Exploring the Relationships among L2 Anxiety, L2 Self-guides, Regulatory Focus and Motivated Behaviors



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Outline



- Literature Review
- Methods
- Data Analysis and Results
- Discussion and Conclusion
- Pedagogical Implications
- Limitations and Future Directions



Literature Review

- The role of L2 anxiety in language learning and teaching: detrimental? Beneficial? Or both?
- Students should experience some tension to create a desire to learn, because if anxiety is at a level that creates no challenges for the students, it is likely that they will make slower or no progress in learning(Young, 1992)
- "Everyone experiences vibes and/or emotions, along with an increasing or decreasing heart rate, but neither is itself stimulating or debilitating—how the emotion is interpreted or appraised forms the basis of action." (Gregersen, MacIntyre & Meza, 2014, p.98)
- Both teachers and students recognize the positive and negative aspects of L2 anxiety (Tran, Baldauf & Moni, 2013)



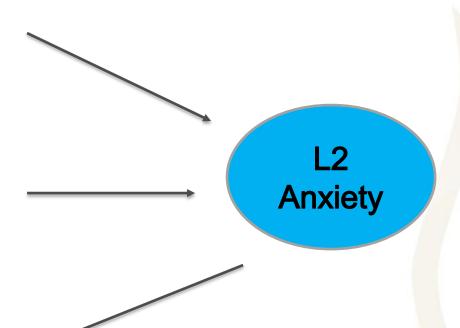
- L2 anxiety positively predicted motivated behavior (Papi, 2010)
- "The desire to meet the expected performance standards in learners with the prevention-focused motives result in some degrees of L2 anxiety and motivated behaviors at the same time" (Papi & Teimouri, 2014, p.518)
- L2 anxiety fits the motivational orientation of learners with a predominant prevention focus and plays a facilitative role by keeping them alert to the presence of possible negative outcomes. (Teimouri, 2017)
- MacIntyre, Mackinnon and Clément (2009) mentioned, "the emotions experienced are critical to understanding the motivational properties of possible selves.... Emotions are fundamentally important motivators. Without a strong tie to the learner's emotional system, possible selves exist as cold cognition, and therefore lack motivational potency" (p.47).
- This study: attempts to explore the motivational factors underlying the construct of L2 anxiety and examine if differences in learners' motivational characteristics could explain the facilitative vs. debilitative controversy.





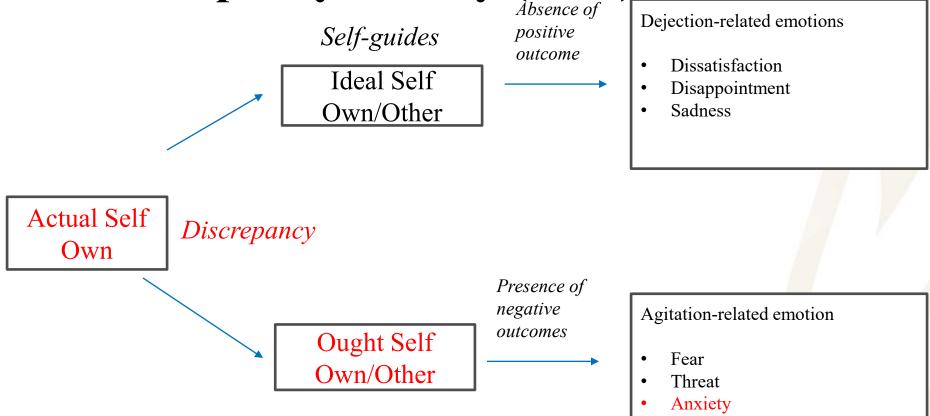
Regulatory Focus

Motivated Behaviors





Self-discrepancy Theory (SDT)



Ideal own: I can imagine a day I could be a doctor.

Ideal other: My family hopes a day I could be a doctor.

Ought own: If I don't pass the exam, it will have a negative impact in my future.

Ought other: My parents blame me if I fail to become a doctor.

