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Students' perceptions of native/ non-native English-speaking EMI teachers: Are NS teachers better than NNS teachers?

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Higher Education internalization has prompted a constant growth of EMI (English as a Medium of Instruction) courses delivered by teachers with different cultural and linguistic backgrounds. Existing literature has revealed that native English-speaking (NS) teachers and non-native English-speaking (NNS) teachers have demonstrated different characteristics in EMI teaching in terms of language proficiency and pedagogy expertise. Previous studies mainly focused on teaching features of NS and NNS EMI teachers that are preferred by students. However, these studies see students as an intact group while ignoring the possible impact of students' different levels of English proficiency on their perceptions of NS and NNS EMI teachers. This study investigates Chinese tertiary students' perceptions of NS and local NNS teachers' competencies in EMI teaching, and how these perceptions connect to their self-perceived English. Data was collected through semi-structured interviews with seven Chinese university students who enrolled in EMI courses. The study highlighted that students perceived these two groups of lecturers' teaching competencies differ regarding their language proficiency and teaching methods. Furthermore, these perceptions can be influenced by students' self-perceived listening and speaking proficiency. The findings provide insights for EMI implementation in Chinese Higher Education and suggestions for refining EMI teachers' teaching expertise.

KEYWORDS

student's perspective, EMI teaching competencies, higher education internationalization, global Englishes, English proficiency

Introduction

Higher education internalization has become the main trend in the global education industry in recent decades. Following this trend, English is widely used as the medium of instruction (EMI) to teach disciplinary knowledge across countries where English is not the native language (Dearden, 2015). A sharp rise in the popularity of EMI is also witnessed in Asian countries where English is traditionally taught as a foreign language (EFL), and such growth is especially rapid in China which is an EFL country where students are rarely

exposed to cultural knowledge related to English outside the classroom (Zhao and Dixon, 2017; Macaro, 2018; Gao and Ren, 2018). Thus, implementing EMI in China becomes a challenging task as it requires EMI teachers to have both content expertise and sufficient English proficiency, so as to facilitate students in learning the subject knowledge in a foreign language (Qiu and Fang, 2019).

In many EFL countries, EMI teachers are often recruited globally with both native English-speaking (NS) teachers and local non-native English-speaking (NNS) teachers recruited (Qiu and Fang, 2019). Research has revealed that NS and NNS EMI teachers demonstrate different teaching behaviors and language use, which could, in turn, impact students' perceptions of teachers' competencies in teaching through EMI (Karakaş, 2017; Inbar-Lourie and Donitsa-Schmidt, 2019). For example, while students favor the interactive and diverse teaching approaches adopted by NS teachers, they prefer the dense schedule and content-rich lessons delivered by local NNS teachers in the EMI context (Qiu and Fang, 2019). Additionally, previous studies also found that students' perceptions of EMI teachers are affected by their perceived L2 proficiency, as students with different levels of English proficiency may encounter different challenges in the EMI classroom (Wei and Hricko, 2021). However, studies investigating students' perceptions of NS and NNS EMI teachers see their perceptions as a consensus among all students (or students as an intact group) while ignoring the impact of students' L2 proficiency.

To fill the gap mentioned above, this study investigated the impact of students' self-perceived language proficiency on their perceptions of NS and NNS teachers. This study provides implications on how students with different self-perceived L2 proficiency can be better prepared and supported in NS and NNS teachers' courses in the EMI higher education context.

Literature review

EMI teachers' competencies

EMI teachers' language and pedagogy expertise are the two main aspects that affect their competencies to teach in the EMI context (Wilkinson, 2017). With no exception, in the Chinese context, it is also pointed out that qualified EMI teachers should have both pedagogical skills and sufficient English that enables them to communicate content knowledge with their students (Chen et al., 2020; Wei and Hricko, 2021). Therefore, language and pedagogical competencies will be taken as a conceptual framework for this study.

