3 At the Interface of the Socio-educational Model, Self-determination Theory and the L2 Motivational Self System Model

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For what you see and hear depends a good deal on where you are standing.
C. S. Lewis, The Magician's Nephew

Introduction

Although it is a key predictor of learners' eventual proficiency in their target language (TL), motivation has been a tricky construct to define. As many language learning motivation (LLM) researchers have argued, motivation is best understood as an umbrella term for a broad concept that covers a variety of cognitive, affective and behavioural processes explaining: (1) why people decide to do something; (2) how long they will sustain the activity and (3) how much effort they will expend to pursue it (Boekaerts, 1995; Dörnyei, 2001). Indeed, a recent volume has a dozen or more chapters on different psychological constructs that arguably have motivational implications (see Mercer *et al.*, 2012). Because of the diverse aspects of motivation, teachers and researchers might face a quandary deciding which constructs are most useful for understanding learners' motivation in their particular social and educational context.

There are many ways to deal with theoretical diversity. Some choose one framework and eschew all others. Others seek to integrate the diverse approaches in a single grand theory. Still others would rather have nothing to do with theory, arguing that it can constrain thinking and result in dogmatic adherence to one way of thinking. We choose to adopt the perspective-taking approach advocated by MacIntyre *et al.* (2010), which

maintains that different theories reflect different perspectives, such that any point of view will simultaneously reveal some aspects of the phenomena of interest and conceal others. MacIntyre *et al.* (2010: 1) liken this theoretical perspective-taking to viewing a garden:

> A famous garden at the Ryoanji Temple in Japan has 15 stones. The positioning of the stones is fascinating; from any vantage point an observer will see 14 stones, never all 15. Contemplating the meaning of the garden at Ryoanji raised for us 'what does it mean to take "A" perspective?

MacIntyre and his colleagues stress the value of being acquainted with diverse points of view, arguing that by considering the theories together, we can see complementary, and perhaps richer, ways of understanding motivation and language learning.

With this idea in mind, we will consider the concepts of self and identity as they are framed in three widely used motivational frameworks, including the Socio-Educational Model (SEM; Gardner, 1985, 2010), Self-Determination Theory (SDT; Deci & Ryan, 1985; Ryan & Deci, 2000) and the Second Language (L2) Motivational Self System (L2MSS; Dörnyei, 2009). In so doing, we hope to identify areas of convergence and divergence, which will provide a more nuanced understanding of the role of the self in L2 motivation. We also hope to point out directions for future research, primarily by directing attention to the methodological and contextual trends in current research and suggesting how these trends can not only offer affordance but also place constraints on our thinking about motivation. To accomplish these goals, we first present an overview of the self- and identity-relevant aspects of the SEM, SDT and L2MSS and consider their similarities and differences conceptually and empirically. As part of this discussion, we report the results of an empirical study that examines the overlap of the three theories. Lastly, we highlight some methodological and contextual issues with our study and with studies in this area more generally that we feel need to be addressed in future theorizing and empirical research.

Three Theoretical Frameworks

The socio-educational model (SEM)

Gardner's (1985, 2010) SEM was formulated at a time when ethnolinguistic group relations in Canada and elsewhere were particularly politically charged (see Noels & Giles, 2009, for a review). In light of this, it is not surprising that an important aspect of this model concerns learners' attitudes towards the TL community. Gardner (2010) argued that

language learning involves more than just learning new words and grammatical structures; there is an acculturative aspect such that when one learns another language, one is encouraged to learn and internalise something from another cultural group, much as a child imitates its caregiver and is reinforced with the caregiver's feedback. This aspect, termed 'integrativeness', reflects 'a general openness to adopting characteristics of other cultural communities' (Gardner, 2010: 85), and includes an interest in foreign languages, positive attitudes towards the TL community and an integrative orientation.

An orientation represents 'the underlying force directing the choice of a particular reason' (Gardner, 2010: 16). The integrative orientation is characterised by an interest in and desire to communicate with the TL community, and in some definitions includes the possibility of identifying with the TL group (e.g. Masgoret & Gardner, 2003). To have an impact on volitional behaviour, any orientation must also be linked with a drive to learn and effort extended towards the goal of language learning. An integrative motivation thus includes not only an integrative orientation towards language learning but also motivational intensity, the desire to learn the TL and affective aspects, which include positive attitudes towards the specific language learning situation, language learning in general, the specific TL group and ethnic out-groups in general. Individuals with an integrative orientation want to approach and integrate with the TL group, although Gardner specifies that this does not necessarily mean that they want to assimilate into that group (albeit that may happen in extreme cases), rather, they want to engage with the TL community (Gardner, 2010: 88).

Several orientations other than the integrative orientation can direct motivation; one alternative (but not necessarily oppositional) orientation is the instrumental orientation. This orientation involves a desire to learn the TL for practical, utilitarian reasons such as 'because it will make me more educated' and 'it will be useful in getting a good job' (Gardner et al., 1997: 361). Although Gardner and his colleagues did not extensively examine the instrumental orientation, it is useful to contrast it with the notion of integrativeness in order to highlight the latter's emphasis on intergroup relations and social identity concerns.

Self-determination theory

Drawing from principles in humanistic psychology, SDT (Deci & Ryan, 1985) maintains that people have an innate tendency to explore and master novel aspects of their environment and assimilate these new experiences into their existing self-structures. This process is not random; rather persons are assumed to regulate their behaviour in line with their sense of self. That is, with each new experience, a person considers other

possible actions in light of her/his current interests, and then acts in a way that reflects the best correspondence with these interests. A person's actions are considered authentic when they are endorsed by the person and are congruent with other value commitments that a person holds.

Extending these principles to the study of motivation, it is assumed that if people feel that an activity is consistent with their sense of self, they will be more motivated to engage in that activity. With regard to language learning, the more people feel that learning and using a language are congruent with the other values that they have, the more motivated they will be to engage in learning and using the language. This experience is termed integrated regulation.

Of course, we are not all motivated to learn languages because doing so is integral to our sense of self. We may see the value of learning and using a language even if we don't see the language as self-defining. For instance, the language may help us to achieve goals that we feel are important to us (e.g. an English as a Foreign Language (EFL) teacher learns the native language of her students to better communicate with them; a fiancé learns his sweetheart's language to better understand her and her familial background). Such an orientation, where the person has personally identified the value of the activity, is termed identified regulation.

Alternatively, we might be motivated less because of our own sense of what is important and valuable, but more because we have a generalised sense of what ought to be important. Perhaps this sentiment arises because of the values of those around us. For example, parents might emphasise that knowing another language is an important educational goal, and students might internalise this belief to some degree. Even if they can't see the value or relevance of learning the language for themselves, personally, they might feel that learning a language is something that every good child and/or good student should do. This feeling that one should or ought to learn a language is termed introjected regulation.

In still other cases, we may engage in an activity not because we feel it is self-relevant or have some sense that it might be good to do, but rather because there is some obvious reward or punishment for doing so. For instance, learning a language might be a means to getting a required course credit, or failure to do so might result in the denial of a job promotion. Such reasons have very little to do with a learner's sense of self, but rather are driven by people or circumstances external to the learner. Hence, such an experience of motivation is termed external regulation.

These experiences of motivation, then, vary in the extent to which the regulation of action is self-determined. SDT proposes another form of motivation which relates back to the idea that we have 'an inherent tendency to seek out novelty and challenges, to extend and exercise our capacities, to explore, and to learn' (Ryan & Deci, 2000: 70) about our

physical and social worlds. Engaging in such an activity brings about a feeling of enjoyment, absorption and fulfilment, termed flow by Csikszentmihalyi (1990). Thus, the process of learning a language could be experienced as being a pleasurable process in and of itself; a person might not necessarily feel that the activity is tied to their sense of self, but simply enjoy engaging in the activity for its own sake. This experience of intrinsic motivation then is distinct from the other forms of regulation that are subsumed under the term extrinsic motivation.

