ISSN 2663-8169 Vol. 7, Issue 4: 50-58, DOI: 10.25236/IJNDE.2025.070408

Motivational Profiles of Adolescent English Language Learners in China: A Multiple Regression Model

Zixian Zhang[1,*], Yanyan Chen[1], Lixiang Qiu[2]

[1]Department of Education, Hefei University, Hefei, Anhui, 230000, China
[2]Huaibei Experimental Senior High School, Huaibei, Anhui, 235000, China
**Corresponding author*

Abstract: *Based on Self-Determination Theory, the current study investigated the relationships among Chinese adolescents' motivation for learning English as a foreign language, their perceptions of psychological need satisfaction, English learning self-efficacy, and classroom engagement. Results suggested: (1) adolescents who were primarily regulated by intrinsic regulation for learning English tended to show desired learning-related behaviors; (2) adolescents who were mainly regulated by external regulation for learning English were also likely to have an intention to engage into classroom activities; (3) when adolescents perceived that teachers provided learning environment that supported their autonomy, competence, and positive relatedness, they tended to engage in learning activities. Moreover, adolescents' learning-related beliefs could predict their learning-related behaviors, for example, active involvement in learning activities.*

Keywords: *motivation; English as a foreign language; psychological need satisfaction; self-efficacy; classroom engagement; adolescents*

1. Introduction

Motivation, a psychological construct, can be used to explain one's desire to perform an action [1], as it influences what, when, and how one learns [2]. Generally, students' motivation for learning plays an important role in academic learning as well as in language acquisition[3]. Motivation may well be viewed as an antecedent of behaviors and performances rather than consequences/achievement [4]. The purpose of this study is to investigate to what extent Chinese adolescent English language learners'motivation for learning English as a foreign language, students' integrative orientation[5-6], perceptions of teachers' support for psychological need satisfaction (i.e., learning environment that supports students' autonomy, competence, and positive relatedness), and English self-efficacy (i.e., beliefs in one's ability to learn well) predict their classroom engagement (i.e., active involvement into learning activities).

1.1 Self-Determination Theory

The present study was framed by Self-Determination Theoryand its assumptions about three psychological needs that must be fulfilled to promote students' intrinsic motivation[7-8].

1.1.1 Three Basic Psychological Needs

Deci and Ryan (2000) revealed that to elicit and sustain intrinsic motivation, one requires that basic needs for competence, autonomy, and relatedness be met.

The need for competence refers to the need to have skills for taking control of the environment [9]. Students' perceptions of competence in learning would be related to both their positive relatedness and their intrinsic motivation [10]. The need for autonomy refers to one's need to have a sense of agency in interacting with the larger context. Students' perceived autonomy in learning is positively associated with their intrinsic motivation [11-12]. The need for relatedness refers to one's desire to interact with other people, to maintain close and affectionate relationships with others such as parents, teachers, and peers . When students' experienced positive feelings of relating to teachers and other students, they were more likely to have positive learning outcomes, including more intrinsic motivation [13] and a higher sense of autonomy [14].

ISSN 2663-8169 Vol. 7, Issue 4: 50-58, DOI: 10.25236/IJNDE.2025.070408

1.1.2 Motivational Regulations

Ryan and Deci (2000a, 2000b) presented a different viewpoint on motivation by considering regulatory orientations (e.g., intrinsic motivation, extrinsic motivation), locus of causality (internal, external), and regulatory processes (e.g., conscious valuing of activity). As described below, motivation-development is conceived as a continuum — from amotivation (i.e., aimless), through various levels of extrinsic motivations (i.e., relying on external rewards), to intrinsic motivation (i.e., conducting behaviors because doing so is reward in itself) **[15]**.

Amotivation refers to a psychological state in which people either have not the motivation to do a task or do a task without any intent . When one is regulated by external regulation, he or she may perform a task to obtain rewards. Next, in the continuum, comes introjected regulation. At this point, people engage in a task because they think they should and they might feel guilty if they do not finish the task. With this type of regulation, people may a small amount of internal regulation but not internally accepting it as one's own. Identified regulation involves a more autonomous and self-determined behavior than either external or introjected regulation. At this stage, people choose to do a task because it is important to them to do so or it would be good for them. The most autonomous stage of extrinsic motivation is integrated regulation. It reflects a moving into an intrinsic regulation, but still is considered as extrinsic motivation. This is because people perform a task because the task is important and it may help them develop a sense of self. Intrinsic regulation occurs when people complete actions out of their desire to do so. People who are intrinsically motivated perform behaviors because of interest, enjoyment, and inherent satisfaction.

