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Who perceives more value of teacher feedback? Exploring the roles of college students' possible second language selves and language learning strategies

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Abstract

Students can only benefit from teacher feedback if they recognise its value for learning. However, there is still a lack of research to investigate the factors influencing students' perceptions of the value of teacher feedback in the context of learning English as a foreign language. This study investigated the impacts of two significant individual factors (i.e. possible second language (L2) selves and language learning strategies) of 687 college English learners on their perceived value of teacher feedback (i.e. grades and comments) in a Chinese university. Structural equation modelling analyses indicated the following:

- (i) Ideal L2 self significantly and positively predicted the perceived value of grades, both directly and indirectly (mediated by self-regulation strategies).
- (ii) Ideal L2 self significantly and positively predicted the perceived value of teacher comments, both directly and indirectly (mediated by social strategies and self-regulation strategies).
- (iii) Ought-to L2 self only indirectly predicted the perceived value of grades, mediated by memory strategies.

The findings highlight students' proactive roles in the feedback process. Only if students aspire to become proficient English users and frequently use deep language learning strategies, they will perceive more value of teacher feedback and take up it for better learning.

Keywords: Possible second language selves, Language learning strategies, Perceived value of teacher feedback, College English learners

Introduction

Teacher feedback is the information provided by the teacher on the aspects of individual learning performance (Hattie & Timperley, 2007). It significantly influences students' learning outcomes in the context of learning English as a foreign language (EFL) (Hyland & Hyland, 2006; Lee, 2014). However, the large variability of feedback effects on learning has been witnessed in the literature (Shute, 2008). More and more researchers realise

that students can only benefit from teacher feedback if they recognise its value for learning (e.g. Crisp, 2007; van der Kleij, 2019; Winstone et al., 2021). Students' characteristics especially their learning motivation, prior knowledge and skills, and abilities would influence how students view and utilise teacher feedback, thus further mediating the effects of teacher feedback on learning (Shute, 2008). Surprisingly, there is very limited empirical evidence available to reveal how individual variables influence students' views about teacher feedback and the subsequent use of it (van der Kleij, 2019; Winstone et al., 2017).

Among individual variables, learning motivation and learning strategies are especially important because they largely decide students' roles in the feedback process, which may cause different interpretations of teacher feedback and uptake of it (Carless et al., 2011; Harks et al., 2014). Some research has investigated the influence of intrinsic motivation and development goals of EFL learners on their perceived value of teacher feedback (e.g. Papi, Rios, et al., 2019; van der Kleij, 2019). Even though possible second language (L2) selves have been widely used to examine students' English learning motivation in EFL learning contexts (Mackay, 2019; You & Dörnyei, 2016), their relationship with their perceived value of teacher feedback is still unknown.

It was found that in both EFL and non-EFL contexts, students' use of learning strategies especially self-regulation strategies make them appreciate teacher feedback due to its requirement of promotion-focused strategic behaviour (e.g. Jang & Lee, 2019; Lefroy et al., 2015; Nicol & Macfarlane-Dick, 2006; Rowe & Wood, 2008; Vattøy & Smith, 2019). At the same time, students' possible L2 selves have been shown to significantly predict their language learning strategies, perceptions, and outcomes (Dörnyei & Chan, 2013; Papi, Bondarenko, et al., 2019). For example, individuals with ideal L2 selves employ distinct learning strategies in their goal pursuits (Higgins, 1997). Because language learning strategies are related to both possible L2 selves and the perceived value of teacher feedback, a mediating effect of language learning strategies may be hypothesised between them. Until now, such a mediating effect has not been investigated in the literature.

In order to fill the above-mentioned research gaps, this study attempted to investigate the influence of Chinese college English learners' possible L2 selves on their perceived value of teacher feedback obtained from their compulsory College English courses and the mediating roles played by language learning strategies. To achieve these research objectives, a survey was issued to 687 freshmen from a foreign language university in southern China.

Literature review

Students' perceived value of teacher feedback in EFL learning

After submitting assignments, university students often receive teacher feedback in the forms of grades and/or comments (Chalmers et al., 2018). Brookhart (2018) believed that grades are evaluative and play a summative function, while comments are descriptive and play a formative function. Students can benefit from both grades and comments in different but complementary ways (Guskey, 2019). Grades help students to assess and track their EFL learning and calibrate their self-assessment against standards. Comments facilitate and improve students' EFL learning by providing constructive suggestions. Teachers often have a feeling that the full potential of feedback has not been used

in students' EFL learning (Lee, 2011). Recent studies have increasingly recognised that if students devalue teacher feedback, they are less inclined to engage with and benefit from it (Crisp, 2007; van der Kleij, 2019; Winstone et al., 2021). Therefore, students' perceived value of teacher feedback is considered as a prerequisite condition for maximising teacher feedback effectiveness on EFL learning.

The existing studies have revealed that EFL students might differentiate the formative and summative values of teacher feedback. For example, Zhan (2019) found that EFL college learners endorsed more judging and encouraging functions of teacher feedback than its improving functions. This finding is consistent with that of other studies (e.g. Deeley et al., 2019; Henderson et al., 2019; Lee, 2008; McLean et al., 2015; Poulos & Mahony, 2008). Students who disregard the formative value of teacher feedback are likely to overlook valuable information that could improve their learning (Winstone & Boud, 2022). To maximise the effectiveness of teacher feedback, students should be encouraged to pay equal attention to grades and comments. Therefore, it is important to find out what factors would influence students' perceived value of teacher feedback.

