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Jianling Xie

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Learner perceptions of demotivators in the English as a foreign language (EFL) classroom:
Conceptual framework, scale development, and tentative underlying cause analysis

By

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Mississippi State University
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy
in Educational Psychology
in the Department of Counseling, Educational Psychology, and Foundations

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Abstract

Notwithstanding the negative influence of demotivation on student learning outcomes, prior research in EFL demotivation suffers from the lack of generally agreed-upon conceptual understanding, which hampers scale development. The present series of studies sought to explore the ideas of demotivation and describe the development of the Learner Perception of Demotivators Scale (LPDS) both conceptually and psychometrically. In Study 1 (N = 295), an exploratory factor analysis offered preliminary support for a factor structure comprising three dimensions: negative teacher behavior, loss of task value, and low expectancy for success. In Study 2 (N = 320), the proposed factor structure was further corroborated through confirmatory factor analysis, and its validity was documented by means of correlating with academic performance, self-efficacy, and mindset. A second-order factor model was tested to investigate whether a set of demotivating factors load on an overall construct that may be termed “Demotivator”. Whereas the model fit confirmed a well-fitting second-order model with post hoc model adjustment, one low first-order loading (*negative teacher behavior*) does not seem to support “Demotivator” as a higher order construct comprising three subdimensions. Furthermore,

the LPDS demonstrated evidence of configural, metric, scalar invariance, and residual invariance across gender, suggesting the same underlying construct is measured across gender groups.

Contrary to the findings in motivation research, loss of task value was a stronger predictor of performance than low expectancy for success. Further, in Study 3 (N =320), loss of task value distinguished extremely motivated EFL learners from ordinary ones, offering tentative evidence for the reason behind demotivation in EFL learning. The unique role of task value found in Study 2 and Study 3 gave insights into the hypothetical construct of “demotivation”. It was also examined in the context of East Asian culture. By establishing a nomological network (academic performance, self-efficacy, and mindset), the current study provided a lawful pattern of interrelationships that exists between the hypothetical construct (demotivation) and observable attributes (e.g., academic performance) and that guides researcher for future L2 studies. More implications and limitations for future studies are discussed.

Keywords: demotivation, second language acquisition, scale development, social cognitive theory, expectancy-value theory

DEDICATION

I dedicate my dissertation work to my family, professors at JXAU, friends, and colleagues. Sincere thanks to my family who has supported me throughout the process. I will always appreciate all they have done. A special feeling of gratitude to my professors at JXAU, Professor Xiao Youqun and Professor Gao Jun who inspired my pursuit of educational psychology. I also dedicate this work to my best friend Zeng Yan for being there for me throughout the entire doctorate program and my best colleague Candy Grant for helping me survive my first year at MSU.

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CHAPTER I

INTRODUCTION

The English language is considered by many a universal language, and it has become an indispensable part of educational curricula worldwide. Driven by globalization and the urbanization of the country, English teaching and learning has become an important component of Chinese education. The English language is perceived by the Chinese government as a critical cornerstone of international competition. On an individual level, its acquisition guarantees the availability of opportunities to degree attainment, employment, and desirable lifestyle.

The strong emphasis placed by Chinese culture on education has fueled the growth of the children's education market in China. Chinese parents spend an average of \$17,400 a year on extracurricular tutoring for their children, and the total amount of money that Chinese spend on English learning annually is approximately \$4.40 billion (Wang, 2017). Despite the investment devoted to cultivating English among Chinese language learners, the learning outcomes fail to live up to learners' expectations (Zhang & Zhao, 2015).

The academic lives of students are challenging and complex. In line with the mission of schooling, students are expected to engage in class and be motivated to learn. Motivation is of particular interest to educational psychologists due to the critical role it plays in student learning. The term motivation originates from the Latin verb *movere*, which means to move. Motivation entails arousing, persisting, sustaining, and directing preferable behavior (Skinner, 1947). Motivational theories involve the energization and direction of behavior. The significance of

student motivation has changed from peripheral to central in educational psychology research over the decades (Pintrich, 2003). Researchers in educational psychology devoted discussion to a rich and extensive literature regarding constructs such as individuals' causal attribution, beliefs about intelligence, autonomy, and emotions within various academic settings. Motivation can be perceived as the product of expectancy beliefs and subjective value. Student motivation is sometimes driven by fear of failure. However, a growth mindset is believing that learning from past failure is what leads to eventual success. Individuals with high self-efficacy level often have high motivation level and vice versa. In addition, mastery goal orientation is generally correlated with more desirable learning outcomes such as high level of engagement, intrinsic motivation, and persistence.

Motivation directly impacts how an individual learns. Without sufficient motivation, even individuals with the most impressive skills cannot achieve their goals. Motivation has long interested researchers and practitioners seeking to understand human behavior and performance. Throughout the history of research on language learning, motivation has been regarded as one of the most crucial determining factors in an individual's success in second language (L2) acquisition (e.g., Deci & Ryan, 1985, Dörnyei, 2001; Gardner & Lambert, 1972). Motivation is consequential in L2 learning, for it considerably influences why people decided to do something, how much effort they are going to exert, and how long they are willing to sustain their behaviors (Dörnyei, 2001; Oxford & Shearin, 1994).

Motivation and Demotivation Research in Second Language Acquisition

Research in L2 motivation began in the late 1950s and flourished in the 1970s with the pioneering work of Lambert and Gardner (Mallik, 2017). The field of language learning and teaching has been influenced for many years by the model which came from the studies of

language immersion in Canada (Ehrman, 1996). The model classifies motivation into two categories, instrumental and integrative. Instrumental motivation refers to learning to accomplish a task, such as passing a course or getting a raise. Integrative motivation refers to a favorable attitude toward the target language community, possibly a wish to integrate and adapt to a new target culture through use of the language. Learners with an instrumental motivation want to learn a foreign language because of a practical reason. Learners who are integratively motivated want to learn the language because they want to get to know the people who speak that language. They are also interested in the culture associated with that language. (Gardner & Lambert, 1972).

Following the motivation research in L2, in recent years researchers have paid increasing attention to L2 demotivation. Demotivation in L2 acquisition is an emerging research topic that fascinates both researchers and practitioners. Dörnyei (2001) defined demotivation as specific external forces that reduced or diminished the motivational basis of a behavioral intention or an ongoing action. If motivation is the force that drives learners to achieve their goals, demotivation drives them in the opposite direction. Demotivation, as the name implies, influences learners in a negative way, degrades classroom dynamics and students' motivation, and eventually leads to negative learning outcomes such as low self-efficacy and performance (Falout, Elwood, & Hood, 2009).

Zhou (2012) described three characteristics of demotivation: (a) Motivation must exist in L2 learners before there can be a gradual loss of drive to acquire the target language; (b) It is an internalized process induced by external and /or internal triggers, namely demotivators; and (c) It is a reversible process. It is also important to note that students' motivation to study English fluctuates (Koizumi & Kai, 1992; Sawyer, 2007). Demotivation also occurs, for instance, when the motivation of a highly motivated student decreases to an average level (Kikuchi, 2009).

Due to the lack of theoretical framework, L2 demotivation research starts from and still focus on identifying demotivating factors from learners' perspective (e.g., Chang & Cho, 2003; Dornyei 1998; Muhonen, 2004). Typically, most of the studies conducted in America and Europe employ qualitative methods for gathering data (Chamber, 1993; Oxford, 1998), and later researchers in Asia develop their own questionnaires and then explore the factor structure of the questionnaire items through exploratory factor analysis (EFA; e.g., Sakai & Kikuchi, 2009; Zhou, 2012). Relatedly, along with the study of motivation in educational psychology, in recent years, research on amotivation has been undertaken in earnest (e.g., Barkoukis, Tsorbatzoudis, Grouios, & Sideridis, 2008; Legault, Green-Demers, & Pelletier, 2006).

Motivation and Amotivation Research in Educational Psychology

Educational psychologists focus specifically on motivation for learning. It centers upon the volition, or will that students bring to a task, their level of self-efficacy and the personally held goals that guide their learning behavior (Weiner, 1990). Many conceptual perspectives have been proposed to better understand academic motivations. In line with L2 motivation research, researchers in educational psychology also classified motivations using differences in reasons or goals as a discriminant. One helpful perspective posits that behavior can be intrinsically motivated, extrinsically motivated or amotivated (Deci & Ryan, 1985). Roughly equivalent to integrative motivation in L2 studies, intrinsic motivation comes from within. It refers to engaging in an activity for its own sake, and the enjoyment and satisfaction derived from participation. Extrinsic motivation is equivalent to instrumental motivation in L2 studies. It pertains to a wide variety of behaviors in which students engage as a means to an end. Amotivation is a state in which individuals cannot see a relationship between their behavior and that behavior's subsequent outcome (Deci & Ryan, 1985). Amotivated learners feel detached

from their actions and thus put little effort in its implementation. The state of amotivation has been likened to learned helplessness which is a sense of powerlessness arising from persistent failure to succeed (Abramson, Seligman, & Teasdale, 1978) and boredom (Ntoumanis, Pensgaard, Martin, & Pipe, 2004).

Demotivation versus Amotivation

While it is relatively easy to understand the concept of demotivation and amotivation (both concern various negative influences that cancel out existing motivation), they are interpreted differently by scholars who first investigated these two constructs in educational settings.

Dörnyei's (e.g., 2001, 2005) work has been focused on learner demotivation, which he defined as "specific external forces that reduce or diminish the motivational basis of a behavior intention or an ongoing action" (Dörnyei, 2001, p. 143). However, *amotivation* is originally a clinical symptom (e.g., amotivation syndrome). Amotivation as defined by Deci and Ryan (1985) refers to the relative absence of motivation that is not caused by a lack of initial interest but rather by the individual's feelings of incompetence and helplessness when faced with the activity. Demotivation should not be confused with the conceptually different phenomenon of amotivation (Christopher & Gorham, 1995). Amotivation is an absence of motivation (Legault et al., 2006). Amotivated learners see no point in learning because they do not perceive a contingency between their behaviors and outcomes. On the other hand, demotivated learners still come to classes and engage in activities if they feel like it because demotivation is situational, and demotivated learners can be motivated again (Vallerand & Ratelle, 2002). Amotivation is a state of motivational apathy in which students harbor little or no reason (motive) to invest the energy and effort that is necessary to learn or to accomplish something (Cheon & Reeve, 2015).

According to self-determination theory (SDT), facilitation of amotivation occurs through the lack of attainment of three psychological needs: competence, autonomy, and relatedness (Ryan & Deci, 2000). SDT is an approach to motivation that emphasizes people's psychological needs as innate motivational assets that, when satisfied, facilitate optimal functioning and psychological wellbeing. When applied to the educational context, the support of the psychological needs for autonomy, competence, and relatedness leads to positive learning outcomes, the frustration of these same psychological needs from teachers, leaves one prone to negative learning outcomes. In other words, the primary reason students experience amotivation is because they first experience psychological need frustration.

According to Deci and Ryan (1985), amotivation comes from within (e.g., feelings of incompetence or helplessness), and demotivation as defined by Dörnyei is caused by external factors (e.g., teacher personality or class environment). However, existing literature afterwards showed that both can be caused internally and contextually (e.g., Kikuchi, 2009; Ntoumanis, et al., 2004). Theoretically, early empirical studies on amotivation conceptualized it as a one-dimensional phenomenon that represented the absence of intentionality toward action (Vallerand, Fortier, & Guay, 1997). Others proposed that a one dimensional conceptualization was insufficient to depict the motivational deficits (Pelletier, Dion, Tuson, & Green-Demers, 1999). Subsequently, Legault and his colleagues developed a four-dimensional academic amotivation inventory (Legault, Green-Demers, & Pelletier, 2006). The four dimensions includes (a) Low ability, or the belief that one lacks sufficient aptitude to perform a particular task, (b) Low effort, or a lack of desire to put the effort necessary into a task, (c) Low value, or a lack of perceived benefit within a particular behavior, and (d) Unappealing tasks, or the perception that the task at hand is an unattractive thing to do. Similarly, with respect to demotivation, others (Falout et al.,

2009; Kikuchi, 2015; Sakai & Kikuchi, 2009; Zhou & Wang, 2012) included in their studies of demotivation both external factors, such as teachers and class materials, and internal factors, such as a lack of self-confidence and negative attitudes. However, empirical studies on L2 demotivation failed to conceptualize demotivation in terms of dimensions. Major syntheses published over the last two decades devoted considerable attention to categorizing demotivation or identifying demotivators (e.g., Falout et al., 2009; Kikuchi, 2015; Sakai & Kikuchi, 2009; Zhou & Wang, 2012). Yet if demotivation and amotivation are conceptually related, it is plausible to assume that demotivation is multi-dimensional as well. By implication, this warrants further investigation concerning the dimensionality of L2 demotivation.

Application in other Disciplines

Amotivation is most frequently used in psychopathology in the context of amotivational syndrome (e.g., Garland & Baerg, 2001; Lac & Luk, 2018). People with amotivational syndrome find no reason to live since sources of joy are blocked. However, the World Health Organization (WHO), rejected the description of an amotivational syndrome being a psychiatric condition (Hall, Room, & Bondy, 1998) as the small number of controlled field and laboratory studies have not found compelling evidence for such a syndrome. If amotivation does not exist as a psychiatric condition, it could exist as a feeling. Everybody will experience - or has experienced - periods of amotivation, whether short or long, in specific parts of their lives or as a reoccurring issue. In this case, it may be difficult to draw a fine line between amotivation and demotivation. Additionally, the two terms are used in different but related academic disciplines. *Amotivation* has been used primarily in sport psychology (e.g., Ntoumanis et al., 2004) and educational psychology (e.g., Cheon & Reeve, 2015). Besides the application in L2 studies, the term *demotivation* is also used in industrial and organizational psychology (e.g., Smither & Walker,

2000), social psychology (e.g., McLoughlin & Carr, 1997), learning, instruction, and education (e.g., Addison & Brundrett, 2008; Lens & Decruyenaere, 1991; Mooij, 2008).

Taken together, while amotivation and demotivation are distinguishable theoretically, no strong empirical evidence has been found to support the difference. This is not surprising. Even though “motivation” is a term frequently used in both educational and psychological settings, researchers disagree on definition of the construct. Motivation is defined as a state, a condition, a process, a desire, a want, an arousal, a force, or a drive (e.g., Ames, 1992; Deci & Ryan, 1985; Huijt, 2011; Maslow, 1970). It also refers to a set of interrelated goals, needs, values, and emotions as reflected in various motivation theories in educational psychology. Researchers seem to agree that motivation is central to determining human behavior by energizing it and giving it direction, but they disagree regarding how and why this happens. For example, achievement goal theory offers a unique perspective as to why some show resilience and others helplessness in the face of adversity. Achievement goal theory traces this experience to the goals students pursue for their learning task (Dweck, 1986). However, for educational psychologists who study academic emotions, they believe adaptive emotions such as enjoyment of learning helps to open the mind to creative problem solving (Pekrun, Goetz, Titz, & Perry, 2002). As motivation research in general seeks to answer no less than the fundamental question of why humans behave as they do (Dörnyei, 1998), it is expected a lack of simple and straightforward definition for motivation along with amotivation or demotivation.

While there is no simple definition of amotivation or demotivation, a general consensus can be reached within the context of existing literature (e.g., Dörnyei, 2001; Kikuchi, 2015; Legault et al., 2006; Zhou, 2012). Demotivation or amotivation is: (a) a state of task disengagement or motivational deficit that deactivates behavior, (b) a feeling of incompetence

and helplessness when faced with the activity, (c) a process whereby goal-directed activity shows little momentum or persistence, and (d) a drive that deenergizes the goal-oriented behavior.

In light of this, it appears that researchers from separate disciplines work on the same problem independently and have independently arrived at the aforementioned conclusion. The use of demotivation or amotivation is a matter of disciplinary preference rather than two separate constructs. Therefore, to facilitate understanding, communication, and application of research-based strategies derived from the current study in L2 learning, the dissertation study was based on the research of *demotivation/demotivator* to address the core issues within the specific context.

The Significance of EFL Learner Demotivation

English education in China is creating the world's biggest population of English-language learners. Recently, it was reported that China has the world's largest English-learning population in the world. This amounts to approximately 400 million English learners, which is one third of China's population (Bolton & Graddol, 2012).

The Chinese have invested enormous resources in learning English. The study of English is now mandatory in China, and students begin as early as third grade. By the time they reach middle school, English shifts to one of the top three subjects along with Chinese and mathematics. It is a requirement for higher education admission. Although the Chinese government has been pushing students to learn English, standardized test scores have been frustratingly low. Based on a report by the Educational Testing Services (ETS) summarizing the performance of examinees who took the Test of English as a Foreign Language (TOEFL) based on their native language and home country, the average scores for speakers of Chinese is 79 out of 120 (Recine, 2019).

The category of college EFL learners in China is very broad, encompassing English majors who are typically self-motivated, as well as extremely motivated ones who are enrolled in a dual degree English program, and least motivated ones (enrolled in one non-English degree) who take English classes only because they are required. The problem of how to teach those least motivated ones effectively is common among college English teachers in China. Try as the teachers might, students remain passive and demotivated. Demotivated college English learners are a recurring topic in academic conferences across China. Some college students give up studying English, especially after passing the standardized English test required for degree attainment.

Ultimately, analyzing demotivators in EFL classroom has direct educational implications. According to Wang's survey on 467 colleges and universities across China, the percentage of doctoral degree holders among Chinese college English teachers was only 1.5% in 2010, which is far below the percentage in other subject disciplines (Wang & Wang, 2011). Further, the emphasis on English proficiency and insufficient knowledge of educational research methods render most of the college English teachers helpless and hopeless in doing research. Thus, by referring to the findings in demotivators, in-service college English teachers can promote student motivation simply by avoiding practices that demotivate students.

CHAPTER II

LITERATURE REVIEW

American and European Studies on Demotivators

The study of demotivators first started in the U.S. (Gorham & Christophel, 1992; Christophel & Gorham, 1995) in instructional communication. By using both qualitative and quantitative techniques, the two independent studies generated consistent findings: 70% of the reported sources of demotivation in the two studies were teacher-related, which means that students attributed the lack of motivation to what the teacher had done.

In the field of L2 demotivator research, from a close-ended questionnaire surveying 191 elementary students, Chamber (1993) learned that these students blamed teachers' demotivating behaviors, such as not giving clear instructions, criticizing students, and not addressing their lack of interest in the subject. While his investigation was the first that was fully devoted to demotivation in L2 acquisition, Chamber did not characterize demotivators, rather, he simply listed what the students had reported.

Subsequent to Chamber's study, Oxford (1998) advanced the understanding of demotivator by considering the time factor. She recognized the dynamic nature of demotivation, which can be best understood by "looking backward" (five years, in her study). Retrospectively, the students were required to compose essays stating learning experiences with previous teachers and classroom contexts based on a variety of prompts such as: "talking about a classroom in which you felt uncomfortable." Three factors emerged from the content analysis of the student

essays: (a) teacher- student relationship, (b) teaching style, (c) attitude in teaching, and (d) the nature of class activities. However, since the prompts adopted by Oxford specifically referred to teachers' role as a source of demotivating factor, other potential sources might not have been demonstrated by students in the study (Trang & Baldauf, 2007).

Ushioda (1998) substantiated how teachers' behavior may demotivate the students. The researcher employed a structured interview for data collecting and analyzed 20 undergraduate students' experiences on demotivation and their ideas of demotivator sources in their L2 acquisition. Her findings confirmed the conclusion of the previous studies, that is, the demotivators were associated with institutionalized learning context such as certain teaching styles (e.g., disengaging teaching techniques) and learning tasks (e.g., memorization of vocabulary and grammar points)

A study by Hirvonen (2010) explored L2 demotivation among immigrant students in Finland. The participants of the study were seven ninth grade immigrant students. All of the participants were between 14 to 17 years old. The study employed a qualitative approach and the data were collected through semi-structured interviews that lasted 30 minutes on average. Students considered external demotivators more influential than internal demotivators as their number was greater and their range was wider. Among the external factors, all of the participants mentioned at least one demotivating factor related to the teacher and in addition, dissatisfaction related to the teacher were expressed more explicitly and emotionally than other demotivators.

Asian Studies on Demotivators

Inspired by American and European research endeavors, more empirical studies on demotivation were conducted worldwide, especially in East Asia. Most of these studies targeted college students who were successful academically, but highly demotivated as English learners.

Another feature of the studies is that more large-sampled, quantitative approaches were adopted (Li & Zhou, 2013). For example, researchers in Asia started to develop their own questionnaires and then explore the factor structure of the questionnaire items through EFA (e.g., Sakai & Kikuchi, 2009; Zhou, 2012). Furthermore, researchers began analyzing the gender differences in demotivating factors, though the results have been inconsistent (Jahedizadeh & Ghanizadeh, 2015; Rastegar, Akbarzadeh, & Heidari, 2012).

By asking 65 Japanese university students to write about their experiences of demotivation, Ikeno (2003) discovered that a lack of a sense of control over what one is learning was endorsed by most participants. Kim (2009) also found that difficulty of learning English was the most demotivating trigger among Korean high school English learners. Similarly, Sakai and Kikuchi (2009) investigated the sources of demotivation among 676 high school learners of English, along with the differences between more motivated learners and less motivated learners based on their self-reported demotivation level. They collected data concerning demotivating experiences both qualitatively and quantitatively regarding the participants' motivating and demotivating experiences in their high school classrooms. Contrary to what the Western literature suggested, Sakai and Kikuchi concluded that, compared with experiences of failure (e.g., via low test grade), neither teacher competence nor teaching style were substantial causes of demotivation for both the more and less motivated groups.

