This line of research suggests that an investigation of the relationships between teacher self-efficacy and educational outcomes can provide researchers and educators with valuable information regarding how to improve classroom instruction and enhance student engagement.

Sociocultural natures of TSE. Bandura's (1993; 2001) social cognitive theory proposes that an individual's efficacy is shaped and affected by social and cultural surroundings. TSE is a type of human efficacy that largely determines instructional behaviour, which, in turn, impacts students' learning. In other words, TSE is context-dependent and subject-matter specific. This raises a concern as to what extent TSE is transferable across contexts (Tschannen-Moran & Hoy, 2001). Using Bandura's social cognitive theory, we examined how an instrument developed to measure TSE by US researchers can be adapted and used as a reliable and valid measurement tool to assess teachers' self-efficacy with the consideration of a specific EFL teaching context in Niger. In addition, using the data from the TSE instrument, we further analyzed the relationship of the EFL teachers' self-efficacy representing their espoused abilities and actual abilities, which was measured by CLASS.

EFL teacher self-efficacy. EFL teachers have unique resources and constraints in their teaching context. EFL learners live in their own country in which English is not the dominant language; teachers thus have few opportunities to practice English conversation. Students in Francophone countries, such as Niger, learn English as a third or fourth language after their regional language(s) and an official language (French). Only a small number of researchers have focused on EFL teachers' self-efficacy and its relationship to different factors such as teaching experience and gender (Karimvand, 2011), their English proficiency (Choi & Lee, 2016), burnout (Ghaslani, 2015), their motivational teaching behaviours (Huangfu, 2012), and emotional intelligence (Moafian & Ghanizadeh, 2009; Rastegar & Memarpour, 2009).

The relationship between EFL teachers' TSE and their actual instructional practices has been a relatively neglected topic in research. Nishino (2012) investigated the relationship among Japanese high school teachers' beliefs, their practices, and external factors regarding Communicative Language Teaching (CLT). Her analysis revealed that teachers' CLT self-efficacy had a weak but direct impact on their classroom practices. Eslami and Fatahi (2008) found a positive relationship between self-efficacy and practices: EFL teachers with higher self-efficacy tended to use communication-based strategies. Chacón (2005), who examined self-efficacy of EFL middle school teachers in Venezuela, also found a positive relationship between teachers' self-efficacy and instructional strategies. Although these studies offer important insights into the close relationship between self-efficacy and practices, they all used teachers' self-reported instructional strategies as data. That is, the actual instructional strategies the teachers used in their classrooms were not directly observed. The current study builds on the previous research by implementing direct observation of teachers in order to understand the relationship between self-efficacy and teaching practice.

Classroom observation as teaching effectiveness

One of the common beliefs of policymakers—that students' scores on standardized tests can be used to evaluate teachers' instructional quality—has been criticized by education

researchers. As an alternative to this accountability model, more direct observational methods have been recommended because they can provide "rich, descriptive information about teachers' practices and students' experiences" (Pianta & Hamre, 2009, p. 110). In a time of national scrutiny of current teacher evaluation systems in the US (see Darling-Hammond, Amrein-Beardsley, Haertel, & Rothstein, 2012), there has been a "renewed emphasis on developing standardized classroom observational measures with adequate reliability and validity" (Pianta & Hamre, 2009, p. 110). This call for high-quality standardized classroom observational measures is aligned with the consensus that "evidence of teacher contributions to student learning should be part of teacher evaluation systems, along with evidence about the quality of teacher practices" (Darling-Hammond et al., 2012, p. 8).

The CLASS framework focuses on teacher-student interactions as a key component of student learning. Numerous studies have demonstrated a link between classroom interactions as assessed by the CLASS and student learning (Hamre & Pianta, 2001; Pianta & Allen, 2008). CLASS captures the complexity of the teaching processes, conceptualizing teaching in three different domains (Pianta, La Paro, & Hamre, 2008): 1) Emotional Support, 2) Classroom Organization, and 3) Instructional Support.

