

Exploring the Relationship Between Chinese University EFL Learner's L2 Grit And Teacher Support

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Abstract:

L2 grit is significant in the second language acquisition field. Plentiful research has found that L2 grit can be positively affected by teacher support. However, the current study does not explain the correlation between their sub-dimensions. Therefore, this study collected Chinese university EFL learners' L2 grit and teacher support data and analyzed it through factor analysis and correlational analysis to explore the relationships between the sub-factors of L2 grit and teacher support. In this study, perseverance of efforts and consistency of interest are extracted from L2 grit, and academic support, emotional support, and progressive support are extracted from teacher support. Results show that L2 grit and teacher support are significantly positively correlated. However, regarding sub-factors, only the positive correlation between PE and academic support, PE and emotional support, and CI and emotional support are significant. This study supports the importance of teacher support in cultivating learner's L2 grit. Meanwhile, it emphasizes the role of emotional and academic support in evoking learner's positive emotions and helping them develop grit traits.

Keywords: L2 grit; teacher support; Chinese university EFL learners

1. Introduction

L2 grit is of great importance to second language learning. Researchers in second language acquisition and foreign language teaching focus on how teachers can influence and promote learners' L2 grit. With the introduction of the three-pillar theory of positive psychology into second language acquisition, the interaction among L2 grit, emotion, and environmental factors has attracted the attention of researchers [1]. Emphasizes that supportive teacher-student relationships can foster perseverance and achievement in language learning. They highlight the importance of teacher support in enhancing learners' grit, providing valuable insights into the role of interpersonal factors in language learning. They put forward that teacher affective support and teacher enjoyment can affect L2 grit, affirm the influence of teacher support on grit, and generally find a significant positive correlation between teacher support and grit [2,3]. They indicate that foreign language enjoyment mediates the association between teacher support and L2 grit [3].

Research is going further to the factors of L2 grit and teacher support. They analyze the relationship between Chinese high school EFL learners' perceived academic,

instrumental, and emotional sub-dimensions of teacher support and the PE and CI factors of L2 grit and point out that only the positive correlation of teachers' emotional and instrumental support with L2 grit is significant [4]. In summary, researchers generally affirm that there is a significant positive correlation between L2 grit and teacher support. The study aims to explore the factors of teacher support and L2 perseverance and to further analyze the relationship between teacher support and L2 perseverance.

2. Methodology

2.1 Research Design

Referring to two scales from previous studies, the current study modified and adapted them for practical use.

2.1.1 L2 Grit Scale

The scale was developed and validated to measure L2 learners' grit. It is positively related to students' language learning motivation and achievement [5]. A few questions were revised in light of the individual's traits. It consists of two sub-components: perseverance of effort (4 items, e.g. I am a diligent English language learner.) and consistency of interest (4 items, e.g., My interests in learning

English change from year to year.), total eight items. The items are scored on a 5-point Likert scale (1=Not like me at all, 5=Very much like me).

2.1.2 Students’ Perceived EFL Teacher Support Scale (SPEFLTSS)

This study utilizes SPEFLTSS, which consists of 12 items [6]. It was found that EFL teacher support is a tri-factorial structure. Because the sub-dimension of teacher support is controversial, another dimension was added to this scale: appraisal support [7]. In addition, the study adapted some of the questions based on the original scale. The new scale involves academic support (5 items, e.g., The English teacher always carries out special teaching for our weak points (such as attributive clauses, etc.)), instrumental support (3 items, e.g., The English teacher always helps me choose suitable learning materials.), emotional support (4 items, e.g. The English teacher always pays careful attention to my studies.) and appraisal support (3 items, e.g. My English teacher often communicates with me about my performance in class.), totally 15 items. The 6-point Likert scale was changed to a 5-point Likert scale (1=completely disagree, 5=completely agree)

2.2 Data Collection Procedure

The respondents of this study are Chinese university EFL learners. Their majors include English and non-English majors such as law, engineering, and accounting. They were encouraged to complete questionnaires based on their real learning experiences and feelings. The study was carried out utilizing random sampling, with 112 questionnaires collected.

