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Personal investment theory: A multi-faceted framework to understand second and foreign language motivation

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ABSTRACT

The aim of this article is to introduce second and foreign language researchers to personal investment theory, a classic motivation theory that takes a multi-faceted approach to understand when and why learners invest themselves in a particular domain. Personal investment theory posits that there are three key components of meaning—(1) facilitating conditions, (2) sense of self, and (3) perceived goals—which are crucial to understanding motivation and learning. The paper gives an overview of the key tenets of personal investment theory and illustrates the synergies between this theory and research in second and foreign language learning. Although personal investment theory has seldom been used in second and foreign language research, a case is made for how it can enrich mainstream second and foreign language theorizing. Personal investment theory has key strengths including its integrative multi-faceted approach to understanding motivation, sensitivity to the role of socio-cultural influences, focus on powerful yet neglected constructs, and its recognition of cross-cultural similarities and differences. The paper concludes with recommendations for optimizing second and foreign language learning.

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Motivation to learn a second (L2) or foreign language (FL) is multiply-determined (Dörnyei, 1994a; 1994b, 1998). Some students may be motivated because they are genuinely interested in it (interest) (Fryer, *this issue*); others because they see themselves as competent second language speakers (self-efficacy) (Kim & Wang, *this issue*); and still others because they attach a high importance to mastering the target language (value) (Loh, *this issue*). These distinct yet inter-related factors are important in understanding why some students are motivated to learn a L2/FL (or not). Thus, any theory of motivation must take into account the multiple factors that explain why individuals choose to invest themselves in a particular domain such as L2 learning.

L2 motivation research has benefited greatly from the work of major scholars such as Gardner, Lambert, Tremblay, Lalonde, Ushioda, Oxford, and Dörnyei among others. Especially prominent are Gardner's (1985, 2000) pioneering work on the socio-educational model and Dörnyei's (1998, 2005) L2 motivational self system (L2MSS) model which is the dominant framework in the field. These researchers and theories have powerfully brought motivation issues to the fore and advanced the field's understanding of L2/FL motivation. Research, however, best flourishes through a diversity of theoretical perspectives because this gives scholars a wider array of conceptual tools and constructs which they can bring to bear in examining complex

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motivational issues. In this paper we proffer personal investment (PI) theory as a potential framework for understanding motivation in the field of L2/FL.

Personal Investment (PI) theory is a multi-faceted framework that can help researchers understand the multiple factors that underpin the decision to invest oneself in learning a L2 or a FL. Although PI Theory has had a long and illustrious history in mainstream educational psychology and cross-cultural psychology (King & McInerney, 2014; King, McInerney, & Datu, 2018; Maehr & Braskamp, 1986; Maehr & McInerney, 2004; McInerney, 2008; McInerney & Liem, 2009; McInerney & Sinclair, 1991; Zusho & Clayton, 2011), it has not been widely used in the field of L2 and FL motivation. The goal of this paper is to introduce language researchers to PI theory, make a case for its usefulness especially in terms of how it can enrich mainstream L2/FL motivation research, and to provide practical recommendations to language teachers.

In the section below, we first give a brief overview of PI theory and highlight existing L2/FL motivation research that broadly corresponds with the key constructs of PI theory. We then give a brief sketch of mainstream L2/FL motivation research, highlight the contributions and shortcomings of mainstream theorizing, and argue for the usefulness of PI theory as an alternative theoretical paradigm. We end with practical recommendations that teachers can use in their quest to motivate their students to learn a L2/FL.

1. Theoretical overview: personal investment theory

Personal investment theory is interested in answering the question when and why do individuals invest time, talent, and energy in a particular activity. In the context of the current paper, we ask when and why do students invest themselves in learning a L2/FL. A core assumption of PI theory is that motivation is not a stable trait that either one has or does not have (Atkinson, 1957; McClelland, 1987). On the contrary, it presupposes that individuals all possess resources such as knowledge, skills, time, and energy but choose to invest themselves in different domains. It takes a decision-making approach towards human motivation and posits that the decision to invest oneself in an activity depends on three key facets of meaning which we elaborate below (Maehr & Braskamp, 1986).