It should be noted that these are not categories into which people neatly fall. Rather, drawing on the discourse of dynamic systems theory, intrinsic and extrinsic might be described as two motivational systems (Noels, 2005), one reflecting the extent to which the activity is regulated by internal or external sources and the second reflecting an innate proclivity to explore novelty and seek out new challenges. Because of diverse interactions in their social world, people could hold multiple orientations, and the prominence of one or another might shift from situation to situation and from time to time. Moreover, there is really no objective way to say that one motivational orientation is superior to another. If students value and identify with the language and feel intrinsically motivated, they are more likely to engage creatively with the language. Language instructors might find that such an orientation facilitates the teaching and learning process. However, there might be circumstances where such an orientation is fraught, as might be the case when learning the language of a colonial oppressor, which might result in linguistic and cultural assimilation or marginalisation.

L2 motivational self system (L2MSS) model

Dörnyei's (2009) L2MSS framework draws from work by social psychologists, who study the self as an aspect of social cognition and the thinking of applied linguists interested in dynamic systems theory. The L2MSS has been strongly influenced by the possible selves theory of Markus and Nurius (1986) and Higgins's (1987) self-discrepancy theory. The possible selves theory concerns how people conceptualise their potential and think about their future (Markus & Nurius, 1986). Possible selves act as future self-guides, representing a dynamic, forward-focusing conception that can explain how people are moved from the present to the future. Likewise, self-discrepancy theory postulates that people are motivated to reach a condition where their self-concept matches their personally relevant self-guides (Higgins, 1987).

Synthesising the self-images introduced in the theory of possible selves (Markus & Nurius, 1986) and the self-discrepancy theory (Higgins, 1987), Dörnyei developed three components for the L2MSS. The central concept is the ideal L2 self, which refers to the attributes that one would

ideally like to possess in connection with L2 learning. A complementary concept is the ought-to L2 self, signifying the attributes that one believes one ought to possess in connection with L2 learning. The L2 learning experience consists of 'situated "executive" motives related to the immediate learning environment and experience (e.g. the impact of the teacher, the curriculum, the peer group, the experience of success)' (Dörnyei, 2009: 29).

Dörnyei (e.g. 2009) maintains that key self-related constructions of the ideal L2 self and ought-to L2 self extend the scope of Gardner's (1985) notion of integrativeness, making it applicable in diverse language learning environments in our globalised world (Dörnyei, 2010). He claims (2005: 105) that 'our idealised L2-speaking self can be seen as a member of an imagined L2 community whose mental construction is partly based on our real-life experiences of members of the community/communities speaking the particular L2 in question and partly on our imagination'.

Empirical Comparisons of the Three Theories

Convergence and divergence

There are several points of convergence and divergence between the self and identity constructs in these models, some of which have been substantiated through empirical examinations. We thus turn to review empirical studies, which compared self- and identity-related constructs between the three theories (see Appendix for a summary). The purpose is to consider empirical evidence concerning the relations between the models.

SEM and SDT

Although some have equated the intrinsic–extrinsic and integrative–instrumental distinction, these two pairings are not synonymous. Gardner (2010) suggested that the integrative orientation is better classified as a type of extrinsic motivation because it does not pertain to engaging in the activity for enjoyment per se. We would agree to some extent with this position, but argue that the relationship between these two sets of constructs is more complex. Empirical research indicates that the integrative orientation is strongly associated with intrinsic motivation, but it is also highly associated with more self-determined forms of extrinsic motivation (Noels, 2001; Sugita McEown *et al.*, under review). In their study of Japanese EFL high school students, Kimura *et al.* (2001) found that the largest factor of LLM observed was complex, consisting of intrinsic, integrative and instrumental subscales.

However, the integrative orientation is not synonymous with either type of motivation in that it is not perfectly correlated with either, and it tends to predict different kinds of outcome variables. For instance, Pae's (2008) study demonstrated that integrative orientation was distinct from both intrinsic motivation and extrinsic motivation (identified, introjected and external regulations), although the integrative orientation was relatively closer to intrinsic motivation than to extrinsic motivation. Noels (2001, 2005; see also Sugita McEown *et al.*, under review) found that while the SDT orientations tended to be stronger predictors of learning and classroom engagement, the integrative orientation was a better predictor of community and cultural engagement. Because of these findings, Noels argues that the integrative orientation references issues related to social identity and intergroup relations that might be distinct from the processes taking place in the immediate learning situation. In contrast, Landry (2012) suggests that an SDT approach could also be useful for understanding intergroup relations in language learning.

SEM and L2MSS

The conceptual differences between SEM and L2MSS have been much discussed since Dörnyei (2005, 2009) proposed the L2MSS as an alternative framework to the SEM. According to Dörnyei, (2010), the central theme of L2MSS was the elaboration of the motivational dimension that has traditionally been interpreted as integrativeness/integrative motivation with the ideal L2 self. Lamb (2012) claims that the key differences between the two theories are in whether they are more affectively (SEM) or cognitively (L2MSS) based, and whether the motivationally important identifications are with others (SEM) or with future versions of the self (L2MSS). There are several empirical examinations of the relations between the self-related variables in these two frameworks. The study of Kim and Kim (2012) of Korean EFL secondary school students found that the ideal L2 self was a better predictor for explaining participants' motivated behaviour than integrativeness, and argued that the ideal L2 self could replace integrative orientation. On the other hand, in their study of Hungarian EFL secondary school students, Kormos and Csizér (2008) found that the ideal L2 self and integrativeness are not interchangeable concepts and the ought-to L2 self could not even be identified in their participants. They concluded that integrativeness was more closely related to cultural interest, while the ideal L2 self was more closely related to international posture (Yashima *et al.*, 2002). Although both of the studies investigated a large number of EFL secondary level students using a cross-sectional questionnaire survey, their results were inconsistent.

SDT and L2MSS

As Dörnyei (2009) pointed out, SDT and the L2MSS frameworks have several conceptual similarities, but there are important divergences as well. The ought-to L2 self and introjected regulation would seem to be definitionally congruent. The ideal L2 self would seem to be most similar to the notion of identified and integrated regulation, in that both reflect personally held values and goals. Indeed, in his study of Japanese EFL university students, Nishida (2012) found that the ideal L2 self was most strongly correlated with integrated regulation. These constructs differ, however, in their temporal orientation. The integrated self-regulation refers to well internalised values and goals that comprise one's current, authentic sense of self. In contrast, the ideal L2 self refers to a vision of a future self, as one would like to be. It may be that this ideal self is integrated into a person's self-concept, but it might not be.

These studies generally indicate that although there is considerable overlap between these sets of self-related constructs, they are not isomorphic. To the best of our knowledge, however, no study to date has simultaneously investigated the connections between all three theories, nor how these self-related variables are linked with other motivational variables. To this end, we conducted a study with two purposes: (1) to examine the relations among key concepts in the three theoretical frameworks (i.e. integrative orientation, intrinsic motivation, integrated regulation, identified regulation, introjected regulation, external regulation, amotivation, ideal L2 self and ought-to L2 self) and (2) to explore differences in the predictions among three theories for various affective and behavioural implications of these self-relevant constructs (i.e. engagement in LL, LL anxiety, intention to learn the TL and self-evaluation of TL competence).

An Empirical Study

Participants

A total of 167 university-level language learners were surveyed (gender: 67.7% female; age: M = 18.88, SD = 1.71), including 51.2% who reported that they had been studying the TL for two years or less, 15.8% who studied the TL for between two and five years, and 21.9% who studied the language for 6–19 years. Most indicated that their native language was English (85.6%) or English and another language (14.4%). About 20% reported that one or both of their parents spoke the TL and hence these students could be considered heritage language learners (HLLs). The language courses in which the students enrolled included French (29.3%),

Spanish (24.0%), Italian (9.0%), German (6.6%), Chinese (6.0%) and Ukrainian (3.6%), along with other languages (e.g. Arabic, Cree, Punjabi, etc.).

Instruments

The questionnaire consisted of 55 items to assess the self-relevant constructs proposed by the three frameworks (SEM, SDT and L2MSS). Items were rated on a five-point scale from 1 to 5 (some items were rated on a seven-point scale). Twenty-eight items from Noels *et al.* (2000) assessed SDT orientations: intrinsic motivation (four items: e.g. 'For the pleasure I experience as I get to know [TL] better'; α = .91); integrated regulation (four items: e.g. 'Because it is a part of my identity'; α = .91); identified regulation (five items: e.g. 'Because it helps me to achieve goals that are important to me'; α = .87); introjected regulation (seven items: e.g. 'Because I would feel guilty if I didn't know a second language'; α = .87); external regulation (four items: e.g. 'In order to have a better salary later on'; α = .70) and amotivation (four items: e.g. 'Honestly, I don't know; I truly have the impression of wasting my time in studying [TL]'; α = .86). A total of 23 items from Dörnyei (2010) represented: the ideal L2 self (12 items: e.g. 'I often imagine myself in the future speaking [TL] very well'; α = .95) and the ought-to L2 self (11 items: 'If I fail to learn a foreign language like [TL] I'll be letting other people down'; α = .87). A total of four items from Gardner (1985) assessed integrative motivation (e.g. 'Because it will allow me to meet and converse with more and varied people'; α = .85).

