

Teachers' professional identities and *perezhivaniya* in adopting technology-assisted language teaching: A longitudinal Q-methodology Approach

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ABSTRACT: Recently, as technology advances in language education, technology-assisted language teaching (TALT) has emerged as a promising teaching model. Although English as a foreign language (EFL) teacher professional identity (TPI) has received lots of attention in the context of TALT, limited research focuses on languages other than English (LOTE) TPI. Echoing the connotation of the Vygotskian concept of “*perezhivanie*” and TPI, this study employed a longitudinal Q Methodology to track the evolution of 13 Japanese as foreign language (JFL) teachers' professional identities as they engage with TALT over 15 months. Analysis reveals two main professional identities initially – the “advocate of online teaching” and the “supporter of offline teaching”. However, a new identity, the “regretter”, emerges in the second phase, reflecting a sense of missed opportunities in contributing to online course development. By examining educators' professional identities through *perezhivanie*, this study highlights the dynamics between their cognitive processes, emotional responses, and technology shaping teacher professional identity within the evolving landscape of TALT.

Keywords: Teachers' professional identity, LOTE teacher, Emotion, *Perezhivanie*, Q methodology

Las identidades profesionales de los profesores y los *perezhivaniya* en la adopción de la enseñanza de idiomas asistido por tecnología: Un enfoque longitudinal de la metodología Q

RESUMEN: Recientemente, a medida que la tecnología avanza en la enseñanza de idiomas, la enseñanza asistida por tecnología (TALT) ha surgido como un modelo de enseñanza prometedor. Aunque la identidad profesional de los profesores (TPI) de inglés como lengua extranjera (EFL) ha recibido mucha atención en el contexto de TALT, la investigación sobre la identidad profesional de los profesores de otros idiomas (LOTE) es limitada. En consonancia con la connotación del concepto vygotskiano de ‘*perezhivanie*’ e identidad profesional, este estudio empleó una metodología longitudinal Q para seguir la evolución de la identidad profesional de 13 profesores de japonés como lengua extranjera (JFL) mientras se involucraban con TALT durante 15 meses. El análisis revela inicialmente dos identidades profesionales: el “defensor de la enseñanza en línea” y el “partidario de la enseñanza presencial”. Sin embargo, una nueva identidad, la de “arrepentido”, emerge en la segunda fase, reflejando un sentimiento de oportunidades perdidas al no haber contribuido al desarrollo de cursos en línea. Al exami-

nar las identidades profesionales de los educadores a través del concepto de *perezhivanie*, este estudio resalta la dinámica entre sus procesos cognitivos, respuestas emocionales y la influencia de la tecnología en la formación de la identidad profesional docente dentro del paisaje en constante evolución de TALT.

Palabras clave: identidad profesional de los docentes, profesores de idiomas distintos al inglés, emoción, *perezhivanie*, metodología Q

1. INTRODUCTION

Teacher professional identity (TPI), or “how teachers see themselves as teachers” (Mahmoudi-Gahrouei et al., 2016, p.582), is a key component of teacher identity and a central driver of teacher learning (Freeman, 2016), influencing both teaching practice and individual growth (Sang, 2022). Understanding TPI is, therefore, vital for fostering teacher professional development. In light of China’s Belt and Road Initiative, languages other than English (LOTE) education is experiencing a surge in prominence (Gao & Zheng, 2019). Considering the crucial role LOTE teachers play, investigating their TPI is essential to understanding how they perceive themselves professionally. Moreover, the widespread shift to online teaching brought about by the 2020 emergency has accelerated the adoption of technology-assisted language teaching (TALT), providing teachers with opportunities to reconstruct their professional identities (Zhang & Hwang, 2023). Despite this transformative change, limited research has examined how LOTE teachers’ TPI has evolved within this new TALT landscape.

In addition, research on TPI can still be further refined in terms of theoretical perspective and research methods. First, there has been a predominant focus on cognition in the realm of TPI, often at the expense of the affective (Chen, 2021; Zembylas, 2004). While attempts have been made to rectify this imbalance by shifting focus to emotion within the field of Positive Psychology (Derakhshan, 2022; Wang & Derakhshan, 2024; Wang et al., 2021; Zare et al., 2023), the prevalent approach typically regards cognitive and emotional elements as distinct entities, reflecting a reductionist view. A more holistic understanding of TPI requires viewing cognition and emotion as an integrated unity, a perspective consistent with the sociocultural concept of *perezhivanie*. Therefore, this study adopts *perezhivanie* as a theoretical framework to explore LOTE teachers’ TPI, focusing on the simultaneous interplay of their cognition and emotion (Lantolf & Swain, 2020). Second, regarding research methods, quantitative approaches to studying TPI often separate cognition and emotion into distinct, dependent variables, emphasizing objectivity (e.g., Su et al., 2024). Furthermore, these methods, such as surveys, tend to overlook individual differences by reducing individuals to population-level data, thereby limiting the expression of individual subjectivity. Given the inherently subjective nature of TPI – that is, how teachers perceive themselves professionally – a qualitative approach is arguably more suitable. However, data interpretation in qualitative research is inevitably influenced by the researcher’s own subjective viewpoint. Q methodology, situated on a continuum between quantitative and qualitative approaches (Watts & Stenner, 2012), offers a valuable alternative. Therefore, this study employs a longitudinal Q methodology as its primary research method.