The findings derived from research conducted in Japan and Korea were confirmed by scholars from China (Xie, Wei, Zeng, Lobsenz, & Chen, 2018; Zhou, 2012; Zhou & Wang, 2012). Zhou (2012) compared the impact of four demotivating factors (teacher, learning contexts, language, and culture background) between 41 Chinese undergraduate students and 36 Japanese counterparts. Zhou concluded that the difficulty of the English language was the most

detrimental demotivator for learners from both countries. Zhou and Wang (2012) found that loss of inner interest and lack of learning strategies also cause demotivation. The findings of Zhou's two studies provided insight into Chinese university EFL learners' internal demotivators rather than external ones (such as teacher behaviors) addressed previously by western scholars. Given the uniqueness of East Asian EFL learners' demotivation process, Li and Zhou (2013) conducted another comparative study between Chinese and Korean college EFL learners' demotivators. Not surprisingly, the result was in agreement with the findings from the previous ones conducted in 2012, which suggested internal demotivators such as loss of interest is the most detrimental contributing factor.

Falout and Maruyama (2004) reported more detailed information on sources of demotivation by comparing high proficiency (HP) students and low proficiency (LP) students. They showed that while the teacher-related demotivators consistently influence learners across both HP and LP groups, HP students were more critical about teacher-related demotivating factors and LP students attributed their demotivation more internally such as disappointment in their performance. This is echoed by Xie et al. (2018), who examined how students at different English proficiency levels react to demotivation. They found that while external demotivators such as class environment was regarded as the most detrimental element by HP students, internal demotivators such as experiences of failure was the worst for LP students.

Taken together, Chinese/East Asian studies, revealed that demotivation process possesses strong culture-specific features, such as the effect of Confucianism (Li & Zhou, 2013). Traditional Confucian pedagogy emphasizes teachers' unchallengeable authority in the classroom. In East Asian societies with a Confucian heritage, the teacher enjoys relatively high social status. Imbued with Confucianism, students are less inclined to blame the instructor for

their demotivation issue. These findings provided insights into the major demotivators in the Chinese EFL learner population. Specifically, Chinese EFL learners appear to be more easily demotivated internally (e.g., via experiences of failure or loss of interest) rather than externally (e.g., via negative teacher behaviors). Consequently, this vital distinction in the demotivation process between Western and Asian EFL learners justified further empirical analyses.

Factorizing Demotivation

Several studies address factorizing demotivation in the order of frequency from students' perspective. In the most influential study of factorizing L2 demotivation to date, Dornyei (1998) hypothesized that only demotivated students can describe the reasons for their loss of motivation in L2 learning. Thus, in selecting participants for his study, he focused on those who had been identified as particularly demotivated by their teachers and peers through individual interviews. Data were gathered through long structured interviews. For the first time, the main demotivating factors were categorized in order of frequency: teachers' personalities, commitments, competence, inadequate school facilities, lowered self-efficacy due to failure or lack of success, negative attitude toward the language studied, and compulsory nature of the language study.

Following Dornyei (1998), researchers of varying cultural contexts have also attempted to explore possible facets of demotivation in L2. Chang and Cho (2003) asked 91 junior high school students in Chinese Taipei to compose essays describing experiences in previous EFL classroom environments. Eight demotivating factors emerged through content analysis: (a) learning difficulties, (b) threats to self-worth, (c) monotonous teaching, (d) poor teacher-student relationship, (e) punishments, (f) general and language-specific anxiety, (g) lack of self-determination, and (h) poor classroom management.

In another study in which students wrote essays on the factors demotivating them, Muhonen (2004) worked with 91 Finnish ninth-grade students and identified five demotivating factors: (a) the teacher, (b) learning material, (c) learner characteristics, (d) school environment, and (e) students' attitude towards English.

Trang and Baldauf (2007) asked 100 college students to write an essay on demotivation sources. The demotivating factors that emerged from the writing tasks were classified into two groups: (a) internal attributions (including negative attitudes towards English, experience of failure, self-esteem), and (b) external attributions (including teacher, learning context, inappropriate workload, etc.).

Reviewing existing literature demonstrates that the order of frequency and the demotivating factors themselves vary across cultures and grade levels. Additionally, most of the studies employed qualitative methods for gathering data. Further, triangulation was not assured in those qualitative studies since essay-writing appeared to be the only source of data collection. Triangulation has been perceived as a qualitative research strategy to warrant validity through the convergence of information from different sources. While qualitative research detects themes among words without compromising its richness and dimensionality, qualitative research as a whole has been constantly critiqued due to the issue of subjectivity and contextual ramifications. In light of this, quantitative research studies of scale development are needed to: (a) better define L2 demotivator, (b) acquire knowledge on the dynamic process of demotivation, and (c) build a strong foundation for generalizations of findings and conclusions.

Measurement Issues

Currently, given that demotivation and its relation to second language acquisition is an evolving concept in its early stages, there is only one validated measure of the learner

perceptions of demotivators in the college EFL classroom: Demotivation Questionnaire for College Students (Kikuchi, 2011, 2015). Kikuchi's questionnaire was first presented in his dissertation and later his book published in 2015. Researchers in Asia started to use his questionnaire afterwards (e.g., Xie et al., 2018). The questionnaire consists of 22 four-point (1 = *Not true*; 2 = *Mostly not true*; 3 = *True to some extent*; 4 = *True*) Likert scale items designed to measure four subscales/demotivators: *teacher behavior*, *class environment*, *experiences of failure*, and *loss of interest*. Each subscale score is calculated by averaging the item-level scores, thus ranging from 1 to 4, where a higher score indicates a higher level of demotivation. The Rasch Person Reliability (R_p), an internal consistency measure analogous to Cronbach's alpha (α), was reported to be .81 for teacher behavior, .72 for experiences of failure, .61 for class environment, and .59 for loss of interest (Kikuchi, 2011), suggesting poor to acceptable reliability. While it has contributed to the understanding of demotivation, several limitations of the scale need to be addressed, especially in the context of Chinese college EFL classroom.

Limitations of Demotivation Questionnaire for College Students

The first limitation concerns external demotivators; Kikuchi's questionnaire focuses solely on certain aspects of demotivators (e.g., teaching method and technology use), while neglecting the influence of others such as peer influence and perceived teacher personality. Further, Kikuchi (2015) failed to address teacher behavior appropriately. For example, most teacher-related items in Kikuchi's scale are either manifested through instructional quality (e.g., "Teachers' explanations were not easy to understand.") or behaviors rarely occur at college-level teaching (e.g., "Teachers yell at us."). Human behavior is considerably shaped by a series of both internal and external stimuli. People never stop learning and constructing meaning throughout their whole life from communications within their social environment. Social Cognitive Theory

(SCT), the cognitive representation of social learning theory forwarded by Bandura (1986), accounts for human behavior in a three-way, dynamic, reciprocal model in which personal factors, environmental influences, and behavior constantly interplay. SCT provides a conceptual model for understanding, predicting, and shaping human behavior due to its focus on social influence and its emphasis on external and internal social reinforcement (see Figure 1).

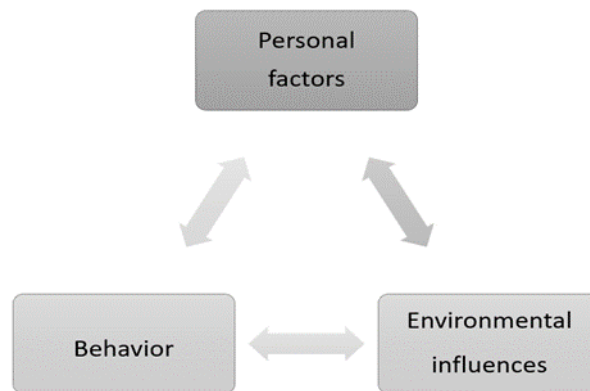


Figure 1. Model of triadic reciprocal causations. From *Social Foundations of Thought and Action: A Social Cognitive Theory* (p. 24), by A. Bandura, 1986, Englewood Cliffs, NJ: Prentice Hall. Copyright 1986 by Prentice-Hall Inc.

Researchers of college educational outcomes have documented peer influence on learning (Pascarella & Terenzini, 1991). Haque (2014) examined the social influences in college peer culture that shape student development regarding academic success and achievement motivation. Exactly 50% of the participants, 13 out of 26, described being influenced by peers in their personal development of definitions of academic success. This result demonstrates how prevalent is using the values of others to shape one's understanding of academic success. This is important to note, as it demonstrates the power of peer culture, and how it may link to the ambivalence in students' decision-making processes pertaining to achievement motivation.

Relatedly, empirical research shows that student achievement depends partly on the teachers they are assigned since student engagement in learning tasks is influenced directly by teachers' actual behavior (e.g., Reeve, Jang, Carrell, Jeon, & Barch, 2004; Skinner & Belmont, 1993). Christophel (1990) researched the relationship between teacher immediacy behaviors and motivation and learned that: (a) trait motivation or personal interest has moderate effect on learning, and then only when accompanied by state motivation or situational interest, (b) state motivation levels are malleable within the classroom environment, and (c) teacher immediacy directly influences state motivation. Negative teacher behaviors (e.g., failing to properly prepare for class) were perceived as more central to student demotivation than positive teacher behaviors (e.g., provision of autonomy and rapport/interaction) were perceived as central to motivation (Gorham & Christophe, 1992).

Likewise, Kim, Dar-Nimrod, and MacCann (2017) found that perceived teacher personality characteristics such as conscientiousness (being hard-working and detail minded) and agreeableness (being sympathetic and kind) are predictive of student self-efficacy. Additionally, Shin, Levy, and London (2016) showed that role model exposure had positive effects on both students' academic sense of belonging and self-efficacy, which in turn determine individuals' motivation, academic decision-making, and as well as educational attainment (e.g., Bandura, 1986). In light of these arguments, it is plausible to assume that the experience of demotivation occurs when a teacher is perceived as disagreeable, inattentive, or not inspirational.

In sum, teacher and peers impact students' educational pursuits. No man is an island. Learners are viewed both as products and as producers of their own learning environments and of their social systems (Bandura, 1986). Thus, investigation of learner perceptions of demotivators may be incomplete without accounting for the influence of others.

The second limitation concerns internal demotivators; while the Demotivation Questionnaire for College Students captures primarily learners' affective experience (e.g., experience of failure and loss of interest), it does not reflect learners' cognition such as learning strategy deficiency. Within the past few decades, psychologists have radically changed their approach to the study of human motivation. Contemporary theorists now depict human motivation as being a function of cognitive processes. Not only does cognition relate to motivation, but in many aspects motivation *is* cognition (Ormrod, 2012). Theorists have begun to realize that effective learning involves control of motivation. Cognitive and social cognitive theorists have started to describe effective learning in a manner of self-regulated learning (e.g., Bandura, 1986). Self-regulated learning entails several processes: setting goals, choosing learning strategies that can help a learner achieve those goals, and then evaluating the learning outcomes (e.g., Zimmerman & Schunk, 2004). Self-regulating learners use a variety of strategies to foster positive learning behaviors, such as effort, persistence, and engagement. According to a study conducted by Li and Zhou (2013), unlike Korean college EFL learners' demotivators, effective learning strategy deficiency was unique to Chinese participants. Learning strategies are defined as "specific actions, behavior, steps, or techniques such as seeking out conversation partners, or giving oneself encouragement to tackle a difficult language task -- used by students to enhance their own learning" (Scarcella & Oxford, 1992, p.63). Language learning strategy is among the main factors that help determine how and how well students learn a second or foreign language (Oxford, 2003). Learning strategies empowers the learners to manage their own learning and enable students to become more independent, autonomous, and lifelong learners (Anderson, 2003; Benson, 2007; Little, 1991). While some learners (e.g., self-regulating learners) can be very skillful and highly motivated at developing strategies to assist their L2

learning, others tend to be ineffective at devising strategies due partly to low self-efficacy regarding their ability to accomplish a learning task (e.g., Schunk & Pajares, 2005). Therefore, they may experience difficulties and consequently demotivation in learning the new language.

Further, whereas loss of interest is multi-faceted, Kikuchi only briefly and broadly addressed it in his scale (e.g., “I lost my interest in English”). Perceived value is predictive of continued interest and the likelihood of future engagement with a task. A substantial body of research suggests that perceived task value is correlated with interest and achievement choices (e.g., Wigfield & Eccles, 2000). The overall interest in the subject or the enjoyment someone has from an activity is derived from intrinsic value (Trautwein et al., 2012). Expectancy-value-cost model (e.g., Eccles & Wigfield, 2000) posits that achievement-related choices (e.g., effort and persistence) are motivated by a combination of people's expectations for success and perceived task value in certain domains. Task value consists of three components: attainment value (i.e., importance of doing well), intrinsic value (i.e., enjoyment), and utility value (i.e., perceived usefulness for future goals). However, despite differences in focus, task values have often been analyzed as a single factor, with empirical studies most often combining intrinsic, utility, and attainment value because many empirical studies found the three facets of intrinsic, attainment, and utility values to be highly correlated (e.g., Eccles, Wigfield, Harold, & Blumenfeld 1993; Perez, Cromley, & Kaplan, 2014). Expectancies for success determine students’ later task value. In other words, students are more likely to value the domains in which they feel competent (Wigfield & Eccles, 2000). In the context of learning, cost has mostly been examined under the expectancy-value framework and defined as the perceived negative consequences of task engagement such as competition with other goals (Jiang, Rosenzweig, & Gaspard, 2018). It may provide insights concerning how to predict students’ avoidance motivation and behaviors since

cost represents competition with other goals. Both expectancy and cost are strongly correlated with value to continued and long-term interest (Flake, Barron, Hulleman, McCoach, & Welsh, 2015). For example, a goal —such as deciding to become a successful English learner— is valued if the student has a keen interest in the domain, if the goal is regarded as useful and important, and the cost of achieving the goal is not prohibitive.

The last limitation is psychometric. Because Kikuchi's (2015) Demotivation Questionnaire for College Students had not been cross-validated in a Chinese sample, my initial consideration was whether Kikuchi's (2015) factor structure fit the college-age English learners' population in China. Thus, by using the data from one previous work, a confirmatory factor analysis (CFA) was performed using Mplus v.7 (Muthén & Muthén, 2012) to examine the 4-factor structure prior to the main analyses. The CFA results did not indicate good model fit: $\chi^2(203) = 397.36, p < .0001$, Comparative Fit Index (CFI) = 0.69, Tucker-Lewis Index (TLI) = 0.65, Root Mean Square Error of Approximation (RMSEA) = .09, 90% CI [.08, .11], Standardized Root Mean Square Residual (SRMR) = .09. (Xie, Wei, Zeng, Lobsenz, & Chen, 2017). When a model fits the data poorly, conclusions drawn from research afterwards are not trustworthy.

Taken together, the conceptual foundation of Kikuchi's scale is not sufficient to capture the broad dimensionality of learner perceptions of demotivators in the college EFL classroom. The current study aimed to extend Kikuchi's work and present a demotivation scale —Learner Perceptions of Demotivators Scale (LPDS) —designed specifically for use in L2 research and tested empirically to provide evidence of its construct, validity, and reliability.

Item Generation

Since the domain of L2 demotivation was delineated, the item pool could then be identified. There are two methods to develop appropriate questions: deductive and inductive (Hinkin, 1995). The deductive method, also known as “logical partitioning” or “classification from above”, by which items are generated through the review of existing literature and evaluation of existing scales. The inductive method, also known as “grouping” or “classification from below” involves the development of questions from the responses of individuals. The responses are obtained through exploratory approaches such as focus groups and individual interviews (Hinkin, 1995). It is recommended that the items generated using deductive and inductive approaches are broader and more comprehensive than one's own theoretical view of the construct (e.g., Clark & Watson, 1995). In addition, the initial pool of items generated should be at minimum twice as long as the desired final scale (Kline, 2000). By implication, items were generated both deductively and inductively and 99 questions were developed for nine intended factors.

The content validity of the survey depends on the extent to which the items are a comprehensive and representative sample of all possible items that could measure the construct of interest. To achieve this, two steps were involved.

First, a comprehensive review of existing literature on L2 demotivator (e.g., Chang & Cho, 2003; Dornyei, 1998; Kikuchi, 2015; Muhonen, 2004; Trang & Baldauf, 2007) was conducted. To identify relevant studies, I searched published journal articles in core L2 education databases, including Academic Search Ultimate, Web of Science, the Educational Resources Information Center (ERIC), and web-based repositories (e.g., Google Scholar). To minimize publication bias (Rothstein, Sutton, & Borenstein, 2005), my search included dissertations in

ProQuest Dissertations and Theses as well. I used the keywords demotivation, demotivator, and demotivating factor in conjunction with the linking terms EFL, ESL, and L2. To be included in the review, a study had to meet the following criteria: (a) report L2 demotivator or demotivating factor, (b) provide demotivators from the learner's perspective, and (c) studies had to be written in English. Approximately, 50 articles were reviewed to generate an item pool for the survey.

Second, individual in-depth phone interviews (20 minutes each) with 15 college EFL learners were conducted to explore the factors contributing to demotivation in the EFL classroom. All participants received a recruitment email beforehand. Via the email, participants were informed of the purpose of the study, that their participation was voluntary, and that they could opt out at any time without any penalty or loss of benefits. All participants were assigned pseudonyms in replacement of actual names for interview gathering. Students understood names would be held in confidence. The interview protocol consisted of three open-ended questions, and when appropriate, the data collectors probed with detailed follow-up questions to clarify participants' stories and perspectives. The three questions focused on learner perceptions of demotivators in the EFL classroom (e.g., "Have you ever felt demotivated as a college EFL learner and why?" "What do you think are the main ingredients of L2 demotivation?" "Can you name some demotivating factors?"). Although the qualitative inquiry was originally guided by a set of general questions with the aim of exploring learner perceptions of demotivator in the EFL classroom, as I moved through the iterative analysis, the guiding questions and emergent coding categories were adjusted based on participants' response. Specifically, as I began to see evidence of multiple sources of demotivation, coding was developed to capture the demotivators systematically (e.g., teacher-related demotivators, learner-related demotivators). While all the demotivators emerged from the qualitative data are within the literature, the purpose of the

interview was to check if there are factors lost besides the literature reviewing process.

Analyzing data generated from the interviews informs the survey designed for larger samples.

Along with the reviewing process, nine factors were developed as follows:

Teacher Behavior

Teacher can affect student motivation in ways that either facilitate or impede learning. Teachers' negative behavior towards students adversely affects students' learning outcomes. For the current scale, negative teacher behavior was depicted from multiple perspectives (e.g., Baloğlu, 2009; Skinner & Belmont, 1993). For example, work ethic (e.g., “Teachers don’t respect us as individuals.”), inconsistency (e.g., “Teachers favor high-achieving students.”), conscientiousness (e.g., “Teachers are not well-prepared for the class.”), general demotivating behavior (e.g., “Teachers don’t care whether we do well or not.”), and teaching style (e.g., “Teachers just read directly off the slide.”).

Peer Influence

Peers play a unique role in human development. Peer influence can be positive or negative. Human behavior is shaped by observing other people (e.g., peers) and their perceptions of the environment. Theoretically, items measuring peer influence were generated based on social-cognitive theory (Bandura, 1986). For example, college EFL learners’ motivation can be influenced by observing others (e.g., “My roommates are not good at English either,” and “Most of my friends are not interested in the English language.”).

Class Material

Class materials are also known as teaching or learning materials. Instructional materials constitute alternative channels of communication, which an instructor can

use to convey more vividly instructional information to students (McLoughlin, 1999). They contain the information conveyed within a course. These typically include the assigned readings, textbooks, multimedia elements, and other resources. Therefore, questions were developed based on the aforementioned components (e.g., “Technology is not fully used in the class,” and “There is too much text on the slide.”).

Instructional Quality

Teachers differ a great deal in their effectiveness. Teaching quality has a lasting effect on student learning. Growing evidence suggests that students are most motivated when teachers have high content knowledge and pedagogic skills (Scherer & Nilsen, 2016). By implementing effective teaching strategies, the teacher creates a motivating learning environment. Instructional quality items were generated from teachers’ subject knowledge (e.g., “The teacher is not effective in conveying the material.”) and pedagogic skills (e.g., “The instruction is not well-organized.”).

Loss of Interest

This factor was measured by items (e.g., “I hate English learning with a passion.”) focused on describe students’ loss of personal interest or intrinsic value in general. Personal interest is the disposition toward a type of activity based on past experiences and is relatively stable over time. Personal interest is unique to the individual, topic specific, long lasting, and exists prior to encountering a particular learning task (Hidi, 1990; Schiefele, 1992). Regardless of the objective value of a learning task, if students do not recognize its intrinsic value, they may not be motivated to expend time and effort.

Expectancy and Cost

Theoretically, this factor was based on expectancy-value-cost model (Eccles & Wigfield, 2002). Motivation level is influenced by individuals' ability beliefs or expectancy for success (e.g., "Learning English takes forever, and it may not get you anywhere.") and expected costs (e.g., "If learning English means losing a fun college life, I'll choose the latter one."). Cost can be defined as how much a student has to sacrifice to engage in a task or the negative aspects of engaging in a task. Expected costs are directly integrated into individuals' value estimation and affect their behavior later on. Four cost-related items were created and the rest of the items under this factor were expectancy-related items.