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Regulatory Focus Theory (RFT)



Promotion – focused
Student A

Envision success,
More eager
Read more
materials

Envision failure because does not do extra work

Does not follow enough guidelines to success

Does not achieve goal Experience negative fit

Attain goal
Achieve positive
regulatory fit

Preventionfocused Student B

More vigilance, adheres to courses requirement

from I or



Relationships between SDT and RFT

Ideal Self Own/Other

A Promotion Focus

Related to aspiration and positive results

Ought Self Own/Other

A Prevention Focus

Anxiety

- Related to responsibilities
- sensitive to negative outcomes
- Using vigilant strategies

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Methods

Research questions

- **RQ1**: What are the relationships among regulatory focus and L2 anxiety for undergraduates majoring in English in China?
- **RQ2**: What are the relationships among L2 self-guides and L2 anxiety for undergraduates majoring in English in China?
- **RQ3**: Are the relationships among L2 self-guides and L2 anxiety mediated by regulatory focus for undergraduates majoring in English in China?
- **RQ4**: Are the relationships among regulatory focus and L2 anxiety mediated by L2 self-guides for undergraduates majoring in English in China?
- **RQ5**: What are the relationships between L2 anxiety and motivated behaviors for Chinese English-major undergraduates with a predominant promotion focus versus those with a predominant prevention focus?

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Participants

- 161 Chinese undergraduates majoring in English (22 male, 131 female, and 8 missing)
- 17 to 21 years old with a mean of (SD=.92)
- Freshmen (45.35%) and sophomores (53.4%)
- Self-reported English proficiency level: Intermediate (56.5%), and Lower-Intermediate (28%)



Instruments

- The Regulatory Focus Questionnaire (RFQ)
- A new L2 self-guides questionnaire (Papi et al., 2019)
- A new motivated behavior questionnaire
- L2 anxiety questionnaire
- Background information

Data Analysis and Results

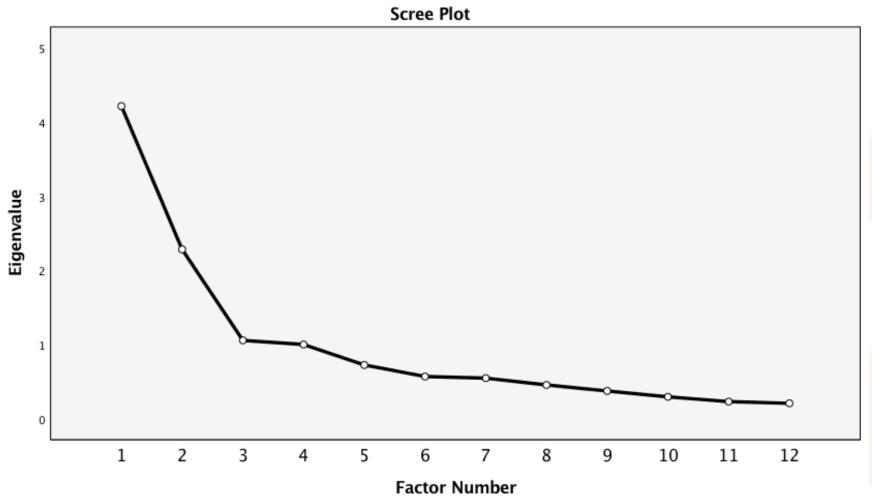
- Exploratory Factor Analysis (EFA) for L2 self-guides
- Regulatory focus vs. L2 anxiety (RQ1)
- L2 Self-guides vs. L2 anxiety (RQ2)
- Mediators (RQ3 & RQ4)
- Motivated behaviors vs. L2 anxiety (RQ5)



EFA

Item No.	M	SD	Ideal L2 Self/Own	Ought-to L2 Self/Other	Ideal L2 Self/Other	Ought-to L2 Self/Own	h2
17	4.96	1.02	.79				.63
12	4.75	1.12	.75				.51
28	4.88	1.02	.73				.63
27	4.96	.97	.62				.73
22	2.74	1.31		.76			.58
32	3.19	1.32		.55			.46
13	5.19	.94			84		.67
19	5.28	1.05			53		.40
29	4.65	1.20			35		.37
26	4.38	1.27				81	.71
21	4.56	1.36				71	.53
23	3.89	1.35				71	66
57.23% of variance			4.21	2.28	1.06	1.00	