Additional instruments assessed engagement, affect and proficiency indices that are hypothesised to be predicted by the self-relevant variables. Nine items assessed schoolwork engagement (e.g. 'I am enthusiastic about my [TL] studies'; α = .95; Salmela-Aro & Upadaya, 2012) and 10 items assessed anxiety (e.g. 'I get nervous when I am speaking in my [the TL] class'; α = .86; Clément & Baker, 2001). Five items assessed the students' intention to continue learning the language (Noels *et al.*, 1999; e.g. 'I want to keep on learning [the TL] as long as possible'; α = .94) and four items from Clément and Baker (2001) assessed the students' self-evaluation of their reading, writing, speaking and understanding of the TL on a scale ranging from 1 to 7, where a high mean score indicated a high self-evaluation of TL competence (α = .83).

Data collection and analysis

Students who were enrolled in diverse language courses at a Canadian university completed an online questionnaire that was part of a larger study on LLM (Chaffee *et al.*, in preparation). The questionnaire wording was adapted to each student's TL and completed at individual computer

terminals during group testing sessions. Prior to completing the survey, participants completed an informed consent procedure as outlined by the Tri-Council Policy of the Government of Canada and the Canadian Psychological Association to ensure their voluntary, informed participation and assure them of the confidentiality of their responses.

In order to examine the overlap between the key variables from the three theoretical frameworks, a principal axis factor analysis with oblimin rotation examined the relation between the self-related variables. The results (Table 3.1) yielded a two-factor solution (based on the Kaiser criterion) accounting for 72% of the variance in the correlation matrix. These factors exhibited a low, positive correlation of .29. The first factor was defined by positive loadings (>.35) by intrinsic, integrative orientation and the ideal L2 self, as well as by identified and integrated regulation; this factor was also defined by negative loadings associated with amotivation. This factor suggested an orientation characterised by a high degree of internalised reasons for learning the language, combined with enjoyment in learning, which were in contrast to having no purpose or meaning for learning the language. The second factor was defined by the ought-to L2 self, introjected regulation and external regulation. This factor seemed to reflect an orientation in which motivation was controlled

Table 3.1 Results of the principal axis factor analysis of motivational variables

	Factors	
Variables	1	2
Intrinsic motivation	.84	
Integrative orientation	.83	
Ideal L2 self	.80	
Identified regulation	.79	
Integrated regulation	.64	
Amotivation	-.57	
Ought-to L2 self		.88
Introjected regulation		.76
External regulation		.66
Eigenvalue	4.74	1.75
Percentage of variance	52.61	19.38

by pressures that are either internal or external to the self. In sum, these results suggest that there are at least two distinct (but not oppositional) subsystems, the first reflecting motivation defined by personal values and goals (including the integrative orientation) and the second reflecting motivation defined by external pressures and/or introjects.

With regard to the prediction of the affective and behavioural variables, a series of stepwise regression analyses were conducted with the self-related indices as the predictor variables and the affective and behavioural indices as the criterion variables (Table 3.2). The best model contains four predictor variables, such that intrinsic motivation and the ideal L2 self positively predicted engagement, but external regulation and amotivation negatively predicted engagement ($R^2 = .63$, $F(4,155) = 65.96$, $p < .01$). With regard to the prediction of classroom anxiety, the best model was one in which the ideal L2 self negatively predicted and introjected regulation positively predicted anxiety ($R^2 = .14$, $F(2,157) = 12.54$, $p < .01$). Concerning the prediction of the intention to persist in learning the language, the best model contained

Table 3.2 Summary of the results of the stepwise regression analyses with integrative orientation, SDT orientations, ideal L2 self and ought-to L2 self as the predictor variables and engagement, anxiety, continue to learn the language and self-evaluation as the criterion variables

	Criterion variables			
Predictor variables	*Engagement*	*Anxiety*	*Continue to learn the language*	Self-evaluation
	B	*β*	*β*	*B*
Integrative orientation				
Intrinsic motivation	.47**	.17**		
Integrated regulation				.59**
Identified regulation				
Introjected regulation		.20**	-.12*	
External regulation	-.15**			
Amotivation	-.17**		-.29**	
Ideal L2 self	.30**	-.41**	.60**	
Ought-to L2 self				

Notes: *$p < .05$; **$p < .01$.

four predictor variables ($R^2 = .73$, $F(4,155) = 105.62$, $p < .01$); the ideal L2 self and intrinsic motivation positively predicted students' intentions, while amotivation and introjected regulation negatively predicted the students' intentions. Finally, the best model to predict students' self-evaluation of their TL competence was one that included only integrated regulation ($R^2 = .34$, $F(1,156) = 81.83$, $p < .01$).

Discussion

The results show that key concepts from two of the theoretical frameworks (SDT and L2MSS) significantly predicted engagement, anxiety and the intention to continue learning the language. However, a striking point is that these outcome variables were best explained by a combination of the key concepts from the different theories. This might again indicate that these theories overlap with each other to some extent. However, considering that self-evaluation was significantly predicted by only one predictor variable from SDT, the key concepts from the different theoretical frameworks might predict different learning outcomes. The integrative orientation did not significantly predict any of these outcomes. One possible reason was that the criterion variables used in this study were learning-related outcomes that did not include any cultural or TL community aspects. As indicated in Noels (2001; see also Sugita McEown *et al.*, under review), integrative orientation tends to better predict language community engagement. Moreover, these regression analyses do not consider the possibility that there might be mediated relations between variables; Kim (2012) found that Gardner's L2 motivational constructs may have an indirect impact on English proficiency that is mediated by the ideal L2 self and the ought-to L2 self. Based on these analyses, we could say that although some conceptual overlaps were confirmed between the three theoretical frameworks, the frameworks might differentially predict learning outcomes.

Methodological and contextual issues

The empirical work just described examined the relations among key concepts in the three theoretical frameworks and differences in their predictive power. Although the findings provide some support for the interplay between these three sets of self-related constructs, this topic needs to be further investigated using different methods and in different learning contexts. In the next section, we will elaborate on such directions for future research, but first we broaden the discussion by considering methodological and contextual trends in research using these three theories over the last two decades. We do so because, in addition to theoretical

stances, the methodological tools we use and contexts within which we carry out our research have the potential to affect our understanding of motivation and the self; our tools limit the kinds of questions we answer and the contexts we work in make certain issues more or less salient. This point is illustrated by calls for more studies using research methods and analytical strategies that can capture the dynamic aspect of LLM (Dörnyei, 2009), and by claims that the integrative orientation may be less relevant in contexts where an opportunity to interact with the TL community is not available and/or a TL community is not clearly associated with the language (e.g. Dörnyei, 1990; Lamb, 2004). Given that methodological practices and research contexts can impact understanding, we reviewed over 70 empirical studies conducted since 1990 that have used one or more of these three theories in order to identify important trends (see Appendix for a summary).

We focused on two methodological dimensions: (1) the design and (2) the type of data collected, following Nakata's (2006) categorisation of common language learning (LL) research designs into four categories: (a) cross-sectional quantitative studies; (b) longitudinal quantitative studies; (c) cross-sectional qualitative studies and (d) longitudinal qualitative studies. Cross-sectional studies typically sample the participants' thoughts, behaviours or emotional stances at one point in time, while longitudinal studies observe the same participants for an extended period in order to detect patterns of development over time. To this scheme we added another category, repeated cross-sectional design, in which data collection occurs across time, but the samples at each timepoint comprise different participants (also termed trend analysis; see Taris, 2000). Moreover, some longitudinal studies include an intervention in their design (e.g. to examine the effects of a new teaching practice on motivational intensity compared to the current practice; see Taris, 2000). In such pre-test–post-test designs, measurements of the variable of interest (i.e. the dependent variable, e.g. motivational intensity) are taken before and after the intervention (i.e. the independent variable; e.g. type of teaching practice). More rigorous designs might include a control group that does not receive this kind of treatment (termed pre-test–post-test control group design). These types of studies can take place in the field or in a laboratory (termed quasi-experimental or experimental designs, respectively).