Personal investment theory focuses on the subjective meaning of situations to individuals. This “meaning” that individuals construe out of the situation can help researchers understand the factors that underpin the decision to invest oneself in a particular activity. PI theory focuses on three key facets of meaning: facilitating conditions, sense of self, and perceived goals. A schematic representation of the theory is presented in Fig. 1, while Table 1 shows the different components of meaning, their definitions, and operationalizations:

The first facet of meaning refers to *facilitating conditions* (What are the available options?) which refer to the social-contextual environment within which a person is situated that makes certain options more available and salient in contrast to other less appealing alternatives. Facilitating conditions include but are not limited to positive and negative influence from one’s parents, teachers, and peers. It also includes the school context and the broader socio-cultural norms in one’s environment.

Studies have found that parent, teacher, and peer support are all important predictors of student motivation, engagement, and achievement (McInerney, Dowson, & Yeung, 2005). McInerney et al. (2005) found that parent support, teacher support,

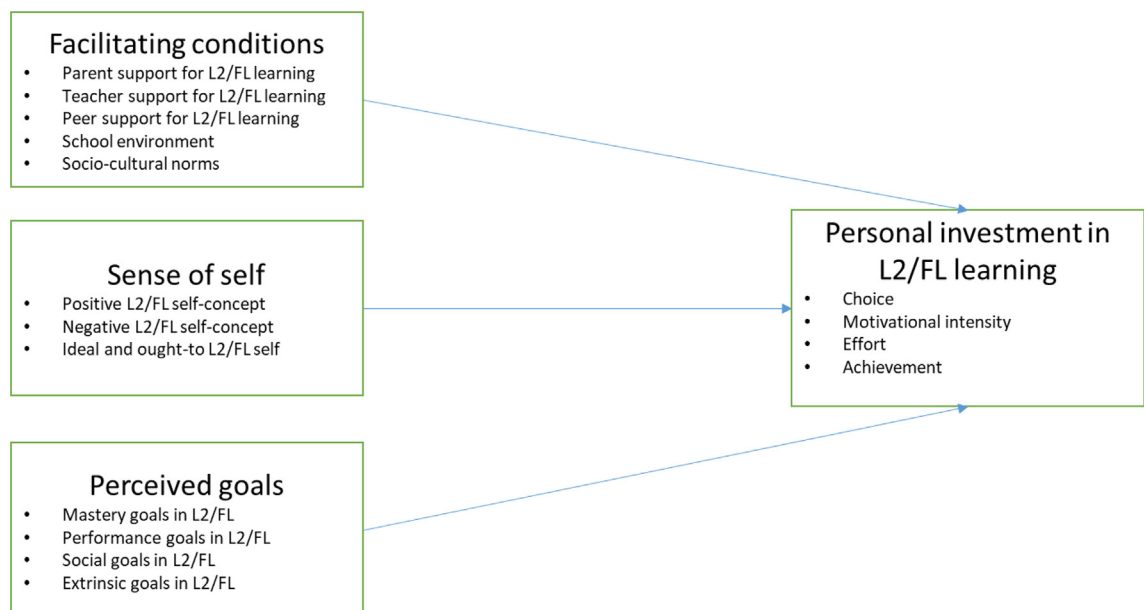


Fig. 1. Factors that undergird L2/FL learning according to personal investment theory.

Table 1
Key constructs in personal investment theory.

Component of meaning	Definition	Sample items
Facilitating conditions		
Parent positive	Positive contributions of parents to learning L2	My mother thinks I am bright enough to do well in English.
Parent negative	Negative contributions of parents to learning L2	My father encourages me to leave school as soon as possible.
Teacher	Perceived positive support from teachers for learning L2	I get encouragement from my teachers to do well in my English class.
Peer positive	Positive contributions of peers to learning a L2	Most of my friends want to do well in English.
Peer negative	Negative contributions of peers to learning a L2	My friends say I should leave English class
Sense of self		
Positive self-concept	Positive perceptions of one's ability in a L2	I am very confident at my English at university.
Negative self-concept	Negative perceptions of one's ability in a L2	I usually make mistakes in my English class.
Sense of purpose		
Perceived Goals	Valuing a L2 for the future	I want to do well at English so that I can have a good future.
Mastery		
Performance	Wanting to do well because of personal interest	I try hard in my study of English because I like my English classes.
Social	Striving to outperform others	Being better than other students at English is important to me.
Extrinsic	Seeking to help others and enhancing sense of belonging	It's very important for students to help each other in English class.
	Seeking social recognition and tangible rewards for schoolwork	I study English best when I can get some kind of reward.