Emotional Support focuses on the affective qualities of classroom interactions, including the emotional tone of the classroom and how supportive the teacher is of students. Classroom Organization examines how the teacher manages the classroom environment and creates a productive atmosphere for students. Finally, Instructional Support focuses on what instructional methodologies are practiced and how the teacher provides feedback to students. Taken together, these three domains provide an illustrative view of classroom interactions.

Classroom observation for EFL instruction. Although research has been conducted on evaluation of teachers' instructional quality through classroom observation, we lack such research in the global context, especially in the EFL setting. Some qualitative studies, such as that conducted by Suryati (2015) and Tsai (2008), used observational protocols they created as tools for collecting data. Mostly, those protocols include specific instructional components, such as classroom activities, classroom instruction, and feedback. In contrast, Guilloteaux and Dörnyei (2008) and Smit, van de Grift, de Bot, and Jansen (2017) used quantitative methods to develop and test observation protocols for EFL instruction. However, these observation protocols focus on such particular instructional components as motivational strategies (Guilloteaux & Dörnyei, 2008) and scaffolding strategies for reading comprehension (Smit et al., 2017).

To the best of our knowledge, there is no study that relates EFL teachers' self-efficacy to the quality of teacher-student interactions as measured by a comprehensive observation protocol like the CLASS. As EFL learners have unique characteristics and needs, especially in economically disadvantaged countries, investigations of their teaching interactions can expand our understanding of the field from a cross-cultural perspective.

METHODS

Research design

This study employed a descriptive correlational research design "to explore relationships among variables" (Martella, Nelson, Morgan, & Marchand-Martella, 2013, p. 207).

Specifically, we investigate, in detail, the overall characteristics of EFL teachers in Niger in terms of their self-efficacy and quality of teacher-student interactions. The data reported in this study comes from a larger study of EFL teachers in Niger (see Wiens, Andrei, Anassour, Smith, 2018; Wiens, Jang, Liu, Anassour, Smith, 2018; Wiens, Andrei, Chou, Smith, & Anassour, 2018).

To better understand our Niger data, we compared it to data from the US. We used the information from Tschannen-Moran and Hoy (2001) and Pianta, Hamre, and Mintz (2012) to compare the TES and CLASS scores of the Niger teachers with those of US teachers. The mean scores of CLASS reported in Pianta et al. (2012) were obtained from 698 teachers of 7th through 9th graders. The mean scores of TSES were obtained from 366 pre-service and in-service classroom teachers who participated in the Tschannen-Moran and Hoy (2001) study.

Participants and settings

All EFL teachers in Niger were sent paper surveys, which were distributed to schools via regional teacher supervisors. Paper surveys were sent to regional teacher supervisors to distribute to all EFL teachers in Niger. Teachers were then given one week to complete the surveys and completed surveys were then returned all together to the research team. Members of the team entered the survey data into a password-protected computer. In total, 609 EFL teachers completed the survey for a response rate of 30.5%. The average teaching experience of the participants was 7.4 years. Out of 609 teachers, 89% were teaching in public schools with 68% reporting they were working in rural schools.

Teacher-student interactions data were collected through observations of 53 EFL teachers in middle and high schools in Niger. These recordings were completed after the printed surveys were sent out to EFL teachers. Then we videotaped and examined the classroom instruction of approximately 9% of the survey participants (53 teachers). We chose specific schools for these recordings in a major city in Niger based on geographical access to the teachers. Unfortunately, we were unable to record teachers in rural schools due to constraints in our resources and limited amount of time for data collection. A local former EFL teacher was hired as a research assistant who traveled to schools located in proximity to the research team. The research assistant recorded as many teachers as time and resources would allow within the constraints of the research budget and timeline. Independent t-tests showed that there was no significant difference in terms of their perceived teaching self-efficacy between the ones video-recorded (N=-53) and the ones not video-recorded (N=556) (all p's >.05). All research procedures were approved in advance by the Niger Ministry of Education in accordance with human subjects protections.

Niger is considered one of the poorest countries in the world, with much of its land area located in the Sahara Desert. According to the *CIA World Factbook*, Niger ranked among the bottom countries in median age, underweight children, life expectancy at birth, and population growth rate (CIA, 2016). Niger has substantial challenges in its educational system, with a literacy rate of 19% and a school life expectancy of five years (CIA, 2016). Five different ethnic groups make up nearly 98% of the Nigerien population—each with its own language. However, French is the official language of the country and the language of instruction in schools. Niger has implemented English as a foreign language in its middle and high school programs.