Consequently, employing a Q methodology, this research explores LOTE teachers’ TPI within the TALT context, drawing on the *perezhivanie* framework. This approach will advance

the field by providing a nuanced understanding of LOTE teachers' TPI, considering both cognitive and emotional aspects. Moreover, the study's findings will offer practical guidance for teacher educators, informing strategies to mediate and foster the development of robust LOTE teacher identities within the evolving landscape of TALT.

2. LITERATURE REVIEW

2.1. *Perezhivanie*

Perezhivanie, a key concept in Vygotskian theory, has garnered increased attention in educational research concerning motivation (Kim, 2021), emotion (Fleer & Hammer, 2013; Qin et al., 2025), identity (Ng, 2021; Zhang et al., 2022), and foreign language material evaluation (Qin et al., 2023), and identity (Ng, 2021; Zhang et al., 2022). *Perezhivanie*, a Russian term, is challenging to be translated into English due to its profound and multi-faceted nature. While it is often rendered as “emotional experience” or “lived experience”, *perezhivanie* encapsulates an individual's subjective awareness, interpretation, and emotional response to a social event (Vygotsky, 1994).

Within the theoretical framework of *perezhivanie*, cognition, and emotion are viewed as interdependent and dialectical components of an individual's subjective experience (Lantolf & Swain, 2019). This perspective underscores the significance of emotion in human development and its intrinsic link to cognition. Vygotsky himself emphasized the inseparable nature of these two elements, arguing that changes in one aspect inevitably affect the other (Swain, 2013). *Perezhivanie* highlights the reciprocal interaction between the individual and their environment (Veresov, 2016). This dynamic relationship encompasses the objective environment encountered by the individual and their subjective interpretation and engagement with it—what Vygotsky termed the social situation of development (SSD, Lantolf & Swain, 2020). Thus, individual development emerges from this constant interplay between external stimuli and internal responses.

Additionally, *perezhivanie* challenges the idea of social determinism by suggesting that the environment influences individuals through their *perezhivanie*, akin to a refractive prism (Vygotsky, 1994). This perspective explains why individuals exposed to similar environments may exhibit unique developmental paths shaped by their individual *perezhivaniya* (plural form of *perezhivanie*).

2.2. Teacher professional identity

TPI encompasses teachers' definitions, perceptions, and beliefs about their educational role (Lasky, 2005), reflecting their professional self-image (Beijaard et al., 2000). Teacher professional identity (TPI) is a dynamic and contextually embedded construct, representing a teacher's evolving sense of self within their professional role. Actively constructed and negotiated through ongoing engagement with situational and contextual factors – such as educational policies (Xu, 2013), student interactions (Derakhshan et al., 2024), collegial relationships (Eslamdoost et al., 2020), school climate/administrator leadership (Wang & Derakhshan, 2024), and practice-level dynamics (Derakhshan et al., 2024) – TPI shapes pedagogical choices, assessment practices, professional agency, and well-being.

2.3. Previous studies on TPIs

Previous studies on TPI are close to teachers' cognition, social context, and emotion. From a cognitive perspective, TPI is studied through highlighting teachers' individual perceptions of their role as professional teachers (e.g., Burr et al., 2017; Golombek & Klager, 2015). More recently, numerous studies underscore the pivotal role of emotions in shaping TPI (Chen et al., 2022; Kang et al., 2022; Rodrigues & Mogarro, 2019; Su et al., 2024; Teng, 2017; Wei, 2021). The contextual nature has also been underscored in the field of TPI (e.g., Derakhshan et al., 2024) because learning to be a teacher is a social process. Because of the social nature of TPI, it is necessary to study it in different contexts, such as TALT. Technology has been playing a vital role in language education (Chun et al., 2016; Guichon, 2024), and language teachers' self-image and perceived roles in integrating technology into language teaching affect their TALT practice (Shafiee et al., 2022). Therefore, it is imperative to study language teachers' professional identity to uncover what and how language teachers, including LOTE teachers, learn to integrate technology into language teaching to maximize the effect of TALT.