Utility Value

Subjective task value is an important predictor of student motivation. As one category of task value, utility value is the perception of the activity's worth in relation to current and future goals (Eccles & Wigfield, 2002). Utility value may be of particular importance for both motivation and performance in educational settings (Simons, Vansteenkiste, Lens, & Lacante, 2004). In the current scale, it was measured by questions such as: "I don't know how English will benefit my future" and "English has no use for my major."

Experiences of Failure

Success and failure significantly change intrinsic motivation. (McCaughan & McKinlay, 1981). Repeated failure threatens self-efficacy and in turn erodes motivation (Bandura, 1986). Experiences of failure was measured by items such as: "I don't get good grades after working hard" and "I have made many attempts to learn English, but I have not improved."

Lack of Learning Strategies

Learners at all levels use strategies. Not being aware of learning strategies and how to use them may lead to students' failure. Several studies have found links between motivation for language learning and reported strategy use. Oxford and Nyikos (1989) discovered that motivation was the best predictor of strategy use in a large-scale study of university students. More motivated students used various learning strategies more often than less motivated students. Lack of learning strategies was measured by questions like: "I wish someone could tell me the best way to learn English" and "I really want to master English but don't know how."

Almost 99% of the items in the current scale are original. Content validity and wording of items were mainly assessed through evaluation by experienced EFL teachers. Specifically, a panel of seven experts (all of them had over 20 years of college EFL teaching experience) was asked to rate each item based on relevance, clarity, simplicity, and ambiguity on the survey. A panel of experts can provide constructive feedback about the quality of the measure and objective criteria with which to represent the domain of interest and evaluate each item. In addition, the expert panel offered concrete suggestions for improving the measure. For example, one item from experiences of failure ("I still can't understand English movies without the Chinese subtitles.") was deleted as this is challenging for most college EFL learners in China. Appendix A contains the items of the LPDS organized conceptually based on the areas reviewed in the literature.

Statement of the Problem

While the study of L2 demotivators first started in Europe (e.g., Chambers, 1993; Oxford, 1998), it blossomed in East Asia such as Japan, Korea, and China (e.g., Kikuchi, 2009; Koizumi & Kai, 1992; Sawyer, 2007; Zhou, 2012). The reason of this phenomenon is probably manifold:

(a) all countries in this region are monolingual, (b) the study of English is mandatory, (c) English belongs to a different language family, and (d) the competitive culture in East Asian educational values and practices. While literature on L2 motivation provides insights into what teachers can do to motivate language learners, the high extrinsic/instrumental motivational context, and the learning experience under those states, suggests that motivation alone seems to be inadequate to account for EFL learning problems (Trang & Baldauf, 2007). Furthermore, one study suggests it is not what teachers *do*, but what they *don't* do that makes all the difference. Christophel and Gorham (1995) found the strongest influence on motivation was not the *presence* of motivators in the classroom, but the *absence* of demotivators. As Dörnyei (2001) put it, in educational contexts, demotivation is a regrettably common phenomenon. Another case in point is that understanding the causes of demotivation lends support to understanding theories of motivation (Sakai & Kikuchi, 2009).

To unveil what demotivates college EFL learners is not the entire story of demotivator research. Whereas the prior literature identifies and explains the possible sources of demotivators in the EFL classroom, there is a lack of research and theoretical rationale that illustrate the underlying reasons of demotivation and the underlying mechanisms for regaining motivation. The reason for this is twofold: (a) the lack of conceptual framework that accounts for the antecedents and consequences of demotivation in EFL studies, and (b) the lack of empirically validated scales that systematically measure learner perceptions of demotivators in the EFL classroom.

Consequently, the first purpose of this study was to present a conceptual framework for learner perceptions of demotivators in the college EFL classroom and develop a theoretically sound assessment instrument. Notwithstanding the negative influence of demotivation on student

learning outcomes, prior research in EFL demotivation suffers from the lack of generally agreed-upon conceptual understanding, which hampers scale development. A theoretically grounded conceptual framework can advance the development of a valid and reliable measurement instrument for future EFL demotivation research. While there is no single theoretical model or measurement that explains all aspects of demotivation, it will serve as the basis for the development of approaches and techniques to combat demotivation in distinct areas of human endeavor.

In line with the first purpose of the study, the second purpose of the study was to demystify the underlying reasons of demotivation and the underlying mechanisms for regaining motivation. In medicine, it is easy to understand the difference between treating the symptoms and curing the condition. While identifying various demotivators in the EFL classroom is important, only treating symptoms will not address the underlying reasons of demotivation. Analyzing the reason behind will allow to address the problem properly and ultimately heal the underlying systems and processes. By using the LPDS, this was achieved via distinguishing motivated EFL learners from demotivated ones in the first place before conducting subsequent group comparisons.

Research Questions

Reflecting upon the above-mentioned objectives, the focus of this dissertation therefore with the following issues being addressed through Study 1(exploratory factor analysis) and Study 2 (confirmatory factor analysis) at first.

1. What are the underlying dimensions of learner perceptions of demotivators in an EFL classroom revealed by Study 1?
2. Whether measures of demotivator in Study 2 are consistent with dimensions established

by Study 1?

Further, to tentatively analyze the reason behind demotivation, the focus of Study 3 therefore with the following issue being addressed.

3. Do students at different motivation level react to demotivators differently?

CHAPTER III

METHOD

Descriptions of the Data

The data for this dissertation were provided by my colleagues in Jiangxi Agricultural University, China. The data were part of an investigation on L2 demotivation in East Asian culture originated in fall 2016. The data for Study 1 were collected in fall 2018, and the data for Study 2 and Study 3 were collected in summer 2019.

Study 1

The purpose of Study 1 was refining items for the Learner Perceptions of Demotivator Scale. The factor structure of those items was also explored. The process of scale development requires sophisticated and systematic procedures that involve theoretical and methodological rigor. Many researchers have agreed that the scale development process can be carried out in three basic steps: item generation, assessment of content validity, and psychometric analysis (Clark & Watson, 1995; DeVellis, 2016).

Item Finalization

Grounded primarily in social cognitive theory and expectancy value theory, 99 items were generated based upon the following nine components of the LPDS (see Figure 2): teacher behavior (TB; 19 items), peer influence (PI; 8 items), class material (CM; 9 items), loss of interest (LI; 11 items), experience of failure (EF; 12 items), and learning strategy deficiency

(LSD; 8 items), utility value (UV; 11 items), expectancy/cost (EC; 9 items), and instructional quality (IQ; 12 items). The LPDS (99 items) was designed to assess – from a student's perspective – the presence of demotivators within the instructional environment and within the student that have been hypothesized to cause demotivation in L2 studies. Items were rated on a 4-point Likert scale from 4 = *Strongly Agree/Very Demotivating* to 1 = *Strongly Disagree/Not Demotivating at All*. Higher scores signify higher levels of demotivating factors.

The question of how many response alternatives to include on a rating scale has challenged researchers for many years and has gained substantial attention in the literature on survey design and measurement error (e.g., Sturgis, Roberts, & Smith, 2014). Yet a lack of consensus persists, and practices in questionnaire design continue to vary widely. A middle response alternative was not provided given the sample size and the number of items in the scale. One problem that may arise when a mid-point response alternative “neutral” is provided is that respondents who are fatigued, or poorly motivated to finish the questionnaire may select the middle alternative instead of providing a directional response. Krosnick has termed this “neutral” responding “satisficing” (Krosnick, 1991).

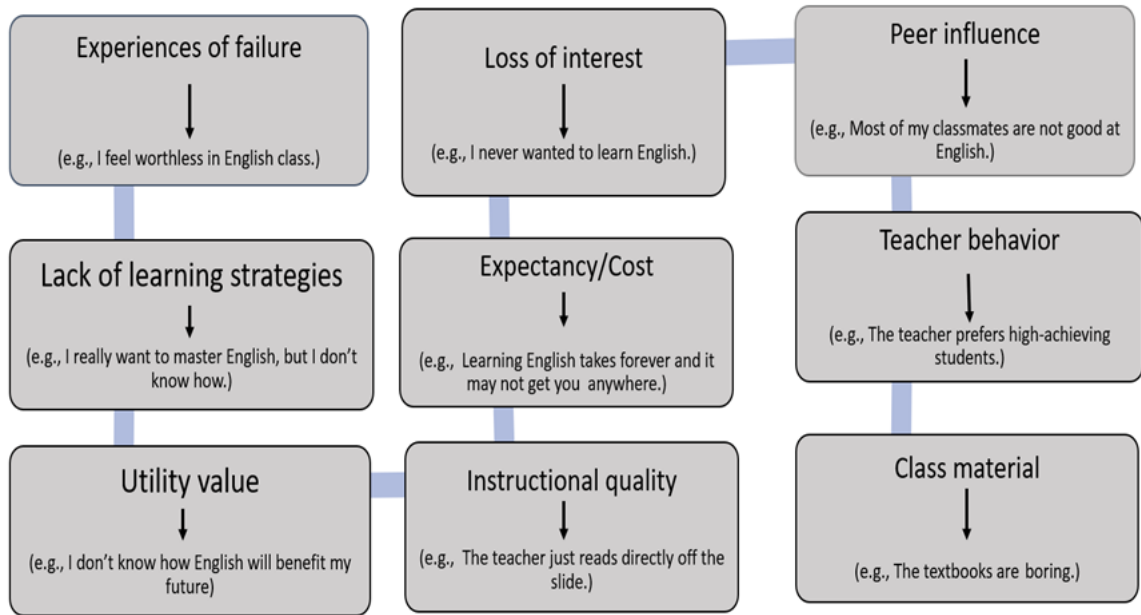


Figure 2. Nine intended factors for LPDS.

Participants and Procedures

Three hundred college junior students ($n = 159$) and graduate students ($n = 141$) were recruited as volunteers from a university in southeast China to participate in Study 1.

Approximately, 60% ($n = 180$) of the participants were males. College junior students and graduate students have completed two years of College English learning and generally have a better understanding of the college EFL classroom context than freshmen and sophomores. The questionnaire was administered to the participants during a 30-minute class break. The principle of voluntary participation was strictly abided by so that students were not forced to participate in the research. They were assured their responses will be confidential and anonymous.

EFA is a widely used statistical analysis in the social sciences. EFA can be utilized for a variety of applications, including developing an instrument for assessing achievement motivation (Costello & Osborne, 2005). EFA is generally used to discover the factor structure and examine

the internal structure of a psychological construct (e.g., demotivation). Being exploratory by nature, it is often recommended when researchers have no hypotheses about the nature of the latent factor structure of their measure (Meyers, Gamst, & Guarino, 2016). While there were nine intended factors in the LPDS, EFA is expected to obtain an objectively refined number of items for subsequent analyses such as CFA. There are four issues need to be addressed while conducting EFA: (a) extraction, (b) rotation, (c) the number of factors retained, and (d) sample size.

There are several factor analysis extraction methods to choose from (such as principal axis factor, maximum likelihood, generalized least squares, unweighted least squares). Typically, maximum likelihood or principal axis factor will provide the best results, relying on whether the data are approximately normally distributed or significantly non-normal, respectively (Costello & Osborne, 2005). Maximum likelihood was selected since the data was approximately normally distributed.

Multiple types of rotations can be performed after the initial extraction of factors, including orthogonal rotations, such as varimax and equimax, which impose the restriction that the factors cannot be correlated, and oblique rotations, such as promax, which allow the factors to be correlated with one another (Costello & Osborne, 2005). Theoretically and empirically, L2 demotivating factors such as experiences of failure and loss of interest are expected to be correlated to some degree (e.g., Bandura, 1986; Tulis & Ainley, 2011). Thus, using orthogonal rotation leads to a loss of valuable information if the factors are correlated, and oblique rotation should theoretically render a more accurate, and perhaps more generalizable solution. By implication, oblique rotation was adopted.

The default in most statistical software packages is to retain all factors with eigenvalues greater than 1.0. However, this is one of the least accurate methods for extracting the number of factors (Velicer & Jackson, 1990). Therefore, scree test is adopted by many as the criterium for determining the number of factors retained. The scree test consists of examining the graph of the eigenvalues and identify the natural bend or break point in the data where the curve flattens out. The number of datapoints above the “elbow” is usually the number of factors should be extracted.

There are two schools of thought in terms of minimum sample size in factor analysis. Some researchers say that the absolute number of cases (N) is important while the others say that the case-to-variable ratio (p) is important (e.g., Kuncze, Cook, & Miller, 1975). By reviewing the sample size rules in social sciences, 50 is very poor, 100 is poor, 200 is fair, 300 is good, 500 is very good, and 1000 or more is excellent. (e.g., MacCallum, Widaman, Zhang, & Hong, 1999). Based on the case-to-variable ratio rule, there should be at least twice as many subjects as variables in factor-analytic investigations (Kline, 1993). Thus, for the current study, the minimum case should be no less than 200. Further, Kaiser-Meyer-Olkin (KMO) Test is also employed to test sampling adequacy. KMO is a measure of suitability of the data for factor analysis. The test measures sampling adequacy for each variable in the model and for the complete model. KMO returns values between 0 and 1. KMO values between 0.8 and 1 indicate the sampling is adequate. KMO values smaller than 0.6 indicate the sampling is not adequate and that remedial action should be taken (Cerny & Kaiser, 1977).

In line with any statistical modeling procedure, EFA carries a set of assumptions. There are several requirements for a dataset to be suitable for EFA: (a) normality, while EFA is generally robust to minor violation of assumptions of normality, statistical inference is improved

if the assumption is met, (b) linearity, based on correlations between variables, EFA is part of general linear model (GLM), it is important to check there are linear relations amongst the variables, (c) no perfect multicollinearity, although mild multicollinearity is not a problem for EFA, it is critical to avoid extreme multicollinearity or singularity, (d) outliers, EFA is sensitive to outlying cases including univariate outliers and Multivariate outliers, (e) homoscedasticity, at each level of the predictor variable, the variance of the residual terms should be constant, and (f) factorability, it assesses whether there are sufficient intercorrelations amongst the items to warrant EFA. (Williams, Onsman, & Brown, 2010; Yong & Pearce, 2013).

Reliability

Cronbach's alpha was used to measure internal-consistency reliability for demotivation total score and each of the retained constructs. Internal consistency is typically a measure based on the correlations between different items on the same test (or the same subscale on a larger test). It assesses whether multiple items that propose to measure the same underlying construct produce close scores (Clark & Watson, 1995).

Study 2

A primary goal of Study 2 was to confirm the underlying dimensional structure of the LPDS in a larger and more diverse sample. I also sought to further examine and establish (a) the internal consistency of ratings across the items that constitute the LPDS, (b) a higher order CFA to extract a second-order factor that could account for each subdimensions of learner perceptions of demotivators, (c) the extent to which different gender groups provide consistent ratings and structures for the assessment, and (d) construct validity by means of correlating with related psychological and behavioral constructs.

Participants and Procedures

Another 325 college junior students ($n = 225$) and senior students ($n = 100$) from a university in southeast China were recruited as volunteers to participate in study 2. Approximately, 60% ($n = 191$) of the participants were females. College junior students and graduate students have completed two years of College English learning and generally have a better understanding of the college EFL classroom context than freshmen and sophomores. The questionnaires were administered to the participants during a 30-minute class break. The principle of voluntary participation was strictly abided by so that students were not forced to participate in the research. They were assured their responses will be confidential and anonymous.

Researchers often use CFA for construct validation of psychological, clinical, and educational questionnaires, especially when the tests are supposed to be multidimensional. CFA is a quantitative data analysis method that belongs to the family of structural equation modeling (SEM) techniques. CFA focuses on the assessment of fit between the data and a pre-conceptualized, theoretically grounded model that specifies the hypothesized causal relations between latent variables and their observed indicators (Meyers et al., 2016).

CFA expresses the degree of discrepancy between predicted and empirical factor structure in chi-square (χ^2), and indices of “goodness of fit” (Meyers et al., 2016). CFA borrows many of the concepts from EFA except that the factor structure is pre-determined, and a hypothesis test is conducted to see if the structure is appropriate. Traditionally, chi-square is used to assess the fit of the hypothesized model. Because researchers are testing a close fit, a nonsignificant chi square is desired. However, the chi-square statistic is very sensitive to sample size; larger samples produce larger chi-squares that are significant even with very small

discrepancies between implied and obtained covariance matrices. Thus, many researchers advise against the sole use of the chi square test value in assessing the overall fit of the model (e.g., Bentler, 2005). Though several varying opinions exist, other fit measures commonly used in educational and psychological scale validation studies are confirmatory factor index (CFI), Tucker Lewis index (TLI), Root Mean Square Error of Approximation (RMSEA), and Standardized Root Mean Square Residual (SRMR). CFI compares the fit of a target model to the fit of an independent, or null, model. It can range between 0 and 1 (values greater than 0.90 indicate good fit). TLI indicates the model of interest improves the fit by 95% relative to the null model. TLI is preferable for smaller samples (values greater than 0.90 indicate good fit). RMSEA refers to a parsimony-adjusted index; values closer to 0 represent a good fit (cut off for good fit is $RMSEA < .08$). SRMR is the square-root of the difference between the residuals of the sample covariance matrix and a value of zero indicates perfect fit. A value smaller than .08 is generally considered a good fit. (Hu, Bentler, & Kano, 1992; Hooper, Coughlan, & Mullen, 2008).

Second Order Factor Model

Second-order factor models have been used in psychological and educational settings to study various domains, including self-concept (Marsh, Ellis, & Craven, 2002), psychological well-being (Hills & Argyle, 2002), and academic amotivation (Legault et al., 2006). Second-order models are most typically applicable in research contexts in which assessment instruments measure several related constructs, each of which is indicated by multiple observed variables (items under each factor or construct). The second-order model represents the hypothesis that these seemingly independent, but correlated constructs can be accounted for by one or more common underlying higher order constructs (Chen, Sousa, & West, 2005). For example, to

examine whether there is a general intelligence construct or factor that carries a variety of specific intelligence-related abilities (Spearman, 1927), one can hypothesize that the specific abilities (which are each assessed by multiple items) are lower order factors, and the general intelligence is a higher order factor, which explains the commonality among the specific abilities. For example, in LPDS, teacher behavior, loss of task value, and low expectancy of success would represent an overall L2 demotivator construct. Compared to first-order models with correlated factors, second-order factor models are more parsimonious and interpretable when researchers hypothesize that higher order factors underlie their data (Chen et al., 2005).

Measurement Invariance/Equivalence

When comparing two or more groups (males and females in the current study) with the same measurement scale, the assumption is made that the scale measures the same constructs in the same ways across different groups. Satisfying this assumption, referred to as measurement invariance (or equivalence), is crucial if the scale is intended for such comparisons. Meaningful comparisons of statistics such as means and regression coefficients can only be made if the measures are comparable across different groups (e.g., Byrne & Watkins, 2003). With continuous variables, one of the most frequently used techniques for testing measurement invariance is multiple group CFA. The early statistical developments of this technique (e.g., Jöreskog, 1971) and later applications were limited to the comparison of covariance structures. More recent work (Meredith, 1993) has further developed the technique so that the comparison of mean structures among the groups is also considered. This further examination is significant if researchers intend to go beyond a comparison of the covariance structures in the groups and also compare the mean levels of the constructs, often an issue of considerable interest. Following recently established guidelines (Vandenberg & Lance, 2000), examinations were made to test

whether factor loadings, intercepts and residual variances were equivalent in a factor model that measures a latent construct.

Nomological Network / Potential Correlates with Demotivation

The nomological network is an approach to construct validation (i.e., collecting evidence about the meaning) of psychological constructs. Conclusion drawn from a nomological network can provide indirect evidence of validity by demonstrating how well the construct correlates with other measures or it should theoretically relate to. By situating a construct in the context (or network) of other construct, behavior, or properties, scale developers sharpen and articulate the very meaning of the construct itself (Cronbach & Meehl, 1955).

Academic performance

While academic performance is the most intuitive variable to provide construct validity of demotivation (i.e. low-achieving students should be extremely demotivated), only few studies (Xie et al., 2018) have addressed the link between L2 performance and demotivation. The correlation between demotivation and academic performance is moderate ($r = -.44$) in the study above. Therefore, I expected to find a moderate and negative correlation between academic performance and demotivation.

Measurement of academic performance. The CET score could be used to test postdictive or retrospective validity of the LPDS. As one of the subtypes of criterion validity, retrospective validity is the extent to which an instrument that claims to measure a particular behavior can be shown to correlate with past occurrences that demonstrate this behavior (Jolliffe et al., 2003). For example, if a measure of criminal behavior is valid, then it should be reasonable to use it to predict whether an individual has an antisocial or criminal behavior record. Participants in the

current study took the CET exam before the administration of the scale. Thus, the scale should negatively predict their past English performance.

Students' EFL performance was measured using students' self-reported College English Test "Band 4" score, better known as CET 4 (National College English Testing Committee, 2006), which is a national English language proficiency test in Chinese higher education institutions, and often used by institutions as one of the criteria for their graduates' degree attainment. The National College English Test (CET 全国大学英语四六级考试) is a large-scale standardized exam administered by the Ministry of Education in China. In 2017 alone, nearly 10 million people took CET4 and CET6, the exam's two levels (Gu, 2018). This huge number of test takers suggests that more people take the CET than any other English test for non-native speakers of English. The fundamental purpose of the CET is to comprehensively evaluate English teaching and learning in Chinese colleges and universities. It is widely recognized among Chinese institutions and employers.

