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The effect of perceived teacher support on self-regulated learning behaviors: language mindsets and L2 grit as chain mediators

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The present study examines the complex relationships between perceived teacher support, language mindsets, L2 grit, and self-regulated learning behaviors among 522 students from five universities across China. The results showed that: (1) there are significant correlations between perceived teacher support, language mindsets, L2 grit, and self-regulated learning behaviors; (2) both growth language mindset and L2 grit are mediators in the relationship between perceived teacher support and self-regulated learning behaviors, and they also collectively serve chain mediators. However, the mediating effect of fixed language mindset is not significant. This study provides suggestions for promoting students' self-regulated learning through shaping positive language mindsets and personalities, and offers an insight into further studies.

KEYWORDS

perceived teacher support, self-regulated learning behaviors, language mindsets, L2 grit, the chain mediating role

1 Introduction

Self-regulated learning are described as the process where learners independently set academic goals and, subsequently, actively adjust and manage learning behaviors under the guidance of the goals and the constraints of the real-world environment. This is an autonomous and constructive process that demonstrates learners' abilities (Pintrich, 2004; Schunk, 2005). It is a critical element determining the efficacy of language education, and can help students gain a sense of control, which motives them to try arduous tasks in the process of learning a foreign language (Winne and Perry, 2000). Consequently, it is requisite to probe the factors that enhance EFL learners' self-regulation learning.

Social cognitive theory pointed out the close association between environmental factors and students' personal traits and behaviors (Bandura, 1986). The self-regulated learning behaviors of college students are influenced by various environmental factors and individual traits. Among them, teacher support is considered as an essential environmental factor for meeting basic psychological needs and a key resource for promoting students' learning behaviors. Teachers are able to promote students' self-regulated learning through multiple channels. For example, they can teach students effective learning methods and strategies or create a conducive learning environment for them (Dignath-van Ewijk and van de Werf, 2012; Dignath-van Ewijk, 2016). Teachers can also offer clear guidance on efficient learning practices and help students optimize their learning processes through formative feedback (Brown et al., 2016; Zhu and Mok, 2018). In addition, research also showed that learners' language mindset

and personality traits as internal factors have also been proven to affect students' academic achievements (Elahi Shirvan et al., 2024; Sudina and Plonsky, 2021). Language mindsets can affect learners' ways of thinking, emotional states, and behaviors in foreign language learning. Particularly, the growth language mindset is involved in inducing positive learning emotions (Wang et al., 2021), promoting students' classroom participation (Derakhshan et al., 2024; Sadoughi and Hejazi, 2023) and so on, and can further improve students' foreign language ability. At the same time, L2 grit, considered as a stable individual trait, also serves as an important factor affecting students' foreign language learning behaviors, academic achievements, etc. (Maddi et al., 2012; Strayhorn, 2014).

As the procedural goals in language teaching process, students' self-regulated learning and self-management ability significantly affect students' language acquisition outcomes. However, after entering university, many students begin to loosen their self-discipline. They often exhibit poor self-control, weakened study efficiency, unclear academic goals, and a lack of motivation for self-regulated learning (Wang, 2002). Therefore, it is urgent that the environmental and internal factors influencing students' self-regulated behaviors be given comprehensive consideration. Previous studies have confirmed the associations between teacher support, language mindsets, L2 grit, and students' self-regulated English learning behaviors, but the internal mechanisms and potential pathways among them remain unknown. Therefore, this study assumes that perceived teacher support can shape students' language mindsets and L2 grit, and maintain students' interest and efforts in foreign language learning, which finally stimulate students to learn foreign languages more autonomously. This study attempts to enrich the empirical research in the SLA field, deepen the understanding of how environmental factors affect students' individual characteristics and behavior patterns, and also provide theoretical and practical references to further facilitate students' self-regulated English studying.