Considerable differences exist in how individual students perceive the value of teacher feedback (Poulos & Mahony, 2008). Evans (2013) identified 12 individual factors that can influence students' perceptions of teacher feedback such as learning ability, personality, past learning experiences, and motivation. Winstone et al. (2017) suggested individual variables such as learning motivation, self-concept, academic skills, and learning ability play a crucial role in determining their acknowledgement of teacher feedback value. Among these individual variables, learning motivation and learning strategies are particularly important, as they influence students' identification of their roles in the feedback process, which differentiates their interpretation of teacher feedback and further action (Carless et al., 2011; Harks et al., 2014). The present research focused on exploring the complex relationship between learning motivation, learning strategies, and the perceived value of teacher feedback in the context of EFL learning.

Possible L2 selves and perceived value of teacher feedback

Some previous studies have linked students' language learning motivation with their perceived value of teacher feedback. van der Kleij (2019) found that Australian students' intrinsic motivation positively predicted their perceived value of teacher feedback in English learning. Papi, Rios, et al. (2019) found that in foreign language learning, American students who endorsed development goals were more likely to attend to teacher corrective comments than those who endorsed demonstration goals. In general education, Winstone et al. (2021) found that students' mastery goals had a significant association with their perceived value of teacher feedback. It should be noted that even though possible L2 selves have been shown to better explain students' language learning motivation in EFL contexts (Mackay, 2019; You & Dörnyei, 2016), no studies to date seem to have specifically explored the influence of possible L2 selves on the perceived value of teacher feedback.

Possible L2 selves consist of ideal and ought-to selves (Dörnyei, 2009). The former represents "the learner's internal desire to become an effective L2 user", whereas the latter reflects "social pressures coming from the learners' environment to master the L2" (Dörnyei & Chan, 2013, p. 439). Higgins (1996) used self-discrepancy theory to interpret

the impetus triggered by possible selves by arguing that a person's actions are often driven by the aspiration to fill the gap between the possible self and present self. However, the roles played by the ideal and the ought-to selves are different in such a process. The ideal self-guide focuses on promoting learning success, always with wishes, desires, growth, and achievement. On the contrary, the ought-to self-guide emphasises preventing learning failure, often with duty, safety, and promise (Dörnyei, 2005). Intrinsic motivation, mastery goals, and development goals, as mentioned above, have a promotion tendency, which is related to the desire for self-development (Papi, Rios, et al., 2019; Winstone et al., 2021). The ideal L2 selves have the same focus. Therefore, it could be inferred that the ideal L2 selves would positively predict the perceived value of teacher feedback. On the contrary, the ought-to L2 selves with the prevention regulatory focus may make students see teacher feedback, especially when it is negative as an attack on their self-image (Papi, Rios, et al., 2019), thus causing their less recognition of teacher feedback value.

Language learning strategies as a mediator of the relationships between possible L2 selves and perceived value of teacher feedback

Language learning strategies refer to “actions chosen by learners (either deliberately or automatically) for the purposes of learning or regulating the learning of language” (Griffiths, 2015, p. 426). Oxford (1990) categorised six groups of language learning strategies in her Strategy Inventory for Language Learning, namely memory, cognitive, compensation, metacognitive, affective, and social. In this study, three types of language learning strategies were explored including self-regulation strategies, social strategies, and memory strategies. Memory strategies are often described as the most frequently used English learning strategies by Chinese students (e.g. Hu, 2002; Jiang & Smith, 2009). Tragant et al. (2013) categorised memory strategies into the surface group of language learning strategies since they emphasised repetition, review, and reproduction. On the other hand, they grouped the strategies which demanded the use of higher-order skills like metacognitive strategies and interacting with others into the deep cluster of language learning strategies. Students' use of deep language learning strategies is often regarded as a crucial condition for the success of English learning (e.g. Zhan et al., 2021; Gerami & Baighlou, 2011; Ghasemi & Dowlatabadi, 2018; Oxford, 2016; Purpura, 1997). For example, self-regulation strategies facilitate students' learning to learn (Zimmerman & Schunk, 2011) and help to monitor their learning behaviour by filling the gaps between their current performance and their target grades or goals (Nicol & Macfarlane-Dick, 2006). Social strategies highlight the collaboration with others in the English learning process, and the use of these strategies helps students to overcome the learning difficulties which might not be solved by themselves (Qingquan et al., 2008).

Some studies have investigated the effect of students' possible L2 selves on their use of language learning strategies. Kormos and Csizér (2014) found that the ideal L2 selves were positively correlated with students' adoption of self-regulation strategies. Jang and Lee (2019) reported that in English writing, the ideal L2 selves had a positive association with students' use of planning strategies, while the ought-to L2 selves only significantly predicted their use of revising strategies. Papi, Bondarenko, et al. (2019) found that students with ideal L2 selves tended to use eager L2 learning strategies like regulating their

effort and time and asking others for help. Accordingly, we assumed that the ideal L2 selves were more likely to trigger students to use deep learning strategies such as self-regulation strategies than the ought-to L2 selves.