Academic self-efficacy

Experiences of failure or difficulty in learning English is the most harmful demotivator for East Asian EFL learners. This finding corroborates Bandura's (1986) theory of self-efficacy. According to Bandura, a person's sense of self-efficacy directly relates to effort expenditure on a given task. Students' successful academic experiences boost self-efficacy, while failures erode it. Failures often induce rumination that can block effective task performance (Brunstein & Gollwitaer, 1996). Repeated failures are assumed to decrease control expectations on future test task, which in turn produce motivation deficits. Thus, it is plausible to conclude that students' self-efficacy is a potential and negative correlate of demotivating factors.

Self-efficacy beliefs determine how people feel, think, and most importantly motivate themselves. Self-efficacy magnitude can predict how motivated people feel. Disbelief in one's capabilities undermines motivation (Bandura, 1986). Thus, academic self-efficacy could be used to test concurrent validity to add another supporting piece of evidence for the criterion validity of LPDS. Concurrent validity is the extent to which one measurement is backed up by a related measurement obtained at about the same point in time (Jolliffe et al., 2003). For example, if a measure of criminal behavior is valid, then it should be reasonable to use it to predict whether an individual is currently breaking the law. Self-efficacy was measured at the same time point with demotivating factors. Thus, the scale should negatively predict their concurrent self-efficacy level.

Measurement of academic self-efficacy. The Grade 9 French Survey developed by Netten et al. (1999) were used to measure self-efficacy (Cronbach's $\alpha = .84$). This survey was specifically developed to measure self-efficacy in an L2 classroom. While it was intended to be administered to adolescent students, it is suitable for the emerging adults in the current study since the average age were around 20.5 years. Slight modifications were made to items included in this measure to reflect an English classroom. To be specific, each time the word "French" appears in the survey was replaced by "English" (e.g., "I believe I can do well in English."). All items were rated on a 4-point Likert scale from 4 = *Strongly Agree* to 1 = *Strongly Disagree*. A higher score indicates a higher level of self-efficacy.

Fixed and growth mindset

Carol Dweck (2006) studies why people succeed (or do not) and what is within our control to foster success. She claims that developing a growth mindset (the core belief that abilities are malleable and not fixed) is crucial to adopting learning-oriented behavior. A growth

mindset leads to increased motivation and achievement test scores. Specifically, students who believe that their ability could be increased tend to value learning as a goal, even when it means hard work or initial errors. On the other hand, when fixed mindset students hit a setback (e.g., experiencing failure in learning English), they will turn off and try hard to hide mistakes and deficiencies (e.g., skipping English classes or being disengaged), further alienating them from success. Mindset has been consistently shown to account for students' academic performance in multiple ways and can predict whether students will put forth or withdraw academic effort when encountered academic challenges (Yeager, Paunesku, Walton, & Dweck, 2013). In the field of language learning, Mercer (2012) discovered that a fixed mindset seems to prevail. She also asserted that people with a fixed mindset will be more likely to refrain from challenging themselves and lower their language learning expectations, and feel helpless following their failure, therefore becoming easily demotivated. By implication, I examined how students' mindset influences the level of demotivating factors. Similarly, mindset was measured at the same time point with demotivating factors. Thus, the scale should predict their concurrent mindset.

Measure of mindset. This study measured two components of mindset, theory of intelligence and effort beliefs using the adapted Student Mindset Survey (Blackwell, Trzesniewski, & Dweck, 2007). The original Student Mindset Survey (SMS) was based on a model of achievement motivation that influenced the meaning systems people build to understand success and failure (Dweck, 2000). The six items in the current survey were re-written for a L2 learning population and to measure students' theory of intelligence and effort beliefs. Mindset theory of intelligence was measured using three entity theory statements (e.g., "I have a certain amount of English learning intelligence, and I really can't do much to change it").

Mindset effort beliefs consists of three negative items that measure students' beliefs that effort has no positive effect on achieving positive outcomes (e.g., "If I am not good at English, working hard won't make me good at it."). All items were rated on a 4-point Likert scale from *Strongly Agree* to *Strongly Disagree*. Higher scores are intended to imply more of a growth mindset.

Study 3

Demystifying the Underlying Reasons of Demotivation

Among the 320 participants in Study 2, 38 were students enrolled in a dual degree English literature program. A dual degree, sometimes called a double degree or joint degree, allows a student to work toward two degrees simultaneously. Being in a dual-degree English literature program is not like pursuing a double major. When candidates graduate from a dual-degree program, they get two degrees—a bachelor's degree in English literature in addition to a bachelor's degree in arts or science. Besides paying more tuition fees, they have to fulfill substantially more requirements than that of regular students (enrolled in one program only). Pursuing two degrees results in tight schedules and a busy life. Thus, candidates are usually extremely motivated and passionate about English learning. To demystify the underlying reasons of demotivation, comparisons were made between students enrolled in the dual degree English literature program and regular students in terms of various demotivators.

I hypothesize that group differences drawn from this unintended quasi-experimental design can help researchers answer the question of why demotivation occurred in the first place and demystify the underlying reasons of it. The rationales for this unintended quasi-experimental design are: (a) given the cost, students enrolled in the dual degree English literature program must be considerably more motivated than regular English learners, (b) demotivation is the other side of motivation, and (c) differences in motivation level should reflect differences in

demotivation level. Additionally, if significant group difference(s) was (were) found in terms of demotivation, further analyses will be conducted by controlling for potential covariates such as gender and performance given that the role of gender and academic performance in shaping achievement motivation has a long history in psychological and educational research. For example, significant gender differences were found in intrinsic value in language arts (e.g., Jacobs, Lanza, Osgood, Eccles, & Wigfield, 2002; Pajares & Valiante, 2001). Moreover, expectancies for success determine students' later task value. In other words, students are more likely to value the domains in which they feel competent or perform well (Wigfield & Eccles, 2000).

Participants and Procedures

All participants were from Study 2 and data were collected through Study 2.

CHAPTER IV

RESULTS

Results for Study 1

Data Screening Prior to EFA

The data were analyzed using SPSS v.25.0. Data from five participants were excluded due to missing information. Prior to conducting a statistical analysis, sufficient data screening methods should be used for all research variables to determine such as normality and linearity problems, outlier influences, and missing value presence.

Although various statistical methods have been proposed to test normality, there is no current golden standard method. A Shapiro-Wilk's test ($p < .001$) (Shapiro & Wilk's, 1965) showed that the items for measuring demotivation were not normally distributed. However, formal normality tests (e.g., Shapiro-Wilk test and Kolmogorov-Smirnov test) may be unreliable for large samples in this current study (Ghasemi & Zahediasl, 2012). A visual inspection of their histograms, normal Q-Q plots and box plots showed incompatible results for the same data since no drastic deviations were found from any of the three visual presentations. Thus, in this case, given the sample size, the distributions of all quantitative variables appear to be normal. Moreover, with large enough sample sizes ($n = 295$), the violation of the normality assumption should not cause major problems (Pallant, 2013).

A univariate outlier is a data point that comprises an unusual value on one variable. A multivariate outlier is a combination of extreme scores on at least two variables (Kline, 2015).

When looking for univariate outliers for continuous variables, standardized values (z scores) can be used. According to a conventional criterion, univariate outliers can be considered standardized cases that are outside the absolute value of 3.29 (Tabachnick, Fidell, & Ullman, 2007). No univariate outliers were detected based on the criterion. While 16 multivariate outliers were identified according to the Mahalanobis distance value (significant at $\alpha = .001$ level in a Chi-square distribution), none of them were removed since no substantial differences were detected in EFA results such as Bartlett's test of sphericity, the scree plot, and the pattern matrix.

Given the substantial number of the item in the scale (99 items), SPSS failed to plot the scatterplot matrix to signify linearity. However, the scatter plot of regression standardized residual suggested that both homoscedasticity and linearity assumptions were met since it did not have an obvious pattern and points were equally distributed. Additionally, there was no perfect multicollinearity and the assumption of factorability was not violated either.

Exploratory Factor Analysis

To assess the factorial validity of the 99-item version of the LPDS, the students' responses were factor analyzed using a maximum likelihood method of factor extraction. Evaluation of the correlation matrix indicated that it was factorable: Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy = .84, which is "meritorious" ($> .80$) according to Kaiser's criteria (Cerny & Kaiser, 1977). Bartlett's Test of Sphericity ($\chi^2 = 14766.15$, $df = 4851$, $p < .001$) was significant, indicating that the correlation matrix was not an identity matrix, and all measures of sampling adequacy were deemed sufficient (Pett, Lackey, & Sullivan, 2003).

The number of factors to extract was determined on the basis of two traditional criteria, including examination of the resulting scree plot and eigenvalues greater than 1.0 (e.g., Hayton, Allen, & Scarpello, 2004). The initial extraction revealed 26 factors with eigenvalues greater

than or equal to 1, eight factors with eigenvalues greater than 2, four factors with eigenvalues greater than 3, and three factors with eigenvalues greater than 4. Examination of a scree plot (see Figure 3) indicated the presence of an "elbow" between the third and fourth factors, and visual inspection of the item intercorrelations suggested three or four consistent patterns of correlations. Thus, comparison was made by fixing the number of factors to either three or four.

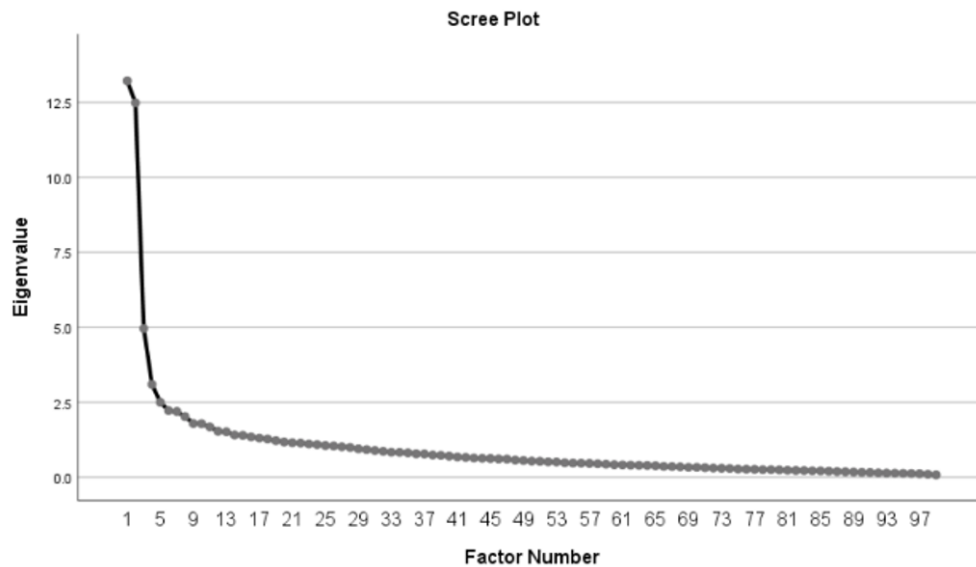


Figure 3. The scree plot of EFA.

After rotation, the items' loadings on each factor were examined. Several criteria were used to determine the number of factors and individual items to be retained in the final solution: (a) each factor needed to contain at least three items, (b) the absolute value of all factor pattern coefficients needed to be .40 or greater on one factor only, and (c) items with factor pattern coefficients (absolute value) load on more than one factor were dropped (e.g., Matsunaga, 2010; Pett et al., 2003). After eliminating items that did not meet the retention criteria, the fourth factor consisted of only two items. Therefore, it was determined that the 99-item LPDS consisted of

three primary factors. The 3-factor simple factor structure accounted for 35% of the variance in total scores and used 66 (67%) of the original items. Inspection of the table of communalities revealed that all items had high extracted communalities ($> .40$), which suggests that much of the common variance in the items can be explained by the three extracted factors (Pett et al., 2003).

The first factor (extraction eigenvalue = 16.30) included 30 teacher behavior-related items. The second factor (extraction eigenvalue = 13.06) included 22 task value items. The third factor (extraction eigenvalue = 5.97) included 14 expectancy belief items. Three intercorrelations ranged from $-.11$ to $.25$ for the three-factor matrix. To be specific, there was a slight negative correlation ($r = -.11$) between negative teacher behavior and loss of task value. There was a very weak positive correlation ($r = .03$) between negative teacher behavior and low expectancy for success. The strongest correlation took place between loss of task value and low expectancy for success ($r = .25$).

Reliability Analysis

Based on the results of the EFA, first, a reliability analysis was run on the 66 items retained in the LPDS. The Cronbach's alpha for these 66 items was $.91$. Next, three reliability analyses were run on the 30 items retained in the negative teacher behavior subscale, the 22 items retained in the loss of task value subscale, and the 14 items retained in the low expectancy for success subscale. The Cronbach's alpha values for the negative teacher behavior subscale, the loss of task value subscale, and low expectancy for success subscale were $.89$, $.94$, and $.87$ respectively.

The results of EFA (standardized factor loadings, item-factor correspondence, Cronbach's alpha as reliability index and factor correlations) are presented in Table 1.

Table 1

Dimensions of Learner Perceptions of Demotivators (Study 1: EFA)

Item	NTB	LTV	LES
Teachers give negative or no feedback to our performance.	.75	.03	-.09
Teachers are not responsible to our learning needs	.70	.00	-.05
Teachers don't have a sense of responsibility for the teaching job.	.70	.04	.02
Teachers show no enthusiasm for their work.	.69	-.12	.05
Teachers are not well-prepared for the class.	.66	-.12	.03
Teachers don't have faith in their students	.65	-.05	-.03
Teachers don't care whether we do well or not.	.64	.07	.02
Teachers are not inspiring or encouraging.	.64	.07	.03
The pace of the class is not appropriate	.62	.19	-.10
Teachers don't respect us as individuals.	.62	.05	.02
Teachers don't believe in their students.	.61	-.03	-.10
Teachers don't have high expectations for us.	.61	.13	-.08
Teachers reward performance rather than learning.	.61	.11	.01
The instruction is not well-organized.	.59	-.08	-.02
Teachers seldom motivate us to learn.	.59	-.08	.02
Teachers just read directly off the slide or the textbook.	.57	.02	.07
Teachers are not passionate about teaching.	.57	-.19	.15
Teachers are not agreeable.	.55	.14	.01
The learning objectives are not clear for the class.	.55	.00	.03
There aren't many teacher-student interactions in the class.	.53	.04	-.09

Table 1 (continued)

Item	NTB	LTV	LES
Teachers make one-way explanations too often.	.52	-.18	.04
We don't have enough opportunities to express ourselves in class.	.51	-.04	-.02
Teachers favor high-achieving students.	.49	-.06	.07
Multi-media is not frequently used in class.	.48	.15	-.12
There is gap between the classroom and the real world.	.47	.07	.01
There is too much teacher talking time.	.45	.02	-.03
Teachers bring too much of their personal life to the class.	.41	.09	-.08
There is no slide made for the class.	.41	-.10	.07
Teachers talk too much in Chinese.	.41	-.02	-.08
Technology is not fully used in the class.	.40	.18	.01
English has lost its charm on me.	.03	.75	-.16
I never wanted to learn English.	.07	.74	-.10
I never liked learning English.	-.01	.69	-.02
I hate learning English with a passion.	-.01	.69	.01
The only purpose of learning English is to pass all the exams.	-.03	.68	.07
I don't see the value of learning English.	.01	.68	-.15
Learning English takes forever, and it may not get you anywhere.	-.03	.63	.00
I wonder why English is needed in a monolingual country.	-.03	.63	.05
English has no use for my major.	.05	.61	-.10
English is not important for my future.	-.01	.61	-.17
Attending English class is torture for me.	-.05	.61	.09

Table 1 (continued)

Item	NTB	LTV	LES
I want to skip all English classes.	.04	.56	-.07
I will not pursue English after passing my exams.	-.09	.56	.12
There is no relationship between my major and English.	.06	.55	-.10
It seems I only study English for exams.	-.03	.53	.19
Honestly, I don't understand why I have to learn English.	-.03	.53	.08
I'm not interested in English at all.	-.08	.52	-.05
It's not clear to me why I must learn English.	.05	.52	.09
I take English class only because it's a required class.	-.04	.50	.19
I don't know how English will benefit my future.	.14	.50	.19
If learning English means losing a fun life, I'll choose the latter one.	.08	.48	.01
I feel worthless in English class.	-.06	.47	.14
I seriously don't know how to speak English fluently and confidently.	-.02	.03	.66
I really want to find out how to read faster and better.	.07	-.24	.57
I hope someone can give me some tips on learning English Grammar.	.01	-.29	.56
I have made many attempts to learn English, but I have not improved	.04	.12	.53
I'm not aware of the strategies to improve my English listening skills.	-.06	.15	.53
It's frustrating that native speakers don't understand my English.	.02	.07	.50
English grammar is tough and confusing.	-.07	.13	.50
I wish someone could tell me the best way to learn English.	.05	-.21	.48
I really want to master English, but I don't know how.	.08	.08	.48
I haven't found an effective way to learn English.	-.10	.08	.48

Table 1 (continued)

Item	NTB	LTV	LES	
Reading comprehension articles are hard to understand.	-.04	.14	.47	
Native speakers are hard to understand even after years of studying.	.03	.22	.46	
I struggle with improving my English writing skills.	-.04	-.22	.45	
I don't get good grades even after working hard.	-.20	.19	.44	
Eigenvalues	12.88	10.32	4.72	
Percentage of variance explained	16.30	13.06	5.97	
	Correlations among factors	NTB	LTV	LES
Teacher behavior	–			
Loss of task value	-.11	–		
Experiences of failure	.03	0.25	–	
Cronbach's alpha	.89	.94	.87	

Note. n = 295. Target loadings are in boldface. NTB = Negative teacher behavior, LTV = Loss of

Task Value, LES = Low expectancy for success

Results for Study 2

Data Screening Prior to CFA

The LPDS retained from EFA is a 66-item instrument structured on 4-point Likert-type scale that ranges from 4 = *totally agree* to 1 = *totally disagree*. It is composed of three subscales, each measuring one facet of demotivator; the NTB (negative teacher behavior) subscale comprises 30 items, the LTV (loss of task value) subscale comprises 22 items, and the LES (low expectancy for success) comprises 14 items.

The CFA model of LPDS hypothesizes a priori that (a) responses to the LPDS can be explained by three factors – NTB, LTV, and LES, (b) each item has a nonzero loading on the demotivator factor it was designed to measure, and zero loadings on all other factors, (c) the three factors are correlated, and (d) the error/uniqueness terms associated with the item measurements are uncorrelated. The data were analyzed using Amos v25.0. A schematic representation of this model is shown in Figure 4.

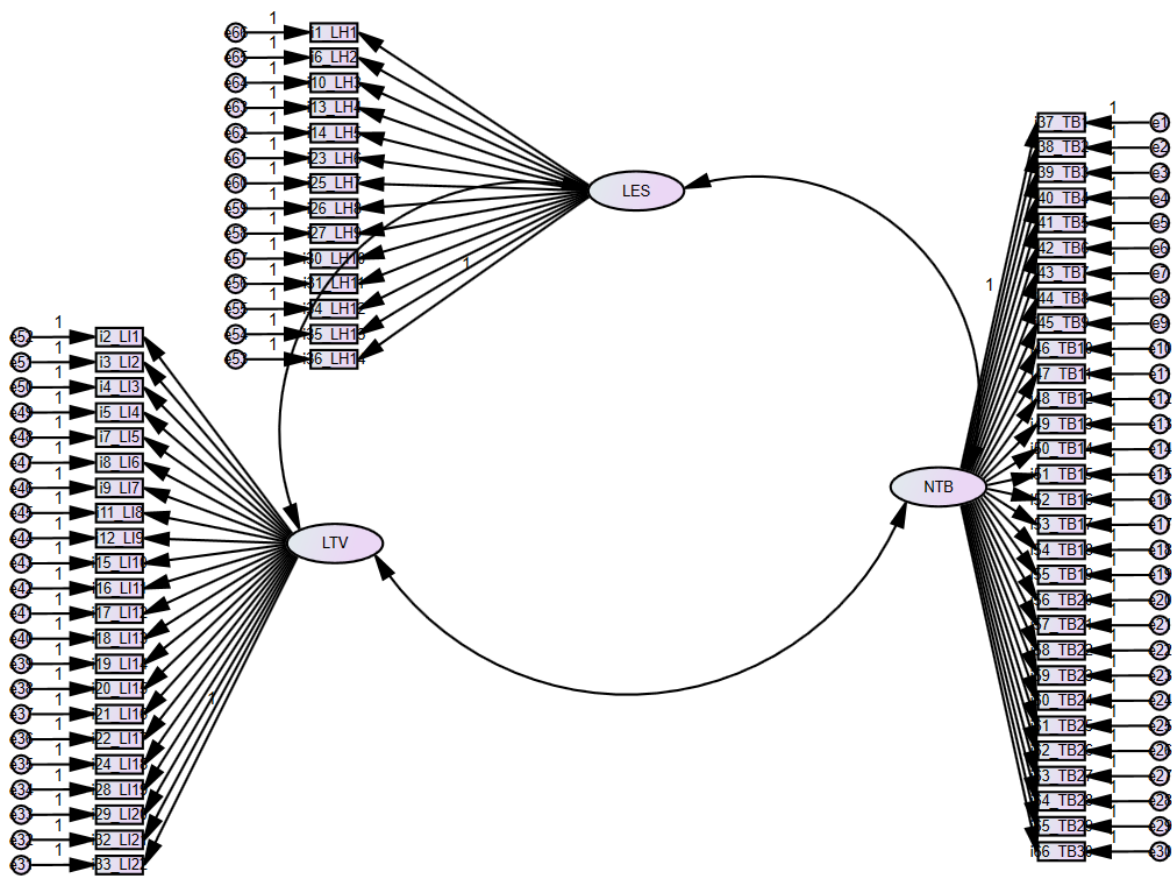


Figure 4. Hypothesized model of factorial structure for the LPDS (Model 1) in Amos Graphics format. NTB = negative teacher behavior, LTV = loss of task value, and LES = low expectancy for success.