The first 32 questionnaires were collected for pre-analyzed. For the L2 Grit Scale, it was found that item (2),

“My interests in learning English change from year to year.” had a weak relationship with the other analysis items. As a result, this question was removed, and the reliability of the L2 Grit Scale was measured to be 0.731 after deletion. For SPEFLTSS, the pre-analysis showed a good reliability of 0.843.

After verifying the validity of the data, a valid sample of 101 students was obtained. In this sample, 91 participants (90.1%) were female and 10 (9.9%) were male; 64 participants (63.37%) were English majors and 37 (36.63%) were non-English majors. They are all intermediate EFL learners who have passed the CET4 exam.

3. Results

3.1 Factors of L2 grit

After testing, the data of L2 grit is suitable for factor analysis (the outcome of Bartlett’s test of sphericity is significant, KMO=0.785). Two factors are extracted from the seven items through principal component analysis and maximum variance rotation. The two factors explain 56.917% of the variance, meaning the loss of information is acceptable.

As shown in Table 1, all the items of the first factor are related to the effort learners put into English study. Therefore, the first factor is “perseverance of effort (PE).” Items related to the second factor are related to the learner’s interest in studying English. Therefore, “consistency of interest (CI)” is the second factor.

Specifically, Chinese university EFL learners have a medium level of L2 grit (M=2.98, SD=0.68). Most of them have higher levels of PE (M=3.06, SD=0.80) than CI (M=2.86, SD=0.82).

Table 1. Factor analysis of Chinese university EFL learner’s L2 grit.

Item	Factors of Chinese university EFL learner’s L2 grit	
	1	2
1 I am a diligent English language learner.	0.720	
5 Now that I have decided to learn English, nothing can prevent me from reaching this goal.	0.790	
6 I will not allow anything to stop me from my progress in learning English.	0.637	
8 I spent a lot of time and effort improving my weaknesses in English learning.	0.790	
3 New subjects and projects will not interfere with my plan to learn English.		0.565
4 I used to be interested in learning English for a short period, and then lose interest.		0.754
7 I am not as interested in learning English as I used to be.		0.433
Characteristic value	2.827	1.157
Explained variance	40.388	16.529

3.2 Factors of Student’s Perceived Teacher Support

The data of students’ perceived teacher support is suitable for factor analysis (the outcome of Bartlett’s test of sphericity is significant, KMO=0.761). Through principal component analysis and maximum variance rotation, three factors are extracted from the 15 items and explain 55.175% of the variance.

Based on Table 2, all the items of the first-factor show that English teachers are helping students learn English by imparting knowledge and providing feedback. Therefore, factor 1 is named “academic support”. Items of the second

factor show that teacher express their care and support to students in their English studies. So, factor 2 is called “emotional support.” The commonality of items 1, 7, and 9 is that they are all related to the teacher’s effort to enable students to progress in English learning. Therefore, factor 3 is named “progressive support”.

Specifically, Chinese university EFL learners perceived English teacher support to be relatively high (M=3.44, SD=0.57). They perceive more academic support (M=3.80, SD=0.58) and less emotional support (M=3.27, SD=0.81) and progressive support (M=3.14, SD=0.83) in English class.

Table 2. Factor analysis of Chinese university EFL learners’ perceived English teacher support.