The primary concern of EMI teachers' teaching competencies is language proficiency (Hellekjaer and Wilkinson, 2001). NNS teachers with insufficient L2 proficiency have difficulties in explaining the content in sufficient clarity and are weak in terms of expressiveness, and thus they cover fewer teaching materials in the allotted time compared with their NS counterparts (Vinke, 1995). Additionally, teachers' accents also influence the comprehensibility of the content covered. As shown in a Swedish study, students consider non-native accents and non-idiomatic expressions as low English proficiency, which negatively affects students' perceptions of the quality of NNS teachers' courses (Bolton and Kuteeva, 2012; Kuteeva, 2014). The desire for native language proficiency was also identified in a study with German university students in which students view NS teachers as more competent in explaining the content in fluent instructional language (Gundermann, 2014). Despite 'the native speaker myth' (Phillipson, 1992), Jensen et al. (2013) demonstrated that students rated EMI teachers with high English proficiency as qualified teachers, which shows that language proficiency matters in EMI courses rather than being NS or NNS teachers. Interestingly, a study in Hong Kong revealed contradictory findings where students generally preferred local NNS teachers because they found that the local accent is easier to understand while NS teachers use more complex English and speak fast (Evans and Morrison, 2011). Such findings could possibly be explained by their long years of listening to local secondary school teachers, and the fact that local NNS teachers had a greater sensitivity to their needs and difficulties, including using L1 to clarify complex concepts when needed. This finding is further supported by a Turkish study which demonstrates that students consider content comprehension is easier in local teachers' courses and communication between students and lecturers is easier (Karakaş, 2017).

Such findings indicate that whether NS or NNS teachers can explain content more clearly seem to depend on students' expectations and learning needs. One strength of NNS teachers, according to the theory of code-switching in the classroom, is that their bilingual resources facilitate students' understanding of the content knowledge (Chen et al., 2020). Students' preferences for NS or NNS teachers go beyond the mother tongue of the EMI teacher itself. An Iranian study investigating students' perceptions toward NS teachers and NNS teachers found that students showed no preference for either lecturer but identified certain attributes of effective EMI lectures such as language proficiency and creating an international environment (Inbar-Lourie and Donitsa-Schmidt, 2019). Similarly, in the Chinese context, Qiu and Fang (2019) found that students favor the interactive teaching approach of NS teachers and the intense schedule developed by NNS teachers. Therefore, it can be postulated from the seemingly inconsistent and contradictory findings that students' perceptions of NNS and NS differ regarding their characteristics of language use in the classroom context.

Apart from the language proficiency, teachers' pedagogical competencies in teaching content *via* English is equally important, including the ability to interact and use teaching materials effectively (Wilkinson, 2017). Macaro (2018) highlights that effective interaction through English leads to effective content knowledge communication. Similarly, Zhao and Dixon (2017) pointed out that engaging students in meaningful interaction in the EMI context improves students' language proficiency and leads to an enhanced understanding of content. Besides pedagogical skills, EMI teachers' use of materials is equally

important. Since PowerPoint (PPT) slides become a common teaching material in the EMI context (Evans and Morrison, 2011), the ways EMI teachers design and present their PPT slides affect students' comprehension of content knowledge. Well-designed PPT slides can navigate students through the content of the lecture, which can complement NS teachers' insufficient L2 proficiency (Chang, 2017). Additionally, there are also discussions regarding how text-dense PPT slides used by NNS teachers caused students to lose concentration, in comparison with contentconcise ones used by NS teachers (Evans and Morrison, 2011). Thus, the different pedagogical skills in EMI teaching and the course material design are other aspects that would be explored in our study.

The role of students' English proficiency

Apart from teacher factors, it is evident that students' L2 proficiency is a detrimental factor that affects their learning in the EMI context. This challenge is particularly obvious for students who have been taught through their mother tongue in high schools, as they could not comprehend the subject knowledge delivered in their L2 (Xiao and Cheung, 2021). The quantitative evidence supports that students' L2 proficiency is a strong predictor of successful content learning (Hu et al., 2014; Rose et al., 2019). For example, the lack of English vocabulary could impede students' comprehension of lectures, learning materials, and communication in the classroom (Evans and Morrison, 2011). In addition, due to inadequate listening and speaking proficiency, students cannot talk or express themselves comfortably in class discussions, which in turn reduces their confidence in learning through EMI (Yıldız et al., 2017). Accordingly, EMI learning processes can be challenging for students with insufficient L2 proficiency because students' language proficiency affects their understanding of the content delivered in class. For example, it was reported that students with inadequate listening skills have difficulty in listening to long stretches of talk, and performing in lecture activities or seminars (Klaassen and De Graaff, 2001). More recently, Huang (2015) found that students with low selfperceived English proficiency are likely to suffer from learning anxiety in the EMI context as they may not be able to understand the content uttered by teachers, which in turn causes low achievement in content learning. Therefore, it can be postulated that students' self-perceived L2 proficiency could impact their perceptions of NS teachers and NNS teachers because courses delivered by NS teachers and NNS teachers tend to place requirements on students' L2 proficiency to different extents.