Prior studies have shown that students' intrinsic regulation and identified regulation are often related to positive learning outcomes such as greater persistence and effort[16], higher academic self-efficacy [17], stronger perceptions of autonomy, competence, and relatedness support from learning environments [18-19], better classroom engagement , and higher levels of academic achievement . In contrast, students' external regulation and introjected regulation are often associated with negative learning outcomes such as learning anxiety [20].

1.2 Integrative Orientation

Gardner (1985) suggested that one important motivational reason for learning a second language is that a student may seek to engage with the culture and community associated with the target-language. According to Gardner[21] , an integrative orientation reflects one's motivation for learning another language because one has developed 'a sincere and personal interest in the people and culture represented by the other language group" [22]. In the field of second/foreign language acquisition, students' self-determined forms of motivational regulations – including identified regulation and intrinsic regulation – within SDT seem to be positively related to learning engagement, whereas students' integrative orientation tends to be positively associated with cultural and community engagement [23-24]. Moreover, Chen and Turner suggested that students' who were primarily regulated by intrinsic regulation and identified regulation for learning English before entering college were more likely to choose to engage in English culture and community than students who were mainly regulated by external and introjected motivational regulations in the college English program[25].

2. Relationships among Students' Motivation for Learning, Self- Efficacy, and Classroom Engagement

Previous studies suggested that there are reciprocal relations between students' motivation and learning outcomes **[26]**. In school settings, engagement refers to the degree of a student's active involvement in instructional activities **[27]**. Students' classroom engagement is a personal construct that may predict learning outcomes; meanwhile, it also reveals students' underlying motivation **[28]**. Research findings have shown that students' engagement in learning could predict their academic performance and achievement ; at the same time, it is also viewed as an important indicator of students' underlying motivation during instruction [29].

Self-efficacy refers to 'beliefs in one's capabilities to organize and execute the courses of actions required to produce given attainments" [30]. In school settings, students who feel more self-determined in learning are likely to have less learning anxiety, more positive attitudes toward learning, and higher academic self-efficacy [31]. As for the relationship between students' academic self-efficacy and classroom engagement, Bandura (1997) stressed that when individuals have high self-efficacy

ISSN 2663-8169 Vol. 7, Issue 4: 50-58, DOI: 10.25236/IJNDE.2025.070408

perceptions, they are more likely to engage in tasks that facilitate the development of capabilities and skills than individuals whose self-efficacy is low. Prior studies have indicated that high levels of self-efficacy can instigate and sustain task engagement [32].

Based on the above literature review results, we addressed the following research questions:

Does students' motivation for learning English predict their classroom engagement?

Do students' integrative orientation for learning English and perceptions of teachers' support for psychological need satisfaction incrementally contribute to predicting their classroom engagement?

Does students' English self-efficacy incrementally contribute to predicting their classroom engagement?

3. Method

3.1 Participants and Procedures

This study was conducted in two urban junior high schools in a capital city in the southeast of China. Surveys were created by using an online survey tool of Qualtrics.. The sample consisted of 620 adolescents recruited from two junior high schools located in an urban area of a capital city in Southeast China. 226 (36.45%) were male students, and the student participants were 12 to 15 years old (78 participants were 12 years old; 338 participants were 13 years old; 104 participants were 14 years old; 100 participants were 15 years old; M = 13.74 years, SD = 0.94). 466 (75.16%) were identified as the only child in the family.

3.2 Instruments

The surveys were composed of statements that elaborate students' perceptions, feelings, and beliefs about their English learning experience. Participants were asked to respond to each statement with their levels of agreement based on a five-point Likert scale including, "1 = Not at All True For M', "2 = A Little Bit True For Me', '3 = Somewhat True For Me", '4 = Very True For Me", and '5 = Extremely True For Me".