	1851	7
Factors	M(SD)	α
Ideal L2 Self/Own 12. I can imagine a day when I speak English like a native speaker of English. 17. I can imagine a day when I speak English fluently with international friends/colleagues. 27. I can imagine a day when I write effectively and read fluently in English. 28. I can imagine a day when I use English effectively to communicate with people from all around the world.	4.88 (.86)	.85
Ideal L2 Self Other 13. My family hopes that one day I will speak English fluently. 19. My family will be proud of me if one day I master the English language. 24. It is my parents' hope that one day I will speak English fluently. (DELETED) 29. The people who are important to me hope that one day I will master the English language.	5.04 (.82)	.65
Ought-to L2 Self Own 15. If I don't improve my English, it will have a negative impact on my future. (DELETED) 21. If I don't work on my English, I will fail in my future career. 23. If I don't work on my English, I will fail in my social life. 26. If I don't work on my English, I will fail in university.	4.27 (1.14)	.83
Ought-to L2 Self Other 16. If I don't learn English, I will disappoint my parents/teachers. (DELETED) 18. It will upset my family/teachers if I fail to learn English. (DELETED) 22. My family puts a lot of pressure on me to learn English. 32. If I fail to learn English, my family/teachers will blame me.	2.96 (1.14)	.67



Reliability coefficient

· ·		
Variables	M (SD)	α
L2 Anxiety	3.66(.96)	.85
Motivated Behaviors	4.31(.73)	.77
Promotion	3.04(.52)	.62
Prevention	3.74(.64)	.71
Ideal L2 Self/Own	4.88(.86)	.85
Ideal L2 Self/Other	5.04(.82)	.65
Ought-to L2 Self/Own	4.27(1.14)	.83
Ought-to L2 Self/Other	2.96(1.14)	.67

Regulatory focus v.s. L2 anxiety (RQ 1)

Outcome	Predictors	В	Std.	Beta	t	95% CI
Variable			Error			
	(Constant)	5.25	.57		9.23***	[4.12, 6.37]
L2 Anxiety	Prevention	.06	.12	.04	.49	[17, .28]
R ² =10	Promotion	59	.14	32	- 4.15***	[87,31]

^{*}*p* < .05, ***p* < .01, ****p* < .001



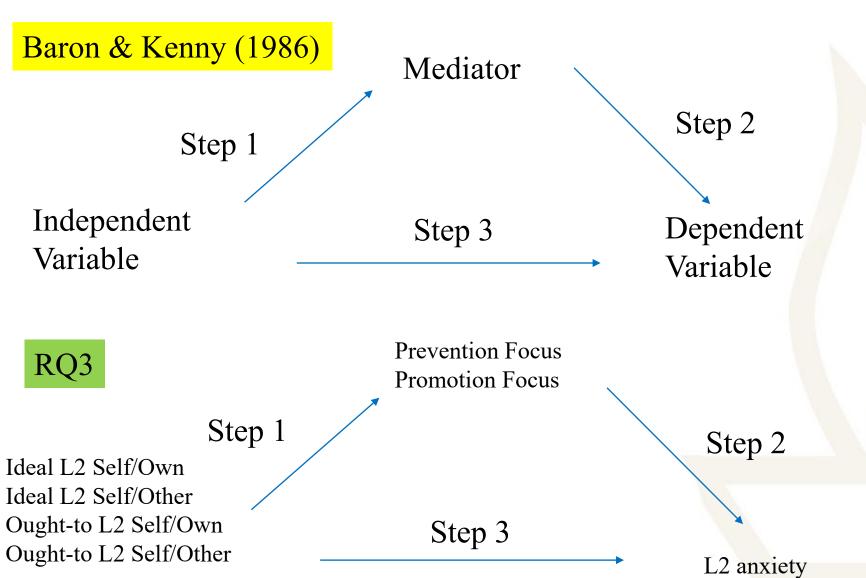
L2 self-guides v.s. L2 anxiety (RQ 2)