Students' language proficiency also affects their participation in pedagogical activities. For example, interactive teaching methods require students to have a certain level of oral English skills, and students with high self-perceived L2 speaking proficiency are likely to participate more frequently in interactions in lectures and enjoy this kind of teaching method (Lee, 2014). Additionally, students with low self-perceived English proficiency are likely to find NNS

teachers' courses more supportive and effective, as they would have chances to obtain more assistance through L1, which supports their comprehension of the content knowledge (Karakaş, 2017; Inbar-Lourie and Donitsa-Schmidt, 2019). In the Chinese higher education context, one reason why students feel reluctant to ask questions is their lack of confidence in their English, accordingly, they prefer to ask questions in L1 during break or after lectures (Evans and Morrison, 2011), which implies that they rely more on NNS teachers. Cai (2010) demonstrates that low self-perceived English proficiency is one reason why EMI students choose to drop NS teachers' courses as students cannot accommodate their learning with NS teachers' teaching methods that require intensive use of English. Therefore, although Zhang (2017) found that Chinese undergraduates enrolled in EMI courses considered NS teachers' interactive teaching approach prompts learning and they appreciated the interactive pedagogical activities, students' inadequate command of English is likely to prevent them from participating in classroom interaction; therefore, they may consider teachers' use of interaction is a drawback in their teaching competencies (Airey and Linder, 2006).

Based on the literature reviewed above, this study aims to enlarge the knowledge of EMI students' perceptions toward NS and NNS teachers' teaching competencies, and respond to the call of Qiu and Fang (2019) for further research that explores the impact of students' self-perceived L2 proficiency on their perceptions of these two groups of teachers.

The current study addressed the following research questions (RQs):

RQ1: How do Chinese university students perceive the local NNS teachers' teaching competencies in the EMI context?

RQ2: How do Chinese university students perceive the NS teachers' teaching competencies in the EMI context?

RQ3: How do Chinese students' self-perceived L2 proficiency affect their perceptions toward the NS teachers' and NNS teachers' teaching competencies?

Research methods

The current study adopts an exploratory approach and qualitative research methods were used to collect students' perceptions toward NS and NNS EMI teachers' teaching competencies, and how their self-perceived English proficiency could impact these perceptions.

Participants

Purposive sampling was adopted in selecting interview participants (Patton, 2009). Since the study aims to explore students' perceptions toward NS teachers and NNS teachers, third-year or fourth-year undergraduates enrolled in EMI courses in Chinese universities were selected because they have experienced EMI education for a longer period of time and could

TABLE 1 Background information of participants.

| Participant | Gender | Major | Year of study |
|-------------|--------|---------------------------|------------------|
| Student A | Male | Mechanics | Third-year |
| Student B | Male | Chemistry | Third-year |
| Student C | Female | Architecture | Third-year |
| Student D | Male | Finance and management | Third-year |
| Student E | Male | International business | Fourth-year |
| Student F | Male | Biology | Fourth-year |
| Student G | Female | English literature | Fourth-year |

TABLE 2 EMI lecturers' language proficiency.

| Language competencies | | | | | |
|-----------------------|---|---|--|--|--|
| | NNS | NS | | | |
| Content explanation | Repeating and code- switching | Rephrasing Giving various examples | | | |
| Fluency | Limited expressions | Explain knowledge flexibly | | | |
| | Use simpler sentence structure and vocabulary | Use authentic and complicated English expressions | | | |
| Accent | Chinese accent | Authentic accent | | | |

articulate clear perceptions of NNS and NS teachers. A total sample of seven students from different majors participated in the semi-structured interview, as shown in Table 1. Such selection aimed to pursue the diversity of disciplines to achieve maximum variation. The participants were informed that their participation in this research was voluntary. All participants signed a consent form and ethical approval was obtained from the ethics committee of the university where the first author is from. The background information of the participants is displayed in Table 1.