Note: Sample items for the facilitating conditions component are adapted from the Facilitating Conditions Questionnaire (McInerney et al., 2005). The sense of self and perceived goals components are taken from the Inventory of University Motivation-English (Da Silva & McInerney, 2008) which in turn are derived from the original Inventory of School Motivation (McInerney & Sinclair, 1991).

valuing for school, positive affect towards school, and peer support were positively correlated with achievement, while negative peer influence and negative parental influence were both negatively correlated with achievement among elementary and high school students (see also McInerney, 2008).

The school environment is also an important facilitating condition. Schools where students feel that they belong and that are characterized by a sense of psychological safety may better nurture students' learning (Wang & Degol, 2016). Beyond the school would be the socio-cultural norms and values that pervade the cultural context which can also have an impact on learning and motivation (King & McInerney, 2014). For example, cultures that value a long-term time orientation may enhance motivation and learning insofar as education is a future-oriented activity (Hu, Leung, & Teng, 2018).

The second component is *sense of self* (Who am I?) which refers to the more or less organized collections of perceptions, beliefs, and feelings about who one is. Sense of self is multifaceted but in PI theory is usually operationalized in terms of one's self-concept which Rosenberg (1979) defined as "... the totality of the individual's thoughts and feelings having reference to himself as an object" (p. 7). Researchers typically acknowledge self-concept as multi-dimensional comprising of different self-concepts across various domains of life (e.g., academic self-concept, physical self-concept, among others). For personal investment researchers, academic self-concept or self-concept towards specific subject areas (e.g., English/math) are the most pertinent.

To measure self-concept, PI researchers have further dichotomized self-concept into positive academic self-concept (the degree to which a student espouses desirable feelings toward his or her academic skills) and negative self-concept (the extent to which a student holds undesirable feeling toward his or her academic competencies) (McInerney & Sinclair, 1991). Several studies have found that positive academic self-concept is both a facilitator and an outcome of academic achievement (Guay, Marsh, & Boivin, 2003; Marsh & Martin, 2011).

The third facet of meaning in PI theory are *perceived goals* (What do I want?) which refer to reasons or purposes for engaging in a task (see also Lee & Bong, this issue for a more detailed review). Although students can pursue different goals in school, most PI researchers focus on four types of goals: mastery (wanting to do well because of personal interest), performance (wanting to do well to outperform others), social (seeking to help others and enhance sense of belonging), and extrinsic (seeking social recognition and tangible rewards).

In general, research has found cross-cultural evidence for the existence of these four perceived goals and the superiority of mastery goals in facilitating learning outcomes (King, McInerney, & Nasser, 2017; McInerney, 2008; McInerney & Ali, 2006; McInerney, Roche, McInerney, & Marsh, 1997). Although we do not know as much about social goals as compared to mastery and performance goals, there is increasing evidence suggesting that social goals also lead to optimal learning-related outcomes (King, McInerney, D. M., & Watkins, D. A. 2012). In contrast, extrinsic goals may be more detrimental to learning (Ames & Archer, 1988; Ryan & Deci, 2000). The role of performance goals is more ambiguous with some studies showing adaptive and others maladaptive effects. Whether performance goals lead to adaptive or maladaptive outcomes likely depends on the context, the person, and the nature of the outcome examined (Elliot & Moller, 2003; Midgley, Kaplan, & Middleton, 2001).

2. PI theory and L2 motivation research

Although not explicitly framed using PI theory, there are numerous studies which have examined the individual components of meaning in PI theory as they relate to L2/FL learning (see Tremblay & Gardner, 1995; Williams & Burden, 1997). We review these existing studies focusing on facilitating conditions and sense of self components of PI Theory in this section:

2.1. Facilitating conditions

Research on facilitating conditions can be broadly classified into those that focus on the teachers, peers, parents and other aspects of the social context.