The most common examples of quantitative data in LLM research are responses to closed-ended questions that are usually answered on a numerical scale, or qualitative responses that are coded into numerical categories or scales. Usually this information is collected with questionnaire surveys. The most common examples of qualitative data in the field are verbal or written responses to open-ended questions, whether elicited through open-ended items in a questionnaire, verbal responses in personal or focus group interviews or researchers' field notes from observational

studies. These two forms of data are not exclusive, and many researchers mix both types of data to address the issues in which they are interested.

As can be seen in the Appendix, 76.9% of the reviewed studies used a cross-sectional design, and 80% of these used questionnaires to collect quantitative data. Four cross-sectional studies collected only qualitative data, but six studies collected mixed data. Among the longitudinal studies (21.8%), almost half of the studies used mixed data (41.2%), and 41.2% reported only quantitative data. Qualitative data from interviews and/or open-ended questionnaires were elicited less often. Thus, there is a preponderance of cross-sectional research designs using questionnaire surveys to elicit quantitative information. If, as a field, we wish to better understand the dynamics of motivation and assess our causal claims, we should conduct more studies with longitudinal and experimental designs (cf. Reinhart *et al.*, 2013). We would likely also develop a richer understanding by collecting mixed data in our studies.

We examined three contextual aspects: (1) the level of education in which a student enrolled (and, relatedly, the age of the language learner); (2) the nature of the language contact situation and (3) the country in which the data collection took place. The educational level of learners has been argued to be important for understanding self-related aspects of motivation because it corresponds with the age of the learner. Age is an important aspect because research shows that there are developmental differences in the structure and dynamics of the self-concept across the lifespan (Harter, 2012), and dynamics of motivational processes could have different impacts during different periods in learners' development (Dörnyei, 2001). We thus coded the studies across three age-related categories: (a) elementary level learners (E); (b) secondary level learners (S; age 13–17 years) and (c) post-secondary level learners (PS; over 18 years). As shown in the Appendix, post-secondary students have been the focus of 61.5% of the reviewed studies, particularly in studies using SEM and SDT. In contrast, studies employing the L2MSS framework have recruited more young learners than post-secondary language learners. This would suggest that we need additional research across age groups. Moreover, comparisons between theoretical frameworks may be problematic because different age groups tend to be studied by scholars with different theoretical perspectives.

The context in which language contact takes place is a macrosocial factor that describes the relation between the learner's ethnolinguistic community of origin and that of the TL community. We adapted the contextual taxonomy developed by Clément *et al.* (2007) to describe three aspects of the intergroup context that have implications for motivational variables. These include: (a) the opportunity for immediate contact with members of the TL community (i.e. second language (SL) or foreign language (FL) contexts); (b) the degree of ancestral relatedness that a person has with the TL community (i.e. whether or not one is a heritage learner

[HL]) and (c) whether the TL is English or not. The most common contact situation was the EFL/ESL (English as a second language) context: 51.3% of the studies were solely based on this situation, and another 12.8% examined the EFL/ESL context and another language. Other foreign and second languages were examined in 47.4% of the studies (16.7% and 14.1%, respectively) and only 3.8% examined several different languages within one study. HL learning was examined in only 2.5% of the papers. This analysis suggests that greater diversity in the languages represented is needed. As well, more attention could be directed towards HL learning. Although it is important to develop proficiency in the language of the receiving society, maintenance of the HL is also an important issue for immigrants and their offspring.

As noted above, the country in which the data collection takes place has been suggested to make salient different issues in language learning depending on the opportunities available for interaction with the TL group. The country in which the research takes place is also an important consideration because countries potentially differ in their cultural systems in ways that are reflected in motivational processes (see Heine 2010; Sorrentino & Yamaguchi, 2008). As the Appendix shows, about 70% of the empirical studies using the SEM were carried out in North American or European countries, such as the United States, Canada, Hungary and Spain. In contrast, researchers using SDT or the L2MSS frameworks recruited participants less often in so-called Western societies, but more in East Asian contexts, such as China, Japan and Korea (38.2% and 61.8%, respectively). Given that current research in (cross-) cultural psychology has demonstrated important variations in how people construe their selves, how accepting they are of power hierarchies and how they view their relationships with others, it would seem critical to better understand how these cultural dynamics relate to motivational dynamics involved in LL.

Future directions for the self and LLM

In this chapter, we examined the differences and similarities among three theoretical frameworks (SDT, SEM and L2MSS), and highlighted various methodological and contextual trends in the empirical research emanating from these theories. Below, we summarise important issues that we feel merit greater attention in future studies.

First, the researcher's choice of theoretical constructs should be informed by the types of outcome variables that the researcher wishes to understand. Although these theories have conceptual overlap, our review and empirical study findings suggest that if the phenomena we wish to investigate are learning-related (such as motivational intensity, self-evaluation or academic engagement), SDT and L2MSS would be good theoretical

choices; however, if we want to look at intercultural and community-related outcomes, it might be useful to incorporate the notion of integrativeness, particularly if there is an identifiable TL group.

Second, the relative absence of studies with longitudinal designs has limited our representations of motivational processes to a static snapshot, even though two of the theories (SDT and L2MSS) have explicitly presented frameworks with a temporal aspect. Longitudinal designs would allow us to better model intra-individual and inter-individual changes in LLM across time. Examinations of short durations provide us with insight into the dynamic interrelations between individual differences and the contextual aspects of LLM (cf. MacIntyre *et al.*, 2010), and investigations of longer durations provide us with a greater understanding of developmental trends and pathways across courses, programmes of study, grade levels and even across the lifespan. Moreover, given that many of the applied questions that LLM researchers ask do not readily lend themselves to experimental examinations in a laboratory setting, longitudinal data would better allow LLM researchers to examine causal relationships between variables of interest (cf. Vargas Lascano & Noels, 2013). There are several developmental approaches that LLM researchers could adopt, including the popular notion of dynamic systems. We maintain that LLM researchers would do well to further explore approaches articulated by developmental scientists (cf. Bornstein, 2009; Zelazo, 2013).

Third, although the three theoretical frameworks appear to be well equipped to explain change over time, researchers must still be attentive to whether the different theoretical frameworks are more or less appropriate for different age groups. For instance, some have argued that L2MSS might be less appropriate for younger age groups because an individual's capacity to think self-reflectively and to envision an ideal self might emerge in adolescence and young adulthood (Dörnyei, 2009). The construct of intrinsic motivation (having fun while learning the language), on the other hand, might be particularly relevant to younger learners. In addition to age, experience with the TL might also moderate motivational processes. For instance, integrated self-regulation might be less relevant to novice language learners who have had limited time and experience to incorporate the TL into their self-concept. One group of (generally) more advanced language learners are HLLs; research suggests that they tend to have a stronger sense of the TL as an integrated part of their self-concept, perhaps due to their more extensive experience with the TL and its community (Comanaru & Noels, 2009). More studies and reviews that compare the empirical data of different age groups by employing cross-grade surveys (cf. Gardner, 2010; Kim 2012) or meta-analytic reviews (cf. Masgoret & Gardner, 2003), for instance, would be very useful.

Fourth, the increase of studies in EFL contexts, where English represents a global lingua franca rather than any particular TL community, has

highlighted many new motivational issues, perhaps the most notable of which is the idea that interactions with the TL community might not carry strong motivational forces in some societal contexts. However, this increased interest in English corresponds with the relatively few studies that have been conducted in contexts where learners could readily interact with members of the TL community. This shift in focus raises the question of whether the key concepts in the three theories (integrativeness, ideal L2 self and self-determination) may or may not be relevant in these contexts. Given that some theories, particularly SDT, were not originally developed for the language learning context, they might need to incorporate additional aspects specific to language learning (such as an intercultural aspect) into their formulations to more comprehensively describe and explain LLM.

