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## CHAPTER 3

# Motivation, anxiety and emotion in second language acquisition\*

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### Introduction

When we think of individual differences among language learners, motivation springs quickly to mind as one of the most important of these variables. In this chapter, language learning motivation theory will be examined from three approaches. First, Gardner's (1985) socio-educational model, whose tenets have been studied for over 40 years, will be examined. This model has been widely accepted in the language learning area, but some recent critics argue that its popularity has led to its unhealthy dominance among language researchers and educators, preventing the exploration of other motivational frameworks. The model and its critique will be summarized. This leads to a second focus of this chapter, representing a sort of criticism of the Gardner critics. Those critics proposed a long list of motivational variables for inclusion in models of language learning motivation. The interrelations of such variables are likely to be more complex than has been suggested, possibly paradoxical. Some examples from the literature on motivation within psychology will be offered to illustrate some of the unexpected effects of the motivational processes proposed for study. Finally, the third major section of the chapter will deal with the concept of emotion, one that has been closely linked to motivation in the literature of psychology over the years. Emotion has not been given sufficient attention in the language learning literature, with the exception of studies of language anxiety. It will be argued that emotion just might be the fundamental basis of motivation, one deserving far greater attention in the language learning domain.

## What is motivation?

As a starting point, this is probably not a good question. The question seems to imply that motivation is a "thing" or a "condition." In spoken English, we use phrases like "she is motivated" or "I can't motivate my students." As a working hypothesis, let us assume that most human behavior is motivated. This helps put motivation for language learning into context, as one of the many motives a person might possess. People are motivated to eat, play games, work, socialize, on so on, with potentially hundreds or thousands of more specific motives that could be cited. The number is not as important as the observation that all of these motives occur, to some smaller or larger degree, at the same time. There are a multitude of motives present in every person and these motives wax and wane as time moves along.

Given that individual motives rise and fall over time, we can conceptualize motivation theory in general as an attempt to explain that which "...gives behavior its energy and direction" (Reeve, 1992, p. 3). In other words, questions about motivation tend to address two issues: (1) why is behavior directed toward a specific goal, and (2) what determines the intensity or effort invested in pursuing the goal. A third key question, embedded in the first two, involves a search for explanations for individual differences in motivation: why do different people in the same situation differ in the direction and strength of motivated behavior? Against this larger theoretical backdrop, we can examine the leading theory of motivation in the area of language learning, Gardner's (1985) socio-educational model. It is possible that the success of this model over the years has been due to its ability to answer all three questions.

### Motivation in the socio-educational model: Gardner and his critics

A schematic representation of the socio-educational model, taken from Gardner and MacIntyre (1992), is presented in Figure 1. Gardner (1985), in defining motivation, argues that four elements must be present for a student to be considered motivated: a goal, desire to achieve the goal, positive attitudes, and effort. This is an expansion upon the definition offered above, to include attitudes and desires. Gardner has referred to these as "affective variables," clearly differentiating them from the more purely cognitive factors associated with language learning such as intelligence, aptitude and related variables (see Gardner & MacIntyre, 1992, 1993a). This definition of motivation is consistent with definitions in the general literature on motivation, but allows Gardner's model to address a wide

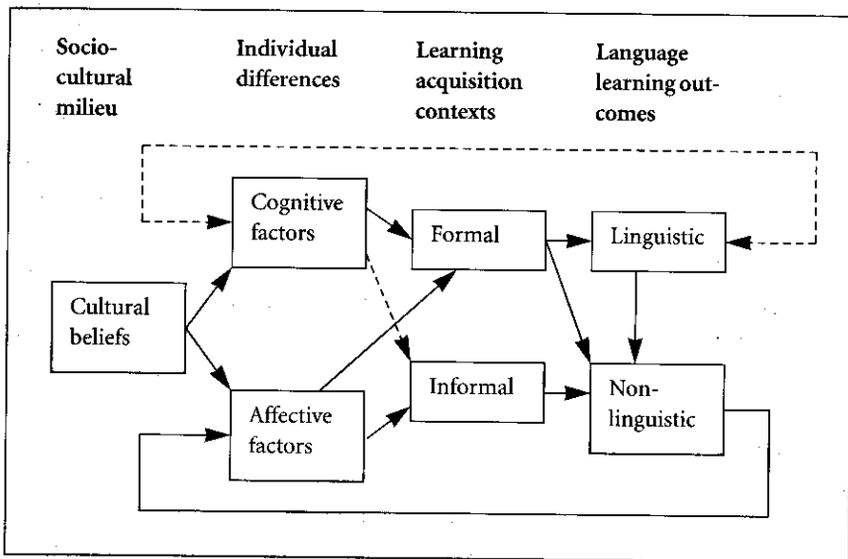


Figure 1. The socio-educational model (Gardner & MacIntyre, 1992)

range of issues under the motivation rubric. It also allows for tapping of the link between motivation and emotion, an essential link that is often missing from motivational concepts emerging from cognitively-oriented psychology.