2.1.1. Teachers

Teachers play a crucial role in influencing L2/FL learners' motivation (Chambers, 1999). For example, perceived teacher support (Carreira, Ozaki, & Maeda, 2013; O'Reilly, 2014) and specific teacher behaviors (Cheng & Dörnyei, 2007) are influential in facilitating students' L2/FL motivation. Many of these studies have focused on the motivational techniques employed by teachers (e.g., Alison & Halliwell, 2002; Cheng & Dörnyei, 2007; Dörnyei & Csizér, 1998).

Researchers have found a strong association between teachers' motivational strategies and their students' L2/FL learning motivation. For example, Moskovsky and colleagues, (2013) found that students' L2/FL learning motivation increased when teachers employed preselected motivational strategies than traditional teaching methods. Apart from self-report studies, observational research of teachers' motivational strategies (e.g., letting students work in pairs/groups; explicitly expressing the objectives of the lesson; stating the purpose/utility of the activity; designing activities that let students express personal meaning, etc.) and students' language learning motivation in classroom also found similar results, showing a strong positive relationship between the motivational practice of teachers and students' motivational behavior (Papi & Abdollahzadeh, 2012). These findings provide emerging evidence of the significant influence of teachers' motivational strategies on students' L2/FL learning motivation.

2.1.2. Peers

Enjoyment in the L2 classroom is also related to the presence of a supportive peer group (Dewaele & MacIntyre, 2014). According to Ushioda (2007) who proposed the 'person-in-context relational' perspective in L2/FL motivation, supportive interpersonal interactions can stimulate motivation in a positive way. The peer group can be a key source of motivational energy, and studies have empirically documented that perceived peers' motivation in L2 learning is positively associated with learner's motivation (Kozaki & Ross, 2011; Tanaka, 2014). On the other hand, demotivated classmates decrease the motivation of learners (Chang, 2010). Whole class cohesiveness was positively related to L2/FL motivation (Clement, Dörnyei, & Noels, 1994). Research has shown that a partner's task attitudes influence one's motivation to engage in L2 task such as communication using L2/FL (Kang, 2005). Positive social climate also enhances L2/FL learning engagement and motivation (Poupore, 2016).

2.1.3. Parents

Family expectations and social support from the family influence students' motivation to learn a L2/FL (Dörnyei, 2001). Conceivably, parents who can speak the L2/FL that the child is learning can serve as a role model. Existing evidence has suggested that parental attitudes have strong effects on children's L2/FL learning motivation (Busse & Williams, 2010). High income parents are found to be more likely to provide support and create a nurturing environment for children learning L2/FL (Butler, 2015). Parental encouragement has been found to influence the ideal L2 self (Henkel, 2010; Taylor & Busse, 2015). Parental views on language learning may also serve as facilitators of L2/FL learning (Csizér; Kormos, 2009, pp. 98–119).

2.1.4. Limitations of current research in relation to facilitating conditions

Although the role of context in influencing L2/FL motivation is recognized (e.g., Ushioda, 2009), there is still a lack of empirical studies examining the impact of various dimensions of context on L2/FL learning motivation. Most of the studies only focused on a single factor and very few studies have simultaneously examined various contextual dimensions. As outlined earlier, the social context can be regarded as a set of facilitating conditions or options that can help students invest themselves in learning a L2/FL. PI Theory can serve as a useful guiding framework by elucidating the different facilitating conditions that L2/FL researchers can attend to. Simultaneously examining teacher, parent, peer, and the learning environment as well as the interactions among these conditions can increase the explanatory power of L2/FL motivation research.

PI theory also argues that facilitating conditions go beyond the proximal classroom environment to the broader socio-cultural context. Although L2/FL researchers recognize this (for example, Dörnyei demonstrated how motivation to learn Russian decreased after the fall of the USSR), the broader socio-cultural context is seldom explicitly examined. Much of the L2/FL motivation research has been about the motivational strategies that teachers use (Guilloteaux & Dörnyei, 2008). However, students are embedded in broader socio-cultural contexts that might have an impact on L2/FL learning, and these broader environments deserve greater research attention.