Recent technological advancements have propelled online teaching to the forefront, prompting the emergence of novel professional identities distinct from those found in traditional face-to-face settings. Consequently, a growing body of research explores the evolving TPI of teachers as they transition to TALT (Ashton, 2022; El-Soussi, 2022; Jonker et al., 2018; Yan & Wang, 2022; Zhang & Hwang, 2023). For instance, Jonker et al. (2022) observed that some teachers embraced TALT and felt confident in their abilities, while others resisted it and expressed negative feelings about their competence. This (re)construction of TPI is influenced by both individual factors, such as teachers' beliefs, agency, knowledge, and routines (Ashton, 2022; El-Soussi, 2022; Jonker et al., 2018), and contextual factors, including engagement with online teaching (Zhang & Hwang, 2023) and institutional support (El-Soussi, 2022). While these studies provide valuable insights into the learning needs of teachers adapting to TALT, several research gaps remain.

First, studies examining TPI within the TALT context often overlook the critical role of emotion. Second, there is limited research specifically investigating TPI changes among LOTE teachers in TALT environments. Third, much of the existing research focuses on the initial transition from face-to-face teaching to TALT, neglecting the ongoing evolution of TPI *within* the TALT setting itself. Finally, research on TPI through the lens of *perezhivanie* has primarily relied on traditional qualitative methods (Barahona & Toledo-Sandoval, 2025; Uştuk & Yazen, 2024; Wei, 2021; Weng et al., 2024), which can limit generalizability. While quantitative approaches, such as Yan et al.'s (2024) English Teacher Identity Measure and Wong & Liu's (2024) scale for assessing student TPI, offer valuable numerical data, they may not fully capture the nuanced and contextual nature of identity development. To address these limitations, this study employs Q methodology to facilitate a deeper exploration of subjective perspectives and evolving identities within the specific context of LOTE teachers and TALT (Morea, 2022).

Q methodology is particularly well-suited to this study for two primary reasons. First, it aligns intrinsically with the core concepts of *perezhivanie* (e.g., Qin & Derakhshan, 2025; Qin & Dong, 2025) and TPI. *Perezhivanie*, as a complex psychological phenomenon, en-

compasses an individual's subjective cognition and emotion in relation to a specific event. Similarly, TPI reflects teachers' opinions, perceptions, and beliefs about their professional role, emphasizing the inherent subjectivity of their teaching identity. Q methodology, in turn, is "designed to systematically examine people's perspectives on complex and subjective matters" (Morea & Ghanbar, 2024, p. 1). Thus, *perezhivanie*, TPI, and Q methodology all share a fundamental emphasis on individual subjectivity. Second, Q methodology offers the flexibility of a longitudinal design, allowing for the investigation of changes in subjectivity over time (Morea, 2022). This is consistent with both the historical nature of *perezhivanie* (Qin & Ren, 2021; Ng, 2021) and the dynamic, evolving nature of TPI (Hong et al., 2024).

Therefore, to address the research gaps identified above, this study employs a longitudinal Q methodology (e.g., Zheng et al., 2020) to track changes in LOTE teachers' professional identity through the lens of *perezhivanie*. By examining the nuanced construction of participants' TPIs, this research seeks to answer the following research questions (RQs).

RQ1: What were the participants' *perezhivaniya* and TPI during the massive online teaching?

RQ2: How did the *perezhivaniya* and TPI evolve over a period of 15 months?

3. METHODS

3.1. Participants and Context

JFL (Japanese as a Foreign Language) teachers were selected as participants due to their significant representation within the landscape of foreign language education in China. Specifically, while there are approximately 300,000 foreign language teachers in Chinese higher education (Wang, 2022), at least 180,000 specialize in Japanese language education (Yoshikawa, 2013). This substantial proportion makes JFL teachers a particularly relevant group for investigating TPI in the context of TALT. Thirteen JFL teachers were recruited from a well-regarded foreign language university in Northeast China using purposive and convenience sampling. Q methodology is known for its focus on depth over breadth, and thus does not require large sample sizes. As Webler et al. (2009) note, an effective Q-methodological study typically involves 12-36 participants, while Watts (2015) suggests a range of 20-40. Therefore, a sample size of thirteen, similar to that used in Wu and Pan's (2025) study, is appropriate for the present study.

All participants read and signed the Informed Consent Form, indicating their voluntary agreement to participate in the study. Participant demographics are detailed in Table 1. It's worth noting that only one participant holds a Ph.D., which may indicate a difference in academic qualifications compared to colleagues in English departments, as highlighted by Kang et al. (2022, p. 4).