A few researchers have examined the influence of students' learning strategies on their perceived value of teacher feedback. Rowe and Wood (2008) made a general observation that students who used deep learning strategies preferred teachers' comments, whereas those who used surface learning strategies preferred grades and corrective answers. Recently, as indicated in van der Kleij (2019), Australian students' self-regulation in English learning and their intrinsic motivation conjointly predicted their perceived value of teacher feedback. Vattøy and Smith (2019) also found that Norwegian students' self-regulation strategies are closely related to their perception of teacher feedback quality. Based on these limited references, we hypothesised that language learning strategies could mediate the relationship between possible L2 selves and the perceived value of teacher feedback.

Research questions

To address the research gaps in the literature discussed above, this study attempted to explore the influence of possible L2 selves and language learning strategies on Chinese freshmen' perceived value of teacher feedback obtained from their compulsory college English course. Teacher feedback examined in this study had two forms, namely grades and comments which played summative and formative functions respectively. Four specific questions were explored as follows.

- a) How is students' perceived value of grades influenced by their possible L2 selves?
- b) Do language learning strategies mediate the relationship between possible L2 selves and the perceived value of grades?
- c) How is students' perceived value of comments influenced by their possible L2 selves?
- d) Do language learning strategies mediate the relationship between possible L2 selves and the perceived value of comments?

Methodology

Participants

The sample consisted of 687 freshmen from a foreign language university in southern China. They ranged in age from 17 to 22. One-hundred and sixty-five (24.0%) of the participating students were males, 511 (74.4%) were females, and 11 (1.6%) did not indicate their gender. Their majors were as follows: 60.2% studied business, management, and economics; 15.9% studied minority languages; 11.7% studied arts and communication; 8.0% studied various other disciplines, such as law, social work, and psychology; and 4.2% did not report their majors.

Measures

The questionnaire consisted of three scales measuring possible L2 selves, language learning strategies, and perceived value of teacher feedback. All the scales were initially designed in English and further translated into Chinese when they were used in this

study. In addition to completing these three scales, the participants were asked to tell demographic information (e.g. gender, age, and major). The survey took approximately 15 minutes to finish.

The scale for possible L2 selves was designed by adapting and simplifying the L2 motivational self-system survey (Dörnyei & Taguchi, 2010) and the Chinese language learning motivation survey (You & Dörnyei, 2016) to fit the context of college English learning in China. The scale covers both ideal and ought-to L2 selves, each of which was measured using four items. A sample item of ideal L2 selves is “I imagine that someday I will speak English with foreigners”. A sample item of ought-to L2 selves is “I have to study English; if I did not, I think that my parents would be disappointed with me”. All of the items were answered on a 6-point scale with 1 indicating “strongly disagree” and 6 indicating “strongly agree”. Cronbach’s alpha coefficient of the ideal L2 selves was 0.801, and that of the ought-to L2 selves was 0.852. The item-scale correlation coefficients of all of the items ranged from 0.774 to 0.873 (see Table 1), indicating good internal consistency of the two subscales. Confirmatory factor analysis (CFA), illustrated in Fig. 1, provided further evidence of the validity of the scale ($\chi^2/df = 2.885$; $CFI = 0.985$; $PNFI = 0.516$; $RMSEA = .052$).

The scale of language learning strategies was designed based on Zhan et al.’s (2021) survey on deep language learning strategies and the Cognitive and Metacognitive Strategy Questionnaire (Purpura, 1999). It investigated the students’ social strategies (3 items), self-regulation strategies (5 items), and memory strategies (5 items). Social strategies were defined as strategies that enabled the students to work with other people in the English learning process. A sample item is “I ask my teacher to correct my English errors”. Self-regulation strategies were related to planning, evaluating, and monitoring the English learning process. A sample item is “I manage my study schedule to guarantee that I have enough time to learn English”. Memory strategies involved rote recitation and rehearsal skills. A sample item is “I do mock papers to learn English”. All of the items were measured on a 6-point scale with 1 indicating “never” and 6 indicating “always”. The Cronbach’s alpha coefficients for social strategies, self-regulation strategies, and memory strategies were 0.692, 0.829, and 0.862, respectively. Table 1 shows that the item-scale correlation coefficients of all of the items ranged from 0.697 to 0.844, indicating an acceptable level of internal

Table 1 Item-scale correlation of three scales

Possible L2 selves				Language learning strategies						Perceived value of teacher feedback			
Ideal		Ought to		Social		Self-regulation		Memory		Grades		Comments	
Item	Corr.	Item	Corr.	Item	Corr.	Item	Corr.	Item	Corr.	Item	Corr.	Item	Corr.
PS1	0.820**	PS5	0.774**	LLS1	0.790**	LLS4	0.763**	LLS9	0.833**	TF1	0.894**	TF4	0.822**
PS2	0.828**	PS6	0.859**	LLS2	0.785**	LLS5	0.816**	LLS10	0.816**	TF2	0.860**	TF5	0.844**
PS3	0.784**	PS7	0.873**	LLS3	0.793**	LLS6	0.787**	LLS11	0.844**	TF3	0.843**	TF6	0.773**
PS4	0.809**	PS8	0.838**			LLS7	0.802**	LLS12	0.817**			TF7	0.822**
						LLS8	0.697**	LLS13	0.721**			TF8	0.752**
Mean	0.810	Mean	0.836	Mean	0.789	Mean	0.773	Mean	0.806	Mean	0.866	Mean	0.803