2.2. Sense of self

PI theorists also foreground the role of the sense of self or self-perceptions in understanding motivation and learning. In the field of L2/FL research, a lot of the research attention has focused on distinguishing between the ideal and ought-to self originally proposed by Dörnyei (2005). The ideal self refers to the learner's internal desire to become an effective L2/FL user and the ought-to self refers to the social pressures coming from the learner's environment.

The ideal and ought-to selves, however, both focus on the future, but the present dimension is also an important aspect that shapes student motivation and learning. Lamb (2017) pointed out that the research community “has directed too much attention towards future-oriented aspects of the self, and ignores the motivational consequences of other self-concepts and more immediately relevant identities.” (p. 318).

Researchers may need to examine a wider range of self-concepts that are more focused on the present. Moreover, mainstream research has demonstrated that one's self-concepts in different subject areas can either inhibit or facilitate each other. For example, math self-concept has been found to dampen one's verbal self-concept (Marsh, 1986, 1990). Students do not develop their L2/FL self-concept in isolation from other subject areas. Thus, L2/FL motivation scholars may need to examine how students' self-concepts in other relevant domains (e.g., self-concept towards their native tongue, math, and science among others) are related to their L2/FL self-concepts (see for example Moller & Marsh, 2013).

3. What PI theory can contribute to L2 motivation research

The studies reviewed above illustrate that many of the key constructs in PI theory have received attention in the L2/FL literature. However, despite these broad correspondences, we argue that PI theory can enrich and extend L2/FL motivation research in the following ways.

First, PI theory can be used as is an integrative and multi-faceted framework that can broaden the set of potentially useful constructs that L2/FL researchers draw upon. Learning a second or foreign language is a complex issue and sensitizing researchers to a broad array of factors that might potentially impinge on L2/FL learning.

For example, Da Silva and McInerney (2008) examined Japanese students' motivation to learn English. Using PI theory, the authors found the importance of English to Japanese women's career prospects who have relatively more limited choices in the job market compared to their male counterparts. They also overturned the widely held stereotypical assumption that Japanese students lack intrinsic motivation. By focusing on a wide range of key factors, the authors were able to develop a deeper and more nuanced understanding of Japanese students who are often underrepresented in the existing literature.

Second and closely related to the previous point is that PI theory can highlight key constructs that have not received much attention in the L2/FL literature. The dominance of certain theoretical paradigms in L2/FL motivation research might have the unintended consequence of limiting the vision of researchers as they focus only on the key constructs posited in these mainstream L2/FL motivation theories. For example, Gardner's (1985) socio-educational model highlights the role of integrativeness, while Dörnyei's (1998) L2 motivational self system model mostly focuses on the power of ought to and ideal selves.

PI theory highlights crucial motivational ingredients that might not have received enough attention in the research literature including parental and peer influence, multiple self-concepts, and social goals among others. To our knowledge, these constructs are not measured in the prominent L2 motivation questionnaires such as the Attitude/Motivation Test Battery (AMTB) developed by Gardner (1985). Nor are these constructs assessed in the questionnaires inspired by Dörnyei's L2MSS (e.g., Csizér & Dörnyei, 2005; Dörnyei & Csizer, 2001; Papi & Abdollahzadeh, 2012).

3.1. Social influences

Learning a L2/FL is strongly influenced by social context. PI theory explicitly emphasizes the importance of social factors as part of facilitating conditions that can move students to invest or withhold themselves from L2/FL learning. We focus specifically on the potential role of parents and peers in L2/FL motivation given that they have been under-researched compared to the more well-developed literature on teachers:

3.1.1. Parental influence

Parental influence is relatively less examined in mainstream L2/FL motivation research with the bulk of the research focusing on teacher influence (e.g., Papi & Abdollahzadeh, 2012). The few studies on parental influence on L2/FL learning indicate that parents exert a powerful influence on students' L2. For example, Butler (2013) found that parents who were confident and believed that their children can succeed in learning L2 actually had higher L2 (i.e., English) scores. A comparison of the effects of parent-related factors (e.g., parent beliefs about their children's ability to succeed in L2) vis-à-vis school-related factors found that parents played a more important role in determining L2 scores.