Data collection and analysis

Semi-structured interviews were adopted to explore participants' perceptions of NS and local NNS teachers (Gray, 2018). The interview protocol included mainly two parts. The first part of the interview protocol was informed by the conceptual framework of EMI teachers' teaching competencies synthesized in the above literature review and it focused on students' perceptions of EMI teachers' language and pedagogical competencies. In the second part, participants were asked about their perceptions of their English proficiency referring to listening, speaking, reading, and writing skills, and whether these perceptions influence their perceptions of the two groups of lecturers. The first part of the interview addresses RQ1 and RQ2, and RQ3 is addressed *via* the second part of the interview.

Due to the pandemic of COVID-19, all interviews were conducted *via* an online application called Microsoft Teams. All interviews were conducted in the participants' mother tongue – Mandarin to allow them to express their views accurately. Each interview session lasted around 45 min and the interviews were video recorded. Then, the recordings were transcribed and translated into English, which has been checked by both authors. To enhance the validity of the instrument, the questions were piloted with two of the respondents to ensure these questions ask what is intended to be asked and the questions were adjusted according to the pilot interview responses (Arksey and Knight, 1999).

The interview data were analyzed using NVivo following thematic analysis procedures proposed by Kuckartz (2014). The deductive themes are students' perceptions of EMI teachers' language competencies and pedagogical competencies. sub-themes were involved through reading and rereading the transcripts, and they were re-deconstructed and re-reconstructed by the two researchers. Finally, sub-themes such as students' perceptions of NS and NNS teachers' use of teaching materials and language proficiency are involved.

In the end, the researchers developed a coding scheme that covered three core themes: EMI teachers' language competencies, EMI teachers' pedagogical competencies, and how students' selfperceived L2 proficiency impacts their perceptions of NS and NNS teachers' teaching competencies.

Findings

Students' perceptions toward NNS and NS teachers' language competencies

Through the analysis of the transcript, three sub-themes emerged referring to the main differences between NS and NNS EMI teachers' language competencies including (1) the way teachers explain content knowledge, (2) language fluency, and (3) and teachers' accents as displayed in Table 2.

The first and most visible difference is NS and NNS teachers' language fluency. Given the naiveness of NS teachers, it is not surprising that all respondents commented NS teachers' language is fluent and they used authentic and complicated expressions. In contrast, NNS teachers used limited English expression and the use of simpler sentence structures and vocabulary. Based on this difference, a further difference mentioned by all participants is the strategies NS and NNS teachers used to explain the content knowledge. The most frequently-reported strategy used by NNS teachers is repeating the meanings and code-switch which refers to switching English to Chinese when they feel necessary (García, 2013). Conversely, NS teachers' fluent English allowed them to explain the knowledge in more diverse ways. Respondents mentioned "rephrasing," "giving various examples," and "elaboration" (Student A and Student D).

As for how these features of NNS and NS teachers' language contribute to students' learning, our participants expressed different views. Four students in favor of NS teachers' language mostly felt this is easier to understand NS teachers' due to the simple use of English and the similarity between local NS teachers' language use and Chinese students' language use. For instance, two participants expressed as following:

A foreign lecturer will use some authentic expressions, but a Chinese lecturer won't. They are aware of your habits, or they don't know that kind of authentic expression, so they'll use words that are in your repertoire to talk to you. Therefore, it is easy for me to comprehend the content (Student G).

The foreign lecturer used the authentic expression, and the speaking speed was a little faster, which may be a little harder to understand so I prefer Chinese teachers (Student C).

The above extracts indicate student G and student C compared these two groups of teachers and found less difficulty in understanding NS teachers. To compare, three participants preferred NS teachers for their English authenticity and their diverse ways to explain the knowledge, which they believed helps to content understanding and can also add to their chance of improving English. The following responses serve as examples of this:

The foreign lecturers gave us obvious examples or similar concepts to illustrate the content so that I can easily get the meaning he wants to express (Student A).

I like listening to the NS teachers' authentic expressions so that I can, by the way, learn this language knowledge and improve my English level (Student D).

In spite of the different views of NS and NNS teachers' language competencies in facilitating content understanding, all participants rationally considered NS teachers' code-switch strategy as an efficient way in explain content knowledge in class. Take student C and student E as examples:

If we encountered some difficult disciplinary terminology or concepts. Chinese teachers can use Chinese to directly explain them clearly and simply (student C).

I think it is time-saving when Chinese teachers switch to Chinese when they felt that we are confused about the content. Chinese is my mother tongue so I can immediately understand the meaning (Student D).