Table 1. *Participants' background information*

PARTICIPANTS	AGE	GENDER	YEARS OF TEACHING	DEGREE
T1	49	Female	7	Master
T2	47	Female	9	Master
T3	48	Female	19	Master
T4	48	Female	14	Master
T5	40	Female	10	Master
T6	39	Female	13	Master
T7	39	Female	12	Master
T8	46	Female	9	Master
T9	47	Female	15	Master
T10	44	Female	16	Master
T11	38	Female	10	Master
T12	39	Female	14	Master

Over the past few years, JFL teachers at this university have favored traditional face-to-face instruction. However, in 2020, face-to-face instruction was transitioned to online teaching due to a worldwide emergency. Although in September 2020, face-to-face teaching resumed at this university, online teaching was also implemented due to the repeated occurrence of the emergency. We called this period (from 2020 to 2022) massive online teaching. On-site teaching did not resume nationwide until 2023, when the Department of Japanese had implemented blended instruction reform. JFL teachers have created a MOOC (Massive Open Online Courses) to supplement traditional face-to-face teaching. Students were asked to learn online courses in advance before they participated in face-to-face teaching. Different periods may cause different *perezhivaniya*. In December 2022, all the participants experienced online teaching, face-to-face teaching, and developing online courses. In March 2023, with the implementation of blended instruction reform, these teachers experienced blended instruction, a new experience. During the two different periods, JFL teachers experienced different teaching modes, and teachers' emotions and cognition on TALT may also differ.

3.2. Instrument

To capture the nuances of our target participants' identities and *perezhivaniya*, a semi-structured interview was designed to elicit detailed expressions and explanations of individual feelings related to TALT. This protocol, informed by the concept of *perezhivanie*, was used to collect a concourse of statements from a group of JFL teachers in China. All interviews were audio-recorded and transcribed verbatim. The researchers then systematically coded the interview data, guided by the core components of *perezhivanie*—the interconnectedness of cognition and emotion, and the individual's subjective experience of a specific event. For example, the statement “*I did not know about technology-assisted teaching. When I had to take online classes, I was perplexed*”, was coded as reflecting a *perezhivanie* characterized by both a cognitive element (“*did not know about*”) and an emotional element (“*perplexed*”).

This process yielded an initial set of 171 statements related to TALT, consistent with the theoretical literature (Lantlof & Swain, 2020; Veresov, 2016; Veresov & Mok, 2018; Swain, 2013). To refine this initial set and reduce redundancy, we consulted with colleagues and experts in the field, combining similar statements into single, comprehensive statements. This process involved clarifying potentially ambiguous language and eliminating redundant ideas, resulting in a final Q-set of 47 statements. To ensure clarity and comprehensibility, these 47 statements were then presented to two JFL teachers who were not involved in the main study.

3.3. Data collection and analysis

To examine professional identity development, data was collected at two time points: December 2022 (Time 1) and March 2023 (Time 2). The participants had accrued two years of online teaching experience by Time 1 and navigated a blended instruction reform by Time 2.

Q-sorting was utilized via an online platform (<https://qmethodsoftware.com>), with each participant sorting 47 statements based on agreement (from -5 to +5) regarding online teaching experiences into a distribution grid (see Fig. 1), taking 25–40 minutes. Subsequently, responses were analyzed using KADE software (Banasick, 2019), employing Principal Component Analysis (PCA) and varimax rotation. At Time 1, two factors were identified, explaining 63% of the variance. At Time 2, a three-factor solution, explaining 67% of the variance, was retained, with an exclusion of one participant (T6) due to confounding factor loadings. All loadings exceeded the threshold. Finally, two factors emerged at Time 1, with seven sorts on Factor 1 and six sorts on Factor 2. At Time 2, three factors emerged, with five sorts on Factor 1, four sorts on Factor 2, and three sorts on Factor 3. Additionally, we conducted the interview (about thirty-five mins on average for each participant) after the analysis of Q sorts to clarify the data analysis.

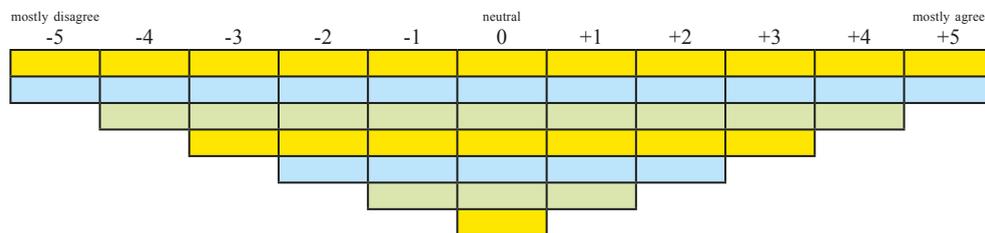


Figure 2. Q-Grid

4. FINDINGS

4.1. Time 1: During the massive online teaching

4.1.1. Factor 1: Cognition-emotion resonance: TALT advocates

Seven participants categorized under Factor 1 showcased a significant harmony between cognition and emotion in online Japanese teaching following a two-year shift to online