Parents can also engage in numerous behaviors to help their children learn L2. A study conducted by Butler (2017) among Chinese parents found that some of these behaviors include checking children's English homework, helping their children pronounce and spell words, and watching English TV programs or movies with their children.

Recent studies in educational psychology have shown how parents' motivational orientations impact their children's motivation (Haimovitz & Dweck, 2016). Researchers found that parents who perceived failure as something that can be used for self-improvement were more likely to have children who have a growth mindset (belief in the malleability of intelligence) (Haimovitz & Dweck, 2016). Although we are not aware of any study specifically focusing on how parents' L2/FL motivation affected their children's L2/FL motivation, it is likely that parental attitudes towards language learning would also have an impact on their children's L2/FL learning and motivation. Parents constitute an untapped motivational resource which can be harnessed to improve students' L2/FL motivation.

3.1.2. Peer influence

As children go into the adolescence stage, the importance of peers for learning and motivation becomes even more important (Martin & Dowson, 2009). Educational psychology research has shown that peer attitudes to learning are important determinants of one's own motivational framework (Ryan, 2000). For example, children who perceive their peers to be engaged in learning are also more likely to enjoy academic tasks (Ryan, 2001). Likewise, students who perceive their peers as denigrating or de-emphasizing academics are also more likely to lack motivation (King & McInerney, 2014). Existing studies show that students can harness their peers to learn L2 or motivate themselves to strive harder. For example, Butler and Liu (2019) conducted a study among Chinese L2 learners and found that some students disclosed their grades with each other and discussed questions they got wrong. Others explicitly asked classmates for help. Still other students turned L2 learning into a game they play with their peers (e.g., competing with each other to see who gets the highest score) and used this to motivate themselves to strive harder. The role of peers in L2/FL motivation is an exciting research avenue in language motivation research.

3.2. Self-concept

Language researchers have usually juxtaposed the ideal and ought-to selves but have seldom explored how self-perceptions related to other key domains might impact one's L2/FL motivation. There is an ample amount of evidence in educational psychology showing that math and verbal self-concepts are negatively correlated with each other (Moller, Pohlmann, Koller, & Marsh, 2009; Skaalvik & Rankin, 1995). That is, students who have a high math self-concept are more likely to have a low verbal self-concept. Extending this line of research to the domain of L2/FL, one can ask the following questions: Do students with a high math self-concept have lower L2/FL self-concept? Are there interference effects between self-concept in one's native language with that of learning a L2/foreign language? These questions are worth asking because students develop self-perceptions in relation to different academic domains (e.g., math self-concept, science self-concept, English self-concept among others). Despite the well-documented frame of reference effects in the educational psychology literature, relatively less attention has been paid to this in the field of L2/FL motivation.

3.3. Social goals

Goals provide motivational energy and focus and are critical to understanding why some students invest in learning a L2/FL. In PI theory, perceived goals include mastery, performance, social, and extrinsic. The implications of mastery and performance (Lee & Bong, this issue) as well as extrinsic goals (McEown & Oga-Baldwin, this issue) are already discussed in other papers in this special issue so we focus only on social goals.

Although L2/FL motivation research has frequently emphasized the importance of social motivation and understanding language learning as a situated process (Clement & Noels, 1992; Giles & Byrne, 1982; McGroarty, 2001; Noels, Pon, & Clement, 1996), it has seldom explicitly examined the pursuit of social goals. PI theory emphasizes the importance of social goals in understanding learning and motivation.

Social goals pertain to social reasons for studying and are distinct from Gardner and Lambert's (1972) work on integrative orientation. For Gardner (2001), integrativeness is a desire to learn a language to "come closer to the other language community" (p. 5). However, social goals within PI theory are more specific in scope and are generally targeted towards one's classmates, course-mates, or schoolmates rather than to a broad language community (e.g., the French-speaking community). For example, Susan may want to help her friend Alice read better in English (social concern goal), while Ben might want to hang out with his friends more and joins the English club where many of his buddies are members (social affiliation goal). These social goals could have different motivational implications for L2/FL learners. The L2/FL classroom is a social setting pervaded by peer and student-teacher interactions. Students pursue different types of social goals that might have important implications for L2/FL motivation and learning.