In the present case, the sample covariance matrix consists of a total of 2211 ($67*66/2$) pieces of information (or sample moments). Of all the parameters in the model, only 135 are to be freely estimated (63 factor loadings, 66 error variances, 3 factor variances, and 3 factor-co variances); all others are fixed parameters in the model (i.e., they are constrained to equal zero or some nonzero value). Consequently, the hypothesized model is overidentified with 2076 ($2211-135$) degrees of freedom.

Assessment of multivariate outliers

Multivariate outliers can influence the outcome of statistical analyses. A classical way of identifying multivariate outliers in a multivariate normal dataset is to calculate Mahalanobis distance. This distance uses estimates of the location and scatter to identify values that are far away from the main cloud of data. Numerically, an outlier will have Mahalanobis' d -squared value stands distinctively apart from all other Mahalanobis' d -squared values. From a review of those values reported in Observations farthest from the centroid (Mahalanobis distance), there are only 11 outlying cases in the data. None of them were removed since no substantial differences were detected from the initial CFA model fit.

Assessment of multivariate normality

A critically important assumption in performing structural equation modeling (SEM) analyses in general, and in the use of SPSS Amos in particular, is that the data show multivariate normality in distribution. This assumption is rooted in large sample theory from which the SEM technique was developed (Arbuckle, 2012). Therefore, it is critical to check that this assumption is met prior to any analysis. However, the assessment of univariate normality is the prerequisite

of multivariate normality since the former is a necessary (though not sufficient) condition for the latter. Statistical research has found that whereas skewness tends to affect tests of means, kurtosis seriously impacts tests of variances and covariances (DeCarlo, 1997). Evidence of kurtosis is of great concern given that SEM is based on the analysis of covariance structure. From a review of those values reported in Assessment of Normality (from Amos output), in terms of univariate normality, no item is substantially kurtotic. However, univariate normality does not guarantee multivariate normality. As shown in Assessment of Normality, the z-statistic of 51.63 (> 5) is highly suggestive of multivariate non-normality in the data (Bentler, 2005).

Addressing the presence of non-normal data

One approach to the analysis of nonnormal data provided by Amos is to run the analysis on asymptotic distribution-free (ADF) estimation (Browne, 1984). However, unless sample sizes are exceptionally large (above 1000), the ADF estimator performs very poorly and can yield seriously distorted estimated values and standard errors (e.g., Hu, Bentler, & Kano, 1992). Given that my current sample size is 325, I cannot realistically use the ADF method of estimation. In addition, Kline (2015) suggested that one option in the testing of models based on nonnormal data is the use of bootstrapping, test or metric that relies on random sampling with replacement or resampling. In light of this, I requested the program to perform bootstrapping based on 1000 samples (Byrne, 2016). However, in line with what Byrne found, the bootstrapping option yielded no benefits in testing for the factorial validity of the LPDS based on the data which are nonnormally distributed to some extent. Provided with no means of correcting the standard error estimates in Amos, Byrne's (2016) made a comparison between the Amos program (with no consideration of the multivariate nonnormality) and EQS program (taking nonnormality into

account by correcting standard errors). The overall conclusion regarding the significance of the estimated parameters and factorial structure remained the same. Thus, I continued to base my analyses on maximum likelihood estimation.

Model Evaluation

Of the primary interest in CFA is the extent to which a hypothesized model “fits” or adequately describes the sample data. The initially hypothesized model (Model 1) did not indicate good model fit: $\chi^2(320) = 4364.37, p < .0001$, CFI = 0.72, TLI = 0.71, RMSEA = .06, 90% CI [.05, .06], SRMR = .07. Given inadequate goodness-of-fit, some modification in specification is needed to identify a model that better represent the sample data.

Evaluation of model fit is a process of seeking the optimal balance between goodness of fit and parsimony. It should be based on criteria focus on the adequacy of (a) the parameter estimates, and (b) the model as a whole.

Standardized regression weights

Model 1 results revealed many poorly loaded items (standardized regression weights less than .50) in all three factors. To achieve parsimony, 31 items were removed from Model 1. In the factor of *teacher behavior*, original instructional material-related items (e.g., “Multimedia is not frequently used in the class,” and “Technology is not fully used in the class.”) and instructional quality items (e.g., “The instruction is not well-organized.”) loaded poorly on *negative teacher behavior* in CFA. In the factor of *loss of task value*, items with ambiguity (e.g., “I feel worthless in English class.”) or worded with extremity (e.g., “I want to skip all English classes.”) had poor loadings as well. In the factor of *low expectancy for success*, items which may not apply to all college English EFL learners loaded poorly (e.g., “Native English speakers are very hard to

understand even after years of studying.”). Most non-English major students do not have many opportunities to communicate with native English speakers.

Modification indices (MI)

Turning first to the MIs related to Covariances, there is clear evidence of misspecification associated with Item 28 and Item 29 ($e_{33} \leftrightarrow e_{34}$, $\Delta\chi^2 = 88.66$, see Figure 4), Item 8 and Item 15 ($e_{43} \leftrightarrow e_{47}$, $\Delta\chi^2 = 58$) and those with Item 12 and Item 22 ($e_{17} \leftrightarrow e_{20}$, $\Delta\chi^2 = 38.17$). Although there are a few other large MI values present, these three stands apart as they are considerably greater than the others; they indicate misspecified covariances. These measurement error covariances suggest systematic, rather than random measurement error in item responses and they may result from characteristics specific either to the items or the respondents (Aish & Jöreskog, 1990). Another type of method effect that can trigger error covariances is a high degree of overlap in item content (Byrne, 2016). Such redundancy takes place when multiple items, although worded differently, essentially ask the same question. After examination, the latter situation seems to be the case here.

Specifically, in the factor of *loss of task value*, Item 28 is “It seems I only study English for exams,” and Item 29 is “I take English class only because it’s a required course.” Similarly, Item 8 is “There is no relationship between my major and English,” and Item 15 is “English has no use for my major.” In the factor of *low expectancy for success*, Item 25 is “I have made many attempts to learn English, but I have not improved,” and Item 36 is “I don’t get good grades even after working hard.” Additionally, in the factor of *negative teacher behavior*, Item 56 is “Teachers don’t have faith in their students,” and Item 53 is “Teachers don’t have high expectations for us.” Obviously, those items are worded similarly and there is considerable

overlap between them. Furthermore, while some items are not worded similarly, they essentially ask the same questions for example, Item 4 is : “Learning English takes forever, and it may not get you anywhere,” and item 7 is : “I don’t see the value of learning English.” Both items relate to the perceived value of English learning. Thus, the residual variances of those similar items were allowed to correlate.

The Principle of Parsimony

Parsimonious models are simple models with great explanatory predictive power. They explain data with a minimum number of parameters, or predictor variables. A rule of thumb for evaluating the model fit of CFA emphasizes model parsimony; all other things being equal, a simpler, more parsimonious model with fewer estimated parameters is better than a more complex one (e.g., DeVellis, 2016; Marsh & Hau, 1996). A model that is parsimonious yet performs better in comparison to other models may be ideal. Parsimony can be achieved by removing redundant items. Redundant items can be identified through the modification indices that suggested overlapping error variances between two items. Generally, the lower factor loading item between the two will be deleted.

Specifically, in the factor of *negative teacher behavior*, item 53 (“Teachers don’t have high expectations for us.”) was removed due to the overlapping error variance with item 56 (e.g., “Teachers don’t have faith in their students.”). In the factor of *low expectancy for success*, item 36 (“I don’t get good grades even after working hard.”) was deleted since it is similar to item 25 (“I have made many attempts to learn English, but I have not improved.”). Similarly, in the factor of *loss of task value*, due to the duplicate wording between item 8 (“There is no relationship between my major and English.”) and item 15 (“English has no use for my major.”), item 8 was removed. The only retained correlation is between item 4 (“Learning English takes

forever, and it may not get you anywhere.”) and item 7 (“I don’t see the value of learning English.”) since dropping either of them deteriorates the model fit slightly.

Post Hoc Analyses

It is not uncommon that initially hypothesized model fails to achieve an adequate fit. If the fit turned out to be sufficiently poor, developers may need to reevaluate the basis for proposing the model and then consider another one. If the fit was not severely poor, developers typically choose to modify the initially proposed model in an effort to achieve better fit. Respecification takes various forms and can lead to different degrees of modification, including deleting indicator items and adding correlations between error variables.

Provided with information related to both model fit and to possible areas of model misspecification, a researcher then needs to modify an originally hypothesized model in a sound and responsible manner by: (a) removing items with poor loading (e.g., Steven, 2012), (b) correlating errors within the same factor, and (c) removing redundant items (e.g., Bentler & Chou, 1987; DeVellis, 2012; Marsh & Hau, 1996; Sörbom, 1975).

After removing 31 items with poor loadings ($< .50$), the CFA results (Model 2) revealed better model fit: $\chi^2(320) = 1183.54, p < .0001$, CFI = 0.86, TLI = 0.85, RMSEA = .06, 90% CI [.06, .07], SRMR = .06. Goodness-of-fit statistics related to Model 2 revealed that deleting poor loading items made a considerable improvement on model fit. To be specific, it resulted in decreases in the overall chi-square from 4364.37 to 1183.54, CFI from 0.72 to 0.86, and TLI from 0.71 to 0.85.

By allowing 14 residual variance to correlate, goodness-of-fit statistics again revealed substantial improvements in model fit between Model 2 and Model 3: $\chi^2(320) = 954.71, p < .0001$, CFI = 0.91, TLI = 0.90, RMSEA = .04, 90% CI [1.60, 2.31], SRMR = .06. In particular,

it decreased the overall Chi-square from 1183.54 to 954.71, CFI from 0.85 to 0.91, TLI from 0.86 to 0.90, and RMSEA from .06 to .04.

Upon removing 11 redundant items, goodness-of-fit statistics again revealed substantial improvements in model fit between Model 3 and Model 4 (see Figure 5): $\chi^2(320) = 392.75, p < .0001$, CFI = 0.94, TLI = 0.93, RMSEA = .05, 90% CI [1.60, 2.31], SRMR = .06. In particular, it decreased the overall chi-square from 954.71 to 392.75, CFI from 0.91 to 0.94, TLI from 0.90 to 0.93. The Fit Indices for CFA models tested in Study 2 were presented in Table 2.

Table 2

Fit Indices for CFA Models Tested in Study 2

	Model 1	Model 2	Model 3	Model 4
1. Chi-square	4364.37	1183.54	954.71	392.75
2. TLI	0.71	0.85	0.90	0.93
3. CFI	0.72	0.86	0.91	0.94
4. RMSEA	.06	.06	.04	.04
5. SRMR	.07	.06	.06	.06

Note. Model 2 is achieved by deleting 31 poor loading items. Model 3 is achieved by allowing 14 error correlation within factors. Model 4 is achieved by deleting 11 redundant items.

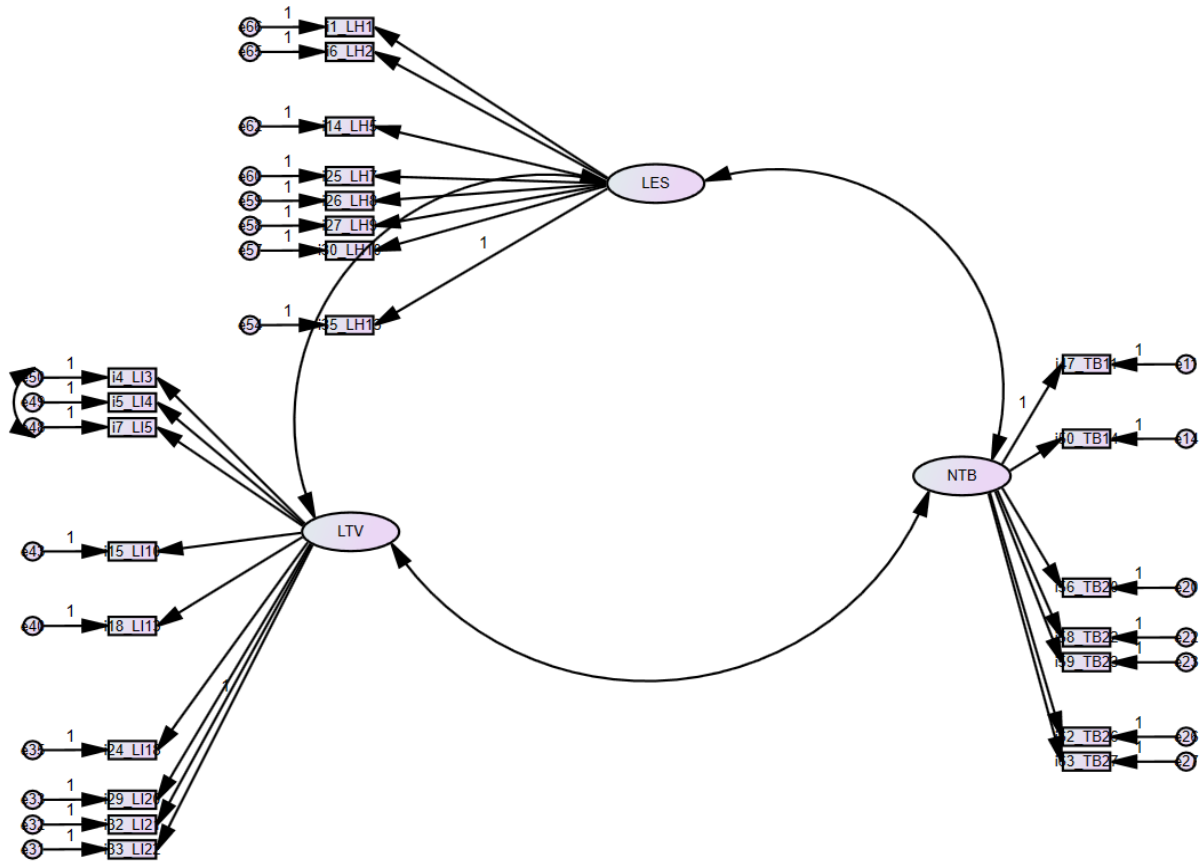


Figure 5. Final model of factorial structure for the LPDS (Model 4) in Amos Graphics format.

Reliability

Based on the results of the CFA, first, a reliability analysis was run on the 24 items retained in the LPDS. The Cronbach's alpha for these 24 items was .85. Next, three reliability analyses were run on the 7 items retained in the *negative teacher behavior* subscale, the 9 items retained in the *loss of task value* subscale, and the 8 items retained in the *low expectancy for success* subscale. The Cronbach's alpha values for the teacher behavior subscale, the loss of task

value subscale, and the experiences of failure subscale were .79, .88, and .82 respectively, which indicated excellent internal consistency.

The factor loadings, correlations among the three latent factors, and the Cronbach's α values from study 2 were presented in Table 2. The demotivation dimensions, the correlations among the dimensions, and their homogeneity (Cronbach's α) from Study 1 and Study 2 are displayed in Table 3.

Table 3

Statistics of Learner Perceptions of Demotivators (Study 2: CFA)

Item	NTB	LTV	LES
Teachers are not responsive to our learning needs	.51		
Teachers don't have a sense of responsibility for the teaching job.	.66		
Teachers don't have faith in their students	.64		
Teachers are not inspiring or encouraging.	.65		
Teachers reward performance rather than learning.	.60		
Teachers seldom motivate us to learn.	.58		
The learning objectives are not clear for the class.	.66		
The only purpose of learning English is to pass all the exams.		.71	
I don't see the value of learning English.		.70	
Learning English takes forever, and it may not get you anywhere.		.69	
I wonder why English is needed in a monolingual country.		.76	
English has no use for my major.		.68	
I'm not interested in English at all.		.65	
It's not clear to me why I must learn English.		.65	
I take English class only because it's a required class.		.63	
If learning English means losing a fun life, I'll choose the latter one.		.64	
I seriously don't know how to speak English fluently.			.60
I have made many attempts to learn English but I have not improved.			.70
I'm not aware of the strategies to improve my listening skills.			.58
English grammar is tough and confusing.			.54

Table 3 (continued)

Item	NTB	LTV	LES
I really want to master English, but I don't know how.			.66
I haven't found an effective way to learn English.			.62
Reading comprehension articles are hard to understand.			.64
I struggle with improving my English writing skills.			.54
	Correlations among factors		
Teacher behavior	–		
Loss of task value	.05	–	
Experiences of failure	.23**	.37**	–
Cronbach's alpha	.79	.88	.82

Note. $n = 320$, ** $p < .001$

Table 4

Correlations Among Dimensions of Demotivators

Dimensions	NTB	LTV	LES
TB	–	-.11	.03
LTV	.05	–	.25*
EF	.23*	.37**	–
Cronbach's α			
Study 1	.89	.94	.87
Study 2	.79	.88	.82

Note. Pearson product-moment correlations among the dimensions are presented above the diagonal (Study 1), and correlations among the latent factors are presented below the diagonal (Study 2). * $p < .05$, ** $p < .001$.

Second Order Factor Model

Having established a well-fitting first-order model, in the next step, I tested whether the three factors identified by the first-order model could be explained by the higher order structure of general demotivator. The CFA model to be tested in the present application assumes a priori that (a) responses to the LPDS can be explained by three first-order factors (Negative Teacher Behavior, Loss of Task Value, and Low Expectancy for Success) and one second-order factor (Demotivator), (b) each item has a nonzero loading on the first-order factor it was designed to measure and zero loadings on the other two first-order factors, (c) covariation among the three first-order factors is explained fully by their regression on the second-order factor.

In the present case, given the specification of only three first-order factors, the higher-order structure will be just-identified unless a constraint is placed at least one parameter in this upper level of the model (e.g., Bentler, 2005; Chen et al., 2005). Specifically, with three first-

order factors, I have six pieces of information; the number of estimable parameters is also six (three factor loadings; three residuals), thereby resulting in a just-identified model. Thus, before testing for the validity of the hypothesized structure, I resolved this issue by placing equality constraints on particular parameters at the upper level known to yield estimates that are approximately equal (Byrne, 2016). The fully labeled hypothesized model showing the constraints is schematically presented in Figure 6. Analysis was based on this respecified model and the validated hierarchical structure of learner perceptions of demotivator is presented in Figure 7.

While results revealed that the second-order model provides a good representation of the variance within the data: $\chi^2(320) = 401.16, p < .0001$, CFI = 0.93, TLI = 0.94, RMSEA = .04, 90% CI [.03, .04], SRMR = .06, one of the three first-order factor loadings (*negative teacher behavior*) are below the threshold of .40. Taken together, whereas the model fit confirmed a well-fitting second-order model with post hoc model adjustment, the one low first-order loading does not seem to support L2 demotivation as a higher order construct comprising three subdimensions.

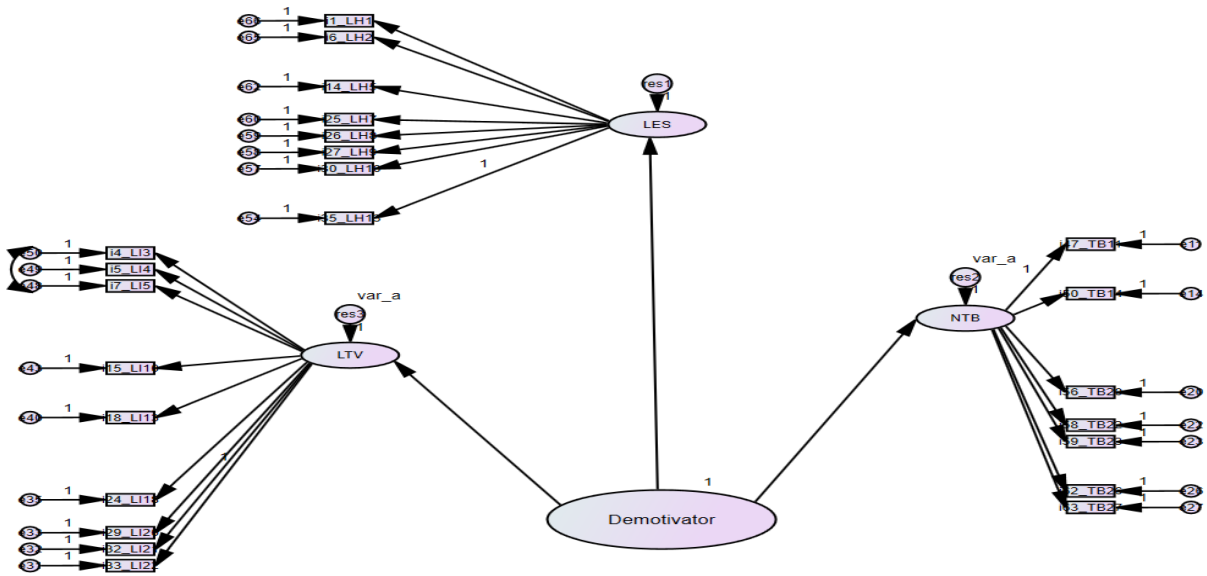


Figure 6. Hypothesized second-order model with residual variances for factor of loss of task value and factor of negative teacher behavior constrained equal.