teaching. They embraced a positive attitude towards TALT, reflecting a strong belief in its effectiveness. Cognitively, they recognized the importance (26: +5) and advantages (31: +4) of technology in teaching, dismissed the notion of its limited instructional value (11: -5), and displayed unwavering confidence in it (16: -5), even considering it a viable substitute for traditional offline teaching. Emotionally, initial anxiety and nervousness (8: +4) due to technological unfamiliarity gave way to a sense of responsibility (38: +5), leading to a shift from apprehension to contentment and joy (8: +4), coupled with a sense of accomplishment (38: +5) and reduced fatigue (44: -4).

4.1.2. Factor 2: Cognition-emotion dissonance: face-to-face teaching supporter

Six participants associated with Factor 2 demonstrated a dissonance between their cognitive beliefs and emotional responses. Despite acknowledging the importance of TALT, they displayed a preference for offline teaching both cognitively and emotionally. Their cognitive processing revealed a nuanced perspective; while recognizing the advantages of technology in teaching (26: +4, 32: +5, 16: -5) and expressing a reluctance to forego it (36: -4), they held a firm belief in the supremacy of offline teaching over online methods (26: +4, 32: +5). Furthermore, they believed online teaching failed to enhance participation among introverted students and ensure fairness in assessment (36: -4). Emotionally, they exhibited a stronger affinity towards offline teaching, expressing contentment in its revival and treasuring it (35: +5), while showing admiration for colleagues proficient in online course design (2: +4) and lacking sentimentality towards online teaching (18: -5).

4.2. Time 2: One-year reform later

4.2.1. Factor 1: Cognition-emotion resonance: TALT advocator

Following a year-long period of blended teaching reform, it was observed that five teachers associated with Factor 1 continued to exhibit a harmonious alignment between their cognitive beliefs and emotional responses in TALT, underscoring their role as optimistic supporters of technology-facilitated learning.

These teachers remained steadfast in their endorsement of technology-assisted learning, recognizing its value in teaching processes (10: -4, 16: -5) and its ability to bolster their instructional practices (3: +5). Contrary to the notion that online teaching inadequately reflects student engagement and learning outcomes, they rejected such claims (20: -4) and progressively acclimated to technology-assisted methodologies (8: +4), displaying a readiness to explore and innovate in this domain (26: +4). Moreover, they emphasized the importance of collaboration with peers (5: +5) and actively sought MOOCs and video resources to enhance their instructional designs for blended instruction (25: +4).

In line with their positive cognitive stance towards TALT, these teachers reported an absence of confusion (15: -4), irritation (20: -4), or skepticism about technology-based instruction (16: -5), instead manifesting a sense of tranquility and satisfaction with such methods while demonstrating a proactive approach towards further exploration (8: +4). In conclusion, their emotional responses mirrored a positive orientation towards TALT.

4.2.2. Factor 2: Cognition-emotion dissonance: face-to-face teaching supporter

Four educators aligned with Factor 2 exhibited a cognitive-emotional disparity regarding TALT at Time 2. They showcase a proclivity towards traditional offline teaching despite acknowledging the merits of technology integration.

Cognitively, these teachers displayed contradictory beliefs. While recognizing the benefits (4: +5) and importance of technology in education, they refuted notions of doubt, resistance, or redundancy towards technology-assisted methods (16: -4). They also indicated a gradual acclimatization to TALT and a willingness to delve deeper into its applications (8: +4). However, their preference for offline instruction over online and blended approaches was evident, emphasizing a perceived lack of emotional connection during online teaching (7: +5) and a preference for printed materials (6: +4).

Emotionally, discord persisted. Despite reporting contentment with technology adaptation (17: +4) and lack of anxiety towards blended instruction (12: -4), concerns emerged in their emotional responses, particularly regarding the impact of online teaching on student learning and well-being (7: +5, 17: +4). Notably, with the resurgence of offline teaching, they expressed no desire for a return to online instruction (18: -5).

4.2.3. Factor 3: Cognition-emotion complex: regretter

Three educators loaded on Factor 3 exhibit limited involvement in TALT reform, leading to a constrained grasp of its nuances. Despite this, they demonstrate intricate emotional responses, notably marked by a prevailing sense of regret.

Similar to Factor 1 teachers at Time 2, these educators underscore the value of collaborative teamwork (5: +5). They exhibit a nuanced perspective on TALT, acknowledging its benefits and necessity while also recognizing the irreplaceability of traditional offline teaching (16, -4; 13, -4). Moreover, they refute claims of engaging in technology-driven teaching solely due to school pressure (47: -5).