Four major parts of the model are shown: the socio-cultural milieu, individual differences, language acquisition contexts, and language learning outcomes. According to Gardner and MacIntyre (1992), the socio-cultural milieu plays a role in influencing both cognitive and affective individual differences among language learners. Affective variables include attitudes and motivation, language anxiety, and self-confidence. Cognitive factors include variables such as intelligence, language aptitude, and language learning strategies. These individual differences, especially the affective variables, have been the focus of most of the studies done by Gardner and his colleagues (see Gardner, 1985). Gardner and MacIntyre (1992) state that "there are probably as many factors that might account for individual differences in achievement in a second language as there are individuals" (p. 212). Given this proviso, it is well known that Gardner's primary research interest is directed toward the integrative motive, its key concepts measured by the Attitudes/Motivation Test Battery (AMTB, Gardner, 1985)<sup>1</sup>. The focus on the integrative motive allowed the socio-educational model to concentrate on a specific subset of variables in a veritable conceptual jungle, and this, coupled with the AMTB, allowed research to proceed in an orderly, programmatic fashion.

The three major variables comprising the integrative motive are attitudes toward the learning situation, integrativeness, and motivation. We can divide the integrative motive into integrativeness and motivation. Integrativeness, which begins with the cultural beliefs present in the socio-cultural milieu, reflects the individual's level of interest in social interaction with the target language group and attitudes toward the learning situation. The AMTB measures integrativeness with scales tapping attitudes toward the target language group, general interest in foreign languages, and a set of integrative orientation items reflecting reasons for language study based on attraction to the target language group. The socio-cultural milieu also fosters attitudes within the learning situation that are embodied, at least in part, by the teacher as a representative of the target language group. The AMTB captures these attitudes with respect to the teacher and the language course. Combined, these two categories of attitudes (integrativeness and attitudes toward the learning situation) supply the underlying direction in the learner's behavior.<sup>2</sup>

It should be stressed that Gardner (1996) proposed that the effects of integrative motivation on language learning are largely the result of the motivation component. This component is defined by Gardner as a combination of motivational intensity, desire to learn the language, and attitudes toward learning the language. Gardner emphasizes that it is the active learner, the student who engages with the language, who can be considered motivated. The student who endorses the integrative attitudes, or more simply an integrative orientation or goal, but who does not show effort and engagement with the language, is simply not a motivated learner. This satisfies Gardner's (1985) four-part definition of motivation, having a goal, desire to achieve the goal, positive attitudes, and exerting effort. Gardner and MacIntyre (1993a) argue that this helps to explain why studies of orientations alone produce inconsistent correlations with various specific measures of language achievement (such as cloze tests and course grades).

To complete the socio-educational model, Gardner and MacIntyre (1992) propose that individual differences act in both formal and informal language learning situations, generating linguistic and non-linguistic outcomes. Formal situations refer primarily to classroom settings where direct language instruction is provided. Both cognitive and affective variables operate directly in formal contexts where the focus is on teaching language skills. Informal situations refer to language acquisition contexts where learning is incidental to some other activity, as when one "picks up" another language from friends or co-workers during interactions with them. In informal contexts, the exposure to

the language can be considered voluntary; one might encourage or discourage friends or co-workers from using the L2. Gardner and MacIntyre (1992) suggest that, because entry into these situations is voluntary, motivation will play a substantial role in an individual's exposure to situations that provide such opportunities for language learning. Once an individual has decided to enter informal situations, both cognitive and affective variables will operate.

The outcomes of language learning may be either linguistic or non-linguistic. Linguistic outcomes describe the skill, knowledge, and competence in the language itself. A variety of non-linguistic outcomes also are possible, with some of these outcomes being the very same individual difference variables described earlier in the model. That is, as a student progresses through the language learning process, changes in attitudes and motivation are to be expected. In this way the socio-educational model is dynamic, describing how changes in individual difference variables occur over time. For example, one would expect that positive experiences in learning a language will tend to improve objective language proficiency, but also increase motivation and positive attitudes, among other things.

Over the years, the socio-educational model has been widely studied with two purposes, often within the same study: to establish that motivation is related to language achievement and to investigate the structure of the integrative motive. There has been variation in the social and learning contexts and in the focus of research from study to study, as well as some variation in the resulting empirical model. For example, Lalonde and Gardner (1984) found that attitudes toward the learning situation and integrativeness formed two separate factors, but Gardner and Lysynchuk (1990) found that they could be combined into a single factor. Further, Gardner, Lalonde and Pierson (1983) report a model in which attitudes toward the learning situation influence integrativeness but MacIntyre and Charos (1996), in a different social context, report that the influence runs in the opposite direction. Given that these variables are hypothesized to be related, and even derived from the same socio-cultural factors, it should not be surprising that they are highly correlated. In some studies, the variables are so highly correlated that it is empirically justified to consider them part of one construct. Indeed, the major theoretical propositions remain unchanged even if the structure of the model representing them changes slightly in form and empirical results (see Gardner & MacIntyre, 1993a). Thus some variability in the model is to be expected from one study to the next as one reviews the literature on the socio-educational model. However, results consistently support the general hypothesis

that elements of the integrative motive are significantly correlated with indices of language achievement (Gardner, 1985; Gardner & MacIntyre, 1993b; Clément & Gardner, 2001).