PI theory originally focused on two types of social goals – social affiliation (the desire to affiliate with other students) and social concern goals (the desire to help others) (McInerney et al., 1997). More recent work has identified other types of social goals such as social approval goals (the desire to seek parental and teacher approval), social responsibility goals (the desire to fulfill social role obligations), and social status goals (the desire to increase one's future social status through education) (Dowson & McInerney, 2003, 2004; King, McInerney, & Watkins, 2012). Research suggests that social concern and social responsibility goals are most optimal for learning. Though we are not aware of any L2/FL research explicitly examining social goals, it is likely that concern and responsibility goals might also facilitate L2/FL learning.

Dörnyei (1994a) has in fact indirectly examined social goals through the construct of affiliative motive which he describes as the desire to please the teacher. The measures of ought-to self in L2/FL research also seem to contain some form of social goals. Items that measure ought-self such as "Studying English is important to me in order to bring honor to my family"; "I study English because close friends of mine think it is important"; "Being successful in English is important to me so that I can please my parents/relatives" (Li, 2014) seem to bear some resemblance to social goals. Although L2/FL motivation researchers seem to sense the importance of social goals, existing research on social motivation in L2/FL is still in its infancy and could benefit from greater theoretical precision which PI theory can provide.

3.4. Cross-cultural similarities and differences

L2/FL motivation researchers have recognized the important role of culture in learning a L2/FL. For example, [Schmidt and Savage \(1992\)](#) examined the motivation of Thai learners of English. Contrary to [Csikzentmihalyi and Nakamura's \(1989\)](#) prediction that challenge and skill are the primary determinants of motivation, they found that there was no significant correlation between Thai learner's perceptions of the level of challenge, their skill, and measures of motivation and affect. Instead, they found that many other factors including ego orientation, smooth and harmonious interpersonal relationships, a fun-pleasure orientation, and perception of education as a means to climb the social ladder are all important determinants of motivation. The authors concluded that [Csikzentmihalyi's \(1997\)](#) model of intrinsic motivation might not be applicable to Thai learners given that it assumes the sources of intrinsic motivation are universal rather than culture-specific.

[Schmidt and Watanabe \(2001\)](#) examined five groups of foreign language learners (French, Spanish, Chinese, Filipino, and Japanese). The researchers found important motivational differences. For example, learners of Spanish were learning mainly to satisfy the university's language requirements. However, Chinese, Filipino, and Japanese learners were learning primarily because of their interest in their heritage languages as most of these learners were ethnically Chinese, Filipino, and Japanese respectively.

The two examples above highlight the importance of taking culture into account when understanding L2/FL motivation. Different cultural groups may be motivated by distinct factors when learning a L2/FL. Moreover, the relationships among the constructs themselves may vary as a function of cultural context. In contrast to earlier need models of achievement motivation which posited motivation as a stable trait that is exhibited across different situations, the role of culture in motivation has always been a central theme in PI research from its inception ([Maehr & Braskamp, 1986](#)).

Although most of the modern theories of achievement motivation acknowledge the role of situational and contextual factors, these are rarely explicitly examined in most empirical studies. Many of the studies assume that the relationships among the key variables are universal or invariant across cultures and that the meaning of motivation is also invariant across cultures. PI theorists, however, have long recognized that the relationships among key factors can vary across cultures. A core assumption of PI theory is that although students across diverse cultures are assumed to be influenced by facilitating conditions, perceived goals, and sense of self, the particular content and specific manifestations of these dimensions may be different for students in different contexts ([King & McInerney, 2014](#)).

4. Implications for practice

Although PI theory has not yet been widely used within the field of L2, we propose some tentative recommendations that might help improve L2 learning and teaching.