Emotionally, these teachers display a diverse range of responses. Initially perplexed and anxious about online teaching, a sense of duty propels their perseverance (24: +4). Upon the return to offline teaching, they express joy and appreciation for traditional methods (35: +4). However, their limited engagement in blended teaching reform elicits strong regrets over missed opportunities for online course development (46: +5) and aspirations for future involvement in such initiatives (40: -5).

4.3. Summary of findings

From the analysis of two Q-sorts, we found that JFL teachers' professional identities were both stable and changeable (Day et al., 2006; Jonker et al., 2018; Westberry et al., 2015). As shown in Table 3, advocates for TALT and supporters of face-to-face teaching were both found at Time 1 and 2. Additionally, a new identity, termed "regretter", emerged among those who refrained from participating in the development of online courses at time 2, indicating the changeability of TPI.

Table 3. *The summary of findings of two Q-sorts*

Factor	Time 1 (Participants)	Time 2 (Participants)
1	Cognition-emotion resonance: TALT advocates (T3, T4, T5, T7, T10, T11, T12)	Cognition-emotion resonance: TALT advocates (T3, T4, T7, T10, T11)
2	Cognition-emotion dissonance: face-to-face teaching supporter (T1, T2, T6, T8, T9, T13)	Cognition-emotion dissonance: face-to-face teaching supporter (T2, T5, T12, T13)
3		Cognition-emotion complex-regretter (T1, T8, T9)

From Time 1 to Time 2, T5 and T12 changed from TALT advocates to face-to-face teaching supporters. T1, T8, and T9 changed from face-to-face teaching supporters to “regretters”. The interview data showed how the dialectical relationship between the context and the individual influences the TPI. For example, T5, who changed from TALT advocates to face-to-face teaching supporters said that she “*knew less about TALT before 2020*”. When she was forced into online teaching, she said that “*learning new technology and the instability of the internet*” made her “*stressful*”. With the adoption of online teaching, she found the advantage of technology in teaching. She explained further:

I have to admit the advantage of TALT: efficiency. It is not limited by time. Some students can take leave during class and record the teacher’s lecture to study at other times or locations. It did not limit the number of participants. Whether there are 10 students or 100 students in the class, issues like those in the back rows not being able to hear or see clearly do not exist.

When returned to face-to-face teaching during the period of Time 1, she used some technology in her class. Apparently, she was an advocate of TALT at Time 2. However, with the experience of blended instruction, she is inclined to face-to-face teaching. She explained:

Students need to proactively complete online courses before attending in-person classes. However, they may not watch attentively and might just play the videos to finish the required duration, which diminishes the effectiveness of the online courses.

T8’s change in TPI also showed the influence of the dialectical relationship between the context and the individual on her TPI. Before the massive online teaching, T8 had taken part in TALT. She recorded some micro lessons on vocabulary to help students learn more, but she found “*students disengaged with the micro lesson*”. Similarly, she found that “*micro lessons play a little role on students learning*” during the online teaching. In addition, she thought “*the interaction between the teacher and the students was not real*”. Thus, she supported offline teaching at Time 1. After one year of blended instruction, she regretted for being unable to participate in online course development to develop her own online course because she found “*the online course lacked teachers’ individual characteristics*”, which was not suitable for her teaching. However, she admired her colleagues’ efforts in developing online courses when she participated in blended instruction.

5. DISCUSSION

Through analyzing teachers' *perezhvaniya* of TALT, this study illuminates how teachers construct and reconstruct their TPIs from the perspective of *perezhivanie*. The findings revealed a cognition-emotion resonance among TALT advocates, while supporters of face-to-face teaching exhibited cognition-emotion dissonance. The “regretters,” on the other hand, displayed a more complex interplay of cognition and emotion. These results underscore the critical role of emotion in understanding TPI, aligning with previous research (Burr et al., 2017; Chen et al., 2022; Golombek & Klager, 2015; Kang et al., 2022; Rodrigues & Mogarro, 2019; Su et al., 2024; Teng, 2017; Wei, 2021). However, this study extends prior work by highlighting the dialectic relationship between cognition and emotion in shaping TPI, a core tenet of *perezhivanie*. For example, teachers in Factor 2 at Time 1 cognitively acknowledged the importance of TALT yet emotionally favored face-to-face instruction. Separating cognition and emotion would obscure a complete understanding of these TPIs. Thus, a comprehensive understanding of TPI necessitates attention to both cognition and emotion, the central principle emphasized by *perezhivanie*.