2 Literature review

2.1 The relationship between perceived teacher support and self-regulated learning behaviors

Perceived teacher support (PTS) refers to students' perceptions of a range of behaviors provided by teachers, including offering feedback and suggesting strategies for improvement (Andersson and Palm, 2017), providing specific learning resources (Affuso et al., 2023), and establishing supportive interactive behavior and offering positive emotions (Liu et al., 2018). There are diverse classifications of the dimensions of teacher support, among which the most widely adopted dimensions are autonomous support, emotional support, and competence support. Students' perceptions of support served as determinants of their academic achievement (Sharma, 2016). To the extent, "without sufficient teacher support, students may find it become extremely difficult to learn, even impossible" (Piechurska-Kuciel, 2016). Some scholars verified the effect of teacher support on learning behaviors and achievements. For example, Paloş et al. (2020) also proved students' self-regulated learning was predicted by teacher support. Besides, perceived teacher emotional support, including the respect, trust, care and warmth perceived from teachers, could also result in positive educational outcomes, which enhanced students' motivations and learning behaviors and made students more willing to seek help when encountering difficulties (Mercer et al., 2011; Newman and Schwager, 1993). Therefore, it can be postulated that teacher support predicted self-regulated learning behaviors of students.

2.2 The mediating role of language mindsets

Language mindsets are considered as individuals' beliefs of their language learning abilities (Lou and Noels, 2016), encompassing two dimensions: growth language mindset and fixed language mindset. Learners who have a strong fixed language mindset consider that language intelligence is static and unchangeable, and cannot be further improved or developed. In contrast, learners with a growth language mindset deem their language abilities are changeable and can be improved through deliberate practice (Mangels et al., 2006). Research has found language mindsets are closely linked to foreign language learning, and can significantly predict academic emotions (Wang et al., 2021), learning motivation (Jiang et al., 2024; Liu, 2022), and self-regulated learning behaviors (Bai and Wang, 2023). A growth language mindset helped students to be more confident, show higher ability in coping with failure, and are inclined to overcome setbacks (Brandisauskiene et al., 2021). Although mindsets towards language are relatively stable, they can still be influenced and shaped by some external environmental factors, such as teacher support (Mangels et al., 2006). For instance, Zarrinabadi et al. (2021) explained how teacher support influences students' growth language mindset, which in turn affects their communicative competence; that is, students who perceived more teachers' support are inclined to establish a higher level of growth language mindset. Additionally, Rau (2016) also highlighted that a process-oriented language environment offering by teachers can mold students' mindsets towards language and their ability to respond to challenges.

2.3 The mediating role of L2 grit

Grit expresses individuals' consistent effort and sustained interest, which reflects their perseverance and passion for long-term goals (Duckworth et al., 2007). Many scholars have begun to explore the application of grit in the field of SLA, which is called L2 grit. It specifically refers to the grit trait exhibited by learners in the process of SLA (Teimouri et al., 2022). Previous research has shown the predictive effect of L2 grit on students' learning engagement (Khajavy, 2021), foreign language performance (Wei et al., 2019), and motivation (Pawlak et al., 2024). Extensive research has pointed out L2 grit can be affected by teacher support (Derakhshan et al., 2025; Hejazi and Sadoughi, 2023). Gao et al. (2024) demonstrated that teacher support affected students' studying engagement through L2 grit and intended effort. In addition, Yang et al. (2024)'s research also showed that teacher support contribute to shaping L2 grit and enhancing students' academic behaviors.

2.4 The chain mediating role of language mindsets and L2 grit

The socio-motivational model pointed out that individual traits can be viewed through two self-concept frameworks: fixed and growth. The self with a fixed self-concept, is conceptualized as a collection of immutable traits. In contrast, the growth self-concept framework understands the self as a malleable system of traits that can evolve through individual effort and experiences. Specifically, language mindsets represent an individual's self-concept framework in the L2 acquisition process. Individuals with a high level of growth language mindset believe their language ability is ductile. When facing obstacles and difficulties, they are inclined to be more confident and resilient, and invest their time and effort consistently to overcome difficulties, which will finally cultivate their grit trait in the process of L2 acquisition. Therefore, it is reasonably inferred that language mindsets are closely related to L2 grit.