** $p < .001$

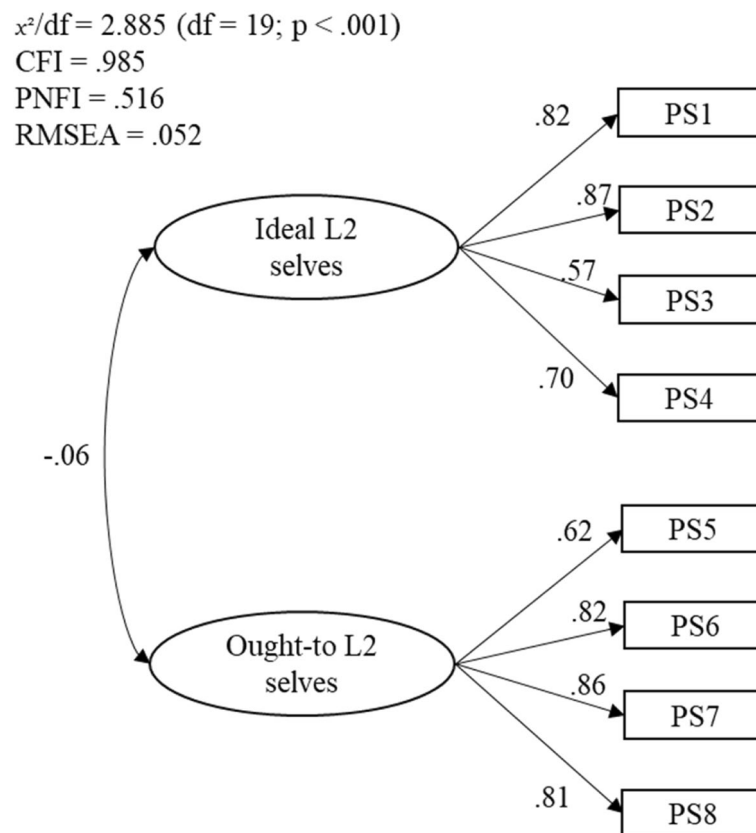


Fig. 1 Model of possible L2 selves

consistency of the three dimensions of the scale. As indicated in Fig. 2, CFA provided further evidence of the validity of the scale ($\chi^2/df = 3.496$; $CFI = 0.954$; $PNFI = 0.638$; $RMSEA = .060$).

The scale of the perceived value of teacher feedback was developed based on the first author's another qualitative study of college students' beliefs about the functions of teacher feedback (Zhan, 2019). The grade dimension included three items related to the types of grades usually received by the students in college English courses (i.e. total course grade, the grade assigned to assessment tasks in daily teaching, and final exam grade). The comment dimension consisted of five items that represented the types of comments that the students normally received in college English courses (i.e. written comments, oral comments, individual comments, whole class comments, and comments based on the provided checklist). All of the items were rated using a 6-point Likert scale with 1 indicating "totally unimportant" and 6 indicating "extremely important". Cronbach's alpha was .832 for the grade dimension and .861 for the comment dimension. As shown by Table 1, the item-scale correlation coefficients of all of the items ranged from 0.752 to 0.894, suggesting a high level of internal consistency of the two dimensions. An additional CFA, shown in Fig. 3, provided further evidence of the validity of the whole scale ($\chi^2/df = 4.973$; $CFI = 0.969$; $PNFI = 0.507$; $RMSEA = 0.076$).