Fifth, the shift in research focus to the EFL context corresponds with an increased amount of research available across more diverse countries. This increased diversity within societal settings is laudable. However, few studies have explicitly articulated whether and why motivational processes might differ across cultural contexts. Cultural and cross-cultural psychologists, as well as cultural anthropologists and cultural sociologists, have long noted that motivational processes might operate in very different ways depending upon the cultural context. For instance, considerable research suggests that people in East Asian nations tend to hold more collectivistic values and have a sense of self that is more interconnected with other people than do people from North America and some European nations (see Hofstede, 2001; Markus & Kitayama, 2010). Those with more interdependent self-constructs tend to include the considerations of others in their motivated behaviour than do those who have more independent self-constructs (Morling & Kitayama, 2007). Given that the self-related constructs of the three theories originated in Western countries, it is important to address whether and how these constructs might differently account for motivational dynamics and processes across cultures.

Conclusion

These issues we have discussed here make it difficult for us to conclude which theory best describes LLM. Each theory has its own specific perspective, and these perspectives may best explain different populations, different contexts and different outcome variables. If we happen to find ourselves at the stone garden at Ryoanji Temple in Japan, we might choose a particular point of view to experience the garden, but this choice limits the range of what can be seen. If we know which stones we want to look at, we can make an informed choice about what perspective to take while remaining aware of what information we are missing.

Therefore, researchers need to identify what aspect of L2 motivation they want to look at – that is, which theory or theories work best based on their respective research contexts, targeted populations and outcome variables of interest.

That being said, there is clearly an overlap between the three sets of constructs. This might suggest that although each theory takes on somewhat different perspectives, the perspectives they each offer come from one end of the garden alone. Although LLM researchers continue to draw different variables into the realm of investigation (e.g. Mercer *et al.*, 2012), we might wonder how the garden would look from other points of view (e.g. Atkinson, 2011). In other words, there may be aspects of language learning experiences that have not been covered by any of these three theories, and some elements would benefit by being re-examined from a new angle.

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Notes

(1) Recent empirical studies submitted to peer reviewed journals were collected through LLBA and PSYCINFO databases and also by directly contacting L2 motivation researchers through e-mail. ERIC administrators took their database offline at the time when the literature review was conducted.

(2) Participants over 18 were identified as post-secondary level learners regardless of their degree information.

(3) It should be noted that several studies conducted before 1990 with the SEM focused on secondary level learners (see Gardner, 1985, for review).

(4) We define the criteria for the SL context as follows: SL context refers to the context in which: (1) the TL is an official or national language and/or (2) the TL is generally spoken, such as in a bilingual context.

(5) The third aspect of the framework of Clément *et al.* (2007) is the relative status or dominance of the TL group compared to the speaker's heritage language group. Because there were relatively few studies of LLM in contexts where inter-ethnic contact between languages other than English was likely, we decided to instead focus on English.

References

Al-Shehri, A.S. (2009) Motivation and vision: The relation between the ideal L2 self, imagination and visual style. In Z. Dörnyei and E. Ushioda (eds) *Motivation, Language Identity and the L2 Self* (pp. 164–171). Bristol: Multilingual Matters Limited.

Anya, U. (2011). Connecting with communities of learners and speakers: integrative ideas, experiences, and motivations of successful black second language learners. *Foreign Language Annals* 44, 441–466.

Atkinson, D. (2011) *Alternative Approaches to Second Language Acquisition*. London, UK: Routledge.

Baker, C., Andrews, H., Gruffydd, I. and Lewis, G. (2010) Adult language learning: A survey of Welsh for adults in the context of language planning. *Evaluation and Research in Education* 24, 41–59.

Bernaus, M. and Gardner, R.C. (2008) Teacher motivation strategies, student perceptions, student motivation, and English achievement. *The Modern Language Journal* 92, 387–401.

Bernaus, M., Masgoret, A.M., Gardner, R.C. and Reyes, E. (2004) Motivation and attitudes towards learning languages in multicultural classrooms. *International Journal of Multilingualism* 1(2), 75–89.

Boekaerts, M. (1995) *Motivation in Education*. London: British Psychological Society.

Bonney, C.R., Cortina, K.S., Fiori, K.L. and Smith-Darden, J.P. (2008) Understanding strategies in foreign language learning: Are integrative and intrinsic motivation distinct predictors? *Learning and Individual Differences* 18, 1–10.

Bornstein, M. H. (2009) *Handbook of Cultural Developmental Science*. New York: Psychology Press.

Chaffee, K.E., Noels, K.A., Sugita McEown, M.S., Mizumoto, A. and Takeuchi, O. in preparation Teaching style and motivation across Japan and Canada: Cross-cultural effects of "secondary control" in the language classroom.

Carreira, J.M. (2012) Motivational orientations and psychological needs in EFL learning among elementary school students in Japan. *System* 40, 191–202.

Chen, J.F., Warden, C.A. and Chang, H. (2005) Motivators that do not motivate: The case of Chinese EFL learners and the influence of culture on motivation. *TESOL Quarterly* 39, 609–633.

Clément, R. and Baker, S.C. (2001) Measuring social aspects of L2 acquisition and use: Scale characteristics and administration. Technical Report. Ottawa, Canada: University of Ottawa.

Clément, R., Dörnyei, Z. and Noels, K.A. (1994) Motivation, self-confidence, and group cohesion in the foreign language classroom. *Language Learning* 44, 417–448.

Clément, R., Noels, K.A. and MacIntyre, P.D. (2007) Three variations on the social psychology of bilinguality: Context effects in motivation, usage and identity. In A. Weatherall, B.M. Watson and C. Gallois (eds) *Language, Discourse, and Social Psychology* (pp. 51–77). Basingstoke, UK: Palgrave MacMillan.

Comanaru, R. and Noels, K.A. (2009) Self-determination, motivation, and the learning of Chinese as a heritage language. *Canadian Modern Language Review* 66, 131–158.

Csikszentmihalyi, M. (1990) *Flow: The Psychology of Optimal Experience*. New York: Harper and Row.

Csizér, K. and Lukács, G. (2010) The comparative analysis of motivation, attitudes and selves: The case of English and German in Hungary. *System* 38, 1–13.

Deci, E.L. and Ryan, R. M. (1985) *Intrinsic Motivation and Self-determination in Human Behavior*. New York: Plenum Press.

Dörnyei, Z. (2010) *Questionnaires in Second Language Research: Construction, Administration, and Processing* (2nd edn) London: Routledge.

Dörnyei, Z. (2009) The L2 Motivational Self System. In Z.Dörnyei and E. Ushioda (eds) *Motivation, Language Identity and the L2 Self* (pp. 9–42). Bristol: Multilingual Matters Limited.