The early critics of Gardner, such as Au (1988) and Oller (1981), when discussing the impact of attitudes/motivation on language achievement, spent a great deal of time criticizing Gardner's conceptual and operational definitions on the basis of inconsistencies such as the ones just described. The same authors were far less concerned with the arguably more difficult task of defining language achievement. Various studies from various authors have employed various definitions of language achievement. As Gardner and MacIntyre (1993b) show, even within a single sample, attitudes and motivation will display a wide range of correlations with different measures of language achievement. The effect of using a variety of indices of language achievement, such as course grades, standardized achievement tests, or specific language performance tasks (such as the cloze test), on theorizing in the language area should not be underestimated. It would be difficult to justify an expectation that all indices of L2 proficiency correlate uniformly with the variety of attitude and motivation variables under consideration here. Similarly, as noted by Au (1988), theoretical difficulties can be created when variables with names similar to those included in the socio-educational model are used but measured differently from those in the AMTB (Gardner, 1980, 1996). The AMTB has been widely tested showing satisfactory reliability and validity; measures adapted or written for use within a specific study must be assessed for reliability and their validity established empirically, over several samples. Adaptations of the AMTB itself suffer from a similar problem. To the extent that items are omitted, altered, or replaced, and to the extent that contrasting cultural beliefs create different connotations for the items, the theory underlying the AMTB should be examined closely for its applicability.

In the early 1990s, three papers were published that were critical of Gardner's socio-educational model. The critics sought to expand on the socio-educational model to include a host of additional motivational variables. Given their potential impact on the study of motivation for language learning, and their particular relevance to language pedagogy, let us consider each of the studies in depth.

#### *Crookes and Schmidt (1991)*

The first of the "critique" papers was by Crookes and Schmidt (1991), who took issue with the social-psychological approach adopted by Gardner, Lambert and

their associates. They argue that the socio-educational model has been so dominant in the language learning field, that other approaches to the study of motivation have “not seriously been considered” (p. 501). This resulted in an unbalanced picture, involving a conception that was, as Skehan (1989) put it, “limited compared to the range of possible influences that exists” (p. 280). However, the socio-educational model covers some of these variables to a greater extent than first meets the eye (see MacIntyre, MacMaster, & Baker, 2001).

Crookes and Schmidt (1991) discussed three other approaches to motivation: Giles and Byrne’s (1982) speech accommodation theory, Schumann’s (1978) acculturation model, and Krashen’s (1985) monitor model. Crookes and Schmidt (1991) strongly support both Gardner’s and Schumann’s emphasis on the active learner, stating “...it seems reasonable that motivation, as it controls engagement in and persistence with the learning task, should also be considered worthy of renewed scrutiny” (p. 480). This point is well taken.

Crookes and Schmidt (1991) spend the majority of the article discussing practitioners’ usage of the term motivation. They argue the

“... invalidity of SL treatments of motivation in terms of their distance from everyday, nontechnical concepts of what it means to be motivated. When teachers say that a student is motivated, they are not usually concerning themselves with the student’s reason for studying ... Teachers would describe a student as motivated if he or she becomes productively engaged in learning tasks, and sustains that engagement, without the need for continual encouragement or direction. They are more concerned with motivation than affect” (p. 480).

This is an error in focus. A consideration of affect is valuable, if not essential, to any discussion of the source of the engagement that many authors see as the key to motivation.

Crookes and Schmidt used Keller’s (1983) education-oriented theory to define motivation as the choices people make about the experiences and goals they approach or avoid, and the degree of effort they exert. According to Keller four major determinants of motivation are interest, relevance, expectancy, and outcomes. Crookes and Schmidt apply these four determinants at the micro-level, the classroom level, the syllabus level, and to informal experiences outside the class. Clearly their emphasis is on classroom-based approaches to understanding motivation, though they indicate that motivation extends beyond the classroom into naturalistic settings. Much as Gardner does, they assert that motivation will operate in both settings in similar ways because essentially “...no different processes of learning are involved” (p. 494).

The discussion by Crookes and Schmidt is both interesting and valuable.

They offered the harshest of the three critical evaluations of the socio-educational model under discussion here, and helped to inspire the other two. Unfortunately, they exhibit a tendency to speculate on what empirical research might demonstrate, without explicitly considering the intricate relations among motivation-related variables that necessarily would be involved. For example, at the classroom level, Crookes and Schmidt suggest that students who experience failure and blame themselves for it "...are likely to have a low estimate of their future success in SL learning, which may in turn lead to low risk-taking, low acceptance of ambiguity, and other behaviors that are probably negatively correlated with success in SL learning" (p. 490). They propose cooperative learning as a way to prevent or modify this undesirable sequence of events because such techniques allow the underachiever to feel that success is possible.

The proposed effects of failure seem reasonable and the advocacy for cooperative learning comes across as plausible. But we should not assume that these are the necessary, common, or only psychological and behavioral consequences of failure experiences. Nor should we assume that underachievers would react as proposed. Further, it is possible that high achievers, introverts, and anxious students might be frustrated by group-work, and these potential effects are not mentioned. This highlights the need for empirical work, for which there is no substitute.