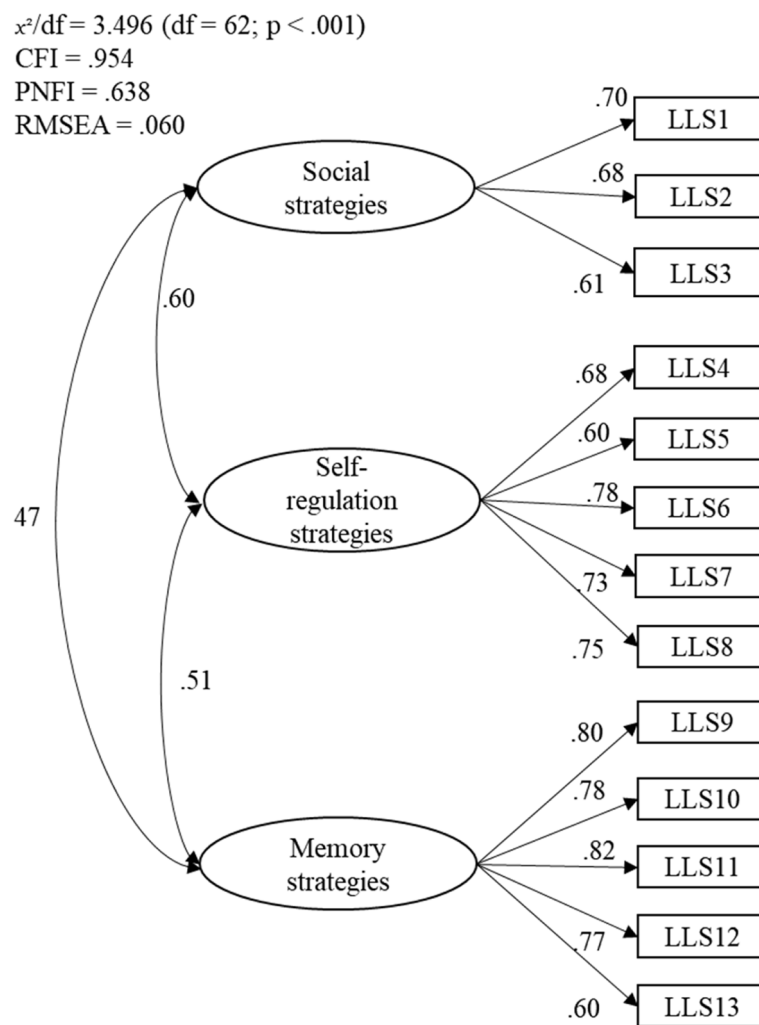


Fig. 2 Model of language learning strategies

Statistical analyses

We conducted Pearson's correlation analysis to initially explore the relationships between students' possible L2 selves, language learning strategies, and perceived value of teacher feedback. As mediation effects may exist among these three variables, structural equation modelling (SEM) analyses were also utilised to establish a more accurate path model and further estimate the path coefficients for the variables. Although various fit indices can be used for SEM, the ratio of the chi-square statistic to the degrees of freedom (χ^2/df) is the most widely applied. Other three common SEM fit indices are CFI (comparative fit index), PNFI (parsimonious normed fit index), and RMSEA (root-mean-square error of approximation). This study calculated all four fit indices.

In this study, we explored students' perceived value of teacher feedback in terms of grades and comments. As discussed before, in most cases, grades play a summative function, while comments play a formative function, and EFL students often differentiate these two types of teacher feedback. Therefore, two SEM models were established separately responding to the research questions.

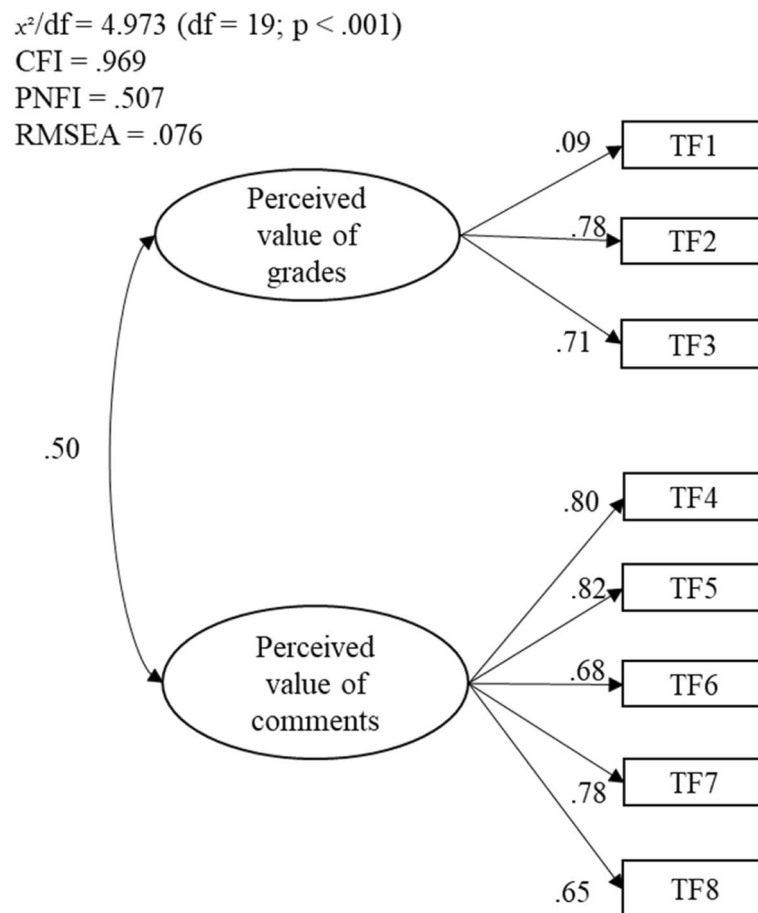


Fig. 3 Model of perceived usefulness of teacher feedback

Results

Correlations between possible L2 selves, language learning strategies, and perceived value of teacher feedback

For the scale measuring possible L2 selves, the mean of the ideal L2 selves was found much higher ($M = 5.403$; $SD = 0.665$) than that for the ought-to L2 selves ($M = 2.833$; $SD = 1.077$). Of the three dimensions of language learning strategies, self-regulation strategies were scaled highest ($M = 3.886$; $SD = 0.882$), and social strategies were scaled lowest ($M = 2.977$; $SD = 0.948$). It was also found that the perceived value of grades ($M = 4.843$; $SD = 0.739$) was higher than the perceived value of comments ($M = 4.588$; $SD = 0.757$).