With the increasing prevalence of online teaching, this study identified both TALT advocates and supporters of traditional face-to-face instruction. Consistent with previous research (e.g., Jonker et al., 2018; Zhang & Hwang, 2023), these findings demonstrate that a shift in the teaching context does not automatically lead to the reconstruction of TPI. Consequently, distinct TPIs can emerge even within the same environment. From the perspective of *perezhivanie*, not all affordances of the context exert equal influence on personal development; rather, “individual brings particular features of his or her own psychology to the environment” (Lantolf & Swain, 2020, p. 85). Thus, individuals selectively recognize certain affordances of the context, leading to different SSDs. For instance, T7, in Factor 1 at Time 1, was intrinsically motivated and interested in TALT, so she was positive to both cognition and emotion toward the TALT. In contrast, T8, in Factor 2 at Time 1, was skeptical about TALT because of her past *perezhivanie* of micro-lessons. Therefore, she favored face-to-face teaching compared with online teaching. The case of T8 also illustrates how the contextual influence on the individual is a refractive process (Veresov, 2016). In other words, the influence of the context on TPI is filtered through the individual's past *perezhvaniya*.

The present study also tracked changes in TPIs over a 15-month period of TALT, building on previous research (Ashton, 2022; El-Soussi, 2022; Jonker et al., 2018; Yan & Wang, 2022; Zhang & Hwang, 2023). The findings revealed that some teachers' TPIs evolved over time, supporting the notion that TPI is a dynamic construct (e.g., Chen et al., 2022; Zhang & Hwang, 2023). Again, from the lens of *perezhivanie*, the relationship between the context and the individual is also dynamic, which explains the changeability of TPI. During the different periods, teachers constructed different *perezhvaniya*, and different TPIs emerged. For example, T5 did not know about TALT and was forced into online teaching, but she showed positive emotion and cognition toward TALT. Thus, she was an advocate for TALT at Time 1. However, after experiencing blended instruction reform, T5 supported face-to-face teaching because she found students did not watch the online course. Her *perezhvaniya* was changed from person-context resonance to person-context conflict, and her TPI was also changed.

6. CONCLUSION

This study employed the Q methodology to investigate the evolution of professional identity among a cohort of JFL teachers through the lens of *perezhivanie*. Analysis of the Q methodology data revealed a spectrum of cognitive and emotional responses among these teachers towards TALT, leading to the formation of distinct professional identities within the group. Furthermore, the study identified shifts in the TPIs across two different time points, underscoring the dynamic and evolving nature of professional identities among educators (Chen et al., 2022).

Theoretically, this study presents a comprehensive understanding of TPI by examining it through the perspective of *perezhivanie*. This underscores that the construction of TPI is influenced by individual cognitive processes, emotional responses, and contextual factors. In terms of methodology, the current study shows how to use the Q methodology to investigate TPI from the lens of *perezhivanie*, providing a rationale and advantage methodology for other researchers on both TPI and *perezhivanie*. On the one hand, the Q statement based on the *perezhivanie* could present cognition and emotion as a whole rather than two different variables in the traditional quantitative method. On the other hand, Q methodology offers a structured approach where participants are tasked with arranging statements based on their degree of agreement or disagreement, with subsequent loading of Z-scores on these statements. By analyzing the Z-scores assigned to each statement, researchers can discern which statements best encapsulate the characteristics of each participant. This advantage is not possessed by qualitative narrative research that was usually used in the previous research on both TPI and *perezhivanie* (e.g., Qin et al., 2022; Zhang et al., 2022).

In addition, the study has several practical implications. First, teachers can reflect on their professional identities when adapting to TALT by delving into their *perezhivaniya*. As a result, teachers could improve their instructional methods in the context of TALT. Second, investigating teachers' *perezhivaniya* and understanding TPI provides insights for teacher educators. In this way, teacher educators can aid in-service or pre-service teachers in reflecting on and interpreting their *perezhivaniya* and professional identity, providing timely support and guidance (Johnson & Golombek, 2020). Lastly, the study has implications for department directors, particularly in the context of JFL teachers within language teaching faculties, who sometimes receive inadequate attention within university settings. Some teachers may encounter challenges with TALT. As department directors, it is imperative to offer additional support through initiatives such as seminars, training sessions, and collaborative lesson planning. Emotional support should also be prioritized to ensure the well-being of these educators.