3.2.1 Students' Motivational Regulations

To measure students' motivational regulations (i.e., external regulation, introjected regulation, identified regulation, and intrinsic regulation), they were asked to complete an adapted Chinese version of Noels et al.'s Language Learning Orientation Scale – Intrinsic Motivation, Extrinsic Motivation, and Amotivation Subscales (LLOS-IEA)[33]. For example, in Noel's, there is an item that was used to measure language learners' external regulation, 'I learn a second language in order to have a better salary later on." We modified this item to be, 'I learn English in order to have a better salary later on." In this study, the associated Cronbach's α of students' motivational regulations was .89.

3.2.2 Students' Integrative Orientation for Learning English

Items measuring students' integrative orientation for learning English were developed based on the Chinese version Gardner's (1985) Integrative Orientation Scale in Attitude/ Motivation Test Battery (AMTB). Items were modified to assess adolescent English learners' desire to learn English for integrative or social reasons (e.g., better understanding and appreciating English culture or participating more freely in the activities of other international cultural groups). In this study, the associated Cronbach's α of students' integrative orientation was .91.

3.2.3 Students' Perceptions of Teachers' Support for Psychological Need Satisfaction

Items measuring students' perceptions of teachers' support for psychological need satisfaction were developed based on the Chinese version of Klassen, Perry, and Frenzel' [34]autonomy support scale. Klassen et al.'s (2012) scale was adapted from Baard, Deci, and Ryan's [35] the Work Climate Questionnaire (WCQ) to particularly measure the supportive climate in school settings. Klassen et al. (2012) adapted the original scale to assess teachers' perceptions of principals' support for autonomy, competence, and positive relatedness in their schools.

In this study, items were modified to investigate students' feelings of being closely related to other students and teachers in their English classes. For example, the item, 'I feel understood by my principal" was changed to, 'I feel understood by my teachers." In this study, the associated Cronbach's α of students'

ISSN 2663-8169 Vol. 7, Issue 4: 50-58, DOI: 10.25236/IJNDE.2025.070408

perceptions of teachers' support for psychological need satisfaction was .92.

3.2.4 Students' English self-efficacy

Items that measure students' English self-efficacy was adapted from Torres and Turner's Foreign Language Self-Efficacy Scale (FLSES)[36] . The original scale was to assess students' self-perceived competence in foreign language skills including listening, speaking, reading, and writing. In the present study, items were revised to measure students' self-efficacy in learning English as a foreign/second language. For example, there was an item measuring about students' self-efficacy in foreign language writing, 'write your teacher an email in the foreign language". We changed it to be, 'write my teacher an email in English". Items were translated by two doctoral students majored in educational psychology and one master student majored in English linguistics. In this study, the associated Cronbach's α of students' English self-efficacy was .94.

3.2.5 Students'classroom engagement

Students' classroom engagement scale was adapted from the Chinese version of Revee and Tseng's[37] study on students' engagement during learning activities. The items that were used in Revee and Tseng's study originally measured high school students' classroom engagement. We revised the items by focusing on the context of learning English as a foreign language. For example, an item that was used to measure students' behavioral engagement is, 'I try very hard in school". We adjusted the item to be, 'I try hard to do well in English class". In this study, the associated Cronbach's α of students' classroom engagement was .93.

4. Results

As might be expected for this sample of Chinese adolescent English language learners, most students'; ratings on the above-mentioned constructs were high. SPSS was used for conducting data analysis. Table 1 displays descriptive statistics of variables, and Table 2 displays the inter-relationships among variables.

Table 1 Descriptive statistics of major variables

Variable	Mean	Median	Range	SD	Skewness	Kurtosis
Students' intrinsic regulation	3.66	3.67	4.00	.78	-.22	-.17
Students' identified regulation	4.29	4.33	4.00	.75	-1.15	1.40
Students' introjected regulation	2.69	2.67	4.00	1.01	.16	-.66
Students' external regulation	2.91	3.00	4.00	.98	-.03	-.47
Students' integrative orientation	3.55	3.63	4.00	.82	-.21	-.29
Students' need satisfaction	3.42	3.43	3.67	.73	-.03	-.20
Students' self-efficacy	3.74	3.75	3.38	.63	-.09	-.19
Students' classroom engagement	3.60	3.59	3.35	.71	-.01	-.34