In summary, besides the commonly perceived advantage of NNS teachers' code-switch strategy, students tend to have different

perspectives on the merit of NS and NNS teachers' features in their language competencies.

Pedagogical competencies

Under the second theme, two sub-themes emerged from our results: interaction and the use of PPT slides. All participants described a general trend that NNS teachers tend to be teachercentered while NS teachers were more interactive in their classes. The participants not only commented that the extent of interaction in the classes of NS and NNS teachers was different, but also they mentioned that NS and NNS teachers interacted with students in different manners. NNS teachers may simply ask students contentrelated questions to check understanding while NS teachers tended to have diverse interaction activities such as brainstorming and group discussions. Both student A and student B expressed the monotonous interaction of NNS teachers while five students reported diverse interaction when recalling their experience of lectures of NS teachers.

Regarding students' perceptions of the effectiveness of interaction and teacher-centeredness in content learning, different views were reported in our findings. Students who preferred NNS teacher-cantered teaching method considered the dense schedule in such lectures to provide them with sufficient content to learn easily and they showed a reluctance in participating in NS teachers' interactive activities. The following extracts exemplify this:

I do not like interaction. I think it is time-wasting and reduce the efficiency of lectures.

But I just need to follow the Chinese lecturers' pace and they just tell us the knowledge that we need to know (Student E).

I prefer Chinese teachers because he was only talking there, all I need to do is to listen to them on my site, which is easy to learn the knowledge (Student G).

To compare, students who preferred NS teachers' interactive teaching methods commented on their merit in facilitating dependent thinking and deep understanding of content knowledge. Take student D as an example:

I am more inclined toward foreign lecturers. Personally speaking, because I brainstormed, the lecturer will also answer my questions based on my ideas, and my memory of the relevant knowledge that he taught will be deeper (Student D).

Therefore, these difference between students' perceptions of NNS and NS teachers' teaching methods is largely impacted by how students see the role of interaction in facilitating learning.

The other frequently mentioned sub-theme is NS and NNS teachers' use of PPT slides. The participants mostly commented that NNS teachers' PPT slides are made and presented in a detailed manner while NS teachers' PPTs tend to be content-concise and they are less bound to presenting PPTs compared with their NNS counterparts. Furthermore, our results reveal that NNS teachers tend to resort to PPT more and the detailed knowledge information is covered in their slides while NS teachers may try to trigger students' thinking rather than showing students detailed PPT. The following quotations serve as examples of this pattern:

Foreign lecturers use the whiteboard more and write while they are teaching, but Chinese lecturers prefer to use PPT slides and look at the PPT slides to sort out the knowledge points during the lecture (Student E).

For foreign lecturers, the content of the textbooks presented on the PPT is relatively small, while for the Chinese lecturer, the content of the textbooks presented on the PPT is relatively more (Student D).

In respect of students' content learning with the use of PPT of NS and NNS teachers, opposing views were reported. Four of the participants expressed that NS teachers detailed PPT slides helped them to follow the lectures and served as a resource for previewing and reviewing content knowledge. However, three students expressed a negative attitude toward NS teachers' PPT slides as they thought it may diminish deep thinking and cause inattentiveness during lectures. However, all participants considered NS teachers' detailed PPT slides were valuable resources for reviewing knowledge when preparing for exams.

I like NNS teachers' detailed PPTs as I can easily see what I need to learn when teachers present them, and I can also preview if they were made available before class. That helps me follow the lectures (Student C).

Chinese lecturers are accustomed to making more detailed PPT slides and sorting out all the things that need to be understood and mastered. In this way, the process of our note-taking is completely based on the PPT presentation without our original critical thinking (Student D).

I like PPTs better since I can read them after the lecture to review the knowledge if I did not understand the knowledge (Student E).

In summary, our findings reveal students have inconsistent perceptions of NS and NNS teachers' teaching competencies. How could this inconsistency be explained by students' self-perceived L2 proficiency will be analyzed in the next section.

Students' self-perceived English proficiency

Table 3 displays students' self-perceived English proficiency in this study. There are two skills in students' self-perceived L2 proficiency that are found to have an impact on their perceptions of NS and NNS EMI teachers' teaching competencies: selfperceived listening and speaking.