Niger shares many of the same challenges in educating teachers that many sub-Saharan nations face. Because of a push for universal education, combined with rapid population growth

because of high birth rates, this region has needed more schools, teachers, and resources (UNESCO, 2010). Until 2011, when the UN closed the Niger Peace Corps program for security reasons, most EFL teachers in Niger were foreigners from France, US, and other African countries. Today, more than 95% of EFL teachers in Niger are Nigerien nationals. There are no licence or examination requirements for becoming an EFL teacher. Prospective teachers who either have completed a training program (e.g., university-based program, training in a foreign country, a summer training) or have had no training at all can become EFL teachers in Niger (Wiens, Andrei, Anassour, & Smith, 2018). Both the Niger-specific context and shared challenges among West African countries lead to a need for research with EFL teachers in the area. Such research will help inform policymakers on decisions regarding how to train EFL teachers and what contextual factors to consider for improving the EFL teaching and learning environment. Also, it will help Teaching English to Speakers of Other Languages (TESOL) programs practically prepare future teachers who would like to teach in an EFL context, particularly in African countries.

Measures

Two instruments served as data-collection tools: Teachers' Senses of Efficacy Scale (TSES) and Classroom Assessment Scoring System (CLASS). Both instruments were initially developed and constructed in English. The self-efficacy survey provided to participants was translated into French. We asked two interpreters who were also Nigerien EFL teachers to separately translate the survey items. After translation, the two French versions were compared and differences between the two versions reconciled by the interpreters. Finally, members of the research team proofread and edited the French for clarity. The final survey instrument was bilingual, containing both the original English and the French translation.

Teachers' Senses of Efficacy Scale (TSES). The first instrument (Tschannen-Moran & Hoy, 2001), TSES, consists of 24 items to measure teachers' sense of self-efficacy for EFL instruction. There are three subscales: 1) Efficacy for Instructional Strategies, 2) Efficacy for Classroom Management, and 3) Efficacy for Student Engagement. Each subscale has eight items with a nine-point response scale. The original developers reported high internal consistency of each subscale: Efficacy for Instructional Strategies (.91), Efficacy for Classroom Management (.90), and Efficacy for Student Engagement (.87).

Classroom Assessment Scoring System-Secondary (CLASS-S). CLASS (Pianta, Hamre, Haynes, Mintz, & La Paro, 2007) is a standardized, reliable, and valid measure to assess three domains and 11 dimensions of teaching interactions using a seven-point scale. CLASS-S is a secondary school version of the original CLASS, which was initially developed for early childhood settings. The CLASS-S intends to capture teachers' ability to create a positive classroom climate, effectively manage classroom time, and deliver high-quality instruction and feedback by measuring the quality of interactions between teachers and students in secondary classroom settings. The Emotional Support domain includes three dimensions: positive climate, teacher sensitivity, and regard for adolescent perspectives. The Classroom Organization domain contains three dimensions: behaviour management, productivity, and negative climate. The Instructional Support domain consists of five dimensions: instructional learning formats, content understanding, analysis and inquiry, quality of feedback, and instructional dialogue. The CLASS is coded at the dimension level and then generally composited and analyzed at the domain level. Hamre et al. (2010) reported reliability ranging from alphas of .81 to .89.

As part of the current study, two bilingual individuals (fluent in English and French) attended a three-day CLASS training in the US. These coders then passed a computer-based reliability test on the CLASS measure prior to coding the videos. All the videos were double coded. Per CLASS manual guidelines, rater agreement was calculated within one score of each other and coding agreement was calculated at 83% between the two coders. Additionally, analysis of differences between coders was calculated using an independent samples t-test and found that there were differences between the coders, MD = .19 on a seven-point scale, $p < .001$. However, the two coders' scores were highly correlated $r = .70$, $p <.001$ and, therefore, the CLASS scores were averaged between the two coders to create a final CLASS score for each participating teacher.