The growth mindset helps learners consider their language abilities are improvable rather than static, which encourages them to face obstacles with endurance, and consider setbacks as opportunities (Mrazek et al., 2018). Besides, Sadoughi and Hejazi (2023) also mentioned a growth language mindset can positively affect individuals' L2 grit. Similarly, Fathi et al. (2024) also found that language mindsets can affect students' foreign language enjoyment through L2 grit, which verified the predictive effect of language mindsets on L2 grit again. However, a previous study also found only a growth mindset has a positive correlation with grit, while there is a negative association between a fixed mindset and grit (Teimouri et al., 2022). In particular, another research also found that a growth language mindset only positively influences students' perseverance of effort, but has no direct effect on students' consistency of interest (Khajavy et al., 2021).

In conclusion, students who perceived more support from teachers, both competence and emotional, tend to evaluate their language ability objectively and optimistically, and be expectant of their future language abilities. Even when facing setbacks, they are inclined to be more resilient and persevere based on their objective evaluation, which will further result in more learning investment.

2.5 The present study

Extant studies in the SLA field have confirmed the close correlations among teacher support, language mindsets, L2 grit, and self-regulated learning behaviors. However, the impact of different language mindsets, as well as the underlying mechanisms of personality traits has not been clear yet. Additionally, research on language mindsets has predominantly focused on growth language mindset with limited attention given to the effect of fixed language mindset on SLA outcomes. Therefore, the present study proposes three hypotheses:

> *H1*: University students' perceived teacher support positively predicts their self-regulated learning behaviors.
>
> *H2*: University students' language mindsets and L2 grit respectively mediate the relationship between perceived teacher support and self-regulated learning behaviors.
>
> *H3*: University students' language mindsets and L2 grit co-mediate the relationship between perceived teacher support and self-regulated learning behaviors.

The hypothesized model is illustrated in Figure 1.

3 Method

3.1 Participants and procedure

A convenience sampling was used to select university students from five different institutions across China as participants online. Considering that third- and fourth-year non-English major undergraduates in China typically do not have English courses in their curriculum, this study focused on first- and second-year students. 624 questionnaires were collected in total. All subjects provided a consent prior to the study, with a guarantee that their data would remain confidential and anonymous. 102 questionnaires were excluded, because of incompleteness and inconsistency, resulting in a final sample of 522 questionnaires (74.9% females and 25.1% males; mean age = 18.500 ± 0.685 years) and a response rate of 83.65%.

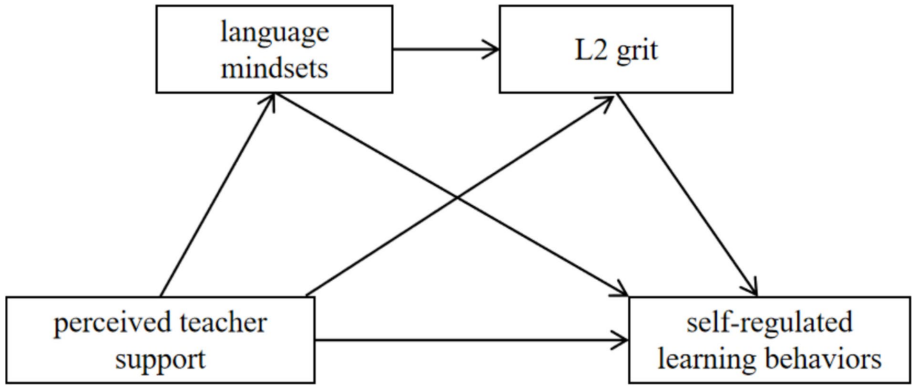

FIGURE 1
The hypothesized mediation model.

3.2 Instruments

3.2.1 Perceived teacher support

This study employed the Perceived Teacher Support Scale revised by Chen (2022), which is repeatedly proven to be applicable to college students as participants. It consists of three dimensions. The six-point Likert scale includes 24 items, such as "My English teacher often provides me with support in both academic and daily life." The internal consistency is 0.926.

3.2.2 L2 grit

The L2 Grit Scale was adapted from Teimouri et al.'s (2022). It includes two dimensions: "perseverance of effort" and "consistency of interest" and consists of nine items, for example, "Nothing can prevent me from achieving my goal once I decide to master English." It is a 5-point Likert scale, and the internal consistency is satisfactory, reaching 0.822.