Our results reveal that students' self-perceived listening and speaking skills are closely associated with their perceptions of NS and NNS teachers' teaching methods. In addition, it emerged in our results that self-perceived listening and speaking proficiency also have an impact on students' willingness to communicate with NNS and NS teachers outside classrooms. Students with high selfperceived listening and speaking English enjoyed the interactive activities in NS teachers' classes and they perceived that engagement in such activities leads to dependent thinking on the content knowledge so that they are more likely to comprehend the content and keep them longer in their memories. Student D and Student A who perceived themselves with a high level of listening and speaking showed their favor to NS teachers' interactive activities. They also expressed they would like to ask NS teachers questions both in and outside the classroom to clarify the understanding. By contrast, students with low self-perceived speaking English were more likely to prefer NNS teachers' teachercentered teaching method and reply on NNS teachers' PPT slides to compensate for the missing knowledge due to their insufficient listening proficiency. For example, both student B and student E expressed their reluctance to participate in interactive activities in NS teachers' classes. Given this reluctance, they did not feel they benefit from these activities so they have negative perceptions of such activities. For example, student E mentioned that he thought interaction is a waste of time.

Additionally, students' self-perceived English listening has an influence on their perceptions of NS and NNS teachers' language competencies. For those with low self-perceived listening proficiency, local NNS teachers' English is perceived to be easier to understand therefore benefiting their learning. These students also mentioned a wish to have more materials to refer to when taking NS teachers' courses to compensate for the knowledge that they did not capture in classes. However, student A, student D, and student F who perceived themselves to have good listening proficiency preferred the authentic native output produced by NS teachers. They commented that NNS teachers' speaking English was a drawback because it was accented and non-authentic. They also expected to improve their own English by immersing in NS

TABLE 3 Students' self-perceived language proficiency.

| Student self-perceived English proficiency in EMI | | | | | | |
|---|-----------|----------|---------|---------|--|--|
| | Listening | Speaking | Reading | Writing | | |
| А | Good | Good | Medium | Medium | | |
| В | Medium | Medium | Medium | Medium | | |
| С | Good | Weak | Good | Weak | | |
| D | Good | Good | Good | Medium | | |
| Е | Medium | Weak | Medium | Medium | | |
| F | Good | Good | Medium | Weak | | |
| G | Weak | Weak | Good | Good | | |

teachers' courses. For example, students mentioned how they felt about NS and NNS teachers' language:

As long as there is a non-native accent, it may discount the meanings, so I think it is a drawback (Student A).

Because my listening is good, I prefer to listen to foreign teachers and I can improve my English by listening to accurate English (Student D).

To conclude, NS and NNS teachers' features in teaching competencies which are seen as strengths by some students may be seen as weaknesses by others as a result of students' self-perceived L2 proficiency. Our findings in this section could explain the different perceptions of students' on NS and NNS EMI teachers' teaching competencies by connecting these perceptions with students' self-perceived L2 proficiency. However, to gain a more comprehensive understanding of factors that impact students' perceptions of NS and NNS EMI teachers, further research is needed.

Discussion

The current study investigated university students' perceptions of NS and NNS EMI teachers' language proficiency and teaching methods, and how their self-perceived English proficiency influences these perceptions. Referring to RQ1 and RQ2, our findings revealed that NS teachers used authentic and diverse expressions to explain the content fluently, whereas NNS teachers' use of English was largely shadowed by their mother tongue and they could only use limited instructional language when teaching. In addition, NNS teachers were perceived to use traditional teacher-centered methods but content-rich teaching materials. By contrast, NS teachers tend to adopt learner-centered teaching methods involving a large number of interactions but their teaching materials were seen as contentloose. Referring to RQ3, our findings interestingly revealed that the language and teaching methods used by NS and NNS teachers, respectively, both had their strengths and drawbacks in content comprehension from students' perspectives, which was influenced by students' self-perceived listening and speaking proficiency. This finding is one of the major contributions of our study in this filed. The findings will be discussed in the following two sections.