Data analysis

Prior to the data analysis, frequencies for all the items were run to ensure that no data-entry errors occurred. The missing data was identified as missing at random and dealt with by Expectation-Maximization imputation. A measure of internal consistency was computed to determine the reliability of each subscale and of the overall instrument. McDonald omega reliability coefficients for the assessment were .90 for the full scale. Cronbach's alphas were α = .84 for the Efficacy for Instructional Strategies scale, α = .78 for the Efficacy for Classroom Management scale, α = .86 for the Efficacy for Student Engagement scale.

Using Mplus 7.0 (Muthén & Muthén, 2012), confirmatory factor analyses (CFAs) were conducted on the 24 TSES items for the three-factor model. Each factor includes eight items. We acknowledge that there are some concerns in using a nine-point scale in its capacity to reflect participant responses and treating it as ordinal-level data (i.e. responses to categories) (Bond & Fox, 2013), we have used them as interval-level data following the procedures for analyzing both the TSES (Tschannen-Moran & Woolfolk Hoy, 2001) and the CLASS (Pianta & Hamre, 2009), which are both well established in the literature. Chi-square, approximate fit indices, including root mean square error of approximation (RMSEA), comparative fit index (CFI), and standardized root mean square residual (SRMR), were used to evaluate the models based on the following criteria for acceptable fit: RMSEA $\leq$ .08, CFI $\geq$ .90, and SRMR $\leq$ .10 (Hoyle, 1995).

Finally, we examined comparisons in data between Nigerien EFL teachers and teachers in the US using independent samples t-tests. We examined the three domains of the TSES scores among these different sample populations. However, in order to have a more specific understanding of the nature of the differences in classroom interactions, we used dimension-level data for our comparison between US and Niger teachers.

RESULTS

To what extent are TSES and CLASS tests developed for US teachers transferable to the Niger EFL context?

As shown in Table 1, two theoretical models were compared to determine the best-fit measurement to assess the teaching self-efficacy of EFL teachers in Niger. All fit indices indicated that the three-factor model (χ^2 = 627.492, df = 249, $p < .01$; SRMR = .046; RMSEA = .050; CFI = .884) is better than the single-factor model (χ^2 = 687.281, df = 252, $p < .01$; SRMR = 0.047; RMSEA = 0.053; CFI = 0.867).

However, the CFI index was still not in the acceptable range (CFI ≥.90), indicating that the three-factor model did not fully fit the data. Therefore, following the guidelines of Tabachnick and Fidell (2013), we deleted seven items with factor loadings lower than .48. Three of the authors reviewed those seven items and agreed that removal would not harm the overall content validity. They include four items in the efficacy for student engagement (Q1, Q2, Q6, and Q22), one item in the efficacy for instructional strategies (Q20), and two items in the efficacy for classroom management (Q5 and Q21). The seven items are listed below.

> Q1: How much can you do to get through to the most difficult students?
>
> Q2. How much can you do to help your students think critically?
>
> Q5. To what extent can you make your expectations clear about student behaviour?
>
> Q6. How much can you do to get students to believe they can do well in school work?
>
> Q20. To what extent can you provide an alternative explanation or example when students are confused?
>
> Q21. How well can you respond to defiant students?
>
> Q22. How much can you assist families in helping their children do well in school?

Most of the model fit indices, including CFI, were significantly improved and in the acceptable range ($\chi 2 = 272.246$, $df = 114$, $p < 0.01$; SRMR = .041; RMSEA = .048; CFI = 0.937). To sum up, the results of the CFA suggest that measures of the model fit for the finalized three-factor model, after removal of seven items, fit the dataset of EFL teachers in Niger.

Table 1: Model Comparison among the Three Models Compared

	χ^2	df	SRMR Good: ≤ .05 Acceptable: ≤ .08	RMSEA Good: ≤ .06 Acceptable: ≤ .08	CFI Good: ≥ .96 Acceptable: ≥ .90
Single-factor model	687.281***	252	.047	.053	.867
Three-factor model	627.492***	249	.046	.050	.884
Three-factor Model with Q1, Q2, Q5, Q6, Q20, Q21, Q22 removed	272.246***	114	041	.048	.937

*** *p* <.001

To what extent are EFL teachers' self-efficacy consistent with their observed quality of classroom interactions?