### *Dörnyei (1994a)*

To a much greater extent than Crookes and Schmidt, Dörnyei (1994a) acknowledges the important role that the social dimension of second language (L2) motivation plays. Dörnyei also outlines the distinction between integrativeness and instrumentality, as discussed by Gardner. Dörnyei seems to imply that the distinction between integrativeness and instrumentality emanates largely from the Canadian context, although he does indicate that "...broadly defined 'cultural-affective' and 'pragmatic-instrumental' dimensions do usually emerge in empirical studies of motivation" (p. 275). Dörnyei goes on to refer to these as "...broad tendencies — or subsystems — comprising context-specific clusters of loosely related components."

Dörnyei (1994a) then elaborates on what he calls "further" components of L2 motivation. After listing and describing several concepts related to motivation in the broader psychological and educational literatures, Dörnyei integrates these concepts into a three-level framework of motivation. The broadest level is termed the "language level" and is primarily defined by the concepts of

integrative and instrumental motivation. Secondly, the “learner level” describes individual differences among learners using familiar motivational concepts such as need for achievement and self-confidence. The “learning situation level,” to which Dörnyei devotes considerable attention, is the one over which educators have the most control. The learning situation level can be divided into course-specific, teacher-specific, and group-specific motivational components. Dörnyei argues that this level is especially pertinent to classroom teachers and is not sufficiently considered in the socio-educational model. Particularly relevant to this last point are 30 strategies that teachers might use to motivate learners. Given Dörnyei’s emphasis on the language classroom, 20 of these 30 strategies are presented at the learning situation level.

Dörnyei (1994a) examines a wider variety of motivation variables than do Crookes and Schmidt (1991) and the various concepts are grouped into a three-level taxonomy that includes the language level, the learner level, and the learning situation level. It is the learning situation level that most clearly distinguishes Dörnyei’s (1994a) approach from Gardner’s. Yet Dörnyei is the most accommodating of Gardner’s theory. There is a tremendous amount of theoretical work required to integrate the concepts proposed by Dörnyei (1994a) and demonstrate how their interactions affect L2 learning. As well, much empirical research is required to test the ideas. One cannot fault Dörnyei for taking this as the first step. Indeed, to his credit, he has been the most active of the critics in developing and testing an expanded motivational framework (Dörnyei, 2001; Dörnyei & Kormos, 2000).

#### *Oxford and Shearin (1994)*

Oxford and Shearin also propose expanding the theoretical framework for language learning motivation. Like Dörnyei (1994a), they argue that the socio-educational model proposed by Gardner is limited in scope and must be expanded “outward” to include a number of other motivational variables. According to Oxford and Shearin (1994), four conditions impede our full understanding of students’ motivation: lack of consensus on a definition of motivation, the difference between second and foreign language situations, key motivational variables are missing from the models, and teachers do not understand their students’ real motivation for learning. Each of these assertions should be examined in detail before being accepted at face value.

As noted earlier in this chapter, the issue of definition is complex and pervades the study of motivation in general. In discussing this issue, Oxford and Shearin state that “the goal thus helps define the motivational orientation of

the student, which in the best-known version of [the socio-educational] model must be either instrumental or integrative..." (p. 13). The statement likely reflects an overly rigid interpretation of Gardner's work. Gardner has not stated that motivational orientations must be one of these two types (see Gardner & Tremblay, 1994). Dörnyei (1994a, 1994b) is quite correct in noting that Gardner's point has been that the student who values the L2 community will tend to show higher levels of achievement than a student who does not, an idea whose impact has been substantial.

The issue of second vs. foreign language situations will vary in importance depending on the perspective one takes on the definition of motivation. To use Dörnyei's (1994a) terminology, if one focuses on the learner level, this issue is less relevant than if one is concerned with the language level. The focus on the learner level, or on individual differences, will tend to emphasize internal representations of external phenomena. Such an emphasis will attempt to explain why some students develop certain orientations, and other students do not, given similar external environments (e.g., the same teacher and course materials). The focus on the teacher or the language level will tend to emphasize similarities among the students in this same context, glossing over the individual differences. It is quite likely that if one looks for individual differences, they will be found; if one looks for broader commonalities, they also will be found.

The omission of key motivational variables might be interpreted as emphasis on understanding what makes language learning motivation unique, as compared to motivation to learn other subjects. Variables such as intrinsic motivation, goal-setting, need for achievement, expectancy-value, and others will be relevant to motivation theories in general, educational motivation theories in general, and theories of language learning motivation in particular. It is the emphasis on culture, psychological identification with a specific cultural group, and changes in identity that most clearly distinguish language learning from other subjects studied in school. Given this emphasis, Gardner's focus on integrative motivation seems appropriate. None of Gardner's critics have argued that this focus is incorrect, rather they argue that other variables should be considered in addition to those involving integrative motivation. Thus, the question appears to be one of emphasis.

Finally, the lack of teachers' knowledge about the motivation of their students, suggested by Oxford and Shearin, is likely to vary substantially from one teacher to another. However, given the experience brought to the issue by Oxford and Shearin, I cannot dispute the point. Indeed, it will be argued later in this chapter that an empirical measurement of motivation and its relation to achieve-

ment is a desirable goal. Language teachers are capable of asking students about the motives for taking a given course, using any one of several instruments available (for example, see Chapter 12 in Dörnyei, 2001 and the appendix to Oxford's 1996 book). To the extent that teachers employ well known, standardized instruments, their results can be compared to prior research.