Table 2 Correlation matrix of major variables

	1	2	3	4	5	6	7	8
1. Students' intrinsic regulation	—							
2. Students' identified regulation	.58**	—						
3. Students' introjected regulation	.35**	.27**	—					
4. Students' external regulation	.21**	.25**	.45**	—				
5. Students' integrative orientation	.56**	.45**	.40**	.30**	—			
6. Students' need satisfaction	.48**	.34**	.32**	.27**	.49**	—		
7. Students' self-efficacy	.44**	.36**	.25**	.16**	.48**	.53**	—	
8. Students' classroom engagement	.57**	.39**	.27**	.23**	.50**	.65**	.67**	—

Notes. * $p < 0.05$; ** $p < .01$

ISSN 2663-8169 Vol. 7, Issue 4: 50-58, DOI: 10.25236/IJNDE.2025.070408

Table 3 Hierarchical Regression Analysis Predicting Adolescents' Classroom Engagement

	Step and predictor variable	R^2	ΔR^2	B	SE B	β
Step 1:	Motivational regulations	.34**	.34**			
	Intrinsic regulation			.45	.04	.50**
	Identified regulation			.07	.04	.08
	Introjected regulation			.03	.03	.04
	External regulation			.06	.03	.08*
Step 2:	Motivational regulations with psychological need satisfaction and integrative orientation	.52**	.52**			
	Intrinsic regulation			.25	.04	.28**
	Identified regulation			.03	.03	.03
	Introjected regulation			-.02	.02	-.03
	External regulation			.01	.02	.02
	Psychological need satisfaction			.45	.03	.46**
	Integrative orientation			.10	.03	.11**
Step 3:	Motivation, psychological need satisfaction, integrative orientation, and self-efficacy	.62**	.61**			
	Intrinsic regulation			.22	.03	.24**
	Identified regulation			-.00	.03	-.01
	Introjected regulation			-.02	.02	-.03
	External regulation			.02	.02	.03
	Psychological need satisfaction			.32	.03	.33**
	Integrative orientation			.02	.03	.03
	Self-efficacy			.43	.04	.38**

Notes. * $p < .05$, ** $p < .01$

Students' classroom engagement is an important construct that may predict learning outcomes and at the same time, may reveal students' underlying motivation [38]. In this study, we were particular interested in understanding the relationship of the motivational regulations, as well as learning experiences (i.e., classroom contexts that satisfy their psychological needs, engagement into the target language culture and community) and learning-related beliefs, to adolescents' active involvement in learning activities. Therefore, we conducted a hierarchical regression analysis that included the motivational regulations (i.e., intrinsic regulation, identified regulation, introjected regulation, external regulation), adolescents' psychological need satisfaction (i.e., teachers' support for autonomy, competence, and positive relatedness to promote intrinsic motivation), integrative orientation (i.e., students' willingness to engage in the target language culture and community), and adolescents' self-efficacy (i.e., students' learning-related beliefs) as predictor variables. This analysis allowed us to test the relative importance of adolescents' motivational regulations, their learning experiences as well as each individual variable of predictive value concerning adolescents' engagement in class.

Our first interest was in determining whether adolescents' motivational regulations in SDT, might explain why they engaged in classroom activities. Using classroom engagement as the dependent variable, the motivational regulations were the first predictor variables entered into the regression equation. The motivational regulations were moderately significantly related to adolescents' classroom engagement, $R2 = .34$, $F (4, 615) = 80.15$, $p < .01$. Among four motivational regulations (see Table 3), intrinsic regulation and external regulation contributed significantly to the prediction of their classroom engagement.