As indicated in Table 2, the ideal L2 selves were positively associated with all three language learning strategies. The coefficients were all significant. Social strategies ($r = 0.183$, $p < .01$) and self-regulation strategies ($r = 0.215$, $p < .01$) more strongly correlated with the ideal L2 selves than memory strategies did ($r = .086$, $p < .05$). As for the ought-to L2 selves, the coefficient was only significant for memory strategies ($r = 0.130$, $p < .01$). No significant correlation was identified between the ought-to L2 selves and either social strategies or self-regulation strategies.

Table 2 Correlations amongst possible L2 selves, language learning strategies, and perceived value of teacher feedback

Variables	Alpha coefficients	Mean	SD	1.1	1.2	2.1	2.2	2.3	3.1	3.2
Possible L2 selves										
1.1 Ideal	0.801	5.403	0.665	1						
1.2 Ought to	0.852	2.833	1.077	-.045	1					
Language learning strategies										
2.1 Social	0.692	2.977	0.948	0.183**	.040	1				
2.2 Self-regulation	0.829	3.886	0.882	0.215**	-.039	0.465**	1			
2.3 Memory	0.862	3.262	0.911	.086*	0.130**	0.380**	0.445**	1		
Perceived value of teacher feedback										
3.1 Grades	0.832	4.843	0.739	0.207**	-.023	0.143**	0.184**	0.148**	1	
3.2 Comments	0.861	4.588	0.757	0.296**	.046	0.197**	0.217**	0.133**	0.440**	1

** $p < 0.01$

* $p < 0.05$

Both the perceived value of grades ($r = 0.207, p < .01$) and the perceived value of comments ($r = 0.296, p < .01$) were significantly positively correlated with the ideal L2 selves. All correlation coefficients were insignificant between the perceived value of grades or comments and the ought-to L2 selves. All of the coefficients between the language learning strategies and the perceived value of grades and comments were significantly positive, ranging from 0.133 to 0.217.

Impacts of possible L2 selves and language learning strategies on the perceived value of grades

After the correlation analysis, an SEM analysis was performed to establish a path model linking possible L2 selves, language learning strategies, and the perceived value of grades. In the initial analysis, we hypothesised causal relationships between possible L2 selves, language learning strategies, and the perceived value of grades. No significant relationship effects were found between the ideal L2 selves and memory strategies ($\beta = .08$), between the ought-to L2 selves and social strategies ($\beta = .04$), between the ought-to L2 selves and self-regulation strategies ($\beta = -.04$), between the ought-to L2 selves and the perceived value of grades ($\beta = -.03$), or between social strategies and the perceived value of grades ($\beta = .05$). Therefore, these connections were excluded from the final model (marked with dashed lines in Fig. 4). The final model of the impact of possible L2 selves and language learning strategies on the perceived value of grades was supported and shown in Fig. 4 ($\chi^2/df = 3.466$; $CFI = 0.909$; $PNFI = 0.720$; $RMSEA = .060$). The ideal L2 selves had a direct and significant positive effect on the perceived value of grades ($\beta = 0.20, p < .01$), as well as an indirect and significant positive impact mediated by self-regulation strategies. There were significant path coefficients between the ideal L2 selves and self-regulation strategies ($\beta = 0.21, p < .01$) and between self-regulation strategies and the perceived value of grades ($\beta = 0.16, p < .01$). In contrast, the ought-to L2 selves had only an indirect and significant positive impact on the perceived value of grades, mediated by memory strategies. In this mediated path, there were significant path coefficients between the ought-to L2 selves and memory strategies ($\beta = 0.14, p < .05$) and between memory strategies and the perceived value of grades ($\beta = .09, p < .05$).

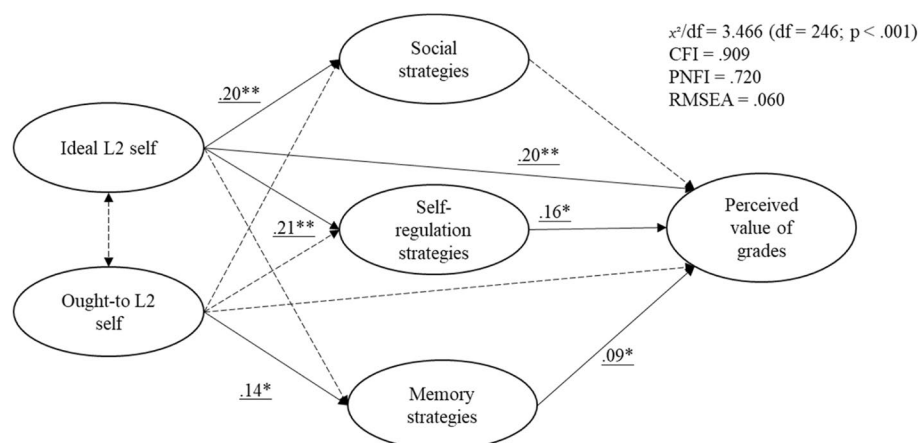


Fig. 4 Path analysis and path coefficients of the impacts of possible L2 selves and language learning strategies on students' perceived value of grades

Impact of possible L2 selves and language learning strategies on perceived value of comments