Dörnyei, Z. (2005) *The Psychology of the Language Learner: Individual Differences in Second Language Acquisition*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Dörnyei, Z. (2001) *Teaching and Researching Motivation*. Harlow: Longman.
Dörnyei, Z. (1990) Conceptualizing motivation in foreign-language learning. *Language Learning* 40, 45–78.
Dörnyei, Z. and Csizér, K. (2002) Some dynamics of language attitudes and motivation: Results of a longitudinal nationwide survey. *Applied Linguistics* 23, 421–462.
Gardner, R.C. (2010) *Motivation and Second Language Acquisition: The Socio-educational Model*. Bern: Peter Lang Publishers.
Gardner, R.C. (1985) *Social Psychology and Second Language Learning: The Role of Attitudes and Motivation*. London: Edward Arnold.
Gardner, R.C., Day, J.B. and MacIntyre, P.D. (1992) Integrative motivation, induced anxiety, and language learning in a controlled environment. *Studies in Second Language Acquisition* 14 (2), 197–214.
Gardner, R.C. and MacIntyre, P.D. (1991) An instrumental motivation in language study. *Studies in Second Language Acquisition* 13(1), 57–72.
Gardner, R.C., Tremblay, P.F. and Masgoret, A.-M. (1997) Toward a full model of second language learning: An empirical investigation. *The Modern Language Journal* 81, 344–362.
Goldberg, E. and Noels, K.A. (2006) Motivation, ethnic identity and post-secondary education language choices of graduates of intensive French language programs. *Canadian Modern Language Review* 62, 423–447.
Harter, S. (2012) *The Construction of the Self*. New York: Guilford.
Harwood, J. and Vincze, L. (2011) Mediating second language learning and intergroup contact in a bilingual setting. *Journal of Multilingual and Multicultural Development* 32, 377–386.
Heine, S.J. (2010) Cultural psychology. In D.T. Gilbert, S. Fiske and G. Lindzey (eds) *Handbook of Social Psychology* (5th edn) (pp. 1423–1464). New York: Wiley.
Henry, A. (2009) Gender differences in compulsory school pupils' L2 self-concepts: A longitudinal study. *System* 37, 177–193.
Henry, A. and Apelgren, B.M. (2008) Young learners and multilingualism: A study of learner attitudes before and after the introduction of a second foreign language to the curriculum. *System* 36, 607–623.
Hernández, T.A. (2010) The relationship among motivation, interaction, and the development of second language oral proficiency in a study-abroad context. *The Modern Language Journal* 94, 600–617.
Hernández, T. (2008) Integrative Motivation as a Predictor of Achievement in the Foreign Language Classroom. *Applied Language Learning* 18, 1–15.
Hernández, T. (2006) Integrative motivation as a predictor of success in the intermediate foreign language classroom. *Foreign Language Annals* 39, 605–617.
Higgins, E.T. (1987) Self-discrepancy: A theory relating self and affect. *Psychological Review* 94, 319–340.
Hofstede, G. (2001) *Culture's Consequences: Comparing Values, Behaviors, Institutions and Organizations Across Nations*. 2nd edn, Thousand Oaks, CA: Sage.
Hiromori, T. (2003) Gakushuusha no doukidukeha naniniyotte takamarunoka: jikoketteirironn niyoru koukousei eigogakushuushano doukidukeno kentou. *JALT Journal* 25, 173–186.
Humphreys, G. and Spratt, M. (2008) Many languages, many motivations: A study of Hong Kong students' motivation to learn different target languages. *System* 36, 313–335.
Humphreys, G.M. and Miyazoe-Wong, Y. (2007) So what is the appeal? The phenomenon of Japanese as a foreign language in Hong Kong. *Journal of Multilingual and Multicultural Development* 28, 468–483.

Jones, B.D., Llacer-Arrastia, S. and Newbill, P. (2009) Motivating foreign language students using self-determination theory. *Innovation in Language Learning and Teaching* 3, 171–189.

Kiany, G.R., Mahdavy, B. and Ghafar, S. (2013) Motivational changes of learners in a traditional context of English education: A case study of high school students in Iran. *International Journal of Research Studies in language Learning* 2, 3–16.

Kim, T.Y. (2012) The L2 Motivational Self System of Korean EFL students: Cross-grade survey analysis. *English Teaching* 67, 29–56.

Kim, T.Y. (2009) The sociocultural interface between ideal self and ought-to self: A case study of two Korean students' ESL motivation. In Z. Dörnyei and E. Ushioda (eds) *Motivation, Language Identity and the L2 Self* (pp. 274–294). Bristol: Multilingual Matters.

Kim, Y.K. and Kim, T.Y. (2012) Korean secondary school students' L2 learning motivation: Comparing L2 motivational self system with socio-educational model. *English Language and Literature Teaching* 18, 1–19.

Kimura, Y., Nakata, Y. and Okumura, T. (2001) Language learning motivation of EFL learners in Japan: A cross-sectional analysis of various learning milieus. *JALT Journal* 23, 47–68.

Koga, T. (2010) Dynamicity of motivation, anxiety and cooperativeness in a semester course. *System* 38, 172–184.

Kormos, J. and Csizér, K., (2008) Age-related differences in the motivation of learning English as a foreign language: Attitudes, selves and motivated learning behaviour. *Language Learning* 58, 327–355.

Kormos, J., Kiddle, T. and Csizér, K. (2011) Systems of goals, attitudes, and self-related beliefs in second language learning motivation. *Applied Linguistics* 32, 495–516.

Lamb, M. (2012) A self-system perspective on young adolescents' motivation to learn English in urban and rural settings. *Language Learning* 62, 997–1023.

Lamb, M. (2007) The impact of school on EFL learning motivation: an Indonesian case study. *TESOL Quarterly* 41, 757–780.

Lamb, M. (2004) Integrative motivation in a globalizing world. *System* 32, 3–19.

Landry, R. (2012) Autonomie culturelle, cultures sociétales et vitalité des communautés de langue officielle en situation minoritaire au Canada. [Cultural autonomy, societal cultures and vitality of official language minority communities in Canada]. *MinoritésLlinguistiques et Société* 1, 159–179.

Macaro, E. and Wingate, U. (2004) From sixth form to university: motivation and transition among high achieving state-school language students. *Oxford Review of Education* 30, 467–489.

MacIntyre, P.D., Noels, K.A. and Moore, B. (2010) Perspectives on motivation in second language acquisition: Lessons from the Ryoanji Garden. In M.T. Prior, Y. Watanabe, and S.-K. Lee (eds) *Selected Proceedings of the 2008 Second Language Research Forum*. Somerville, MA: Cascadilla Press.

Magid, M. (2009) The L2 motivational self system from a Chinese perspective: A mixed methods study. *Journal of Applied Linguistics* 6(1), 69–90.

Magid, M. and Chan, L. (2012) Motivating English learners by helping them visualise their ideal L2 self: Lessons from two motivational programmes. *Innovation in Language Learning and Teaching* 6(2), 113–125.

Mahdinejad, G., Hasanzadeh, R., Mirzaian, B. and Ebrahimi, S. (2012) Motivational Orientations and Students' English Language Learning: The Case of Iranian EFL Learners. *European Journal of Social Sciences* 32, 239–250.

Markus, H.R. and Kitayama, S. (2010) Cultures and selves: A cycle of mutual constitution. *Perspectives on Psychological Science* 5, 420–430.

Markus, H. and Nurius, P. (1986) Possible selves. *American Psychologist* 41, 954–969.

Masgoret, A.M., Bernaus, M. and Gardner, R.C. (2000) A study of cross-cultural adaptation by English speaking sojourners in Spain. *Foreign Language Annals* 33(5), 548–558.

Masgoret, A.-M. and Gardner, R.C. (2003) Attitude, motivation and second language learning: A meta-analysis of studies conducted by Gardner and associates. *Language Learning* 53, 123–295.

Masgoret, A.-M. and Gardner, R.C. (1999) A casual model of Spanish immigrant adaptation in Canada. *Journal of Multilingual and Multicultural Development* 20, 216–236.

Mercer, S., Ryan, S. and Williams, M. (2012) *Psychology for Language Learning*. Basingstoke: Palgrave MacMillan.

Mori, S. and Gobel, P. (2006) Motivation and gender in the Japanese EFL classroom. *System* 34, 194–210.

Morling, B. and Kitayama, S. (2007) Culture and Motivation. In J.L. Shah and W.L. Gardner (eds) *Handbook of Motivation Science* (pp. 417–433). New York: Guilford.

Nakata, Y. (2006) *Motivation and Experience in Foreign Language Learning*. Bern: Peter Lang.

Nishida, R. (2012) An empirical study on L2 ideal self, international posture, intrinsic motivation, willingness to communicate among EFL Japanese university students. The 51st International Convention, JACET.

Nishida, R. and Yashima, T. (2009) The enhancement of intrinsic motivation and willingness to communicate through a musical project in young Japanese EFL learners. Paper presented at the American Association of Applied Linguistics (AAAL), Denver, Colorado. March 21–24, 2009.

Noels, K.A. (2005) Orientations to learning German: Heritage language background and motivational processes. *Canadian Modern Language Review* 62, 285–312.

Noels, K. (2001) New orientations in language learning motivation: Towards a model of intrinsic, extrinsic, and integrative orientations and motivation. In Z. Dörnyei, and R. Schmidt (eds) *Motivation and Second Language Acquisition* (pp. 43–68). Honolulu: University of Hawaii Press.

Noels, K.A., Clément, R. and Pelletier, L.G. (1999) Perceptions of teachers' communicative style and students' intrinsic and extrinsic motivation. *The Modern Language Journal* 83, 23–34.

Noels, K.A. and Giles, H. (2009) Social identity and language learning. In W. Ritchie and T. Bhatia (eds) *The New Handbook of Second Language Acquisition* (pp. 647–670). Bingley, UK: Emerald.