The second regression equation added the components of adolescents' perceptions of teachers' support for psychological need satisfaction and adolescents' engagement into the target language culture and community to investigate the incremental value of these variables to the prediction of adolescents' engagement into classroom activities. Our interest was in determining whether motivation supportive environment and adolescents' inclination to engaging in the target language culture and community might explain why students engaged in classroom activities, after statistically controlling for the influence of variables of motivational regulations. The entry of the two motivation-related variables into the regression equation resulted in a significant multiple regression, $R2 = .52$, $F (6, 613) = 111.95$, $p < .01$, with a significant change in R2 (.18, $p < .01$). Individual variables that emerged at this level of the analysis (see Table 3) included adolescents' intrinsic regulation, $\beta = .28$, $p < .01$, adolescents' perceptions of teachers' support for psychological need satisfaction, $\beta = .46$, $p < .01$, and students' integrative orientation,

ISSN 2663-8169 Vol. 7, Issue 4: 50-58, DOI: 10.25236/IJNDE.2025.070408

$\beta = .11$, $p < .01$.

Finally, the variable of adolescents' learning-related beliefs was entered into the equation to determine whether their beliefs in their ability to learn English well would incrementally contribute to predicting adolescents' classroom engagement. Results (see Table 3) showed that learning-related-beliefs variable significantly added to the prediction of students' classroom engagement, $R2 = .61$, $F (7, 612) = 140.85$, $p < .01$, R2 change = .09. The individual variables that emerged from this analysis included adolescents' intrinsic regulation, $\beta = .24$, $p < .01$, adolescents' perceptions of teachers' support for psychological need satisfaction, $\beta = .33$, $p < .01$, and adolescents' English self-efficacy, $\beta = .38$, $p < .01$.

5. Discussion

Based on Self-Determination Theory (SDT, Deci & Ryan, 1985, 2000; Ryan & Deci, 2000a, 2000b)[39], we investigated the extent to which Chinese adolescent English learns' personal factors (i.e., students' motivational regulations, integrative orientation, and students' English self-efficacy) and the contextual factor of their perceptions of teachers' support for psychological need satisfaction contributed together to explain students' classroom engagement.

Based on SDT, intrinsic motivation strengthens one's will and one's will makes use of intrinsic motivation to 'satisfy needs, resolve conflicts among competing needs, and hold needs in check"[40]. Zhou and Xu (2012) suggested that having internal motives catalyzes a chain of behaviors that results in the realization of one's goals. Results of this study supported previous studies in that students' intrinsic regulation directly predicted students' classroom engagement. In other word, when students were primarily regulated by intrinsic regulations (e.g., interest in learning English), they were likely to engage in instructional activities than students' who were primarily regulated by either identified regulation (e.g., choosing an English-related career) or introjected regulation (e.g., feeling guilty if do not learn English).

Empirical studies in various domains have shown that intrinsic regulation and identified regulation is associated with positive outcomes, whereas introjected regulation, and external regulation was often related to negative/undesired outcomes such as anxiety [41]. For example, Rothes, Lemos, and Gonçalves (2017) found that students who were primarily motivated by introjected regulation and external regulation were less likely to (1) improve their academic self-efficacy, (2) engage in learning tasks, and (3) use deep learning strategies compared to students who were motivated by intrinsic regulation and identified regulation. Aligned with literature, students' introjected regulation did not directly predict students' classroom engagement. However, in this study, different from previous studies, we did not find that identified regulation (e.g., choosing an English-related career) could predict students' classroom engagement. Moreover, different from previous studies, students' external regulation (e.g., learning English for gaining rewards) seemed to directly predict students' classroom engagement. In other words, students' who were primarily regulated by external regulation were also likely to engage in instructional activities in class.

Additionally, consistent with previous literature, the current study suggested that students' intrinsic regulation was related to students' perceptions of having their psychological needs for autonomy, competence, and positive relatedness fulfilled. Regarding the relationship between one's intrinsic motivation and psychological-needs, Deci and Ryan (2000) discussed that, to elicit and sustain internal choice, one's psychological-needs for autonomy, competence, and positive relatedness should be met. In other words, all of these inner motivational resources are required to maintain and promote students' engagement (Ryan & Deci, 2017). Students who perceived teachers' support for psychological need-satisfaction tended to choose to engage in instructional tasks (Hassan & Al-Jubari's, 2016). As for students' perceptions of teachers' support for psychological need-satisfaction, the mean and median of this variable were moderate, indicating that students perceived their teachers as moderately supportive. This finding suggests that English teachers of adolescent English learners in this study embraced and enacted some elements of autonomy-support during their instruction. While they may have lacked systematic training on how to practice autonomy-supportive instruction, they did not exhibit a lack of support. To some extent, this finding supported Jang et al.'s (2009) conclusion that, in collectivist cultures, teachers may provide autonomy-supportive learning contexts in ways that likely meet students' basic psychological needs, and as a consequence, promote their positive school functioning (i.e., students' high ratings in internal choice for learning English).