Students' perceptions of NS and NNS teachers' language competencies

In our study, students' perceptions of NS and NNS teachers' English proficiency are in agreement with the previous studies that NS teachers use more authentic and accurate English compared with their NNS counterparts (Florence Ma, 2012), whereas the use of L1 code-switching was identified as a unique technique that used by NNS teachers (Chen et al., 2020). Similarly, students in the present study articulated that NS teachers' natural, fluent, and authentic English allowed them to explain ideas diversely, whereas NNS teachers' English is characterized as limited expressions and being shadowed by Chinese features, and they would switch the instructional language to students' L1 when needed. Such comparison appears to indicate that NNS teachers' teaching competencies might be weakened as they are less advantageous in the instructional language (Benke and Medgyes, 2005). However, unlike the previous studies where the characteristics of NS or NNS teachers' English were perceived as dichotomous advantages or disadvantages (Florence Ma, 2012; Calafato, 2019), our study reveals that NS or NNS teachers' use of English cannot be dichotomously perceived as beneficial or diminishing to content learning, but is dependent on students' self-perceived English proficiency. Our findings elucidate that student who perceived themselves as having low English listening proficiency prefer NNS teachers' English as they think their English is easier to understand and facilitates content comprehension. The reason for this finding could be that students' insufficient listening proficiency leads to unreadiness for listening to native-level EMI courses so students think courses delivered by NS teachers lack intelligibility and comprehensibility (Jiang et al., 2016; Qiu and Fang, 2019). Hence, it can be postulated that students with low listening proficiency need more assistance to comprehend EMI courses. Such assistance can be provided by NNS teachers as they can tacitly identify students' comprehension barriers and overtly switch to their L1 to explain content (Ellis, 2002). Therefore, our findings further support the notion that NNS teachers conduct more comprehensible EMI courses and can support students' learning with code-switching, when necessary (Florence Ma, 2012; Qiu and Fang, 2019), and we found this is especially true for students with low L2 listening proficiency.

By contrast, the findings illustrate an opposite tendency among students with high self-perceived listening proficiency who have obvious favor for listening to NS teachers' authentic and fluent English but have negative attitudes toward local NNS teachers' English which was shadowed by their L1 features (Jensen et al., 2013; Gundermann, 2014; Inbar-Lourie and Donitsa-Schmidt, 2019). One possible reason, based on the discursive accounts from the interview data, is that students with high self-perceived listening proficiency are more motivated to improve their English; therefore, they tend to consider NS teachers as ideal teachers with an identity of English learners (Florence Ma, 2012). These imply that 'the native speaker myth' (Phillipson, 1992) in the EMI context is more likely to be demonstrated by students with high self-perceived listening proficiency. Such a finding aligns with the findings in Inbar-Lourie and Donitsa-Schmidt's (2019) study where half of the participants reported extreme favor to NS EMI teachers. Overall, whether NS teachers or NNS teachers' English is an advantage or drawback for comprehending the content is associated with students' self-perceived listening proficiency. Our findings show that students' unreadiness in English listening readiness leads to comprehension barriers in NS teachers' courses which in turn affect their NS/NNS preference.

Students' perceptions of NS and NNS teachers' pedagogical competencies

Our study shows that students perceived that NS teachers employed learner-centered pedagogy with intensive interactions while NNS teachers adopted traditional teacher-centered pedagogy with observably fewer interactions, which resonates with the previous findings that depicted similar features of NS and NNS teachers (Florence Ma, 2012; Yeh, 2014; Qiu and Fang, 2019). Drawing upon the socio-culture theory which claims that learning occurred via participation in social interactions, NS teachers' interactive pedagogical practice has been widely reported as effective in facilitating EMI content learning and is preferred by students (Cai, 2010; Zhang, 2017; Qiu and Fang, 2019). However, unlike these previous findings demonstrating the favor of NS teachers' interactive pedagogy, our study surprisingly finds that this widely reported advantage of NS teachers' interactive pedagogy is perceived as a drawback for students with low selfperceived listening and speaking proficiency. This is possible because that insufficient listening and speaking proficiency prevent students from engaging in interactive activities; therefore they do not perceive the benefits from them. These findings echo the early studies illustrating that a lack of English proficiency is the main factor in students' reticence in participating in interactions, especially in English communicative skills (Tsui, 1996; Cheng, 2000). By contrast, the articulations from students with high selfperceived listening and speaking proficiency confirm the effectiveness of interaction in content learning as they reported a strong favor to NS teachers' interactive approach. Such findings affirm the necessity of a threshold of listening and speaking proficiency for students to get engaged in the classroom. To address this issue in the EMI context, both NS and NNS teachers need to develop their interaction skills to cater to the needs of students of different proficiency levels (Lo and Macaro, 2012). Apart from that, our findings suggest that it is crucial to improve students' listening and speaking before they enroll in EMI courses because these two L2 skills may be difficult to improve merely through immersion in the EMI context (Johnson and Swain, 1994).