While the findings contribute valuable insights, it is essential to acknowledge several limitations. Primarily, although the sample size in this study meets the required standard, we recommend including more participants in future studies to enhance the generalizability of the findings further. Secondly, the application of the Q methodology for collecting *perezhivaniya* data was confined to a specific cohort of JFL teachers at a university in China. Given the contextual nuances of *perezhivanie*, teachers from diverse backgrounds may exhibit entirely different *perezhivaniya*. Future research endeavors should aim to encompass teachers from varied contexts to enhance the generalizability of the findings. Lastly, despite the Q methodology being a mixed-method approach, it may not offer as comprehensive individual insights

as qualitative methodologies. Subsequent studies could integrate the Q methodology with narrative inquiry techniques to delve deeper into the reasons behind teachers' affiliations with specific groups and the development of distinct professional identities over time.

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9. APPENDIX

Q statements in the present study

1. I think I am beginning to rely on technology-mediated teaching.
2. I think that my colleagues have done a great job in online course development, and I admire them for it.
3. I consider technology teaching as excellent teaching support, finding technology-mediated teaching relatively easy to implement and quite enjoyable.
4. While I acknowledge the advantages of technology-mediated teaching, I still have doubts and prefer traditional offline teaching.
5. I think that teamwork is necessary for the development of online courses.
6. I think that the advantages of physical books are incomparable to electronic resources.
7. I think that the lack of emotional communication takes place during online teaching and I feel worried and anxious about the outcome of students' learning.

8. I have gradually adapted to and accepted technology-mediated teaching, transitioning from anxiety to a calm and contented state, and am willing to explore actively.
9. When students respond neutrally to technology-mediated teaching, I feel confused and lost.
10. I still do not fully accept technology-mediated teaching and think that it cannot replace traditional offline teaching.
11. I think that incorporating technology-mediated teaching into classroom design has little instructional significance.
12. I think that integrating online course resources into teaching affects the pace of the course, causing anxiety.
13. I feel that offline teaching is more stressful and less efficient than online teaching.
14. I find it troublesome, anxious, and nervous to be unfamiliar with or switch between platforms continuously.
15. I feel perplexed about the integration of online and offline teaching modes.
16. I doubt technology-mediated teaching, resist its use, and think it is unnecessary for me.
17. I think that emotional guidance for students is necessary for online teaching and worry about students' psychological well-being.
18. After returning to offline teaching, I miss online teaching.
19. I am concerned that students may fall behind in their studies and supervise their use of online resources such as MOOCs.
20. I think that online teaching fails to reflect students' engagement and learning outcomes, causing me frustration and distress.
21. I worry about students' learning interests and outcomes because MOOC resources cannot cover the entire semester.
22. I feel that blended teaching is challenging as it requires balancing instructional pace and effectiveness, leaving me exhausted.
23. I feel distressed and anxious when online teaching is affected by network equipment issues.
24. I was unfamiliar with various technology-mediated platforms before the massive online teaching, feeling confused and nervous, but the sense of responsibility kept me going.
25. I seek MOOCs or video resources for teaching and hope to improve course design in the future.
26. I think that the reform of technology-mediated teaching is imperative and worth exploring, and I am willing to engage in exploring and innovating teaching.
27. I think I consider technology-mediated teaching dialectically and actively explore the integration of online and offline teaching.
28. I am unfamiliar with technology-mediated teaching, but I am curious about it and look forward to exploring it.
29. I think that technology-mediated platforms can efficiently track final grades.

30. I think that teacher-student interaction is smooth in online teaching, and the emotional distance is shortened.
31. I think that technology-mediated teaching platforms are powerful and have significance in instruction.
32. I acknowledge the advantages of technology-mediated teaching but think it cannot replace traditional offline teaching.
33. I find that using MOOCs requires redesigning the course and will actively respond to this challenge.
34. I feel confused about online course development and want to give up, but with the help of colleagues, I persevere.
35. I think that offline teaching is better than online teaching and I feel happy and cherish the return to offline teaching.
36. I think that online teaching increases the participation of introverted students, making it more objective and fair.
37. I am pleased with the effectiveness of my online teaching.
38. Although course development is arduous, I find it meaningful and, driven by a sense of responsibility, persist in online course development, feeling accomplished upon completion.
39. I think that technology-mediated teaching platforms cannot monitor and assess students' online learning outcomes, causing me distress and concern.
40. I find online course development laborious and do not plan to participate in online course development in the future.
41. I doubt my decision to include technology-mediated teaching in student performance evaluation.
42. I feel both relieved and concerned about the varying benefits of technology-mediated teaching for different students.
43. I thought that offline teaching time was too short before the massive online teaching, so I considered recording micro-lessons to improve teaching efficiency, saving more time for interactive exercises during the class.
44. I find technology-mediated teaching cumbersome and exhausting.
45. I find online MOOC development interesting, with a good teaching atmosphere and high student enthusiasm, making teaching feel relaxed.
46. I regret being unable to participate in online course development due to personal reasons.
47. I engage in technology-mediated teaching under pressure from the school.