The rest of the Oxford and Shearin paper is devoted to summarizing a number of motivational variables that likely relate to language learning. They examine need theories, expectancy-value theories, equity theories, and reinforcement theories. They also add social-cognitive concepts, emphasizing self-efficacy and reward satisfaction. They round out their inventory with a description of the mastery model and the work of Piaget and Vygotsky. The paper concludes with five practical implications for L2 teachers, including identifying students' reasons for learning, shaping learner beliefs about success and failure, emphasizing that the benefits of L2 learning are worth the cost, enhancing the L2 classroom, and facilitating the transition from extrinsic to intrinsic rewards.

### A comment on the critics

An interesting series of responses to these articles appeared in the *Modern Language Journal* in 1994. Oxford (1994), Dörnyei (1994b), and Gardner and Tremblay (1994) each attempted to elaborate on their prior contributions and clear up misconceptions. The critics indicate that they value Gardner's socio-educational model but wish to explore other areas of motivation. In the original critical articles (Crookes & Schmidt, 1991; Dörnyei, 1994a; Oxford & Shearin, 1994), a long list of potential constructs was proposed and grouped into a taxonomy but these constructs were not integrated with each other to show their interrelationships (see Table 1). It might be noted that examination of the literature on motivation would show that a long list of additional concepts could be offered as well (the subject index to Reeve's (1997) motivation text is 14 pages). Indeed, listing potential additions to the literature is not at all difficult compared to the heavy theoretical and empirical work required to specify how these concepts interact. Studying just the variables in Table 1 would keep the field busy for a very long time.

It must be acknowledged that given its considerable breadth, studying motivation necessarily means slicing off a small piece of the theoretical pie. It would be impossible to include all potentially relevant variables in a single model. The socio-educational model mapped out a specific domain within

the field of language learning motivation, and research proceeded in a programmatic fashion. Gardner should not be faulted simply for omitting variables; such an approach is absolutely necessary if knowledge is to be advanced in an area. Testable hypotheses can be generated from the list of variables in Table 1, but there is a lot of work in understanding the influence of any one of them. A point on which Dörnyei (1994b) agrees with Gardner and Tremblay (1994) is the need for empirical research to test the hypotheses, intuitions, and potential applications of any expanded model of language learning motivation. It is a point that cannot be reinforced strongly enough.

A study by MacIntyre et al. (2001) has employed factor analysis to examine the degree of overlap among a long list of motivational constructs. The variables studied were drawn from Gardner's model, as discussed above. Scales from Pintrich, Smith, Garcia, and McKeachie's (1991) classroom-oriented Motivated Strategies for Learning Questionnaire, including self-efficacy, task value, and beliefs about the degree of student control over learning were used. Tendencies toward preoccupation, hesitation, and rumination (see Dörnyei & Otto, 1998), three variables drawn from Kuhl's (1994a) Action Control Model, a general model of motivation, were measured. Also measured were the three communication-related variables willingness to communicate, perceived competence, and communication apprehension, that have been investigated by McCroskey and associates over the years (McCroskey & Richmond, 1991). These scales, 23 in all, represented a wide variety of concepts emerging from theoretical models that have been developed independently. However, all can be applied to language learning research and would be suggested by the Gardner critics as expansions of the motivational research base.

Results showed that the 23 scales could be summarized by three underlying factors. The first factor, by far the largest, was labeled *attitudinal motivation*. It was defined primarily by the Gardner and Pintrich concepts. Included on this factor were several AMTB scales: attitudes toward learning French, integrative orientation, instrumental orientation, motivational intensity (effort), interest in foreign languages, attitudes toward French Canadians, French use anxiety, desire to learn French, and self-confidence (from Gardner, Tremblay, & Masgoret, 1997). The other measures on this factor, from Pintrich et al. (1991), were task value, self-efficacy, extrinsic orientation, intrinsic orientation, and control over learning beliefs.

The second factor in that study was labeled *self-confidence* and was defined by measures of anxiety and perceived competence in L2 communication. Such a factor has often emerged in studies by Gardner and associates

Table 1. Motivational concepts offered for application to language learning research

	Dörnyei	Oxford/Shearin	Crookes/Schmidt
Interest	☑	Based on previous experience	☑
Relevance	☑	☑	☑
Outcome	Satisfaction: Grades and rewards	Reinforcement	Reward and punishment
Need for achievement	☑	☑	X
Personality traits	X	☑	X
Expectancy	☑	☑	Success or failure
Experience	X	☑	X
Expectancy-value	X	☑	X
Goal-setting	☑	☑	X
Self-efficacy	☑	☑	X
Self-confidence	☑	X	X
Direction	X	X	☑
Persistence	X	X	☑
Continuing motivation	X	X	☑
Classroom motivation	☑	X	X
Intellectual curiosity	☑	X	X
Teacher feedback	☑	X	X
Anxiety	☑	X	X
Perceived competence	☑	X	X
Activity level	X	X	☑
Security needs	X	☑	X
Equity	X	☑	X
Growth needs	X	☑	X
Age of acquisition	X	☑	X
Fear of failure	X	☑	X
Fear of success	X	☑	X
Environmental stimulation	X	☑	X
Mastery vs. relative performance	X	☑	X