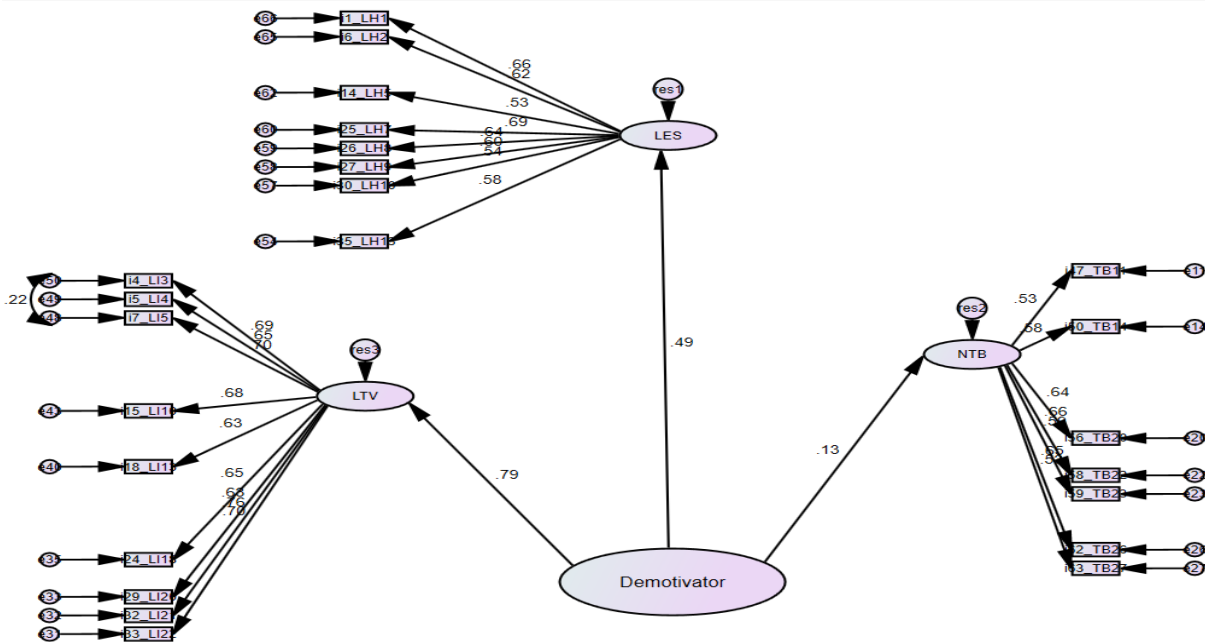


Figure 7. Validated hierarchical structure of learner perceptions of demotivators with residual variances for factor of loss of task value and factor of negative teacher behavior constrained equal.

Measurement Invariance Testing: Multigroup Confirmatory Factor Analysis

To test measurement invariance across participants from various groups, I used multigroup confirmatory factor analysis (Milfont & Fischer, 2015). Multigroup CFA allows researchers to determine whether a research inventory elicits similar response patterns across samples. For nested model comparison, I examined multiple goodness-of-fit indices. The chi-square difference test is highly sensitive in large samples, so I supplemented this test with changes in CFI, TLI, and RMSEA (Meade, Johnson, & Braddy, 2008). Simulation studies comparing multiple goodness-of-fit indices (e.g., chi-square, AIC, RMSEA, and CFI) have recommended Δ CFI as it is independent of model complexity and sample size. Cheung and Rensvold (2002) recommend examining changes in CFI (Δ CFI) as the primary test for invariance, with Δ CFI less than .01 indicating invariance. Further, Meade et al. (2008) has suggested that if Δ CFI indicates invariance and the sample size is greater than 200, any differences between groups are probably trivial and further analyses could proceed, even though the chi-square difference test is significant.

The four typical phases of measurement invariance testing are as follows: configural invariance, metric invariance, scalar invariance, and strict/residual invariance.

Configural invariance

The first, and least stringent, phase in the measurement invariance or equivalence ladder is configural invariance, or invariance of model structure. This step is created to test whether the constructs (in this case, latent factors of teacher behavior, loss of task value, and experiences of failure) have the same pattern of free and fixed loadings (e.g., those that are estimated by the model and those that are fixed at 0) across groups (in this case the two gender groups).

Invariance at the configural level represents that the basic formation of the constructs (i.e., eight loadings on latent factor of experiences of failure) is supported in the two gender groups.

Configural noninvariance indicates that the pattern of loadings of items on the latent factors differs between male and female (e.g., in one gender group only, at least one item loads on a different factor, cross-loads on both factors, etc.). To measure configural invariance, I examined both groups simultaneously (Horn & McArdle, 1992; Level 1). I allowed item parameters (i.e., factor loadings, item intercepts, and item uniqueness), factor variances, and latent means to vary freely across groups. Configural invariance was supported by sound fit statistics: $\chi^2(320) = 698.12, p < .0001$, CFI = 0.92, TLI = 0.91, RMSEA = .04, 90% CI [.03, .04], SRMR = .06, which suggests that the overall factor structure is similar for both males and females.

Metric invariance

As the configural invariance was supported, the next step is to test for metric invariance (Level 2), or equivalence of the item loadings on the factors. Metric invariance means that each item load to a similar degree across groups. Metric invariance is examined by constraining factor loadings (i.e., the loadings of the items on the constructs) to be equivalent in the two gender groups, while still allowing the item intercepts to vary freely as before. The current model (with constrained factor loadings) is then compared to the configural invariance model to measure fit. Metric invariance was supported by non-significant chi-square difference ($p = .25$) and trivial changes in CFI (.002), indicating the variability of constraining the factor loading to be the same across the groups. If metric invariance is met, obtained ratings can be compared across groups and observed differences will indicate group differences in the underlying latent construct (Milfont & Fischer, 2010).

Scalar invariance

Since the metric invariance was supported, the next step is to test for scalar invariance (Level 3), or equivalence of item intercepts. Scalar invariance means that mean differences in the latent construct capture all mean differences in the shared variance of the items. Scalar invariance is measured by constraining the item intercepts to be equivalent in the two gender groups. The constraints applied in the metric invariance model are retained. The current model (with constrained item intercepts) is then compared to the metric invariance model to examine fit. Scalar invariance was supported by non-significant chi-square difference ($p = .15$) trivial changes in CFI (.003), indicating that the latent means can be meaningfully compared across groups. Scalar invariance is required to compare latent means since establishing scalar invariance suggests that observed scores are related to latent scores. To be specific, respondents who have the same score on the latent construct would have the same observed score regardless of their group membership (Milfont & Fischer, 2010).

Strict/Residual invariance

Since scalar invariance was supported, the final step for measurement invariance (Level 4) is to test for residual invariance. Residual invariance represents that the sum of specific variance (variance of the item that is not shared with the factor) and error variance (measurement error) is similar across groups. Strict invariance is tested by constraining the item uniqueness to be equivalent in the two groups. The constraints applied in the scalar invariance model are retained. The current model (with constrained item residuals) is then compared to the scalar invariance model to test fit. While strict measurement invariance rarely holds in applied context, the current residual variance model provided satisfactory fit to the data: ($p < .001$), $\Delta CFI = .002$.

Measuring residual invariance is not a prerequisite for measuring mean differences because the residuals are not part of the latent factor, so equivalence of the item residuals is insignificant to interpretation of latent mean differences. It is theoretically unnecessary and practically hard to achieve (Vandenberg & Lance, 2000). Statistics from all levels of measurement invariance tests were shown in Table 5.

Table 5

Tests of Measurement Invariance Across Gender

	χ^2	$\chi^2 P$ Value	$\Delta\chi^2 P$ Value	CFI	Δ CFI	TLI	SRMR	RMSEA
Female ($n = 191$) vs. Male ($n = 129$)								
Level 1	698.12	.00	–	0.92	–	0.91	.06	.04
Level 2	723.01	.00	.25	0.91	.00	0.91	.06	.04
Level 3	753.19	.00	.15	0.91	.00	0.91	.06	.04
Level 4	819.14	.00	.00	0.90	.00	0.90	.07	.04

Nomological Network

The term “nomological” is derived from Greek and means “lawful”, so the nomological network can be perceived as the “lawful network.” When examining construct validity, researchers typically examine it within a specific nomological network. Understanding a construct’s nomological network tells researchers how their measure should be related to other constructs, behaviors, and properties. A lawful pattern of interrelationships that exists between hypothetical constructs (e.g., demotivation) and observable attributes (e.g., academic performance) and that guides a researcher in establishing the construct validity of a psychological test or measure (Cronbach & Meehl, 1955). Based on both EFA and CFA results

(the intercorrelations among the three factors) and the second-order model result, the three factors were treated independently in the following analyses.

Demotivator and academic performance (Pearson correlations)

Three correlation analyses were conducted to examine the relationship between demotivation (negative teacher behavior, loss of task value, and low expectancy for success) and academic performance (CET score). As expected, loss of task value ($r = -.27, p < .001$) and low expectancy for success ($r = -.24, p < .001$) were negatively related to academic performance. However, negative teacher behavior was positively related to academic performance ($r = .18, p = .04$).

Demotivator and academic performance (regression analysis)

To explore the unique variance explained by the three dimensions on their L2 performance (served as the outcome variable), one multiple regression (negative teacher behavior, loss of task value, and low expectancy for success served as the predictors) was conducted. As hypothesized, all three dimensions were statistically significant predictors of L2 performance, accounting for approximately 15% of its variance. Table 6 presents a summary of the regression analysis.

Table 6

Results of Regression Analysis of Demotivators on CET Scores

	<i>B</i>	<i>SEB</i>	<i>β</i>
Constant	506.51**	30.70	
NTB	4.6**	1.16	.21**
LTV	-2.18**	.81	-.21**
LES	-3.06**	.93	-.21**

Note. $R^2 = .15$, Adjusted $R^2 = .14$, $F(3, 303) = 17.17$, ** $p < .001$.

Demotivator and academic self-efficacy (Pearson correlations)

The academic self-efficacy survey was found to have good reliability (Cronbach's alpha = .75). Three correlation analyses were conducted to examine the relationship between demotivation (negative teacher behavior, loss of task value, and low expectancy for success) and academic self-efficacy. As expected, teacher behavior ($r = -.15$, $p = .006$), loss of task value ($r = -.36$, $p < .001$), and experiences of failure ($r = -.53$, $p < .001$) were negatively related to academic self-efficacy.

Demotivator and academic self-efficacy (regression analysis)

To explore the unique variance explained by the three dimensions on their L2 self-efficacy (served as the outcome variable), one multiple regression (negative teacher behavior, loss of task value, and low expectancy for success served as the predictors) were conducted. As partly hypothesized, two dimensions (loss of task value and low expectancy for success) were statistically significant predictors of L2 self-efficacy, accounting for approximately 32% of its

variance. Unsupportive teacher behavior was not a significant predictor of self-efficacy. Table 7 presents a summary of the regression analysis.

Table 7

Results of Regression Analysis of Demotivators on Self-Efficacy

	<i>B</i>	<i>SEB</i>	β
Constant	25.36**	1.06	
NTB	-0.06	.03	-.07
LTV	-0.12**	.02	-.22**
LES	-0.28**	.03	-.46**

Note. $R^2 = .32$, Adjusted $R^2 = .32$, $F(3, 316) = 50.40$, ** $p < .001$.

Demotivator and mindset (Pearson correlations)

The mindset survey had good reliability (the Cronbach's α values range from .75 to .81). Four correlation analyses were conducted to examine the relationship between demotivator (loss of task value and low expectancy for success) and mindset (theory of intelligence and effort beliefs). In similar direction, loss of task value was negatively related to theory of intelligence ($r = -.32, p < .001$) and effort beliefs ($r = -.34, p < .001$). Likewise, low expectancy for success were negatively related to theory of intelligence ($r = -.22, p < .001$). However, experiences of failure and effort beliefs were not significantly correlated ($r = -.05, p = .35$).

Demotivator and mindset (t-tests).

Four *t*-tests were conducted to highlight how mindset (fixed vs. growth mindset) affects the two dimensions of demotivation (loss of task value and low expectancy for success). Fixed and growth mindset groups were created based on their theory of intelligence and effort beliefs scores (see Appendix B). With regard to effort beliefs, a great majority of students had a growth mindset (98%, $n = 314$). Similarly, as to intelligence, more students had a growth mindset ($n = 262$) than a fixed mindset ($n = 58$). Most of the results were in the expected direction, that is, students with a fixed mindset were more likely to experience demotivation, except for the relationship between low expectancy for success and effort beliefs. It appeared that mindset in terms of effort beliefs did not have an effect on experiences of failure ($t = .03, p = .98$). Table 8 displays the results of the four *t*-tests.

Table 8

Results of Independent-Samples T-test Analysis of Mindset on Demotivators

IV	Theory of Intelligence		<i>t</i>	Effort Beliefs		
	Fixed ($n = 58$)	Growth ($n = 262$)		Fixed ($n = 6$)	Growth ($n = 314$)	
	<i>M (SD)</i>	<i>M (SD)</i>		<i>M (SD)</i>	<i>M (SD)</i>	<i>t</i>
LTV	19.69 (5.55)	17.09 (4.03)	4.12**	23.33 (9.50)	17.45 (7.08)	3.25*
LES	24.26 (4.31)	22.89 (3.80)	2.42*	23.15 (3.90)	22.83 (5.64)	0.19

Note. $df = 318$ for all tests. * $p < .05$. ** $p < .001$. (all p values are Bonferroni corrected).

Results for Study 3

Demystifying the Underlying Reasons of Demotivation

Students enrolled in a dual degree English program versus students enrolled in one degree (t-tests)

Three *t*-tests were performed to examine the difference between students enrolled in a dual degree English program and regular students in terms of demotivation (negative teacher behavior, loss of task value, and low expectancy for success). Interestingly, the two groups were only significantly different in loss of task value after Bonferroni adjustment ($t = 4.0, p < .001$). To be specific, students enrolled in a dual degree English program were more likely to value the L2 learning task.

Students enrolled in a dual degree English program versus regular students (hierarchical regression analysis)

To test how uniquely enrolling in a dual degree English program predicts loss of task value, a hierarchical regression was conducted by controlling for gender and L2 performance. In line with the *t*-test result, enrolling in a dual degree English program significantly and independently predicted L2 task value ($p = .004$). Specifically, at step1, gender and performance contributed significantly to the regression model, $F(2,304) = 12.16, p < .001$ and accounted for 7.4% of the variation in L2 task value. Introducing group classification (whether enrolled in a dual English program) explained an additional 2.6% of variation in L2 task value and this change in R^2 was significant, $F(3,303) = 11.25, p < .001$. Model 2 explains L2 task value better than Model 1, suggesting enrolling in a dual English program explains L2 task value above and beyond gender and performance. Table 9 presents a summary of the hierarchical regression analysis.

Table 9

Hierarchical Regression Analysis Predicting Loss of Task Value

Predictor	<i>B</i>	<i>SEB</i>	β	<i>R</i> ²
Step 1				.08**
Gender	.16	.51	.02	
CET Score	-.02**	.004	-.23**	
Step 2				.10**
Gender	.11	.51	.01	
CET Score	-.02**	.004	-.27**	
Dual Degree	2.20*	.74	.16*	

Note. * $p < .05$, ** $p < .001$.

CHAPTER V

DISCUSSION

Discussion for Study 1

Results from the EFA did not fully reproduce the presumed survey structure. Instead of nine factors, as hypothesized, results suggested only three interpretable factors: *negative teacher behavior*, *loss of task value*, and *low expectancy for success*.

Originally conceived constructs of instructional quality and instructional material loaded only significantly on the factor of *negative teacher behavior*. This is aligned with previous literature that suggested instructional quality corresponds closely to subject-oriented teaching behavior (e.g., Greimel-Fuhrmann & Geyer, 2003). Similarly, instructional materials are the resources teachers use to deliver instruction and enhance learning. Instructional materials provide the core information that students will experience, learn, and apply during a course. They are usually planned, selected, organized, refined, and used by instructors. The 30 items that make up the *negative teacher behavior* subscale assess the respondent's perceived demotivators in terms of teacher behavior in the EFL classroom.

Grounded in expectancy-value theory, loss of interest, utility value, and cost loaded only significantly on the factor of loss of task value. It reproduced the intended dimensions of expectancy-value theory (Eccles & Wigfield, 2002). The 22 items that make up the *loss of task value* subscale assess the respondent's perceived internal demotivators with regards to different dimensionalities of subjective value (intrinsic value, utility value, and cost). For example, one

item (“The only purpose of learning English is to pass all the exams.”) shows a total loss of intrinsic value. Another item (“If learning English means losing a fun life, I’ll choose the latter one.”) measures the cost of the learning task. Additionally, one item (“Learning English takes forever, and it may not get you anywhere.”) seems to measure all dimensions of EVT: expectancy, utility value, and cost. What students learn in school does not always appear to have relevance to their own lives. For example, students who major in traditional Chinese medicinal material may not see the relevance of learning English to their future career and life. Thus, when they are required to take classes that appear to have minimal practical use, they may find themselves demotivated even with educator’s efforts to inspire. Lacking value and meaning in activities can decrease task engagement and the development of competence and positive performance expectations (e.g., Eccles & Harold, 1991; Eccles & Wigfield, 1995).

Along with experiences of failure and expectancy, the only cognitive construct, learning strategy deficiency, loaded only significantly on the factor of low expectancy for success. Expectancy for success refers to the individual's expectation that he or she can succeed at the challenging task, such as mastering a foreign language (Eccles & Wigfield, 2002). Language learning strategy use distinguishes successful language learners from unsuccessful ones (e.g., Qingquan, Chatupote, & Teo, 2008). Failing or struggling students usually lack the study strategies to address learning challenges. The 14 items that constitute the *low expectancy for success* subscale measure the respondent’s perceived internal demotivators with reference to expectancy-related beliefs. For example, two items (“I don’t get good grades even after working hard,” and “I struggle with improving my English writing skills.”) may affect individuals’ expectancy for success since learners may constantly reevaluate their motivations (i.e., expectancy beliefs) as they experience success and failures (Eccles & Wigfield, 2002). However,

two items (“I’ll never be good at English even if I work hard,” and “I don’t think I can master English no matter how hard I try”) were deleted due to bad loading. Both items actually reflect more of people’s mindset than expectancy-related beliefs or experiences of failure. Another two items (“English sentences can be long and complicated” and “People laugh at me when my words don’t come out right.”) were also deleted due to poor loading. The former one does not seem to elicit people’s response; it is more of a neutral description. For the latter one, most students may not even have this kind of experience throughout their English learning process. Expectancy for success informs performance, effort, and persistence on tasks. Research has demonstrated strong significant relationships between expectancies for success and achievement behaviors such as effort, performance, and persistence (e.g., Eccles & Wigfield, 2002; Jacobs & Eccles, 1992).

Peer influence did not load significantly on any interpretable factors. This can be explained by the composition of the sample. Almost half of the participants were graduate students. There is little doubt that peers influence each other and that the effects of peer influence are stronger during adolescence than in adulthood. Across all demographic groups, resistance to peer influences increases linearly with age (e.g., Steinberg & Monahan, 2007).

Demotivating or negative teaching behavior was negatively associated with loss of task value ($r = -.11$). Students who scored high on the subscale of loss of task value tended to score low on negative teacher behavior, which indicated that students who devalue English learning may have a tolerant attitude towards teachers’ unsupportive behavior. Comparably, the correlation between discouraging teacher behavior and low expectancy for success was minimal ($r = .03$), which suggested struggling students may not attribute their failure to external factors such as teacher’s disappointing behavior. The aforementioned findings correspond closely to L2

demotivation studies conducted in East Asia (e.g., Xie et al., 2018). Typically, Asian students are more likely than their Western counterparts to attribute failure to internal causes such as lack of ability or lack of effort. In a meta-analytic review of self-serving bias (Mezulis et al., 2004), noted a significantly different effect size between western and eastern cultures. Most notably, in East Asian culture, evidence for self-serving biases (i.e., taking personal credit for success and deny responsibility for failure) is particularly weak.

The positive relationship ($r = .25$) between loss of task value and low expectancy for success echoes the findings of recent research applying expectancy value theory. Wigfield et al. (1997) studied change in students' expectancy-related beliefs and values in several domains. They found that at all grade levels (elementary school years) and in all domains (intrinsic value and utility values) relations between expectancy beliefs and task value was positive and increased in magnitude across age. For example, students' expectancy beliefs and task value had a correlation of .23 at first grade, whereas by sixth it was .53, suggesting students tend to value what they are can do well. The Eccles et al. model suggests that expectancy and value are independent constructs that are generally positively and reciprocally related. Positive expectancies or a sense of competence can enable students to perceive value in learning tasks (Eccles & Wigfield, 1995).