3.2.3 Language mindsets

Language Mindset Scale was adapted from Lou and Noels (2017), compassing two sub-scales: growth language mindset scale and fixed language mindset scale. In order to align with the characteristics of Chinese students better, Yao et al. (2021) made preliminary modifications to the scale. The version used in this study draws from a domestically translated adaptation. Each sub-scale is a 6-point Likert scale, and comprises nine items, respectively, for instance "If I'm past a certain age, no matter how hard I try, it's difficult to make real progress in English" and "I always find ways to significantly improve my language skills." The internal consistency of the two sub-scales are 0.898 and 0.837 respectively, both of which are satisfactory.

3.2.4 Self-regulated learning behaviors

Self-regulated Learning Behavior Scale, including 23 items, such as "Actively engaging in collaborative learning with others (such as finding language partners for oral practice or exchanging learning insights with peers) can significantly enhance one's language acquisition." It is a 5-point Likert scale adapted from Xu (2012). This scale was primarily revised from the English Autonomous Learning Ability Questionnaire developed by Xu et al. (2004). The Cronbach's α is 0.955.

4 Results

All questionnaires were administered online and completed through self-reporting, which may introduce common method bias. Therefore, reverse-coded items and Harman's single-factor test were employed. The results revealed 14 factors with eigenvalues greater than 1, with the first factor accounting 26.966% of the variance below 40%, indicating that there was no significant common method bias in the data (Table 1).

4.1 Descriptive analysis and regressive analysis

The descriptive results indicated that university students' perceived teacher support ($M = 3.565$, $SD = 0.542$), L2 grit ($M = 3.021$, $SD = 0.502$), growth language mindset ($M = 3.859$, $SD = 0.772$), fixed language mindset ($M = 3.169$, $SD = 0.754$), and self-regulated learning behaviors ($M = 3.080$, $SD = 0.598$) all fall within the moderate to high range.

TABLE 1 Descriptive analysis and correlation analysis ($N = 522$).

Variables	1	2	3	4	5
PTS	1	–	–	–	–
L2 grit	0.298**	1	–	–	–
GLM	0.337**	0.574**	1	–	–
FLM	−0.299**	−0.507**	−0.443**	1	–
SRLB	0.371**	0.620**	0.492**	−0.325**	1
M	3.565	3.021	3.859	3.169	3.080
SD	0.542	0.502	0.772	0.754	0.598
Skewness	0.396	0.645	−0.109	0.048	0.448
Kurtosis	−0.416	2.221	0.820	0.187	1.322

** $p < 0.01$. PTS, perceived teacher support; GLM, growth language mindset; FLM, fixed language mindset; SRLB, self-regulated learning behaviors.

In the Table 2, Figure 2 indicated that teacher support positively predicts growth language mindset ($\beta = 0.337$). Both growth language mindset ($\beta = 0.535$) and perceived teacher support ($\beta = 0.117$) positively predict L2 grit. Perceived teacher support ($\beta = 0.175$), growth language mindset ($\beta = 0.159$), and L2 grit ($\beta = 0.477$) all positively predict self-regulated learning behaviors.

Figure 3 showed teacher support negatively predicts fixed language mindset ($\beta = -0.299$). Both fixed language mindset ($\beta = -0.459$) and perceived teacher support ($\beta = 0.161$) predict L2 grit, with fixed language mindset showing a negative effect. Perceived teacher support ($\beta = 0.208$) and L2 grit ($\beta = 0.572$) predict self-regulated English behaviors. However, fixed language mindset does not significantly predict self-regulated learning behaviors ($\beta = 0.026$, $p > 0.05$).