The initial SEM analysis also hypothesised the causal relationships between possible L2 selves, language learning strategies, and the perceived value of comments. After eliminating insignificant paths (marked with dashed lines in Fig. 5), a final model was established, which was supported by the SEM analysis ($\chi^2/df = 3.231$; $CFI = 0.911$; $PNFI = 0.732$; $RMSEA = .057$) (see Fig. 5). The ideal L2 selves had a direct and significant positive impact on the perceived value of comments ($\beta = 0.28$, $p < .01$) and two indirect and significant positive effects on the perceived value of comments, mediated by social and self-regulation strategies, respectively. Specifically, there were significant path coefficients between the ideal L2 selves and social strategies ($\beta = 0.19$, $p < .01$), between the ideal L2 selves and self-regulation strategies ($\beta = 0.21$, $p < .01$), between social strategies and the perceived value of comments ($\beta = 0.13$, $p < .01$), and between self-regulation strategies and the perceived value of comments ($\beta = 0.17$, $p < .01$). In contrast, the ought-to L2 selves had no direct or indirect impacts on the perceived value of comments.

Discussion

This study explored students' perceived value of teacher feedback. Descriptive analysis of the data revealed that the students were more likely to acknowledge the value of grades than that of comments. This finding aligns with other studies (e.g. Zhan, 2019; Deeley et al., 2019; Henderson et al., 2019; Lee, 2008; McLean et al., 2015; Poulos & Mahony, 2008). Even more importantly, our findings reveal individual differences in students' perceived value of teacher feedback with substantial evidence.

Possible L2 selves and language learning strategies

Previous studies have indicated that the ideal L2 selves are associated with greater motivation capacities than the ought-to L2 selves (e.g. Kormos & Csizér, 2014; Papi, Bondarenko, et al., 2019; Teimouri, 2017; You & Dörnyei, 2016). Echoing this, this study found that the ideal L2 selves had significantly positive impacts on self-regulation strategies,

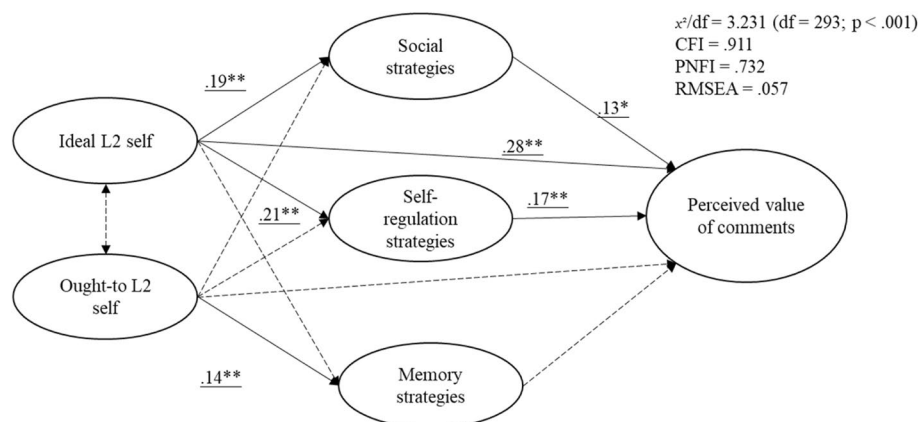


Fig. 5 Path analysis and path coefficients of the impacts of possible L2 selves and language learning strategies on students' perceived value of comments

social strategies, and memory strategies, while the ought-to L2 selves have a positive impact on memory strategies.

In fact, ideal L2 self-driven students have a promotion focus and adopt eager L2 learning/use strategies to sustain their sense of achievement (Higgins, 1997; Papi, Bondarenko, et al., 2019). At the same time, self-regulation strategies investigated in this study belong to eager L2 learning/use strategies which require “the control of one’s present conduct based on motives related to a subsequent goal or ideal that an individual has set for him or herself” (Zimmerman & Schunk, 2008, p. 1). Therefore, a positive relationship was found in the present study between the ideal L2 selves and self-regulation strategies.

On the contrary, students with ought-to L2 selves have a prevention tendency that in turn encourages vigilant and effortful goal-pursuit strategies (Higgins, 1997). They tend to focus on ensuring accuracy and avoiding mistakes when doing tasks, with the goal of staying in a safe and secure learning context (Papi, Bondarenko, et al., 2019). Memory strategies can be regarded as vigilant and effortful goal-pursuit strategies, as they require students to spend time and energy reciting and practising the language to avoid making mistakes. Consequently, the ought-to L2 selves were found as a significant predictor of memory strategies in this study.

Language learning strategies and perceived value of teacher feedback

Nicol and Macfarlane-Dick (2006) maintain that self-regulated students “actively interpret external feedback [...] in relation to their internal goals” (p. 200). Self-regulated students are sensitive to teacher feedback and are good at monitoring their learning behaviour by filling the gaps between their current performance and their target grades or goals. Both grades and comments contain useful information for them (Lefroy et al., 2015). Therefore, in this paper, self-regulation strategies were found to significantly predict their perceived value of teacher feedback. Moreover, it was found in this paper that students who used social strategies were particularly aware of the value of comments. Students who use more social strategies may be more willing to approach teachers for feedback, which makes them more aware of the value of teacher feedback (Li & Han, 2022; Nicol, 2010).