As for students' integrative orientation, previous studies suggested that in the field of second/foreign language acquisition, students' intrinsic regulation and identified regulation within SDT seem to be positively related to learning engagement, whereas students' integrative orientation tends to be positively

ISSN 2663-8169 Vol. 7, Issue 4: 50-58, DOI: 10.25236/IJNDE.2025.070408

associated with cultural and community engagement (Noels, 2001a; Pae, 2008). Results of the current study not only showed that students' intrinsic regulation for learning English directly predicted their integrative orientation, but also showed that students' integrative orientation directly predicted students' high levels of classroom engagement. This finding adds to the literature the idea that, for Chinese adolescent English learners, students who have their psychological needs fulfilled are likely to have a greater intention to engage in English culture and community. Previous studies suggested that, to promote students' integrative orientation for learning English, teachers should incorporate cultural materials into the class .. In junior high English programs in China, English teachers not only teach English language-related skills (e.g., listening, speaking, reading, writing, grammar), but also incorporate English cultural materials into every English-course . Thus, for Chinese adolescent English learners, their perceptions of teachers' support for psychological-needs likely enhanced their overall learning experience, thus, supporting students' learning-related beliefs, such as a greater intention to engage in the target-language culture and community.

As for the relationship between students' learning-related beliefs and behaviors, results of the current study suggested that adolescents who had high levels of English self-efficacy were likely to engage in classroom activities. This finding was aligned with previous studies in that students' beliefs about their abilities was an important precursor to their completion of academic tasks [41].

6. Conclusion

Findings of the current study showed that Chinese adolescent English language learners, who were primarily regulated by intrinsic regulation for learning English (i.e., interest in learning English) tended to show desired learning-related behaviors (e.g., active involvement in learning activities). Nevertheless, adolescents who were primarily regulated by external regulation for learning English (i.e., performing a task for obtaining rewards) were also likely to have an intention to engage into learning activities in class. Moreover, when adolescents perceived that teachers provided learning environment that supported their autonomy, competence, and positive relatedness, they tended to engage in learning activities. As for the relationship between students' English self-efficacy and their classroom engagement, this study showed that adolescents' learning-related beliefs could predict their learning-related behaviors, for example, active involvement in learning activities.

Chinese adolescent English language learners' motivation for learning English as a foreign language was a topic worthy of study. Future research would help explore nuances of the positive or negative effects of students' external motivational-regulations within Self-Determination Theory and, thereby, enhance SDT's explanatory power for understanding students' motivational regulations for learning in Eastern collectivist cultures.

Acknowledgements

2022 Anhui Provincial University Humanities Research Fund Project, project name: Analysis of the Influence of Parents' Positive Emotional Support--An empirical study based on the first generation of college students in Anhui Province (Project number: 2022AH051775)

References

[1] Pintrich, P. R. (2003). A motivational science perspective on the role of student motivation in learning and teaching contexts. Journal of Educational Psychology, 95(4), 667–686. DOI: 10.1037/0022-0663.95.4.667

[2] Schunk, D. H. (1995). Self-efficacy and education and instruction. In J. E. Maddux (Ed.), The Plenum series in social/clinical psychology. Self-efficacy, adaptation, and adjustment: Theory, research, and application (pp. 281–303). New York, NY, US: Plenum Press.

[3] Dörnyei, Z. (2005). The psychology of the language learner: Individual differences in second language acquisition. Mahwah, NJ: Lawrence Erlbaum.

[4] Deci, E. L., & Ryan, R. M. (2000). The 'what" and 'why" of goal pursuits: Human needs and the self-determination of behavior. Psychological Inquiry, 11(4), 227–268. doi.org/10.1207/S15327965PLI1104_01

[5] Noels, K. A., Pelletier, L. G., & Vallerand, R. J. (2000). Why are you learning a second language? Motivational Orientations and self-determination theory. Language Learning, 50, 57–85.