4.2 Mediation analysis

Model 6 of PROCESS v4.1 was employed to testify the chain mediation effects, which means that bootstrap sampling method was used to examine the mediating effects, and the confidence intervals were determined after 5,000 repeated samplings. The chain mediation effects of language mindsets and L2 grit has been shown in Table 3. The total effect size and direct effect of teacher support on students' self-regulated behaviors are 0.371 [95% CI (0.291, 0.451)], and 0.175 [95% CI (0.106, 0.244)] respectively. Besides, the mediating effect size of Path 1 is 0.054, taking up 14.56% of the total effect [95% CI (0.021, 0.088)]; the mediating effect size of Path 2 is 0.056, accounting for 15.09% of the total effect [95% CI (0.014, 0.102)]; the mediating effect size of Path 3, with the 95% bootstrap interval (0.056, 0.123), excluding 0, is 0.086, which explains 23.18% of the total effect.

However, in the Table 4, the direct effect of teacher support on students' self-regulated behaviors is 0.208 [95% CI (0.138, 0.278)]. The mediating effect of Path 4 is not significant [95% CI (−0.033, 0.017)]; the mediating effect size of Path 5 and Path 6 are 0.092 [95% CI (0.040, 0.147)] and 0.078 [95% CI (0.052, 0.110)], which account for 24.80 and 21.02% of the total effect, respectively.

TABLE 2 Results of regressive analysis (N = 522).

Regression equation		Fit index			Sig.	
Predicative variable	Outcome variable	R	R^2	F	β	t
PTS	GLM	0.337	0.114	66.770	0.337	8.171***
PTS	L2 grit	0.585	0.342	134.960	0.117	3.102***
GLM					0.535	14.142***
PTS	SRLB	0.662	0.439	134.954	0.175	4.957***
GLM					0.159	3.864***
L2 Grit					0.477	11.747***
PTS	FLM	0.299	0.089	51.081	−0.299	−7.147***
PTS	L2 grit	0.529	0.280	100.992	0.161	4.114***
FLM					−0.459	−11.750***
PTS	SRLB	0.650	0.423	126.597	0.208	5.859***
FLM					0.026	0.670
L2 grit					0.572	14.530***

*** $p < 0.001$.

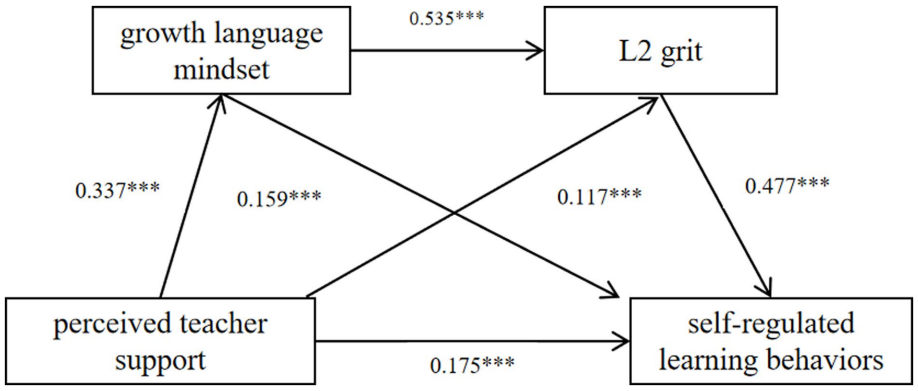

FIGURE 2
The chain mediating effect of GLM and L2 grit.

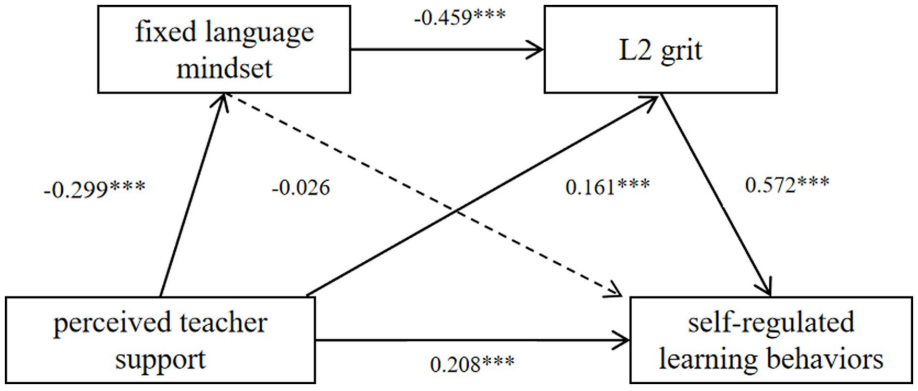

FIGURE 3
The chain mediating effect of FLM and L2 grit.