In line with Rowe and Wood (2008), we found that students who used memory strategies tended to recognise the value of grades. The Chinese participants’ use of memory strategies may have been related to the emphasis on accuracy of judgement and effort cultivated by the Chinese examination culture (Zhan & Wan, 2010), making them tend to regard grades as useful information.

Possible L2 selves and perceived value of teacher feedback

Besides the impacts mediated by learning strategies, direct impacts of the ideal L2 selves were found on the perceived value of both grade and comments. Previous research has indicated that the ideal L2 selves have the desire for self-development (Higgins, 1997; Papi, Bondarenko, et al., 2019). Since both grades and comments can provide hints for students to identify the direction of self-development, students with more ideal L2 selves will be more inclined to acknowledge the value of both grades and comments. In addition, the ideal L2 selves tend to stimulate positive emotions such as joy and pride

(Higgins, 1997; Teimouri, 2017), which is crucial for students' acknowledgement of teacher feedback value.

In opposition to the ideal L2 selves, the ought-to L2 selves focus on preventing learning failure and can easily cause L2 learning anxiety and shame (Teimouri, 2017). Students with ought-to L2 selves are likely to interpret the inconsistency between the present selves and possible selves as "a sense of inferiority, unattractiveness, or defectiveness/deficit on the part of the learners" (Teimouri, 2017, p. 691). To protect their positive self-image, students with ought-to L2 selves may display strong emotional resistance to teacher feedback (MacDonald, 1991). Hays and Williams (2011) claimed that the perceived value of feedback is negatively related to individuals' desire to protect themselves from information that could damage their self-image or others' impression of them. Therefore, it makes sense that the ought-to L2 selves did not directly predict the perceived value of teacher feedback but only were indirectly associated with the perceived value of grades, mediated by memory strategies. Grades may contain less information than comments (Brookhart, 2018), and memory strategies would drive the attention of the students with ought-to L2 selves to grades.

Conclusion and implications

This study has provided empirical evidence on the roles played by students' learning motivation and learning strategies to unlock the potential of teacher feedback (Carless & Boud, 2018; Papi, Rios, et al., 2019). Only if students desire to become effective English users and adopt more deep language learning strategies, especially self-regulation strategies, they will be more likely to perceive more value of teacher feedback no matter be it grade or comment. Their perceived value of teacher feedback can further trigger their effective uptake of it, thus potentially generating positive effects on learning. These findings could inspire EFL teachers to figure out the measures of maximising feedback effectiveness beyond the recommendations of improving teacher feedback quality which has been much discussed in the literature (Li & Han, 2022).

To make students perceive more value of teacher feedback, EFL teachers need to cultivate students' ideal L2 selves in English learning. There are many measures that EFL teachers can take to help students establish and sustain their ideal L2 selves. For example, they can use English learning tasks and materials to create attractive and authentic scenarios where students can visualise their self-image to use English (Lee & Lee, 2020). In addition, teachers can act as role models and guide students to make a specific action plan so as to approximate their ideal L2 selves (Zhan & Wan, 2016; Dörnyei, 2009). Furthermore, EFL teachers could create more opportunities for students to use self-regulation strategies and social strategies in English learning. For example, teachers can ask students to do self-reflection after the completion of English learning tasks or allow students to exchange their ideas with peers or with them. These learning opportunities could in turn reinforce students' deep interpretation and appreciation of teacher feedback. The above-mentioned suggestions would enrich Winstone and Boud's (2022) recommendations for maximising the learning function of teacher feedback by considering students' learning motivation and strategies.

In spite of its significant findings on the complex relationships between possible L2 selves, language learning strategies, and perceived value of teacher feedback, this study

has some limitations which call for further investigation. First, the study was carried out in a foreign language university where the overall English proficiency of students might be higher than those in other kinds of universities due to the emphasis on English teaching in the research site. Therefore, further studies should be carried out to examine if the findings of the present research can be applied to students with normal or lower English proficiency. Second, although this quantitative study made inferences on the causal relationships among variables through statistical analysis, further qualitative research is needed to explain or check the conclusions drawn by this paper. Third, in addition to possible L2 selves and language learning strategies, several individual variables may contribute to students' perceived value of teacher feedback such as past learning experiences, self-efficacy, and personality (Chong, 2021; Winstone et al., 2017), which could be investigated in further studies. Last but not least, in addition to teachers, peers are important feedback providers in students' EFL learning. This study has not explored students' perceived value of peer feedback. An interesting further study could be done on individual variations of students' perceived value of peer feedback in EFL learning.

Abbreviations

EFL	English as foreign language
L2	Second language

Authors' contributions

YZ collected data and was a major contributor in writing the manuscript. JCKL constructed the theoretical framework of the paper and advised the writing process. ZHW analysed the survey data and contributed to the writing of discussion part. The authors read and approved the final manuscript.

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Availability of data and materials

The datasets generated and/or analysed during the current study are not publicly available due to ethical issues but are available from the corresponding author on reasonable request.

Declarations

Competing interests

The authors declare that they have no competing interests.

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