Note: ☑=included x=excluded

(Gardner, Smythe, & Lalonde, 1984; Clément, Gardner, & Smythe, 1977, 1980) leading Clément (1980) to propose self-confidence as a secondary motivational process. The third factor was called *action motivation* and was largely defined by the Kuhl (1994b) action control scales. Dörnyei and Otto (1998) have argued that understanding the initiation of behavior, or “crossing the rubicon of

action," is a area of emerging importance in L2 motivation research. It is interesting that willingness to communicate, defined as the intention to initiate communication if given the choice, was found to be related to all three factors (see MacIntyre, Clément, Dörnyei, & Noels, 1998). As a whole, the results of this investigation, particularly the *attitudinal motivation* factor, indicate a great deal of overlap among seemingly disparate motivational variables...

It might be surprising that there is such a high degree of overlap, but it should be noted that the Gardner model has always covered a great deal of conceptual ground. Perhaps it is not surprising that the value students place on a language course and their expectancies for success in that course would be reflected in the same factor. Whereas the concepts clearly can be distinguished theoretically, the degree of empirical similarity is quite high in this sample (MacIntyre et al., 2001).

Clearly it is possible to define a wide variety of motivational influences in theory, but the empirical results must support such distinctions if they are to be useful both in theory and in practice. In this study, the greater empirical distinction appears to be between *attitudinal motivation* and *action motivation*. This presents an exciting challenge for the field, to examine the transition from attitudes to action (see Ajzen, 1988; Dörnyei, 2001; Dörnyei & Otto, 1998) and the way in which willingness to communicate in the L2 seems to connect them (MacIntyre et al., 1998).

### The need for empirical research

There is no shortage of empirical research in the study of motivation, broadly defined. Sustaining this effort over the years have been interesting, at times paradoxical, results. Studies address what might seem to be simple questions, but generate complex answers. It is vital that those conducting theoretical work on motivation for language learning, as well as those reading it, be prepared for contradictory, paradoxical, and unexpected empirical results. To introduce this issue, let us consider one of the most fundamental laws of motivation, homeostasis. Homeostasis is a term coined by Walter Cannon (1932) to describe the regulation of levels of vital substances in the bloodstream. It has been expanded to connote the body's tendency to maintain a steady state. Motivational processes almost always display a tendency toward homeostasis, the key implication being that the regulation of motivation must include both arousing and calming processes, approach and avoidance tendencies. Therefore, when one describes the motives in favor of a particular action, such as integrativeness or additive bilingualism, one must immediately be aware

that there will be motives that counteract action, such as fear of assimilation (Clément, 1986) or subtractive bilingualism (Gardner & Lambert, 1959).

Some examples from the general motivation literature will help to illustrate this point. They are being presented in this chapter because they represent the sort of variables proposed by the critics for addition to the literature on language learning motivation, there has been empirical research on each of them, and the results were more complex than expected. Three research areas will be described: the hidden cost of reward, opponent process theory, and psychological reactance.

### *The hidden cost of reward*

Also called the “overjustification effect,” the hidden cost of reward refers to the paradoxical tendency for external rewards to damage pre-existing intrinsic motivation. It might seem obvious that to increase motivation one can offer a reward; by conventional wisdom, the larger the reward the greater the motivation. However this is certainly not always advisable, and in some cases the strategy should be avoided. The classic study in the field by Lepper, Green, and Nisbett (1973) showed that children who enjoyed drawing before the research began actually drew less after having been rewarded for their drawing. A great deal of research demonstrated the generality and limitations of this finding and it seems clear that offering a reward that is tangible, expected, and highly salient (emphasized) has the potential to create a decrease in intrinsic motivation (Reeve, 1992). For example, a language teacher who accentuates only instrumental goals, such as getting high grades on a test, might actually discourage some students, specifically those who are interested in the language for its own sake. The effect occurs because the reward itself is made the prominent motive for action. Most teachers likely dread the perennial question from students, “Will this be on the test?” because the teacher’s emphasis is on the students’ mastery of the material, but the students’ emphasis is on getting the highest possible grade (reward) on the test. It should be noted that the overjustification effect can be observed with a task that was intrinsically motivating *before* the reward was offered. If intrinsic motivation is low to begin with, adding an extrinsic reward, such as grades, money, or even gold stars, can produce the desired behavior because of an absence of other motivational support.

### *Opponent process theory*

According to opponent process theory (Solomon, 1980; Solomon & Corbit, 1973, 1974), feelings of pleasure and aversion can be acquired in situations

that initially produce the opposite feelings. To take a simple example, consider stepping into a hot bath. Initially the hot water produces feelings of pain and tendency to pull one's foot out of the water. This initial reaction, however, soon gives way to feelings of relief and pleasure that slowly dissipate over time. Unknown to the individual, the initial experience of pain automatically triggers the opposite, or opponent, feeling of pleasure. This helps to maintain the tendency toward homeostasis. Over time, emotional reactions change, and we come to associate the experience of stepping into a hot bath with pleasure rather than pain. Opponent process theory helps to explain apparently contradictory tendencies such as why people long to go home during their vacation and enjoy feeling terrified while watching a scary movie. Of course, there are limits to the situations in which opponent process theory applies (see Mauro, 1988; Sandvik, Diener, & Larsen, 1987). Nevertheless, the counterintuitive nature of the process is noteworthy.