TABLE 3 The effect size of Figure 2.

Pathways	Value	BootSE	BootLLCI	BootULCI	Proportion
Total effect	0.371	0.041	0.291	0.451	–
Direct effect	0.175	0.035	0.106	0.244	47.17%
Path 1: PTS → GLM → SRLB	0.054	0.017	0.021	0.088	14.56%
Path 2: PTS → L2 grit → SRLB	0.056	0.023	0.014	0.102	15.09%
Path 3: PTS → GLM → L2 grit → SRLB	0.086	0.017	0.056	0.123	23.18%

TABLE 4 The effect size of Figure 3.

Pathways	Value	BootSE	BootLLCI	BootULCI	Proportion
Total effect	0.371	0.041	0.291	0.451	–
Direct effect	0.208	0.036	0.138	0.278	56.06%
Path 4: PTS → FLM → SRLB	−0.008	0.013	−0.033	0.017	–
Path 5: PTS → L2 grit → SRLB	0.092	0.027	0.040	0.147	24.80%
Path 6: PTS → GLM → L2 grit → SRLB	0.078	0.015	0.052	0.110	21.02%

5 Discussion

5.1 The predictive effect of perceived teacher support on self-regulated learning behaviors

The results showed that teacher support predicts students' English learning behaviors positively, supporting the social support theory; that is, the competent and autonomous support of teachers, as well as good teacher-student relationships, are essential parts of the social support system. For one thing, they can alleviate students' physical and mental discomfort, and for another, they can promote the cultivation of students' positive personalities (Luo et al., 2014), further fostering students' positive academic behaviors. In the SLA field, when students perceive teachers' care, encouragement, and assistance, they view such support as beneficial for personal growth and are more likely organize cognitive resources more reasonably (Vansteenkiste et al., 2010), and engage in autonomous learning behaviors.

5.2 The mediating role of language mindsets

This study also found growth language mindset mediated the association between teacher support and self-regulated learning, underscoring the effect of classroom climate on fostering a growth language mindset (Wang et al., 2021). Students' mindsets can be greatly affected by providing emotional support, competence support, autonomy support, and even subtle feedback conveying competence-related information (Cimpian et al., 2007). Furthermore, growth language mindset positively predicts self-regulated learning behaviors, which is consistent with Lou and Noels (2016). Students who perceived more rapport from their teacher have the inclination to view their language abilities with a developmental and expectant perspective, objectively recognize their shortcomings and current difficulties, cope with negative academic emotions, and thus arrange their learning behavior reasonably.

However, the predictive effect of fixed language mindset on English learning behaviors was not significant. There may be two main reasons behind this result. First, the heterogeneity of motivation. A fixed mindset is generally associated with extrinsic motivation, while a growth mindset is linked to intrinsic motivation. However, extrinsic motivation can also drive learning behaviors. Students with a fixed mindset may exhibit high levels of learning autonomy, due to fear of failing exams or disappointing parents and teachers. They might proactively design study plans and complete learning tasks independently. However, this kind of self-regulated learning behaviors is pressure-driven and instrumental, rather than stemming from genuine intrinsic interest or a sense of mastery over the learning process. Second, university students' self-regulated English learning is affected by multiple factors, including cultural atmosphere, academic pressure, personal traits and others. In cultural environments that place a high value on exam results and academic achievement, students are often compelled to engage in self-regulated learning under intense external pressure, regardless of their mindsets, which indicates the importance of external learning environment again.