Item	Factors of Chinese university EFL learner’s perceived teacher support		
	1	2	3
2 The English teacher shows us how to compensate for limited knowledge (such as guessing meanings from the context, etc.).	0.519		
4 My English teacher often criticizes me harshly when I make mistakes.	0.238		
8 The English teacher expands our extracurricular cultural knowledge of the textbook content.	0.766		
10 The English teacher helps me choose suitable learning materials.	0.604		
11 The English teacher helps me choose suitable extracurricular reading materials.	0.782		
12 The English teacher shares online learning resources with me (such as word memorization software, etc.).	0.664		
15 The English teacher tells us what is expected of us when we get a test, quiz, or assignment.	0.631		
3 The English teacher pays careful attention to my studies.		0.663	
5 English teachers often express their expectations of me.		0.594	
6 The English teacher understands the difficulty of my English learning.		0.422	
13 The English teacher tells me how well I am doing in my English class.		0.822	
14 The English teacher gives me feedback on my strengths and weaknesses in learning English.		0.766	
1 The English teacher carries out special teaching for our weak points (such as attributive clauses, etc.).			0.653
7 The English teacher imparts language knowledge to us (such as the pronunciation of words, fixed usage, etc.).			0.842
9 My English teacher often corrects my learning methods (e.g., change rote learning)			0.676
Characteristic value	5.218	1.874	1.185
Explained variance	34.784	12.490	7.901

3.3 The Relationship Between L2 Grit and Teacher Support

As shown in Table 3, regarding RQ2, the Pearson correlation coefficient indicates a significant positive correlation between L2 grit and teacher support. This result suggests that the more teacher support learners perceive, the more likely they are to promote their L2 grit.

In terms of the relationships between factors, all of them are positively correlated, but not all are significant. The perseverance of effort factor of L2 grit is significantly

positively related to the whole teacher support and its factor academic support and emotional support. Consistency of interest is not significantly related to teacher support, but its positive correlation with emotional support is significant. Among the three factors of teacher support, only emotional support has a medium significant positive correlation with L2 grit. Progressive support has no significant correlation with L2 grit or its factors. These results suggest that teacher emotional support can positively affect learner’s CI and PE. Moreover, perceiving more academic support helps learners develop a higher level of PE.

Table 3. Descriptive statistics and correlations among latent variables.

	M	SD	1	2	3	4	5	6	7
1 LG	2.98	0.68	-						
2 TS	3.44	0.57	329**	-					
3 PE	3.06	0.80	880**	389**	-				
4 CI	2.86	0.82	785**	129	396**	-			
5 AS	3.80	0.58	162	731**	224*	022	-		
6 ES	3.14	0.83	446**	858**	495**	217*	426**	-	
7 PS	3.27	0.81	169	774**	194	074	333**	562**	-

Note. N=101, **p<0.01, *p<0.05, LG=L2 grit, TS=teacher support, PE= perseverance of effort, CI=consistency of interest, AS=academic support, ES=emotional support, PS=progressive support.

4. Discussion

4.1 The Structures of L2 Grit and Teacher Support

The factor analysis on L2 grit in this study supports it is a bi-dimensional structure consisting of PE and CI [5]. Most Chinese EFL learners pay great attention to L2 academic achievements, leading to their relatively low CI level but high PE level.

Teacher support is a tri-factorial structure consisting of academic, emotional, and progressive support. Because English classes in Chinese usually emphasize improving students’ test scores, the participants show a higher level of perceived academic support than other factors. It should be noted that, though a 4-dimensional questionnaire with items adapted from previous studies is adopted, the factors of teacher support obtained in this study differ from theirs [4, 8]. One of the root causes of this discrepancy may be the differences in participants’ understanding of these items, which stem from cultural differences and the age gap. However, it still conforms to the tri-factorial structure.

4.2 Relationship Between L2 Grit and Teacher Support

4.2.1 relationship between overall L2 grit and overall teacher support

This study finds that the correlation between overall L2 grit and overall teacher support is significantly positive, consistent with previous studies [1, 4, 8].

Teachers are significant participants and builders of the English class environment. The Chinese university EFL learners especially interact with English teachers with high frequency. English teachers guide Chinese EFL learners in their English studies and provide support when they encounter difficulties. To a certain extent, a high level of teacher support can help Chinese EFL learners persist in learning English and better solve problems in their studies. It reaffirms that teacher support can influence the cultivation of Chinese EFL learner’s L2 grit. Meanwhile, learners with higher L2 grit are more sensitive to teacher support.