Outcome Variable	Predictors	В	Std. Error	Beta	t	95% CI
	(Constant)	2.99	.52		5.82***	[1.98, 4.01]
L2 Anxiety	Ideal L2 Self/Own	26	.10	23	-2.61**	[46,06]
$R^2 = .17$	Ideal L2 Self/Other	.13	.11	.11	1.22	[08, .34]
	Ought-to L2 Self/Own	.17	.07	.20	2.27*	[.02, .31]
	Ought-to L2 Self/Other	.19	.07	.23	2.80**	[.06, .33]

^{*}p < .05, **p < .01, ***p < .001



Mediators (RQ 3)





Step 1

Outcome	Predictor Variable	В	Std. Error	Beta	t	Sig.
Variable						
	(Constant)	3.71	.35		10.59	<.001
Prevention	Ideal L2 Self/Own	19	.07	25	-2.74	<.05
	Ideal L2 Self/Other	.30	.07	.38	4.16	<.001
$R^2 = .13$	Ought-to L2 Self/Own	07	.05	13	-1.47	.14
	Ought-to L2 Self/Other	09	.05	15	-1.84	.07
	(Constant)	2.70	.29		9.18	<.001
Promotion	Ideal L2 Self/Own	.14	.06	.23	2.44	<.05
	Ideal L2 Self/Other	002	.06	004	04	.97
$R^2 = .06$	Ought-to L2 Self/Own	08	.04	17	-1.81	.07
	Ought-to L2 Self/Other	<.001	.04	.00	.002	.99

p < .05, **p < .01, ***p < .001



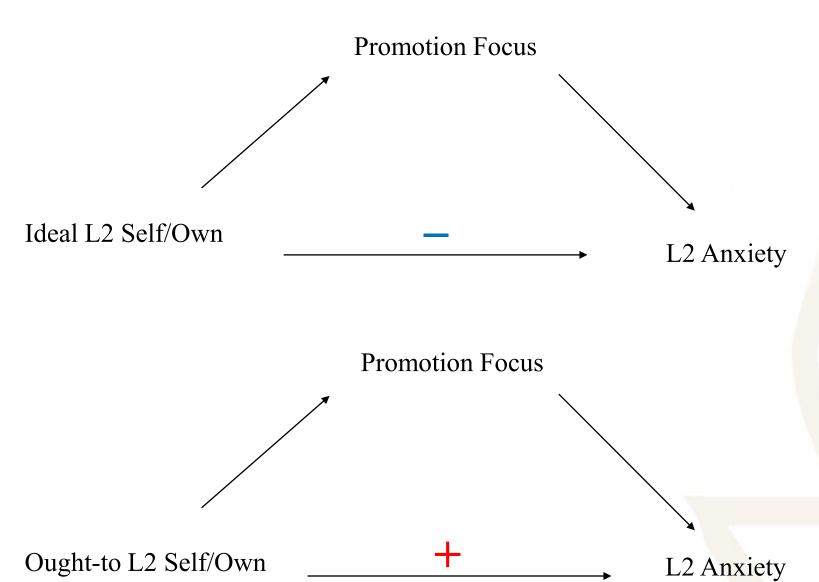
Step 2

Outcome Variable	Predictor Variable	В	Std. Error	Beta	t	Sig.
	(Constant)	5.25	.57		9.23	<.001
L2 Anxiety	Prevention	.06	.12	.04	.49	.63
$R^2 = .10$	Promotion	59	.14	32	- 4.15	<.001