5.3 The mediating role of L2 grit

Another finding is that L2 grit also serves a mediator between teacher support and self-regulated learning behaviors. When teachers care for their students, create a positive classroom atmosphere, build friendly relationships, and provide evaluative feedback or guidance for improvement (Demaray and Malecki, 2002), students are more inclined to obtain positive academic emotions (Dewaele and Dewaele, 2020), which helps learners gain physical and psychological resources when facing obstacles, and maintain sustained effort and interest in SLA, thereby enhancing their motivation and engagement. Consequently, the grittier English learners typically exhibit stronger self-control and motivation in academic pursuits, enabling them to engage in self-regulated learning activities more positively, such as completing assigned reading tasks and asking questions (Ramos Salazar and Meador, 2023).

5.4 The chain mediating role of language mindsets and L2 grit

Perceived teacher support can influence university students' self-regulated learning behaviors through two chain mediation pathways: (1) growth language mindset and L2 grit and (2) fixed language mindset and L2 grit. When teachers believe in their students' academic abilities, grant them autonomy in learning, and create a positive learning atmosphere, students are inclined to develop growth language mindset. Different language mindsets have totally different effects on students' academic performance and achievements. When students perceive more teacher support, they will obtain a stronger sense of control over their foreign language learning and establish a strong self-belief to allot more cognitive resources to daily academic tasks (Ucar and Sungur, 2017). As a result, they are better able to constantly keep interest in SLA, cultivating their grit personality through failures and difficulties (Sadoughi and Hejazi, 2023), and are more attentive to creating reasonable studying plans and adopting effective learning strategies for self-regulated learning. On the contrary, when students cannot perceive sufficient support from teachers, they will develop a fixed language mindset, making it less likely for them to experience enjoyment or avoid burnout (Wang et al., 2021). Consequently, they may lack interest in achieving foreign language learning goals and find it more challenging to motivate themselves to engage actively in L2 learning and daily academic activities (Khajavy et al., 2021).

6 Conclusion and implications

This study examined the chain mediating effect of language mindsets and L2 grit in the association between teacher support and self-regulated learning behavior in the SLA field. Considering the importance of teacher support, for one thing, teachers should provide students with sufficient support as much as possible, guiding them to regard negative events as opportunities for further progress. In addition, teachers can introduce more diverse teaching activities into their daily teaching, creating a relaxed and positive external environment to stimulate students' interest in language learning. For another, extrinsic motivations may also significantly affect students' self-regulated learning behavior (Gao, 2016). Teachers can enrich learning activity modes, for example, by designing a point-based reward and punishment mechanism to stimulate external learning motivation and promote students' learning engagement. In addition, external motivation can be internalized as internal motivation under certain conditions (Bao, 2006). Therefore, when teachers focus on utilizing external learning motivation, they should also be more attentive to improving students' awareness of learning a second language and enhancing their sense of self-determination, so that students can transform and integrate academic requirements into individual identification experiences and self-regulation, thereby promoting students' learning engagement.

Furthermore, it is highlighted that teachers should realize the crucial roles of language mindsets and L2 grit. For one thing, teachers should provide a relatively autonomous environment to help students recognize that language abilities can be improved through constant practice, rather than be fixed and unchangeable, to enhance their academic self-efficacy. For another, teachers could design challenging learning tasks and encourage students to overcome difficulties, and instruct them to set clear long-term learning goals, which will finally enhance students' grit and resilience.

Besides, this research also found that the predictive effect of fixed language mindset on English learning behaviors was not significant. This finding suggests that, in the actual and complex teaching process, teachers cannot simply assume that fostering a growth mindset and suppressing a fixed mindset will necessarily enhance students' self-regulated learning. Instead, educators need to holistically consider factors such as cultural atmosphere, school environment, and peer pressure, and focus on strengthening students' intrinsic motivation and self-efficacy to ultimately promote their self-regulated learning behaviors.

7 Limitations and further studies

The main limitations are that the collected data are mainly self-reported data, which are considered relatively subjective, although several methods have been used to mitigate the impact, such as common method bias test.

Additionally, given the impact of L2 grit and language mindsets on other participants group is different, it is recommended to conduct targeted research on students of different levels to testify the impact and pathways of teacher support.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Ethics statement

The studies involving humans were approved by Nanjing University of Finance & Economics Hongshan College. The studies were conducted in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study.

Author contributions

SZ: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing. ZW: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing.

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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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