### *Reactance theory*

Reactance theory attempts to explain behaviors normally thought of as demonstrating stubbornness. The theory suggests that when a person's ability to control important outcomes is threatened, he or she will act to re-establish control. This theory can help explain why forbidden fruit is the most attractive, why some people don't like to receive a favor, and why making a course mandatory creates ill-will. According to Brehm and Brehm (1981), human beings want to have the freedom to decide which behavior they will pursue at any particular time. Something that interferes with a person's freedom to choose will meet with attempts to re-establish control. These attempts become more vigorous to the extent that the outcomes are of higher importance and people expect to have some control over events. Perhaps paradoxically, however, after several attempts to exert control in the face of a truly uncontrollable event, a person's behavior may show signs of "learned helplessness" where responding stops altogether. The effects that learned helplessness, which are similar to depression (Rosenhan & Seligman, 1984; Seligman, 1975), are likely to be more severe when the outcomes were initially considered more important.

The three examples briefly described here show the complexity of our motivational experiences and the operation of automatic processes that maintain homeostasis. They demonstrate how difficult it is, in the absence of empirical research, to speculate on the effects of attempts to alter motivation. Strongly implicated in these, and indeed most other, motivational processes is emotion. Indeed, the link between motivation and emotion is strong, intricate, and fascinating.

## Emotion as motivation

The motivational properties of emotion have been severely underestimated in the language learning literature. A detailed description of the neurobiology of emotion, applied to L2 experience, is provided by Schumann (1998). In general, there exists a close relationship between motivation and emotion; indeed, there is a scholarly journal of that very title. Silvan Tomkins (1970) notes that throughout the history of psychology, drives have been considered the most basic motives. Tomkins has argued quite convincingly that it is preferable to conceptualize affect as the primary human motive. Emotion functions as an amplifier, providing the intensity, urgency, and energy to propel behavior. In contrasting the primacy of affect with the primacy of "drives," Tomkins outlines three lines of evidence in favor of the primacy of emotion. First, "drives require amplification from the affects, whereas the affects are sufficient motivators in the absence of drives" (p. 104). Take oxygen deprivation as an analogy. Humans require oxygen and are therefore driven to breathe, but it is not oxygen deprivation per se that is motivating — it is the emotions related to fear and panic. Consider the affective difference between holding one's breath for 30 seconds while swimming versus choking for 30 seconds. The level of oxygen deprivation is similar between the examples, but the panic that sets in when one is choking creates extremely intense behavior, and does so immediately, before any effects of oxygen deprivation could possibly be felt. It is the emotion that is motivating.

The second argument in favor of the primacy of affect is the generality of the affective system, which is not limited to time-specific or rhythmic activation. Hunger, thirst, and other drives have particular rhythms; for example, one is not hungry immediately after eating. Affect is not constrained in this way. One may feel anxious for just a moment, for an hour, or consistently for a week. Personality temperament, which is regarded as primarily inherited, describes typical emotional reactions and is responsible for a great deal of the individual differences in personality profiles (Kagan, 1989).

Tomkins' final point is that emotion is continually present, varying in type and intensity. We are always experiencing some sort of emotion. Emotion therefore pervades all of our activities. Given its function as an amplifier, emotion has some impact on everything we do; the stronger the emotion, the greater the impact. Strong emotion can disrupt cognitive and physiological processes, as when high anxiety initiates the powerful "fight or flight response" of the autonomic nervous system. Its effects include halting

digestion, increasing muscle tension and blood pressure, pupil dilation, and directing cognition toward battle or escape plans. The onset of these effects can be very rapid, even in the absence of any physical threat, and take a long time to wear off. Emotions are highly sensitive to the immediate environment, or more specifically, changes in the environment (see Buck, 1984). With emotional experience so pervasive, sensitive, and potentially powerful, emotion can be seen as a fundamental motivator of behavior.

Motivated action is particularly relevant to the present discussion. As Parkinson (1995) notes, emotions often carry with them impulses to act in a particular way appropriate to the emotion. It can be added that these impulses to act might be highly appropriate or inappropriate for smooth social functioning, including L2 interaction. For example, feeling embarrassed usually produces the urge to withdraw and hide oneself, regardless of the source of the embarrassment. It is virtually impossible to imagine a L2 learner who does not embarrass himself or herself from time to time. How an individual reacts will be governed in large measure by the intensity of the emotional reaction. It might be in the learner's best academic, financial, cultural, and social interest to keep talking, but if the emotion is too strong, the person will try to withdraw. It stands to reason that L2 students should talk in order to learn, but reason and emotion are separate issues.