Noels, K.A., Pelletier, L.G., Clément, R. and Vallerand, R.L. (2000) Why are you learning a second language? Motivational orientations and self-determination theory. *Language Learning* 50, 57–85.

Okuniewska, E., Okuniewska, H. and Okuniewski, J. (2010) Motivation and attitudes of Polish students learning Hebrew. *Psychology of Language and Communication* 4, 71–79.

Okuniewski, J. (2012). Polish secondary school students learning German: Motivation, orientations and attitudes. *Psychology of Language and Communication* 16, 53–65.

Otoshi, J. and Heffernan, N. (2011) An analysis of a hypothesized model of EFL students' motivation based on self-determination theory. *The Asian EFL Journal Quarterly* 13, 66–86.

Oxford, R.L. and Shearin. J. (1994) Language learning motivation: Expanding the theoretical framework. *The Modern Language Journal* 78, 12–28.

Papi, M. (2010) The L2 motivational self system, L2 anxiety, and motivated behavior: A structural equation modeling approach. *System* 38, 467–479.

Papi, M. and Abdollahzadeh, E. (2011) Teacher motivational practice, student motivation, and possible L2 selves: An examination in the Iranian EFL context. *Language Learning* 62, 571–594.

Pae, T. (2008) Second language orientation and self-determination theory: A structural analysis of the factors affecting second language achievement. *Journal of Language and Social Psychology* 27, 5–27.

Polat, N. (2011) Gender differences in motivation and L2 accent attainment: An investigation of young Kurdish learners of Turkish. *Language Learning Journal* 39, 19–41.

Ramage, K. (1990) Motivational factors and persistence in foreign language study: A descriptive analysis. *Language Learning* 40, 189–219.

Reinhart, A.L., Haring, S.H., Leven, J.R., Patall, E.A. and Robinson, D.H. (2013) Models of not-so-good behavior: Yet another way to squeeze causality and recommendations for practice out of correlational data. *Journal of Educational Psychology* 105, 241–247.

Ryan, R.M. and Deci, E.L. (2000) Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist* 55, 68–78.

Sakai, H. and Koike, H. (2008) Changes in Japanese university students' motivation to learn English: Effects of volunteering in an international event. *Japan Association for Language Teaching* 30, 51–68.

Salmela-Aro, K. & Upadaya, K. (2012) The schoolwork engagement inventory: energy, dedication, and absorption (EDA). *European Journal of Psychology Assessment* 28(1), 60–67.

Sampson, R. (2012) The language-learning self, self-enhancement activities, and self perceptual change. *Language Teaching Research* 16, 317–335.

Shaaban, K. and Ghaith, G. (2000) Student motivation to learn English as a foreign language. *Foreign Language Annals* 33, 632–642.

Sorrentino, R. M. and Yamaguchi, S. (eds) (2008) *Handbook of Motivation and Cognition Across Cultures*. San Diego, CA: Academic Press.

Sugita McEown, M., Noels, K.A. and Saumure, K.D. (under review). Students' Self-Determined and Integrative Orientations and Teachers' Motivational Support in the Japanese as a Foreign Language Course.

Taguchi, T., Magid, M., and Papi, M. (2009) The L2 motivational self system among Japanese, Chinese and Iranian learners of English: A comparative study. In Z. Dörnyei and E. Ushioda (eds) *Motivation, Language Identity and the L2 Self* (pp. 66–97). Bristol: Multilingual Matters.

Tanaka, H. (2009) Enhancing intrinsic motivation at three levels: The effects of motivational strategies. *JALT Journal* 31, 227–250.

Tanaka, H. and Hiromori, T. (2007) The effects of educational intervention that enhances intrinsic motivation of L2 students. *JALT Journal* 29, 59–80.

Taris, T. W. (2000) *A Primer in Longitudinal Data Analysis*. London: Sage Publications.

Tremblay, P. F. and Gardner, R. C. (1995) Expanding the motivation construct in language learning. *The Modern Language Journal* 79, 505–518.

Ueki, M. and Takeuchi, O. (2012) Validating the L2 Motivational Self System in a Japanese EFL context: The interplay of L2 motivation, L2 anxiety, self-efficacy, and the perceived amount of information. *Language Education and Technology* 49, 1–22.

Vargas Lascano, D. and Noels, K.A. (2013, June) Modeling the motivational dynamics of learning another language. Paper presented at the 5th International Conference on Self-Determination Theory, Rochester, NY, June 27–30, 2013.

Warden, C. and Lin, H.J. (2000) Existence of integrative motivation in an Asian EFL setting. *Foreign Language Annals* 33, 535–547.

Wesely, P. (2009) The language learning motivation of early adolescent French immersion graduates. *Foreign Language Annals* 42, 270–286.
Wesely, P. (2010) Language learning motivation in early adolescents: Using mixed methods research to explore contradiction. *Journal of Mixed Methods Research* 4, 295–312.
Wu, X. (2003) Intrinsic motivation and young language learners: the impact of the classroom environment. *System* 31, 501–517.
Wu Man-fat, M. (2007) The relationships between the use of metacognitive language-learning strategies and language-learning motivation among Chinese-speaking ESL learners at a vocational education institute in Hong Kong. *The Asian EFL Journal* 9, 93–117.
Yang, J.S. and Kim, T.Y. (2011) Sociocultural analysis of second language learner beliefs: A qualitative case study of two study-abroad ESL learners. *System* 39, 325–334.
Yashima, T. (2002) Willingness to communicate in a second language: The Japanese EFL context. *The Modern Language Journal* 86, 54–66.
Yu, B. (2010) Learning Chinese abroad: The role of language attitudes and motivation in the adaptation of international students in China. *Journal of Multilingual and Multicultural Development* 31, 301–321.
Zelazo, P.D. (ed.) (2013) *The Oxford Handbook of Developmental Psychology*. Oxford: Oxford University Press.
Zheng, Y. (2012) Exploring long-term productive vocabulary development in an EFL context: The role of motivation. *System* 40, 104–119.

Appendix A

Table A3.1 Methodological and contextual issues in empirical studies by primary theoretical framework

		Method		*Context*		
		Design	*Data*	*Participants*	*Contact situation*	*Country*
Study by primary theoretical framework		*Cross-sectional/ repeated cross-sectional/ longitudinal/ intervention/ quasi-experimental/ observational*	*Quantitative/ qualitative/ mixed/*	*Elementary (E)/ secondary (S)/ post-secondary (PS)/ teacher (T)*	*HL/SLOE/ESL/ FLOE/EFL*	*Country in which data were collected*
Socio-Educational Model						
1.	Baker *et al.* (2010)	Longitudinal	Mixed	PS	SLOE (Welsh)	Wales
2.	Bernaus & Gardner (2008)	Cross-sectional	Quantitative	S/T	EFL	Spain
3.	Bernaus *et al.* (2004)	Cross-sectional	Quantitative	S	SLOE (Spanish)/ EFL/FLOE (Catalan)	Spain
4.	Chen *et al.* (2005)	Cross-sectional	Quantitative	PS	EFL	Taiwan
5.	Clément *et al.* (1994)	Cross-sectional	Quantitative	S	EFL	Hungary
6.	Dörnyei & Csizér (2002)	Repeated cross-sectional	Quantitative	S	FLOE (German, French, Italian and Russian)/ EFL	Hungary

(*continued*)

Table A3.1 Methodological and contextual issues in empirical studies by primary theoretical framework (*continued*)

		Method		*Context*		
		Design	*Data*	*Participants*	*Contact situation*	*Country*
7.	Dörnyei (1990)	Cross-sectional	Quantitative	PS	EFL	Hungary
8.	Gardner (2010)	Cross-sectional	Quantitative	E/S/PS	EFL	Catalan/Brazil/Japan/Croatia/Poland/Romania/Spain
9.	Gardner *et al.* (1992)	Cross-sectional (experiment)	Quantitative	PS	FLOE (French)	Canada
10.	Gardner & MacIntyre (1991)	Cross-sectional (experiment)	Quantitative	PS	FLOE (French)	Canada
11.	Gardner *et al.* (1997)	Cross-sectional	Quantitative	PS	SLOE (French)	Canada
12.	Harwood & Vincze (2011)	Cross-sectional	Quantitative	S	FLOE (Swedish)	Finland
13.	Hernández (2010)	Longitudinal	Mixed	PS	SLOE (Spanish)	United States
14.	Hernández (2008)	Cross-sectional	Quantitative	PS	FLOE (Spanish)	United States
15.	Hernández (2006)	Cross-sectional	Quantitative	PS	FLOE (Spanish)	United States
16.	Humphreys & Spratt (2008)	Cross-sectional	Mixed	PS	FLOE (Japanese, German and French)/ ESL/SLOE	Hong Kong