We computed descriptive statistics for all six variables included in the analysis and provide the results in Table 2. The EFL teachers in Niger had relatively high self-efficacy for instructional strategies and student engagement classroom management. In terms of the quality of classroom interactions, our analysis revealed that EFL teachers in Niger achieved relatively higher scores on classroom organization than on other two domains of CLASS. CLASS data shows that EFL teachers in Niger received higher scores on class organization (behaviour management, productivity, instructional learning formats) than on emotional and instructional support.

Correlation coefficients among the six factors are presented in Table 3. The highest correlation was identified between the CLASS Emotional Support and CLASS Instructional Support (*r*=.79). Regarding our second research question, all the efficacy subscales were significantly

correlated with the CLASS Instructional Support domain, but not with the other two domains of CLASS.

Table 2: Descriptive statistics of TSE and CLASS

Factors	*N*	Min.	Max.	*M*	*SD*
TSES Engagement (4 items)	609	12 (4)	36 (36)	29.98	5.32
TSES Instruction (7 items)	609	13 (7)	63 (63)	51.02	9.03
TSES Management (6 items)	609	18 (6)	54 (54)	41.71	7.79
CLASS Emotional Support (3 dimensions)	53	4 (3)	13 (21)	7.17	1.81
CLASS Classroom Organization (3 dimensions)	53	10 (3)	16 (21)	12.72	1.39
CLASS Instructional Support (5 dimensions)	53	6 (5)	27 (35)	13.53	4.67

() = maximum/minimum possible values

Table 3: Correlation coefficients among six ubscales

	1	2	3	4	5	6
1. TSES Engagement		.642**	.561**	.179	-.102	.346*
2. TSES Instruction			.589**	.140	.114	.318*
3. TSES Management				.270	.052	.319*
4. CLASS Emotional Support					-.049	.765**
5. CLASS Classroom Organization						.171
6. CLASS Instructional Support						

**. Correlation is significant at the 0.01 level (2-tailed).
 *. Correlation is significant at the 0.05 level (2-tailed).

What are descriptive patterns in terms of self-efficacy and quality of classroom interactions of EFL teachers in Niger compared with those of US teachers?

To identify unique patterns of the teacher self-efficacy and the quality of classroom interactions of EFL teachers in Niger when compared to US teachers, we compared the mean scores from our sample with those from related studies where the data were collected from US teachers. Using the mean scores, standard deviation, and sample size, we calculated a *t*-score to test the mean difference between the US and Niger groups. In terms of the TSES scores, a significant difference between the two groups was identified only in the classroom management scale (see Table 4).

Table 4: Comparison of the TSE scores between the US and Niger Groups.

	Niger			United States				
	N	Mean	*SD*	*N*	Mean	*SD*	*t*	*p*-value
TSE Engagement	593	7.3636	1.25997	366	7.3	1.1	.75	.45
TSE Instruction	589	7.3821	1.28486	366	7.3	1.1	.99	.33
TSE Management	590	6.9491	1.24445	366	6.7	1.1	3.16	.0016

The CLASS scores were analyzed at the dimension level for more nuanced and detailed comparison and they showed significant differences in most subscales except Content Understanding ($t = 1.27$, $p>.05$). For the Negative Climate and Analysis and Problem Solving subscales, EFL teachers in Niger showed higher mean scores than US secondary teachers. Negative Climate represents the "overall level of expressed negativity in the classroom between teachers and students (e.g., anger, aggression, irritability)," but because the negative climate was reverse coded, a higher score on Negative Climate indicates a less negative climate (Hamre et al., 2013, p. 465). For the other subscales, US secondary teachers scored higher than Niger teachers, as shown in Table 5.