4.1. Help parents support their children's language motivation

Existing research on L2/FL motivation has accumulated a solid body of knowledge in terms of how teachers can use strategies that best motivate students (e.g., [Cheng & Dörnyei, 2007](#)). L2/FL researchers have also extensively studied the proximal learning situation. Therefore, we focus on parent support and the broader school environment beyond the immediate L2/FL learning situation. Parents play a substantial role in shaping children's motivation to learn a L2 ([Butler, 2015](#); [Iwaniec, 2018](#)). Parenting programs that focus on promoting parental involvement, changing maladaptive parental behavior and reinforcing supportive parenting style that enhances intrinsic motivation in L2/FL learning are important. More specifically, parental beliefs about their child's capability to succeed in learning a L2/FL have been found to be a strong predictor of L2/FL performance and child's perceived confidence in L2/FL learning ([Butler, 2015](#)) and thus parenting programs should focus on parental beliefs of L2/FL learning. Disadvantaged families may have less resources to support children's L2/FL learning (e.g., providing optimal home literacy environment) and parents from disadvantaged families may be supported by cost-effective means to promote L2/FL learning at home ([Yeung, Ng, & Qiao, 2018](#)).

4.2. Encourage a positive second or foreign language self-concept

Having a positive self-concept is directly linked to enhanced performance ([Marsh & Martin, 2011](#)). In the context of L2/FL learning, educators can directly target students' L2/FL self-concept through the use of performance feedback. Providing performance feedback about students' L2/FL progress will generate a perception that one is competent and that students are making progress towards mastering a skill thereby increasing self-concept. [Hattie \(1992, p. 51\)](#) notes, "feedback is probably among the most powerful modifiers of one's self-concept, and critical when changing others' self-concepts". When teachers tell students how well they are doing and give information on how students have improved their skills and knowledge they have mastered, students can develop a more positive self-concept.

Aside from directly enhancing L2/FL self-concept, educators can also indirectly enhance students' L2/FL self-concept by focusing on other variables closely related to self-concept such as causal attributions. When students attribute successful outcomes to internal (e.g., ability and effort) rather than external factors, they are more likely to succeed and improve their self-concept. Thus one way to indirectly enhance L2/FL self-concept would be through attributional feedback. Teachers can help students recognize that their effort in learning the target language has helped them succeed.

An important caveat though is that a positive L2/FL self-concept is somewhat different from the ideal self which has received more attention in the L2MSS model of Dörnyei and colleagues. The L2/FL ideal self pertains to the future and is usually enhanced through the use of visualization exercises (Mackay, 2019). In contrast, the positive self-concept in PI theory pertains to one's perceptions about one's past performance. Thus, these self-perceptions have different time frames and may provide different routes to L2/FL investment.

4.3. Harness social goals

Language teachers can also harness the power of social goals. One way to encourage social goals would be to engage in cooperative learning wherein students are given the opportunities to help each other (Johnson & Johnson, 1991; Slavin, 1995). Numerous motivation studies have found that striving to help others is associated with optimal learning outcomes (Carlo, White, Streit, Knight, & Zeiders, 2018; Levontin & Bardi, 2018). Though there is less research on social goals per se, there seems to be a solid body of evidence showing the promise of cooperative learning in L2/FL classrooms (Oxford, 1997).

5. Conclusion

L2/FL motivation researchers live in exciting times and the field is flourishing (Boo, Dörnyei, & Ryan, 2015). Numerous theoretical insights have been generated but even more questions await to be answered. PI theory is new to L2/FL motivation research but we hope that it can provide a new lens for looking at L2/FL motivation. PI theory has distinct advantages: it offers an integrative and multi-faceted framework to understand the multiple factors that affect student decision to invest in L2/FL learning, sheds light on critical issues that have heretofore only been given cursory attention in the L2/FL literature, and offers practical recommendations for L2/FL educators and practitioners to motivate their students.

Dörnyei (1998, p. 131) wrote, "motivation is indeed a multifaceted rather than a uniform factor and no available theory has yet managed to represent it in its total complexity." It is our hope that PI theory with the multi-faceted picture of motivation it paints can bring us a little bit closer to our goal of understanding the full complexity of L2/FL motivation and of equipping educators with strategies to motivate students to invest in the arduous yet rewarding journey of learning a L2/FL.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.system.2019.102123>.

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