^{*}*p* < .05, ***p* < .01, ****p* < .001

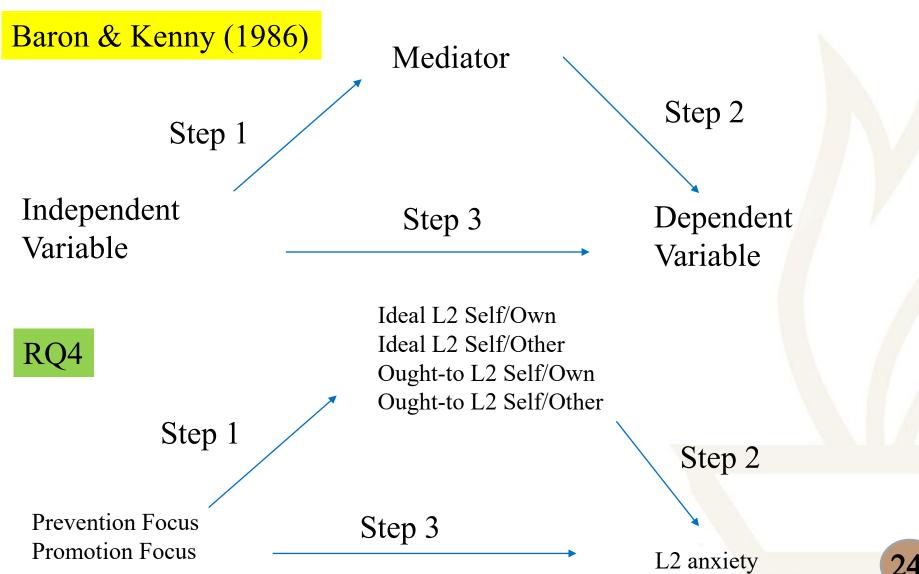
Step 3					R.	1851
Outcome	Predictor Variable	В	Std. Error	Beta	t	Sig.
Variable						
	(Constant)	2.99	.52		5.82	<.001
L2 Anxiety	Ideal L2 Self/Own	26	.10	23	-2.61	<.05
	Ideal L2 Self/Other	.13	.11	.11	1.22	.23
$R^2 = .16$	Ought-to L2 Self/Own	.17	.07	.20	2.27	<.05
	Ought-to L2 Self/Other	.19	.07	.23	2.80	<.01
	(Constant)	4.27	.62		6.91	<.001
L2 Anxiety	Ideal L2 Self/Own	19	.10	17	-1.98	.05
	Ideal L2 Self/Other	.13	.10	.11	1.24	.22
$R^2 = .22$	Ought-to L2 Self/Own	.13	.07	.16	1.83	.07
	Ought-to L2 Self/Other	.19	.07	.23	2.90	<.01
	Promotion	47	.14	26	-3.48	<.01







Mediators (RQ 4)





Step 1

Outcome Variable	Predictor Variable	В	Std. Error	Beta	t	Sig.
Ideal L2 Self/Own	(Constant)	4.47	.52		8.58	<.001
$\mathbf{R}^2 = .04$	Prevention	15	.11	11	-1.40	.16
	Promotion	.32	.13	.19	2.43	<.05
Ideal L2 Self/Other	(Constant)	4.07	.50		8.15	<.001
$R^2=.03$	Prevention	.23	.10	.18	2.28	<.05
	Promotion	.04	.13	.02	.28	.78
Ought-to L2 Self/Own	(Constant)	5.54	.70		7.87	<.001
$R^2 = .02$	Prevention	19	.14	11	-1.32	.19
	Promotion	18	.18	08	-1.04	.30
Ought-to L2 Self/Other	(Constant)	4.25	.70		6.06	<.001
$R^2=.02$	Prevention	24	.14	14	-1.70	.09
	Promotion	13	.18	06	73	.47

^{*}p < .05, **p < .01, ***p < .001



Step 2

Outcome Variable	Predictor Variable	В	Std. Error	Beta	t	95% CI
	(Constant)	2.99	.52		5.82***	[1.98, 4.01]
	Ideal L2 Self/Own	26	.10	23	-2.61**	[46,06]
L2 Anxiety $R^2 = 17$	Ideal L2 Self/Other	.13	.11	.11	1.22	[08, .34]
$R^2 = .17$	Ought-to L2 Self/Own	.17	.07	.20	2.27*	[.02, .31]
	Ought-to L2 Self/Other	.19	.07	.23	2.80**	[.06, .33]