Table 5. *Comparison of the CLASS subscale scores between the US and Niger groups*

	Niger			United States				
	N	*M*	*SD*	*N*	*M*	*SD*	*t*	*p*-value
Positive Climate	53	2.40	.63	698	3.94	.69	15.76	.0000
Teacher Sensitivity	53	2.34	.73	698	3.86	.64	16.28	.0000
Regard for Adolescent Perspectives	53	2.43	.87	698	2.81	.72	3.65	.0003
Negative Climate (reversed)	53	6.85	.41	698	6.42	.51	5.99	.0000
Behaviour Management	53	3.64	1.15	698	5.54	.69	18.23	.0000
Productivity	53	2.23	.70	698	5.46	.69	32.82	.0000
Instructional Learning Formats	53	3.40	1.13	698	3.80	.67	3.95	.0001
Content Understanding	53	3.34	1.18	698	3.47	.67	1.27	.204
Analysis and Problem Solving	53	2.53	1.01	698	2.32	.62	2.25	.025
Quality of Feedback	53	2.02	.93	698	3.12	.66	11.32	.0000
Instructional Dialogue	53	2.25	1.05	698	2.82	.67	5.69	.0000

DISCUSSION

Even among countries where EFL is taught, variations exist, including in educational systems, student populations, and socio-political contexts. This study offers several insights to educators and researchers in foreign language learning and teaching contexts. The findings of the study extend previous research (e.g., Tschannen-Moran & Hoy, 2001) by investigating a distinctly different cultural context that holds altogether different stances toward teaching efficacy and quality.

Relationships between self-efficacy and observed quality of classroom interaction of EFL teachers in Niger

The results of our study revealed that all the efficacy subscales were significantly correlated with only one of the CLASS domains: Instructional Support. This finding means that Niger EFL teachers who felt more efficacious about their teaching were observed to provide more instructional supports, including employing activities to promote students' higher-order thinking, offering quality feedback and using active verbal interactions with students. This is a unique finding in that previous research targeting American classroom teachers (e.g. Guo, Piasta, Justice, & Kaderavek, 2010; Ryan, Kuusinen, & Bedoya-Skoog, 2015) reported a non-

significant relationship between the Instructional Support subscale of CLASS and the TSES subscales. For example, Guo et al. (2010) reported that the Instructional Support subscale is not correlated with TSES. In addition, Ryan et al. (2015) found that only the Classroom Management subscale of CLASS was significantly correlated with all the three subscales of TSES. Considering that the Instructional Support subscale includes three dimensions of concept development, quality of feedback, and language modeling, the Nigerien teachers showed a close relationship between their espoused and actual ability to provide instructional support. However, there appear to be gaps between the teachers' self-efficacy and actual ability in terms of emotional support and classroom organization. Considering that both providing students with emotional support and managing classroom behaviours involve students' social, emotional, and behavioural collaboration, Nigerian EFL teachers may need more sustainable support to reduce the gap between their self-efficacy and observed instructional performance in both domains. Creating a positive and responsive climate in classrooms (emotional support) and helping students regulate their own attention and behaviour (classroom management) will lead to positive language learning trajectories for EFL students.

Another possible explanation of the finding is that Nigerian EFL teachers in this study, most of whom had limited professional training, might have overestimated their actual ability in terms of student engagement and classroom management. Compared to the instructional strategies that include relatively more straightforward knowledge to understand and practice, both student engagement and classroom management require more complicated understandings of various psychological factors (e.g. attitudes, motivation, and goal-orientations) and interactional factors (e.g. peer-interactions and power dynamics among students). Therefore, this finding may be a consequence of only having a vague idea of what is actually required to do specific tasks in those domains. Given the importance of effective instruction in student achievement and success in foreign language learning, we believe that this study contributes to a better understanding of the relationship between teacher self-efficacy and classroom interaction quality in the EFL instruction.

Transferability of TSES to EFL context in Niger

It is noteworthy that the factor loadings of some TSES items were lower than what is expected and thus need to be removed. Previous research (e.g. Khairani & Raak, 2012; Klassen et al., 2009) conducting cross-cultural validation of TSES also reported that specific items need to be removed to improve the construct validity. We hypothesize that some of those items reflecting unique social and cultural values as well as specific instructional strategies may not be applicable to the EFL context in Niger. For example, Q22 measures a teacher's self-efficacy in promoting parent involvement in supporting their children's learning in schools. Many EFL teachers in Niger may not feel confident in encouraging parental involvement in school because the practice of parental involvement is not well-established among teachers and parents due to the lack of school-family communication and parenting programs in developing countries (Donkor, 2010; Kim, 2018). Another example is Item 2 measuring the teachers' self-efficacy in promoting students' critical thinking (Efficacy for student engagement). As reported in Ousseini (2016), most EFL instruction in Niger consists largely of grammar instruction: instructors often simply ask their students to respond to the questions that have the "grammatically correct" answers. Likewise, Wiens, Andrei, Chou, Smith, and Anassour (2018) found that grammar and drills were popular instructional techniques among Nigerien EFL teachers. We assume that different instructional focus and goals might have influenced