ISSN 2663-8169 Vol. 7, Issue 4: 50-58, DOI: 10.25236/IJNDE.2025.070408

[6] Deci, E. L., & Ryan, R. M. (1985). Intrinsic motivation and self-determination in human behavior. New York: Plenum.
[7] Ryan, R. M., & Deci, E. L. (2000a). Intrinsic and extrinsic motivations: Classical definitions and new directions. Contemporary Educational Psychology, 25(1), 54–67. doi: 10.1006/ceps.1999.1020
[8] Ryan, R. M., & Deci, E. L. (2000b). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. American Psychologist, 55(1), 68–78. doi: 10.1037110003-066X.55.1.68
[9] White, R. W. (1959). Motivation reconsidered. Psychological Review, 66, 297–333.
[10] Jang, H., Reeve, J., Ryan, R. M., Kim, A. (2009). Can self-determination theory explain what underlies the productive satisfying learning experiences of collectivistically oriented Korean students? Journal of Educational Psychology, 101(3), 644-661. doi: 10.1037/a0014241
[11] Noels, K. A., Clément, R., & Pelletier, L. G. (1999). Perceptions of teacher communicative style and students' intrinsic and extrinsic motivation. Modern Language Journal, 83, 23–34.
[12] Reeve, J. (2006). Teachers as facilitators: What autonomy-supportive teachers do and why their students benefit. The Elementary School Journal, 106(3), 225–236.
[13] Dörnyei, Z. (2001). Teaching and researching motivation. Harlow, England: Longman.
[14]Ryan, R. M. (1991). The nature of the self in autonomy and relatedness. In G. R. Goethals & J. Strauss (Eds.), Multidisciplinary perspectives on the self (pp. 208-238). New York: Springer-Verlag.
[15] Deci, E. L., & Ryan, R. M. (2000). The 'what" and 'why" of goal pursuits: Human needs and the self-determination of behavior. Psychological Inquiry, 11(4), 227–268. doi.org/10.1207/S15327965PLI1104_01
[16] Hardre, P. L., & Reeve, J. (2003). A motivational model of rural students' intentions to persist in, versus drop out of, high school. Journal of Educational Psychology, 95(2), 347–356. DOI: 10.1037/0022-0663.95.2.347
[17] Alivernini, F., & Lucidi, F. (2011). Relationship between social context, self-efficacy, motivation, academic achievement, and intention to drop out of high school: A longitudinal study. The Journal of Educational Research, 104(4), 241–252. DOI: 10.1080/00220671003728062
[18] Carreira, J. M. (2012). Motivational orientations and psychological needs in EFL learning among elementary school students in Japan. System, 40(2), 191–202. DOI: 10.1016/j.system.2012.02.001
[19] Hiromori, T. (2003). What enhances language learners' motivation? High school English learners' motivation from the perspective of Self-Determination Theory. JALT Journal, 25(2), 173–186.
[20] Reeve, J., Deci, E. L., & Ryan, R. M. (2004). Self-determination theory: A dialectical framework for understanding socio-cultural influences on student motivation. In D. M. McInerney & S. Van Etten (Eds.), Big theories revisited (pp. 31-60). Greenwich, CT: Information Age Press.
[21] Gardner, R. C. (1985). Social psychology and second language learning: The role of attitudes and motivation. London: Edward Arnold.
[22] Lambert, W. E. (1974).Culture and language as factors in learning and education. In F. F. Aboud & R. D. Meade (Eds.), Cultural factors in learning and education (pp. 91–122). Bellingham: Western Washington State University.
[23] Noels, K. A. (2001a). New orientations in language learning motivation: Towards a model of intrinsic, extrinsic, and integrative orientations and motivation. In Z. Dörnyei & R. Schmidt (Eds.), Motivation and second language acquisition (Technical Report No. 23, pp. 43–68). Honolulu: University of Hawaii, Second Language Teaching and Curriculum Center.
[24] Pae, T. (2008). Second language orientation and self-determination theory: A structural analysis of the factors affecting second language achievement. Journal of Language and Social Psychology 27(1), 5–27.
[25] Chen, Y., & Turner, J. (2018, April). What motivated Chinese undergraduate English majors to choose English as a college major? A grounded theory study. Paper presented at poster session at the annual meeting of the American Educational Research Association, New York, NY.
[26] Schunk, D. H., Pintrich, P. R., & Meece, J. L. (2008). Motivation in Education: Theory, Research, and Applications (3rd ed.). Upper Saddle River: Pearson.
[27] Skinner, E. A., Kindermann, T. A., Connell, J. P., & Wellborn, J. G. (2009). Engagement as an organizational construct in the dynamics of motivational development (pp. 223–245). In K. Wentzel & A. Wigfield (Eds.), Handbook of motivation in school. Mahwah, NJ: Erlbaum.
[28] Reeve, J., Deci, E. L., & Ryan, R. M. (2004). Self-determination theory: A dialectical framework for understanding socio-cultural influences on student motivation. In D. M. McInerney & S. Van Etten (Eds.), Big theories revisited (pp. 31-60). Greenwich, CT: Information Age Press.
[29] Furrer, C., & Skinner, E. (2003). Sense of relatedness as a factor in children's academic engagement and performance. Journal of Educational Psychology, 95(1), 148–162. DOI: 10.1037/0022-0663.95.1.148