^{*}p < .05, **p < .01, ***p < .001

Step 3

Step 3						1851
Outcome Variable	Predictor Variable	В	Std. Error	Beta	t	Sig.
	(Constant)	5.25	.57		9.23	<.001
L2 Anxiety	Prevention	.06	.12	.04	.49	.63
$R^2 = .10$	Promotion	59	.14	32	-4.15	<.001
	(Constant)	5.61	.69			
L2 Anxiety	Prevention	.04	.12	.03	.38	.71
$R^2=.11$	Promotion	57	.15	31	-3.90	<.001
	Ideal L2 Self/Own	08	.09	07	92	.36
	(Constant)	4.15	.65		6.37	<.001
L2 Anxiety	Prevention	.09	.11	.06	.83	.41
$R^2 = .15$	Promotion	56	.14	30	-3.99	<.001
	Ought-to L2 Self/Own	.20	.06	.24	3.16	<.01
	(Constant)	4.10	.60		6.86	<.001
L2 Anxiety	Prevention	.12	.11	.08	1.10	.27
$R^2=.20$	Promotion	56	.14	30	-4.12	<.001
	Ought-to L2 Self/Other	.27	.06	.32	4.38	<.001

Motivated behaviors v.s. L2 anxiety (RQ 5)

Group differences in terms of prevention focus and prevention focus

	prom focused	ninant- otion- Group 81)	preve	ninant- ntion- Group 80)		
	M	SD	M	SD	t	df
Prevention Focus	3.38	.66	4.11	.35	-8.72***	122.20
Promotion Focus	3.27	.51	2.80	.40	6.42***	159

^{*}*p* < .05, ***p* < .01, ****p* < .001



Motivated behaviors v.s. L2 anxiety (RQ5)

	Predominant- promotion- focused	Predominant- prevention- focused
L2 Anxiety vs. L2 Motivated Behavior	.26*	04

^{*}Predominant-promotion-focused group: Partialling out Ought-to L2 Self/Own, Ought-to L2 Self/Other, Prevention Focus

^{*}Predominant-prevention-focused group: Partialling out Ideal L2 Self/Own, Ideal L2 Self/Other, Promotion Focus

Discussion and Conclusion

RQ1/RQ2: Promotion focus (-), ideal L2 self/own (-), ought-to L2 self own/other (+) acted as significant predictors of L2 anxiety

- Promotion focus may be the only regulatory mode (English-major students)
- L2 anxiety is chronic (trait anxiety), has social and personal features, and related to L2 learning (state anxiety; Foreign Language Anxiety)



RQ1&RQ2: Promotion focus (-), ideal L2 self/own (-), ought-to L2 self own/other (+) acted as significant predictors of L2 anxiety

L2 Anxiety Facilitative



Ought Self/ Prevention (Vigilant Strategies)

L2 Anxiety Debilitative

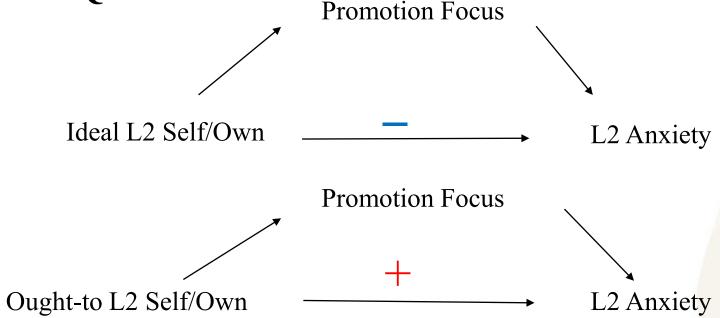
L2 Anxiety



Ideal Self/ Promotion (Eager Strategies)



RQ3 & RQ4



- Generally, the level of L2 anxiety depends on the levels/strengths of L2 self-guides and the levels/strengths of regulatory focus.
- If a person has a future goal, then this person will use regulatory mode to regulate their anxiety levels;
- If a person no specific goals, but have clear regulatory mode such as promotion focus, then the future goals do not influence their L2 anxiety. In other words, in this situation, chronic promotion focus determines their L2 anxiety level.