Additionally, the current study shows that students perceive that NNS teachers designed their PowerPoint slides in a content-rich manner with dense knowledge, which provides sufficient preview and review resources, whereas NS teachers' materials are simpler and do not cover every single piece of knowledge. Unlike the previous studies that NNS teachers' less proficient English may cause less content coverage and knowledge loss (Vinke, 1995; Vu and Burns, 2014), our findings show that NNS teachers' use of PowerPoint slides can effectively address this concern. Such content-rich materials used by NNS teachers are particularly regarded to facilitate content learning from the view of students with low self-perceived listening and speaking proficiency, which echoes the findings of Zhou and Rose (2021), where preview and review the materials that are cohered to courses is crucial to adapting to EMI listening. Therefore, the results suggest that both NS and NNS should provide students with sufficient learning references like detailed PowerPoint slides to

better prepare students' learning, and cater to their needs caused by their insufficient L2 proficiency.

Conclusion and implications

To conclude, this study enlarges the knowledge of EMI in Chinese Higher education by exploring EMI students' perceptions of NS and local NNS teachers' teaching competencies, and the current study is among the first that connects students' perceptions of NS and NNS EMI teachers with their self-perceived English listening and speaking proficiency. Our findings revealed that the advantages of NS teachers' language competencies are perceived by students with high self-perceived L2 language proficiency as an advantage but a challenge for those with low proficiency (Florence Ma, 2012). Specifically, Students with high self-perceived tend to perceive NS teachers as more competent EMI teachers and prefer NS teachers' teaching methods and language rather than NNS teachers. Contrarily, those with low self-perceived listening and speaking proficiency tend to feel NS teachers' courses are challenging, while their learning can be supported by NNS teachers' language and teacher-centered methods.

Therefore, the results infer students with different levels of selfperceived listening and speaking proficiency tend to have different needs and desires in NS and NNS teachers' lessons. Consequently, three implications are brought out to better prepare students for learning via English. First, it is important to develop lecturers' awareness of students' difficulties and needs (Macaro, 2018) so that they can better prepare and refine their teaching based on students' current needs (Qiu and Fang, 2019). One potential way is referring to students' feedback, and course evaluation is a rich source of material for reflection on EMI teaching practice (Airey, 2020), so collecting students' course evaluation periodically informs EMI lecturers of what needs to be refined or adjusted. Second, our findings echo that listening and speaking in lectures can be the main challenges for EMI students (Evans and Morrison, 2011; Yıldız et al., 2017). Accordingly, besides the support in student English for academic Purpose (EAP) and English for Specific Purpose (ESP; Rose et al., 2019; Galloway and Ruegg, 2020), it should be noted that English communicative skills with a focus on students' listening and speaking skills in the EMI context should be emphasized in any kind of EMI language preparatory programs or in-sessional language support to facilitate students' learning in both NS and NNS teachers' courses. Finally, regardless of language native or non-native background, EMI teachers should be encouraged to provide students with sufficient learning materials to recall or pre-learn the content knowledge because these materials function as complementary resources to facilitate students' content comprehension through compensating students' content loss due to their lack of L2 proficiency (Hu et al., 2014; Chang, 2017).

In spite of this, there are limitations to this study. The current research is limited by the qualitative instrument. Using semistructured interviews is difficult to measure the relationship between students' perceptions of NS and NNS teachers, and their self-perceived English proficiency. Additionally, there is lack of triangulation for the qualitative data. Therefore, further research combing a quantitative survey is needed to increase the validity of the results. Additionally, our findings are restricted to the Chinese EMI higher education context and may not be applied to other EMI contexts all over the world, further research in diverse contexts is needed to gain wider implications for a larger number of EMI contexts.

Data availability statement

The datasets presented in this article are not readily available because the data can only be accessed by the authors. Requests to access the datasets should be directed to xuluyao@cuhk.edu.cn.

Ethics statement

The studies involving human participants were reviewed and approved by The University of St Andrews. The patients/ participants provided their written informed consent to participate in this study.

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Author contributions

LX proposed the research, collected data, analyzed the data and wrote up the report. YX analyzed the data and participated in data collection and writing up the report. All authors contributed to the article and approved the submitted version.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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