4.2.2 Relationships between sub-factors

How the PE and CI factors of L2 grit correlate to particular teacher support dimensions has been controversial [4, 8]. This study conducts an in-depth correlational analysis based on factor analysis. It shows that the PE and CI factors of L2 grit have different correlations with particular

dimensions of teacher support.

Perseverance of effort significantly correlates with overall teacher support, emotional support, and academic support. English learning needs long-term hard work, inevitably linked to positive emotions. Teachers' emotional support, including care, encouragement, praise, and so on, can prompt students' energy with emotionally positive feedback. This result validates the collaboration and interaction among environment, emotion, and personal traits [9]. This study also finds a low-degree significant positive correlation between PE and academic support. It reveals that the learning methods, learning aids, and study resources English teachers provide can assist learners in better addressing difficulties to a certain extent and thus promote learners' confidence and perseverance. The progressive support is not significantly correlated with PE. However, the participants in this study come from various majors and university grades, which may have influenced their efforts in English learning.

Consistency of interest has a low degree of significant positive correlation with emotional support. The results indicate that Chinese EFL learners' interest in English learning is likely to be intrinsic, with little direct connection to teacher factors. However, teachers can motivate learner's interest with emotional support. English teachers' expectations, understanding, and discovery of learners' strengths can change their perception of English learning and themselves. With emotional teacher support, learners can perceive more positive emotions in English learning, facilitating interaction between individuals and the environment [10]. When learners better integrate into the English classroom, their interest will likely increase, and thus, their L2 grit can be promoted [8]. This study focuses on the relationship between L2 grit and teacher support without adding other factors. It is noteworthy that teacher support sometimes does not directly affect CI. Rather, their connection can be formed with certain kinds of mediation. Furthermore, different mediating factors may cause different connections between CI and teacher support.

5. Suggestion

The sufficient foundation of effective second language learning is to stimulate students' real participation. Educators are supposed to build a system of lessons relevant to matters close to the student's heart. Implementing a multi-media approach by incorporating videos, games, and interactive activities gives substance to the learning process and, at the same time, gives students a better appreciation of how their lessons bring practical implications.

In addition, teachers and students need to have close contact in second language learning to establish a trusting relationship. Teachers' understanding and care can help students develop a positive learning attitude and help improve their confidence and enthusiasm. So that students can feel emotional support. Build supportive classrooms so students can experience a positive and friendly environment, enabling them to learn a new language more confidently.

Finally, the teacher's continuous encouragement and motivation is crucial. Teachers should discover the students' efforts and achievements in time, working with students to develop personalized learning plans and goals through the cultural support system and reinforcement of the affirmative aspects of second language learning to build lasting drive and genuine enthusiasm.

6. Conclusion

This study delves deeper into the association between the L2 grit and teacher support factors. In general, teacher support is positively correlated with L2 grit. Regarding sub-dimensions, factor analysis reveals that the two sub-dimensions of teacher support, namely academic and emotional support, strongly correlate with PE in second language learning. At the same time, CI is only significantly positively correlated with emotional support.

This suggests that educators should pay attention to students' emotional needs and offer emotional support, academic help, and guidance during the second language acquisition process. Establishing a positive relationship between teachers and students and boosting students' excitement and interest in studying may successfully improve students' ongoing efforts and learning outcomes. This research offers a fresh viewpoint and theoretical basis for studying second language acquisition. It also offers more detailed recommendations and guidance for educators to apply in practical situations, which helps to enhance students' second language learning achievements. Finally, some limitations of the current study need to be pointed out. The participants in this study came from different grades and did not distinguish majors. These factors may have a certain impact on how L2 grit and teacher support are related. Subsequent investigations might explore teacher support and additional variables (e.g., students' capacity for self-regulation, the learning environment, etc.) in detail to find out how they interact and contribute to a deeper comprehension of the field of second language acquisition.

Authors Contribution

All the authors contributed equally, and their names were listed alphabetically.

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