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RQ5

Promotion

Group:

L2 anxiety vs. Motivation (.26*)

Prevention

Group:

*p < .05

L2 anxiety vs. Motivation (-.04)

- For the predominant-promotion group, after controlling all the prevention related factors, some levels of anxiety may facilitate L2 learning.
- English major students may have the experience of promotion-related success experience for dealing with L2 anxiety (Klenk & Strauman, 2011)
- The transformation of L2 anxiety to another positive emotion related to promotion focus



RQ5

Promotion

Group:

L2 anxiety vs. Motivation (.26*)

Prevention

Group:

**p* < .05

L2 anxiety vs. Motivation (-.04)

- "Ideal Self-regulation involves a promotion focus; the stronger this focus the stronger are the cheerfulness-related emotions (i.e. happy)experienced when promotion is working, and the stronger are dejection-related emotions (i.e. disappointment, sadness) experienced when promotion is not working. Ought self-regulation involves a prevention focus, and the stronger this focus the stronger are the quiescence-related emotions (i.e., calm) experienced when prevention is working and the stronger are the agitation-related emotions (i.e., anxiety, fear) experienced when prevention is not working" (Higgins, 1998, p.18)
- L2 anxiety could be beneficial or detrimental for a student depend on the level of regulatory focus (promotion focus and prevention focus)
- The transformation of L2 anxiety to another positive emotion related to promotion focus

Pedagogical Implications

- L2 anxiety is influenced by personal and social factors as well as surrounding environments
- Increase students' ideal self goals/promotion goals to relieve students' anxiety level
- If a student needs to meet some prevention-related or promotion-related goals, then the instructors can encourage students to use their regulatory mode (promotion focus or prevention focus) to regulate their behaviors. Under that situation, the instructors can create certain levels of L2 anxiety for students which L2 anxiety could play a beneficial role.

Limitations and Future Directions

- Only questionnaire(interviews and qualitative data)/Use CFA or SEM in future studies/Only collecting data from English-major students
- More factors can be analyzed such as English proficiency levels, gender and age
- Future study can include some positive emotions such as happiness and serenity. Moreover, how the strength of prevention influence the level of anxiety.
- Considering the quantity and quality of effort, the learning process, and other factors



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Supplementary Materials

	L2 anxiety	Motivation	Prevention	Promotion	Ideal own	Ideal other	Ought own
Motivation	.05						
Prevention	01	.12					
Promotion	31**	.20**	.14				
Ideal own	13	.45**	08	.18*			
Ideal other	.09	.40**	.18*	.05	.52**		
Ought own	.26**	.32**	12	10	.31**	.39**	
Ought other	.33**	.003	14	08	06	.12	.38**

^{*}*p* < .05, ***p* < .01, ****p* < .001

Regulatory Focus v.s. Motivated Behaviors

Outcome	Predictors	В	Std.	Beta	t	95% CI
Variable			Error			
Motivated	(Constant)	3.10	.45		6.96***	[2.22, 3.97]
Behaviors						
$R^2 = .05$	Prevention	.11	.09	.09	1.18	[07, .28]
	Promotion	.27	.11	.19	2.41*	[.05, .49]

^{*}*p* < .05, ***p* < .01, ****p* < .001

L2 self-guides v.s. Motivated Behaviors

Outcome Variable	Predictors	В	Std. Error	Beta	t	95% CI
Motivated Behaviors	(Constant)	1.88	.37		5.10***	[1.15, 2.60]
R ² =.27	Ideal L2 Self/Own	.26	.07	.30	3.61***	[.12, .40]
	Ideal L2 Self/Other	.16	.08	.18	2.11*	[.01, .31]
	Ought-to L2 Self/Own	.12	.05	.19	2.29*	[.02, .23]
	Ought-to L2 Self/Other	05	.05	07	94	[14, .05]

p < .05, **p < .01, ***p < .001