Nigerien teachers' perception of this item, which, in turn, could decrease the construct validity of the Nigerien TSES.

Comparison of TSES and CLASS between Nigerien and US teachers

Interestingly, Nigerien EFL teachers showed higher self-efficacy regarding classroom management than US teachers. However, most subscale scores of Niger teachers on the Classroom Organization domain of CLASS were actually lower than US teachers. That is, Niger EFL teachers had higher confidence in classroom management than US teachers, but their observed classroom organization scores were lower than US teachers. We assume that Nigerien EFL teachers might have different perspectives on effective methods of classroom management from US teachers. This is an important finding, indicating that the US and Niger may have different ways of conceptualizing effective instruction.

Finally, it is notable that Nigerien teachers showed relatively lower levels of negativity in the classroom and provided higher levels of support for their students' problem-solving and analytic thinking than US teachers, although US secondary teachers scored higher in other categories of Instructional Supports than Nigerien teachers. It seems that Nigerien teachers, like US teachers, agree that creating a positive classroom climate and avoiding negativity in the classroom between teachers and students is critical for effective classroom practice and will support students' social and emotional functioning in the classroom (Pianta & Hamre, 2009). Nigerien teachers' lower levels of negativity in the classroom might be attributed to the weight of English language learning in the EFL context of Niger (e.g., teachers' responsibilities and the resulting pressure) compared to the major academic subjects in the US. Furthermore, the result that Nigerien teachers demonstrated higher levels of supporting students' problem-solving and analytic thinking than US teachers suggests that Nigerien teachers use teaching strategies that promote EFL learners' cognitive skills in learning English language and grammar. However, the result that Nigerien teachers had lower scores on other areas of Instructional Supports might suggest that Nigerien teachers use fewer scaffolding methods than US teachers, such as giving students consistent, timely, and process-oriented feedback. The Niger context—preset national curriculum and assessments, EFL setting, and lack of EFL teacher training and certification—might account for this result.

LIMITATIONS

We acknowledge that these findings may be somewhat limited by lack of comparability in the data from Nigerien and US teachers. We computed the standardized *t* scores using the results (e.g., means, standard deviations, and sample sizes) reported in both Tschannen-Moran and Hoy (2001) and Pianta, Hamre, and Mintz (2012). This may introduce potential validity threats in that the source of difference between the US and Niger groups is confounded. This is because of the differences in the levels of training or teaching experience between the US sample and the EFL teachers in this study. Therefore, it is difficult to generalize that the differences were due to the Niger-specific sample versus the US, or to different topic domains, or different experiences levels, or maybe even just the different language used for the assessment tools. In addition, the Nigerien participants who were video-recorded for CLASS were mainly from a metropolitan area in Niger. They may not be representative of Nigerien EFL teachers working in rural areas.

CONCLUSION

The results from this study suggest that teachers' self-efficacy and the classroom interaction quality may need to be assessed in different ways across the two linguistically and culturally different educational contexts. Research should consider nuanced and cultural aspects of teacher practices and perceptions, especially in economically disadvantaged countries like Niger, so as to more accurately address their professional identities and efficacy and to enhance their future instructional quality. Although such a wide range of sources can impact teachers' sense of self-efficacy as previous accomplishment, learning experiences, positive feedback, and physiological arousal (Bandura, 1997), having high teacher self-efficacy can result in positive educational outcomes such as student success, teacher commitment, and willingness to adopt innovative approaches (Guskey, 1988). Finally, this study may serve as a model for other West African countries seeking to improve both their general and EFL education.

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