17.	Humphreys & Miya-zoe-Wong (2007)	Cross-sectional	Mixed	PS	FLOE (Japanese, German and French)/ESL/EFL	Hong Kong
18.	Koga (2010)	Longitudinal	Quantitative	PS	EFL	Japan
19.	Masgoret *et al.* (2000)	Longitudinal	Quantitative	PS	SLOE (Spanish)	Spain
20.	Masgoret & Gardner (1999)	Cross-sectional	Quantitative	PS	ESL/SLOE (Spanish)	Canada
21.	Mori & Gobel (2006)	Cross-sectional	Quantitative	PS	EFL	Japan
22.	Okuniewska *et al.* (2010)	Cross-sectional	Quantitative	S/PS	FLOE (Hebrew)	Poland
23.	Okuniewski (2012)	Cross-sectional	Quantitative	S	FLOE (German)	Poland
24.	Ramage (1990)	Cross-sectional	Quantitative	S	FLOE (French, Spanish)	United States
25.	Shaaban & Ghaith (2000)	Cross-sectional	Quantitative	PS	EFL	Lebanon
26.	Tremblay & Gardner (1995)	Cross-sectional	Quantitative	S	SLOE (French)	Canada
27.	Warden & Lin (2000)	Cross-sectional	Quantitative	PS	EFL	Taiwan
28.	Wesely (2009)	Longitudinal	Qualitative	E	SLOE (French)	United States
29.	Wesely (2010)	Longitudinal	Mixed	E (Graduates; 6th and 7th graders)	SLOE (French, Spanish)	United States

(*continued*)

Table A3.1 Methodological and contextual issues in empirical studies by primary theoretical framework (*continued*)

	Method		*Context*		
	Design	*Data*	*Participants*	*Contact situation*	*Country*
30. Wu Man-fat (2007)	Cross-sectional	Quantitative	PS	ESL	Hong Kong
31. Yu (2010)	Longitudinal	Quantitative	PS	SLOE (Chinese)	China
Self-Determination Theory					
32. Comanaru & Noels (2009)	Cross-sectional	Mixed	PS	HL/FLOE (Chinese)	Canada
33. Hiromori (2003)	Cross-sectional	Quantitative	S	EFL	Japan
34. Carreira (2012)	Cross-sectional	Quantitative	E	EFL	Japan
35. Goldberg & Noels (2006)	Cross-sectional	Mixed	PS	SLOE (French)	Canada
36. Jones *et al.* (2009)	Cross-sectional (intervention)	Qualitative	PS	FLOE (Spanish)	United States
37. Macaro & Wingate (2004)	Cross-sectional	Qualitative	PS	FLOE (German)	England
38. Mahdinejad *et al.* (2012)	Cross-sectional	Quantitative	S	EFL	Iran
39. Nishida & Yashima (2009)	Longitudinal	Mixed	E	EFL	Japan

40.	Noels *et al.* (1999)	Cross-sectional	Quantitative	PS	SLOE (French)	Canada
41.	Noels *et al.* (2000)	Cross-sectional	Quantitative	PS	SLOE (French)	Canada
42.	Otoshi & Heffernan (2011)	Cross-sectional	Quantitative	PS	EFL	Japan
43.	Polat (2011)	Cross-sectional	Mixed	S	SLOE (Turkish)	Turkey
44.	Sakai & Koike (2008)	Longitudinal	Quantitative	PS	EFL	Japan
45.	Tanaka (2009)	Longitudinal(intervention)	Quantitative	PS	EFL	Japan
46.	Tanaka & Hiromori (2007)	Longitudinal	Mixed	PS	EFL	Japan
47.	Wu (2003)	Cross-sectional (intervention:quasi-experimental)	Qualitative	Before E (Age 4–6 years)	EFL	China
L2 Motivational Self System						
48.	Al-Shehri (2009)	Cross-sectional	Quantitative	PS	EFL/ESL	Saudi Arabia/United Kingdom
49.	Csizér & Lukács (2010)	Cross-sectional	Quantitative	S	EFL/FLOE (German)	Hungary
50.	Henry & Apelgren (2008)	Cross-sectional	Quantitative	E	EFL/FLOE (French, Spanish, German and sign language)	Sweden

(*continued*)

Table A3.1 Methodological and contextual issues in empirical studies by primary theoretical framework (*continued*)

		Method		*Context*		
		Design	*Data*	*Participants*	*Contact situation*	*Country*
51.	Kiany *et al.* (2013)	Cross-sectional	Quantitative	S	EFL	Iran
52.	Kim (2009)	Cross-sectional (observational)	Mixed	PS	ESL	Korea
53.	Kormos & Csizér (2008)	Cross-sectional	Quantitative	S	EFL/FLOE (German)	Hungary
54.	Kormos, Kiddle & Csizér (2011)	Cross-sectional	Quantitative	S/PS	EFL	Chili
55.	Lamb (2012)	Cross-sectional	Quantitative	S	EFL	Indonesia
56.	Magid (2009)	Cross-sectional	Mixed	S/PS	EFL	China
57.	Magid & Chan (2012)	Longitudinal	Mixed	PS	ESL	England/Hong Kong
58.	Papi & Abdollahzadeh (2011)	Cross-sectional (observational)	Mixed	S/T	EFL	Iran
59.	Papi (2010)	Cross-sectional	Quantitative	S	EFL	Iran
60.	Sampson (2012)	Longitudinal	Qualitative	PS	EFL	Japan
61.	Ueki & Takeuchi (2012)	Cross-sectional	Quantitative	PS	EFL	Japan

62.	Yang & Kim (2011)	Cross-sectional	Quantitative	S	EFL	China/Japan/Korea/Sweden
63.	Zheng (2012)	Longitudinal	Mixed	PS	EFL	China
Socio-Educational Model with L2 Motivational Self System						
65.	Anya (2011)	Cross-sectional	Qualitative	PS	ESL/SLOE/FLOE (Spanish, French, Latin, Arabic, Portuguese and Japanese)	United States
66.	Henry (2009)	Longitudinal	Quantitative	E/S	EFL/FLOE (French, Spanish, German and sign language)	Sweden
67.	Kim (2012)	Cross-sectional	Quantitative	E/S	EFL	Korea
68.	Kim & Kim (2012)	Cross-sectional	Quantitative	S	EFL	Korea
69.	Kormos & Csizér (2008)	Cross-sectional	Quantitative	S/PS	EFL	Hungary
70.	Taguchi, Magid & Papi (2009)	Cross-sectional	Quantitative	S/PS	EFL	Japan/China/Iran
Self-Determination Theory with Socio-Educational Model						
71.	Bonney *et al.* (2008)	Cross-sectional	Quantitative	S	FLOE (French, Spanish, German and Latin)	United States
72.	Kimura *et al.* (2001)	Cross-sectional	Quantitative	S/PS	EFL	Japan

(*continued*)

Table A3.1 Methodological and contextual issues in empirical studies by primary theoretical framework (*continued*)

	Method		*Context*		
	Design	*Data*	*Participants*	*Contact situation*	*Country*
73. Lamb (2007)	Longitudinal	Mixed	S	EFL	Indonesia
74. Sugita McEown *et al.* (under review)	Cross-sectional	Quantitative	PS	FLOE (Japanese)	Canada
75. Noels (2001)	Cross-sectional	Quantitative	PS	FLOE (Spanish)	United States
76. Noels (2005)	Cross-sectional	Quantitative	PS	HL/FLOE (German)	Canada
77. Pae (2008)	Cross-sectional	Quantitative	PS	EFL	Korea
Self-Determination Theory with L2 Motivational Self System					
78. Nishida (2012)	Cross-sectional	Quantitative	PS	EFL	Japan

HL = heritage language; SLOE = second language other than English; ESL = English as a second language; FLOE = foreign language other than English; EFL = English as a foreign language.

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