Discussion for Study 2

CFA

Results from the CFA suggested several survey modifications that resulted in a refined, more parsimonious version of the LPDS. The final 24-item, three-factor scale appears to be psychometrically sound, with satisfactory factor structure and good internal consistency (see Table 3).

The satisfactory model fit was achieved by removing variables unnecessary and adding correlations between error variance within a factor. Removing unnecessary indicator variables is a relatively invasive approach to respecification (Meyers et al., 2016). Therefore, researchers need to be very careful in what they consider deleting. In addition, the most common and least invasive form of respecification is allowing correlations between error variables within a factor. The “error” variables are the residual variances of the indicator variables that is not accounted for by the factor. Errors can be correlated because the indicator variables share variance with some extraneous construct or element not related to the factor. Such correlations can occur for various reasons. For example, items on a scale may be structured similarly. Bentler and Chou (1987) claimed that forcing large error terms to be uncorrelated is rarely appropriate with real data. In modifying the model, the analysis takes on a more exploratory than confirmatory character (Byrne, 2016), and so researchers need to consider if the modification is theoretically or empirically reasonable. That said, much of social science research is based upon less explicit and testable theories than in the physical sciences. However, any reasonable exploration is more likely to facilitate than hinder the development of the discipline (Meyers et al., 2016).

Altogether 23 items were removed from the factor of *negative teacher behavior* due to poor loading and redundancy. Most deleted items are instructional material-related items such as “Multi-media is not frequently used in class” and “Technology is not fully used in the class.” Technology has always been at the forefront of human education. Computer assisted language learning (CALL) and web-based EFL learning are prevalent. The past few decades have seen a dramatic rise in the number of universities in China using computers and the Internet in their EFL classrooms. Today, most students are equipped with several portable technological devices at any given time. In comparison with other instructional technologies, web-based learning is

growing faster than any other technology (Holley & Oliver, 2011). Web-based learning and face to face learning are equally weighted for Chinese college EFL learning. Typically, each week, students spend two hours in a language lab for individualized e-learning and another two hours for traditional learning with the instructor. Therefore, the integration of technology in traditional classroom instruction is not a top concern for college EFL learners in China.

Moreover, it seems college EFL learners especially adore responsive, encouraging, and motivating teachers yet being tolerant about instructional quality. For example, among the seven items retained from CFA, two are about teacher responsibility (e.g., “Teachers are not responsive to our learning needs.”), four are about motivating teacher behavior (e.g., “Teachers are not inspiring or encouraging.”), and only one is about instructional quality (e.g., “The learning objectives are not clear for the class.”). Despite the differences in the level of importance given to various features, teachers and students alike, reported that being able to build students’ motivation is one of the most important characteristics of effective L2 teachers (Bell, 2005; Brosh, 1996; Mullock, 2003). Language is a systematic means of communication. L2 learners are expected to interact and communicate in the target language. However, one of the most visible differences of East Asian students is a low level of active in-class participation. There has been much research which seems to indicate that Asian students tend to be dependent learners relying on their teachers to take control of the class (e.g., Chan, 1999; Murphy, 1987). Further, in Chinese culture, teachers are well respected with wisdom, they are not only expected to enhance learning but a role model as well (Hu, 2002). By implication, L2 learners in China tend to have high expectations for teachers in terms of their motivational skills. Whereas many teaching behaviors may converge across different educational contexts, there appear to be some undeniably divergent teaching behaviors as well.

Altogether 13 items were removed from the factor of *loss of task value* due to poor loading and redundancy. Most deleted items are worded with strong negative emotions (e.g., “Attending English class is torture for me,” “I hate learning English with a passion,” and “I never liked learning English.”). Psychometrically, this could be caused by social desirability bias. In social science research, social desirability bias is the tendency of survey respondents to answer questions in a manner that will be viewed favorably by others. It can take the form of over-reporting "good behavior" or under-reporting "bad", or undesirable behavior (Latkin, Edwards, Davey-Rothwell, & Tobin, 2017). Culturally, Chinese and East Asian are reluctant to express strong emotions. They tend to be reserved and calmer when excited or disappointed. Chinese respondents are influenced by the harmony and collectivism culture and tend to hold back their emotions or express emotions implicitly (Liu, 2014).

Further, six items (e.g., Native English speakers are very hard to understand even after years of studying”) were also removed from the factor of *low expectancy for success* due to poor loading and redundancy. The item may not apply to most participants since most non-English major students do not have many opportunities to communicate with native English speakers. In addition, both item 10 (“I wish someone could tell me the best way to learn English”) and item 31 (“I hope someone can give me some tips on learning advanced English grammar) were dropped due to poor loadings. While these two learning strategy-related items loaded on the factor of experiences of failure in EFA, they are not ideal items in Study 2 since the criteria for variable inclusion are much more stringent in CFA.

The correlations among the three factors were partly consistent with what had been found in Study 1. Demotivating teaching behavior had almost no relationship with loss of task value ($r = .05, p = .43$), which indicated that students who devalue English learning may have a tolerant

attitude towards teachers' unsupportive behavior. Further, the positive relationship ($r = .37, p < .001$) between loss of task value and low expectancy for success confirmed the findings of Study 1. According to classic psychological theories of motivation, success feedback raises expectancies for success and induces or maintains approach motivation, whereas failure feedback lowers expectancies for success and induces or maintains avoidance motivation (e.g., Atkinson, 1964). However, the correlation between discouraging teacher behavior and low expectancy for success was significant ($r = .22, p = .003$), which was not aligned with Study 1 results, suggesting struggling students are more likely to be influenced by negative teacher behaviors. The inconsistency could be caused by the composition of the sample in Study 2. In Study 1, 60% of the participants were males, whereas only 40% of the participants were males in Study 2. Women are often considered more emotionally expressive and rely on interpersonal support to a greater extent. Females are more likely to cite a positive influence with a teacher as a factor for becoming interested in a subject, which has implications for teacher behavior in fostering an interest in the subject among female students. Verbal encouragement and persuasion appear especially important for women in terms of motivation beliefs (Zeldin & Pajares, 2000). Comparably, when it comes to negative teacher behavior, according to a meta-analysis of teacher support and academic emotions (Lei, Cui, & Chiu, 2018), the correlation between low teacher support and negative academic emotions was stronger for female students ($r = -.25$), compared to their male peers ($r = -.19$).

Second Order Factor Model

The second-order CFA conducted in Study 2 does not seem to characterize L2 demotivation as a higher order construct comprising three subdimensions. In other words, items on the LPDS are not better represented by a second-order structure such that (overall)

Demotivator “causes” the lower order factors of negative teacher behavior, loss of task value, and low expectancy for success, which, in turn, “cause” the observed behavior tapped by the LPDS items. However, before drawing any conclusions or implications based on the current second-order factor model, the model should be validated on an independent sample. Ongoing validation work should investigate this finding further and determine its causes and implications.

Measurement Invariance/Equivalence

The LPDS demonstrated evidence of configural, metric, scalar, and residual invariance across genders. Evidence of measurement invariance herein suggested that the LPDS could be used to collect measurements on different gender groups and that these measurements could be meaningfully interpreted and compared—the scale is effectively free from bias and results are fair and reliable. These findings lend evidence to the validity of interpretations and inferences made from scores on the instruments’ items and subscales.

Nomological Network

Demotivator and academic performance

Whereas loss of task value and low expectancy for success negatively predicted academic performance, the factor of negative teacher behavior positively predicted academic performance.

Task value and performance. Students’ academic achievement is explained by a combination of variables. Among these is task-value. The items of *loss of task value* measure students’ beliefs about intrinsic value, utility value, and cost of engaging in L2 learning. According to expectancy-value theory, subjective task values determines engagement and performance on achievement tasks. An increase in subjective value will lead to improved

engagement and performance. Conversely, if these perceived task values decrease, individuals may be less likely to perform well (Eccles, 2009).

Low expectancy for success and performance. Similarly, academic failure is an unavoidable part in the lives of college students, and it can translate into individuals' expectancy-related beliefs. Students' expectancy beliefs are informed by their prior experiences (Eccles, 2009). If they try a task and experience repeated failure, then eventually they will not engage in the task out of low competence beliefs. When learners do not expect to succeed, they are less likely to put forth the effort and persistence needed to perform well. In other words, academic attainment is the direct function of their expectation of success.

Negative teacher behavior and performance. The factor of negative teacher behavior positively predicted academic performance, suggesting that high-achieving students are less tolerant of discouraging teacher behaviors. This could be explained by the constitution of the sample in which over 50% of the participants were high-achieving (based on their CET scores) females. This could also represent that there might be an interaction effect between gender and performance on teacher behavior.

Demotivator and academic self-efficacy

Whereas loss of task value and low expectancy for success negatively predicted self-efficacy, the factor of negative teacher behavior did not significantly predict self-efficacy.

Task value and self-efficacy. Previous studies have demonstrated not only a positive relationship between task value and self-efficacy (e.g., Bong, 2001), but also that self-efficacy is a direct predictor of task value (e.g., Keskin, 2014). The present study extended the current literature by examining the relationship from the opposite angle. As hypothesized, *loss of task*

value negatively predicted academic self-efficacy, indicating the relationship between task value and self-efficacy might be reciprocal.

Low expectancy for success and self-efficacy. Expectancy and ability beliefs are judgments of students' competence and their self-efficacy (Wigfield & Eccles, 2000). Success feedback raises expectancies for success and induces or maintains approach motivation, whereas failure feedback lowers expectancies for success and induces or maintains avoidance motivation (e.g., Atkinson, 1964). This is in line with self-efficacy theory (Bandura, 1977). Self-efficacy can be gauged through four sources—past performance, vicarious experiences, verbal persuasion, and psychological states. The strongest factor influencing self-efficacy is past experience with similar tasks. Authentic mastery of a given task can create a strong sense of efficacy or expectancies beliefs to accomplish similar tasks in the future. Alternatively, repeated failure can lower efficacy perceptions and expectancies for success.

Negative teacher behavior and self-efficacy. While unsupportive teacher behavior was not a significant predictor of self-efficacy, they were negatively correlated ($r = -.15, p = .006$). Supportive teacher behavior can be multidimensional, teachers can show support by being available to all students and by showing commitment to students' learning. Their involvement is the key to student learning outcomes such as academic self-efficacy. However, similarly, students' self-efficacy is shaped by various factors such as their performance and gender. Thus, this could also represent that gender or performance may carry an effect on the relationship between teacher behavior and students' self-efficacy.

Demotivator and mindset

Whereas intelligence beliefs had an effect on both loss of task value and experiences of failure, effort beliefs only had an effect on loss of task value.

Loss of task value, low expectancy for success, and intelligence beliefs. Students' ability to bounce back from failure or demotivation depends partly on their mindset. Students with growth mindset in intelligence beliefs view failure, frustration, and negative performance feedback as an integral part of the growth process and believe that their abilities can change with effort. Growth mindset is the belief that intelligence can be nurtured through learning and effort. Individuals with growth mindset believe motivation can be nurtured (Ng, 2018), therefore, are less likely to lose task value or lower their expectancies for success. When students have a fixed mindset, they see their abilities as unchanging, and therefore overweigh failure and take frustration personally. If things get too challenging—when they are not feeling smart or talented—they lose interest or question their self-competence.

Loss of task value, low expectancy for success, and effort beliefs. While mindset in terms of effort beliefs had an impact on loss of task value, it failed to influence expectancy beliefs, which represents that people hold similarly expectancy beliefs regardless of their effort beliefs. This was not in line with previous research. Typically, for students with a growth mindset, their perceived self-competence is less likely to be influenced by frustration or setback (e.g., DeBacker et al., 2018; Schmidt, Shumow, & Kackar-Cam, 2017). It could be the extremely unequal sample size in both groups since effort beliefs and intelligence beliefs were strongly correlated ($r = .51, p < .001$). There were only six (out of 320) students in the fixed effort beliefs group, whereas in terms of intelligence beliefs, the sample size was much more equal across two groups.

Discussion for Study 3

Demystifying the Underlying Reasons of Demotivation

By controlling for gender and academic performance, students who are enrolled in a dual degree English program and one-degree students were still significantly different in terms of task value. This result was in line with the hypothesis that candidates for dual degree are usually exceptionally motivated and passionate about English learning given that pursuing two degrees results in a tight schedule.

Another important message was that the two groups were not significantly different in terms of low expectancy for success or negative teacher behavior. Further, based on the hierarchical regression results, even when performance level and gender were held constant, task value predicted students' persistence, suggesting that the root cause of demotivation might be individually perceived value. Learners tend to persist in learning when they see the value of what they are learning (Neuville, Frenay, & Bourgeois, 2007). This aligned with the constitution of the students who are enrolled in a dual degree English program. Typically, students who are enrolled in a dual degree English program: (a) have a strong personal interest in English language learning, (b) intend to study in an English-speaking country in the future, (c) plan to seek English-related jobs after graduation, and (d) decided to pursue a terminal degree in their discipline.

General Discussion

The multidimensionality of L2 demotivating factor

In this dissertation study, I extended the existing literature by performing a second-order factor model for the LPDS. Although the model fit confirmed a well-fitting second-order model with post hoc model adjustment, one low first-order loading (*negative teacher behavior*) does

not seem to support ‘Demotivator’ as a higher order construct comprising three subdimensions. In other words, the result of the second-order factor model of LPDS suggests that there are different dimensions (*negative teacher behavior, loss of task value, and low expectancy for success*) of L2 demotivating factor that can be measured reliably. Further, there is converging evidence for the multidimensionality of learner perceptions of demotivators in the EFL classroom: (a) negative teacher behavior was positively correlated with academic performance, and (b) the only difference between one-degree students and dual-degree students was loss of task value.

Measurement invariance across gender

While studies have specifically examined gender differences in overall influence of L2 demotivator on individuals and demotivator attribution (e.g., Jahedizadeh & Ghanizadeh, 2015; Rastegar, et al., 2012), the current study is the first to demonstrate measurement equivalence across gender. Measurement equivalence or invariance is a logical prerequisite when studying group differences. The LPDS demonstrated evidence of configural, metric, scalar invariance, and residual invariance across gender, justifying comparisons of statistics such as means and regression coefficients for future research (e.g., Byrne & Watkins, 2003).

Demotivation versus motivation

Is demotivation just low end of motivation or the other side of motivation? In the current study (see Table 6), when the three demotivating factors (negative teacher behavior, loss of task value, and low expectancy for success) tested simultaneously, all three factors equally predicted performance. However, while supportive and encouraging teacher behaviors are consistently and positively correlated with student achievement gain (e.g., Brophy, 1988; Rosenshine & Furst,

1971) in motivation research, negative teacher behavior also positively predicted performance in this study. This may indicate that demotivation is not at the low end of motivation range.

However, this could also be explained by: (a) the composition of the sample in which over 50% of the participants were high-achieving (based on their CET scores) females, and (b) the possible interaction effect between gender and performance on teacher behavior. A sense of relatedness and belongingness, such as students feeling respected and cared for by the teacher, facilitates intrinsic motivation (Ryan & Deci, 2000). Additionally, students who rate higher their need for relatedness have higher values for intrinsic goals such as personal growth, close relationship, and affiliation (Niemi, Ryan, & Deci, 2009). By implication, it is plausible to assume that low-performing male students were more extrinsically motivated for English language learning and it is the extrinsic orientation leads to the low need for supportive teacher behavior. Further, Gibbons and Gaul (2004) found that girls placed significant importance on the opportunity to have a socially supportive learning environment. Girls prefer a learning environment that emphasizes cooperation and affiliation.

To further validate this finding without the variable of negative teacher behavior, value was entered after expectancy, value ($\beta = -.22, P < .001$) was a stronger predictor of performance than expectancy ($\beta = -.18, P = .002$). However, in motivation research, although expectancies and values are positively correlated with a variety of adaptive learning outcomes, a unique pattern emerges when both are tested simultaneously. Expectancy is more predictive of performance outcomes (e.g., Dettmers, Trautwein, Ludtke, Kunter, & Baumert, 2010; Wigfield & Eccles, 2000; Xu, 2020). Further, while both expectancy and value predicted performance independently, when value was entered into the model after expectancy, value was no longer a significant predictor of performance (Trautwein et al., 2012).

Moreover, in motivation research, while value is more predictive of continued interest and future course taking outcomes (e.g., Eccles & Wigfield 2002), expectancy for success still uniquely predicts persistence and future enrolment (e.g., Atkinson, 1957; Safavian, & Conley, 2016; Wigfield & Eccles, 1992). In the current study, however, expectancy for success did not predict persistence since the only difference between one-degree students and dual-degree students was task value. This does not make sense theoretically from the EVT perspective, if one values a task, yet not expecting to do well may not be a sufficient reason to engage in it. If demotivation is just low end of motivation, the findings will not contradict with each other. However, more research is needed to draw the conclusion that demotivation is the other side of motivation.

The role of task value in East Asian culture

If more research is needed to prove that demotivation is not just low end of motivation, it is plausible to grapple the role of culture in student motivation. Traditional motivation research in educational psychology could be said to have “largely ignore the cultural backdrops and dimensions of educational process” (Liem & Bernardo, 2013, p.3) with its empirical base built up from monocultural studies, primarily from WEIRD (Western, educated, industrialized, rich, democratic) societies (Henrich, Heine, & Norenzayan, 2010). While evidence for cross-cultural validity of the expectancy-value model has been provided across many cultures (Nagengast et al., 2011), one area in which cross-cultural differences have been found in respect of task value. East Asian students have a “heightened sensitivity to utility value” (Shechter, Durik, Miyamoto, & Harackiewicz, 2011). Compared to Westerners, East Asians: (a) see a stronger relation between their present and distal futures, and (b) more likely to perceive how their current

behaviors have a downstream impact on their distal future (Hofstede, 2001; Ji, Guo, Zhang, & Messervey, 2009; Maddux & Yuki, 2006). Taken together, for East Asian students, once they see the value of the task, they will engage regardless of expectancy beliefs. This is not surprising given that both intrinsic and extrinsic motivation contributed to East Asian students' achievement in an additive fashion, whereas extrinsic motivation appeared to have a detrimental effect on their Western counterparts' learning (Zhu & Leung, 2011). The reasons are manifold. First, throughout East Asia, education has a long history of being a key vehicle for social mobility for individuals (e.g., Yeung & Li, 2019). Thus, it is a cultural heritage that education is highly valued in this community. Second, the education environment in China is very competitive. The extraordinarily competitive pressures of large populations struggling for scarce opportunities make educational success extremely crucial for the future success of individuals. Third, education in China is driven by assessment only, and students' performances on national high-stakes examinations determine how they will be assigned to different education tracks or streams. This learning environment may give rise to competition with other students, which in turn provokes students' extrinsic motivation (Luo, Paris, Hogan, & Luo, 2011). This also explained: (a) why task value can be a stronger predictor of performance in this current study, and (b) why the loss of task value could be the root cause of demotivation.

The unique characteristics of EFL Learning in China

The unique characteristics of EFL learning in China may also give insights into this. One of the most obvious difficulties for Chinese EFL learners stems from the fundamental differences between English and Chinese. Linguistically, the phonetic system, the syntactic structure, and semantics of the languages are so different that the transition from one language to the other involves tremendous efforts from the learner (Cho, 2004). Different linguistic traits affect all the

skills (listening, speaking, reading, and writing) and make learning English a serious challenge for East Asian learners. Unlike Western college foreign language learners who can decide what to learn and achieve, Chinese college EFL learners seem to have fewer choices and less autonomy. This is because university and national curricula have already determined their learning path and therefore limited their choices. Regular assessments of their proficiency, highly competitive achievement-oriented learning environments, as well as social comparisons among the peers lower their expectancy for success, especially in subject domains they are experiencing serious learning difficulties (Archambault, Eccles, & Vida, 2010). Taken together, students do not vary considerably in terms of expectancy beliefs, which in turn make it a weaker predictor of academic performance.

Linking demotivator, self-efficacy, mindset, and performance

By establishing a nomological network, the current study provided a lawful pattern of interrelationships that exists between the hypothetical construct (demotivation) and observable attributes (e.g., academic performance) and that guides researcher for future L2 studies. Research has consistently shown that self-efficacy level carries a mediating effect on achievement and all types of achievement-related behaviors, such as effort and task persistence, learning strategies, course enrollment (e.g., Bong & Skaalvik, 2003; Fast et al., 2010). In an exploratory study of the relationships among motivation, self-efficacy, mindsets, and learning strategies, Lackey (2013) found that self-efficacy is associated with intrinsic motivation as well as growth mindset in 116 college students. When compared to GPA, self-efficacy, academic motivation, and mindset revealed a significant correlation. Further linking the noted factors, individual effort, perseverance, commitment to task, and resilience when faced with lack of success are all strongly correlated with levels of academic self-efficacy, type of mindset, and academic

motivation (Bandura, 1994; Deci & Ryan, 1985; Dweck, 2006). In light of the above discussion, this present study provided a preliminary basis for further theoretical development of L2 demotivation.

Conclusion

Demotivation: Conceptual Framework

Bandura's (2012) social cognitive theory explains individual learning, development, and acquisition of knowledge within a social context, in which teachers play a critical role as social models. Social cognitive theory research has been of interest to scholars because of its explanatory power in understanding human behavior, its practicality, and its applicability to human learning. The reciprocal nature of the determinants of human functioning in social cognitive theory makes it possible for human efforts (e.g., positive teacher behavior) to be directed at personal, environmental, or behavioral factors. Based on the results from the current study, while much motivation is intrinsic to the student, negative teacher behavior hampers the motivation and engagement of their students.