ISSN 2663-8169 Vol. 7, Issue 4: 50-58, DOI: 10.25236/IJNDE.2025.070408

[30] Bandura, A. (1997). Self-efficacy: The exercise of control. New York: Freeman.
[31] Pae, T. (2008). Second language orientation and self-determination theory: A structural analysis of the factors affecting second language achievement. Journal of Language and Social Psychology 27(1), 5–27.
[32] Llorens, S., Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2007). Does a positive gain spiral of resources, efficacy beliefs and engagement exists? Computers in Human Behavior, 23, 825–841. doi:10.1016/j.chb.2004.11.012
[33] Noels, K. A., Pelletier, L. G., & Vallerand, R. J. (2000). Why are you learning a second language? Motivational Orientations and self-determination theory. Language Learning, 50, 57–85.
[34] Klassen, R. M., Perry, N. E., & Frenzel, A. C. (2012). Teachers' relatedness with students: An underemphasized component of teachers' basic psychological needs. Journal of Educational Psychology, 104(1), 150–165. doi: 10.1037/a0026253
[35] Baard, P. P., Deci, E. L., & Ryan, R. M. (2004). Intrinsic need satisfaction: A motivational basis of performance and well-being in two work settings. Journal of Applied Social Psychology, 34(10), 2045–2068. doi: 10.1111/j.1559-1816.2004.tb02690.x
[36] Torres, K. M., & Turner, J. E. (2016). Students' foreign language anxiety and self-efficacy beliefs across different levels of university foreign language coursework. Journal of Spanish Language Teaching, 3, 57–73. DOI: 10.1080/23247797.2016.1163101
[37] Reeve, J., & Tseng, M. (2011). Agency as a fourth aspect of student engagement during learning activities. Contemporary Educational Psychology, 36(4), 257–267. doi:10.1016/j.cedpsych.2011.05.002
[38] Reeve, J., Deci, E. L., & Ryan, R. M. (2004). Self-determination theory: A dialectical framework for understanding socio-cultural influences on student motivation. In D. M. McInerney & S. Van Etten (Eds.), Big theories revisited (pp. 31-60). Greenwich, CT: Information Age Press.
[39] McEown, M. S., Noels, K. A., & Saumure, K. D. (2014). Students' self-determined and integrative orientations and teachers' motivational support in a Japanese as a foreign language context. System, 45(1), 1–15. DOI: 10.1016/j.system.2014.06.001
[40] Chen, Y., & Turner, J. (2018, April). What motivated Chinese undergraduate English majors to choose English as a college major? A grounded theory study. Paper presented at poster session at the annual meeting of the American Educational Research Association, New York, NY.
[41] Walker, C. O., Greene, B. A., & Mansell, R. A. (2006). Identification with academics, intrinsic/extrinsic motivation, and self-efficacy as predictors of cognitive engagement. Learning and Individual Differences, 16(1), 1–12.