Teacher behavior is one of the determinants of the student's motivation and learning. Positive teacher behavior can improve students' emotional states and boost their self-efficacy (personal factors), improve their academic skills and learning practices (behavior), and establish classroom structures that support student engagement and success (environmental factors). On the other hand, negative teacher behavior does the opposite and leads to demotivation. One of the main assumptions of social cognitive theory is that individuals are competent and active agents whose actions affect their learning and behavior (Bandura, 1986). He posits that individuals respond to their environment based on their beliefs, values and prior experiences. Individuals learn and acquire knowledge within a social context, in which teachers play a significant role as

social models. For example, if teachers lack faith in their students or do not have high expectations of their students, in turn, socialized academic interests and expectations may influence perceived efficacy beliefs negatively. Although positive teacher behavior is not a panacea for all demotivation issues in the classroom, it is a powerful source of student engagement. When students perceive their teachers as apathetic, irresponsible, they are less likely to be interested and intrinsically motivated to pursue the task at hand

Demotivation is multi-faceted, including students' goals, interests, sense of self-efficacy, and self-determination. The factors combine to create two general sources of motivation: students' expectancy for success and the value that students attach to a learning task. Modern expectancy-value theories (e.g., Wigfield & Eccles, 2002) are based in Atkinson's (1964) expectancy value model. However, they are different from Atkinson's expectancy-value theory in several ways. First, both expectancy and value are more elaborate and are related to a broader variety of psychological and social/cultural determinants. Second, expectancies and values are believed to be positively related to each other, rather than negatively correlated, as proposed by Atkinson. Expectancy-value theory postulates that achievement-related choices are motivated by a combination of people's expectancy for success and perceived task value in certain areas. While expectancy refers to the subjective estimate of the likelihood of success, influencing the behavior to strive for success, value is multifaceted (intrinsic value, utility value, attainment value, and cost). For example, students are more likely to engage if they expect to do well in English study and they value the task of learning English as a foreign language. Eccles and her colleagues (2002) argue that expectancy and value are influenced by task-specific beliefs (i.e., perceived difficulty) and individuals' goals, which in turn are affected by past achievement experiences. To be specific, if students keep failing in the process of English learning (previous

achievement-related experiences), their future achievement-related choices (e.g., will college EFL learners continue learning English once they are done with all the required English classes?) are assumed to be influenced by the negative task characteristic. In addition, all choices are assumed to have costs linked to them because one choice often eliminates others (e.g., spending more time on English learning means less time for a fun campus life). Thus, the relative value and probability of success of various options are key determinants of choice.

Demotivation: scale development

The central objective of the present set of studies was to develop and validate a comprehensive scale measuring learner perceptions of demotivators in the EFL classroom. In summary, the results of study 1 and 2 suggest that the LPDS is a psychometrically sound and theoretically valid measure of L2 demotivation. Results also indicate that: (a) college EFL students are demotivated for three different categories of reasons: *negative teacher behavior*, *loss of task value*, and *low expectancy for success*, (b) the construct of demotivation in general is multifaceted, and (c) having high levels of demotivation is linked to low performance, low self-efficacy, and fixed mindset. It is hoped that the development of the LPDS will help initiate a new line of research that explores the relationship between demotivation and other important psychological or educational constructs and concepts (e.g., self-efficacy and mindset).

Implications and limitations

Academic success is one of the primary goals of education, central to understanding students' academic success is motivation, typically defined as a set of interrelated goals, values, and emotions that explain the initiation, direction, strength, and quality of behavior. Take achievement goal theory as an example, achievement goals reflect the aim of an individual's

achievement pursuits and may be defined as frameworks that help to understand how individuals perceive, interpret, and react to achievement situations such as dealing with demotivating factors in the EFL classroom (Elliot, 2005). When individuals find themselves in an achievement situation, they will often set goals that give direction to their efforts. In the achievement goal literature, two types of goals have by far received the most attention: mastery goals and performance goals. Mastery goals refer to the aim of improving one's own performance and gain task mastery, whereas performance goals involve the pursuit of outperforming others and display superior performance (Ames, 1992; Dweck, 1986). Achievement goal theory has foundational roots in attribution theory. Carol Dweck and her colleagues examined why students often differed in their responses to negative achievement outcomes (as reflected in the factor of *low expectancy for success*). They claimed that some students attributed their negative performance feedback (e.g., low grades) to causes they perceived as stable (i.e., low ability), giving rise to a helpless response to it. Others explained negative performance feedback to unstable causes (e.g., a lack of effort), resulting in effortful and optimistic responses to it (e.g., Dweck & Leggett, 1988). These different attributions for negative achievement outcomes were related to different achievement goals. When mastery goal is adopted, unsuccessful attempts (e.g., "I have made many attempts to learn English but I have not improved.") will not be demotivating to the learner. By comparison, when performance goal is adopted, challenging learning task (e.g., "I struggle with improving my English writing skills.") will be devastating to the L2 learner. By implication, in particular, I recommend research on L2 demotivation using structural equation modeling (SEM) to examine the interrelationships among demotivating factors, attribution, and achievement goals. SEM is comparable to common quantitative methods, such as correlation, multiple regression, and analysis of variance (ANOVA). However, this method is preferred by

the researcher because it estimates the multiple and interrelated dependence in a single analysis (Meyers et al, 2016). SEM models are especially relevant in exploratory studies, particularly those involving psychological issues with complex interrelationships between variables.

Motivation is not only a matter of *quantity* (being more or less motivated) but also of *quality*—that is, there are different types of motivation (intrinsic versus extrinsic) and different sides or states of motivation (demotivation or amotivation). Given the unique role of negative teacher behavior and loss of task value in predicting academic performance, demotivation did not seem to fall along a continuum of motivation, which would lend evidence to the existence of demotivation. If demotivation was discerned to be a distinct construct rather than the nethermost extreme of motivation in EFL learning, it needs to be replicated to prove its validity in other disciplines. Although the study of demotivation/demotivator first started in the U.S in instructional communication and blossomed in East Asia in EFL learning, it can be applied to other disciplines such as sport psychology due to the following reasons: (a) the study of amotivation in sport psychology, (b) while amotivation and demotivation are distinguishable theoretically, no strong empirical evidence has been found to support the difference, and (c) the similarities between L2 learning and athletic lifestyle. The struggle of being an athlete and a L2 learner is that the entire process is “skill learning” (something you do), rather than “object learning” (something you know). In history class, students start chronologically and use dates in order of how things happened, which is not how language-learning or sport training works. Individuals cannot memorize a few words or moves for figure skating and expect to speak the language or perform the skill. Then what they have is knowledge of ‘language or figure skating as object’. People can describe the language or the move, but they may not be able to use it or perform it. Further, skill acquisition imposes greater demands on attentional or memorial

resources and examine expertise in specific real-world domains (Proctor & Dutta, 1995). The research on demotivation/amotivation in these two disciplines has been active during the past decades due partly to the very nature of skill acquisition. While there is no single theoretical model or measurement that explains all aspects of demotivation, the measurement developed in this study will serve as the basis to approach demotivation/amotivation in distinct areas of human endeavor.

Some limitations were present in the current study. Most notably, some minor levels of selection bias may have been present in the respondent populations. Whereas regional differences and achievement gap exist in every country in the world, the questionnaires were administered to students from the same institution in southeast China. Further, 78% of the participants in Study 2 and 3 were average- or high-achieving students, making the conclusion drawn from the present study less applicable to a more diverse population. It is difficult to provide a comprehensive overview of demotivation on low-achieving students because they are less willing to participate. Self-reporting a low CET score in a survey can be re-traumatizing since it is a high-stakes test and failing means no bachelor's degree attainment.

Quantitative questionnaire is sometimes perceived as an easy way to collect data. However, as with any other research approach and method, it is easy to conduct a survey of poor quality rather than one of reliability and validity. The administration of the surveys from the two studies took place during two separate 30-minute class breaks, making it susceptible to careless response. Class break may not be ideal to assure the best practices of survey administration: (a) personalizing the message to the respondent, (b) explaining the survey, and (d) setting expectations (Kelley, Clark, Brown, & Sitzia, 2003).

As for the sample size, there is no shortage of recommendations regarding the appropriate sample size to use when conducting a factor analysis. Suggested minimums for sample size include from 3 to 20 times the number of variables and absolute ranges from 100 to over 1,000 (Mundfrom, Shaw, & Ke, 2005). While there is little empirical evidence to support these recommendations the sample size for the present study maybe satisfactory but not exceptional.

While allowing correlated errors in CFA is not uncommon, there are problems with this practice. The first problem with allowing measurement errors to correlate in CFA based on post hoc modifications is that it allows researchers to achieve good fit statistics in spite of omitting relevant variables from their models (Cortina, 2002). As a result of the estimation of such correlations, the fit of the model improves, but our understanding of the phenomenon in question does not. Moreover, changing a hypothesized model to allow measurement errors to correlate based on specification search recommendations may improve model fit in an initial sample, but it might fail to hold in cross-validation samples (Hermida, 2015).

Finally, this is the first study examining this instrument, and additional studies are needed to furnish more evidence of construct validity. Future research also needs to establish test–retest reliability, convergent validity, and predictive validity to add more supporting evidence pieces to the reliability and construct validity of LPDS. Convergent validity, a parameter often used in educational psychology research, refers to the degree to which two measures of constructs that theoretically should be correlated, are in fact correlated (Carlson & Herdman, 2012). Potential constructs for convergent validity are: academic amotivation, academic boredom, and learned helplessness. As one of the subtypes of criterion validity (Jolliffe et al., 2003), predictive validity is the extent to which a score on a scale (LPDS) predicts scores on some criterion measure (e.g., future English performance). Research also could be directed at continued tests of

second-order CFA and measurement invariance for different groups. Cross-validation in different cultural settings is also needed.

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APPENDIX A
SURVEY FOR STUDY 1

Learner Perceptions of Demotivator Scale (Initial 99 items)

Please indicate your degree of agreement to the following sentences.

<i>Statement</i>	<i>Strongly Agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly Disagree</i>
	4	3	2	1

EF = experiences of failure, LSD = learning strategy deficiency, UV = utility value, LI = loss of interest, E & C = expectancy & cost,

1. A low test score makes me want to quit English (EF1).
2. I feel disappointed when I earn a poor mark on an exam (EF 2).
3. Native English speakers are very hard to understand even after years of studying (EF 3).
4. It's frustrating that native speakers don't understand me because of my pronunciation (EF 4).
5. English sentences can be long and complicated (EF 5).
6. It's very hard for me to remember new vocabulary (EF 6).
7. Reading comprehension articles are hard to understand (EF 7).
8. English grammar is tough and confusing (EF 8).
9. I feel worthless in English class (EF 9).
10. I don't get good grades even after working hard (EF 10).
11. I have made many attempts to learn English, but I have not improved (EF 11).
12. I don't feel I can improve in English anymore even if I try (EF 12).
13. I really want to master English, but I don't know how (LSD 1).
14. I haven't found an effective way to learn English (LSD 2).
15. I wish someone could tell me the best way to learn English (LSD 3).
16. I struggle with improving my English writing skills (LSD 4).
17. I'm not aware of the strategies to improve my English listening skills (LSD 5).

18. I really want to find out how to read faster and better (LSD 6).
19. I seriously don't know how to speak English fluently and confidently (LSD 7).
20. I hope someone can give me some tips on learning advanced English grammar (LSD 8).
21. Honestly, I don't understand why I need to learn English (UV 1).
22. I don't see the value of learning English (UV 2).
23. I don't know how English will benefit my future (UV 3).
24. English has no use for my major (UV 4).
25. English is not important for my future (UV 5).
26. I wonder why English is needed in a monolingual country (UV 6).
27. There is no relationship between my major and English (UV 7).
28. It seems I only study English for exams (UV 8).
29. I seldom have the chance to communicate in English (UV 9).
30. Even if I get good grades in English, it won't help me much (UV 10).
31. The only purpose of learning English is to pass all the exams (UV 11).
32. I'm not interested in English at all (LI 1).
33. I will not pursue English after passing my exams (LI 2).
34. I never wanted to learn English (LI 3).
35. English has lost its charm on me (LI 4).
36. I hate learning English with a passion (LI 5).
37. I try very hard to force myself to learn English (LI 6).
38. I take English class only because it's a required course (LI 7).
39. I want to skip all the English classes (LI 8).
40. Attending English class is torture for me (LI 9).

41. I never liked learning English (LI 10).
42. It's not clear to me why I have to learn English (LI 11).
43. There are other subjects which are more important for me to study (E & C 1).
44. Learning English takes forever, and it may not get you anywhere (E & C 2).
45. I don't think I can master English no matter how hard I try (E & C 3).
46. I'll never be good at English even if I work hard (E & C 4).
47. If learning English means losing a fun college life, I'll choose the latter one (E & C 5).
48. If learning English means my major subjects will suffer, I'll choose the latter one (E & C 6).
49. I won't learn English at the cost of my major subjects (E & C 7).
50. I won't learn English at the expense of a fun college life (E & C 8).
51. English learning is a long-term commitment and you may not master it (E & C 9).

Please indicate the demotivating level to the following scenarios.

<i>Statement</i>	<i>Very Demotivating</i>	<i>Demotivating</i>	<i>Not Demotivating</i>	<i>Not Demotivating at all</i>
	4	3	2	1

PI = peer influence, CM = class material, IQ = instructional quality, TB = teacher behavior

52. Some classmates make me feel bad because my English is not good (PI 1).
53. People laugh at me when my words don't come out right (PI 2).
54. Most of my friends are not interested in the English language (PI 3).
55. Most of my classmates are not good at English (PI 4).
56. My roommates don't spend much time on English (PI 5).
57. I know people who found very good jobs without being proficient in English (PI 6).
58. I know people who were accepted to graduate school without being good at English (PI 7).
59. I know people who are good at English but still can't find very good jobs (PI 8).

60. English textbooks are boring (CM 1).
61. English videos played in the class are not interesting (CM 2).
62. The contents of the textbook are out of date (CM 3).
63. There is no slide (power point) made for the class (CM 4).
64. There is too much text on the slide (CM 5).
65. There is no guidance in the textbook to improve language skills (CM 6).
66. The textbooks are not good enough to prepare us for College English Test (CET) or English-related jobs (CM 7).
67. Multi-media is not frequently used in the class (CM 8).
68. Technology is not fully used in the class (CM 9).
69. Teachers make one-way explanations too often (IQ 1).
70. Teachers just read directly off the slide (power point) or the textbook (IQ 2).
71. Teachers are not passionate about teaching (IQ 3).
72. Teachers show no enthusiasm for their work (IQ 4).
73. Teachers don't connect what they teach with the real world (IQ 5).
74. Teachers' instruction is not well-organized (IQ 6).
75. Teachers are not well-prepared for the class (IQ 7).
76. The pace of the class is not appropriate (IQ 8).
77. Teachers don't have clear learning objectives for us (IQ 9).
78. Teachers don't give us opportunities to express ourselves in class (IQ 10).
79. We want to be heard but teachers don't give us any chance for that in class (IQ 11).
80. There aren't many teacher-student interactions in the class (IQ 12).
81. Teachers favor high-achieving students (TB 1).

82. Teachers neglect low-achieving students (TB 2).
83. Teachers are not inspiring or encouraging (TB 3).
84. Teachers seldom motivate us to learn (TB 4).
85. Teachers don't care whether we study hard or not (TB 5).
86. Teachers don't care whether we do well or not (TB 6).
87. Teachers are not responsive to our learning needs (TB 7).
88. Teachers are not approachable to us when we need support in understanding (TB 8).
89. Teachers are not agreeable (TB 9).
90. Teachers give negative or no feedback to our performance (TB 10).
91. Teachers don't respect us as individuals (TB 11).
92. Teachers don't have high expectations for us (TB 12).
93. Teachers don't have faith in their students (TB 13).
94. Teachers don't have a strong sense of responsibility for the teaching job (TB 14).
95. Teachers bring too much of their personal life to the class (TB 15).
96. Teachers talk too much in Chinese while they are supposed to teach in English (TB 16).
97. There is too much teacher talking time in an English class (TB 17).
98. Teachers reward performance rather than learning (TB 18).
99. Teachers don't believe in their students (TB 19).

APPENDIX B
SURVEYS FOR STUDY 2

Gender _____ Dual Degree or not _____ CET Score _____

Learner Perceptions of Demotivator Scale (66 items retained from EFA)

Please indicate your degree of agreement to the following sentences.

<i>Statement</i>	<i>Strongly Agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly Disagree</i>
	4	3	2	1
1. I really want to master English, but I don't know how.				
2. Honestly, I don't understand why I need to learn English.				
3. I feel worthless in English class.				
4. Learning English takes forever, and it may not get you anywhere.				
5. I'm not interested in English at all.				
6. I haven't found an effective way to learn English.				
7. I don't see the value of learning English.				
8. There is no relationship between my major and English.				
9. I will not pursue English after passing all the exams.				
10. I wish someone could tell me the best way to learn English.				
11. I don't know how English will benefit my future.				
12. I never wanted to learn English.				
13. It's frustrating that native speakers don't understand me because of my pronunciation.				
14. I struggle with improving my English writing skills.				
15. English has no use for my major.				
16. I never liked learning English.				
17. I want to skip all the English classes.				
18. If learning English means losing a fun college life, I'll choose the latter one.				
19. English has lost its charm on me.				
20. English is not important for my future.				
21. Attending English class is torture for me.				
22. I hate learning English with a passion.				
23. I really want to find out how to read faster and better.				
24. It's not clear to me why I have to learn English.				

25. I have made many attempts to learn English, but I have not improved.
26. Reading comprehension articles are hard to understand.
27. I seriously don't know how to speak English fluently and confidently.
28. It seems I only study English for exams.
29. I take English class only because it's a required course.
30. English grammar is tough and confusing.
31. I hope someone can give me some tips on learning advanced English grammar.
32. I wonder why English is needed in a monolingual country.
33. The only purpose of learning English is to pass all the exams.
34. Native English speakers are very hard to understand even after years of studying.
35. I'm not aware of the strategies to improve my English listening skills.
36. I don't get good grades even after working hard.
37. Teachers favor high-achieving students.

Please indicate your demotivating level to the following scenarios.

<i>Statement</i>	<i>Very Demotivating</i>	<i>Demotivating</i>	<i>Not Demotivating</i>	<i>Not Demotivating at all</i>
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4	3	2	1
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38. Teachers make one-way explanations too often.
39. We don't have enough opportunities to express ourselves in class.
40. Teachers are not passionate about teaching.
41. Teachers give negative or no feedback to our performance.
42. There is no slide (power point) made for the class.
43. Teachers show no enthusiasm for their work.
44. Teachers are not well-prepared for the class.
45. There is a gap between the classroom and the real world.
46. Teachers don't care whether we do well or not.
47. Teachers are not responsive to our learning needs.
48. There is too much text on the slide (power point).
49. Teachers don't respect us as individuals.
50. Teachers seldom motivate us to learn.

51. The instruction is not well-organized.
52. There is too much teacher talking time in an English class.
53. Teachers don't have high expectations for us.
54. The pace of the class is not appropriate.
55. Teachers just read directly off the slide (power point) or the textbook.
56. Teachers don't have faith in their students.
57. Multi-media is not frequently used in the class.
58. Teachers don't have a strong sense of responsibility for the teaching job.
59. Teachers reward performance rather than learning.
60. There aren't many teacher-student interactions in the class.
61. Teachers bring too much of their personal life to the class.
62. Teachers are not inspiring or encouraging.
63. The learning objectives are not very clear for the class.
64. Teachers talk too much in Chinese while they are supposed to teach in English.
65. Teachers are not agreeable.
66. Technology is not fully used in the class.

STUDENT MINDSET

For the statements 1 through 6 below, indicate the extent to which you agree or disagree with each statement by circling the number of your response

1. My English learning intelligence is something I can't change very much.
very true 1 true 2 not true 3 not true at all 4
2. I have a certain amount of English learning intelligence, and I really can't do much to change it.
very true true not true not true at all
3. I can learn new English learning techniques, but I can't really change my basic English learning intelligence.
very true true not true not true at all
4. It doesn't matter how hard I learn English, if I'm not smart I won't learn English well.
very true true not true not true at all
5. If I am not good at English, working hard won't make me good at it.
very true true not true not true at all
6. If English is hard for me, it means I probably won't be able to do really well at it.
very true true not true not true at all

SELF-EFFICACY

For each of the following statements, rate yourself with the number that best represents your feelings towards your perceived self-efficacy in relation to English learning. For the statements 1 through 6 below, indicate the extent to which you agree or disagree with each statement by circling the number of your response

1. I believe I can do well in English.
very true true not true not true at all
2. I feel that I can communicate well enough in written form in English.
very true true not true not true at all
3. I feel that I can identify the main points in a college level English conversation.
very true true not true not true at all
4. I feel that I am able to understand college level English articles.
very true true not true not true at all
5. I feel that I can speak well enough in English to make myself generally understood by others.
very true true not true not true at all
6. I am certain I can master the skills needed for a successful English learner.
very true true not true not true at all