There exists a complex link between reason and emotion. Seymour Epstein (1994) has written a number of descriptions of Cognitive-Experiential Self Theory in which a basic distinction is made between an "experiential" system and a "rational" system. The rational system is seen as being logical, analytic, and based on conscious appraisals of events. The experiential system often operates based on subtle feeling states that occur instantly, automatically, and often below the level of conscious awareness as pervasive, subtle, and influential emotions. These feeling states, which Epstein (1993) calls "vibes," operate to shape both cognition and behavior. "A typical sequence of behavior is that an event occurs; the experiential system scans its memory banks for related events; and vibes from the past events are produced that influence conscious thoughts and behavior" (Epstein, 1993, p. 323). Buck (1984) proposes that emotion is a more basic system than cognition (p. 58), because in both human evolution and personal development, emotional systems are fully developed very early on, and rational systems much later. Buck further discusses a two-system view of emotion itself. One system is primitive, subcortical, and visceral, the other a more modern evolutionary development, seated in the cerebral cortex of the brain, and consciously evaluative based on the

social and cultural learning history of the individual. Thus, the cognitive system itself can stimulate emotion without an external prompt, as when we reminisce about fond memories, recall an embarrassing incident, or nervously contemplate an upcoming examination. These two routes to emotion, reactions to the situation and reactions to our ongoing thoughts, are separate but coordinated and synchronized (see also Panskepp, 1994).

Given the pervasiveness of emotions, their role in energizing behavior, and their flexibility over time, it is clear that emotion forms a key part of the motivational system. Using Buck's two-system view, it can be seen that the attitudes toward language learning tapped by Gardner's AMTB and represented in the socio-educational model have strong reciprocal links to emotion. Indeed, items such as "I love learning French," "I find the study of French very boring," "I really like learning French," and others tap directly into emotional reactions. The role that emotion, to the extent that it can be split off from attitudes and motivation, plays in the language learning process has yet to be widely studied. Researchers in the field of language learning have not paid sufficient attention to emotional phenomena. Even Krashen's (1981, 1985) well-known concept of "affective filter" seems too passive to fully capture the role of emotion as studied elsewhere by Epstein, Buck, Panskepp, and others.

It is proposed here that the difference between the engaged and unengaged learner, discussed by Gardner (1985), Crookes and Schmidt (1991), Oxford and Shearin (1994), and Dörnyei (1994a), lies in the emotions experienced during language learning. Attitudes alone are not likely to be sufficient to support motivation. This helps to account for the finding, often lamented by Gardner and others (see Gardner & Tremblay, 1994), that integrative or instrumental orientations, which are the goals endorsed for language learning (purely attitudinal in nature) and a subcomponent of integrative motivation, often do not correlate with language proficiency. A better understanding of emotion has the capacity to explain cases where students endorse orientations but might not be energized to take action, and also cases where action is prevented by emotional arousal, either present or anticipated. MacIntyre and Noels (1996) have applied this idea to language learning strategy use, arguing that reasons to approach a language learning task must be juxtaposed with reasons to avoid it, and that the two processes seem to occur simultaneously.

The implications of a more explicit focus on emotion must be worked out. However, we already have a pretty good start. The Gardner model refers to its key components as "affective variables," implying an emotional component. Similarly, the test items used by Gardner and associates in the AMTB

over the years clearly have drawn on emotional phenomena, but have organized the results around attitude clusters, rather than emotions. The link between emotions and attitudes is one of Buck's (1984) two systems, meaning that more attention to emotional explanations can be added to the prior research by Gardner and associates. In future research, we can look for a close, reciprocal, mutually enhancing relationship between emotion and attitude, as applied to language learning.

The other of Buck's two systems is a more visceral, low-level, uncontrollable emotional response. These emotions tend to be more intense, at times overpowering cognitive processes, as when an upset person is asked to "stop and think." These emotions are strongly rooted in physiological processes, are relatively universal and independent of culture, are displayed uniquely and can be clearly differentiated, and are automatic reactions to external events (Ekman & Davidson, 1994). Some theorists call these "primary" emotions and the list is typically a short one. Approximately a half-dozen primary emotions are usually proposed, including joy, interest, sadness, disgust, anger, and fear (Reeve, 1997). The only emotion of this sort to be studied in detail in the language learning area is anxiety, a variant of fear. For this reason, we now turn to a detailed discussion of language anxiety.

### Language anxiety

Language anxiety has long been included as a variable in Gardner's socio-educational model, but within the model it has not received the attention assigned motivation nor has it been assigned a consistent place (MacIntyre & Gardner, 1991). In some formulations, anxiety is an antecedent to motivation (see Tremblay & Gardner, 1995) and in others a product of proficiency (Gardner, Tremblay, & Masgoret, 1997). Gardner and MacIntyre (1993a) suggest that the two variables have a reciprocal relationship, that anxiety affects motivation and motivation affects anxiety. Richard Clément (1980, 1986) has proposed a model in which anxiety combines with self-perceptions of language proficiency to create self-confidence which is viewed as a second motivational process (see also MacIntyre et al., 2001). The relationship between anxiety and L2 proficiency is a larger issue and raises an important question about causal direction.

Does anxiety cause poor performance or does poor performance cause anxiety? (see Young, 1986). This is the prototypical question asked about the

interpretation of correlations. Take, for example, a study by MacIntyre and Gardner (1994b) where language anxiety was shown to correlate with a number of specific L2 performance measures. Is this evidence that difficulties in language learning create anxiety or that anxiety reduces the quality of performance on these tasks? It is possible that a third variable, such as motivation or aptitude, might be influencing both test scores and anxiety levels. Along these lines, Sparks and Ganschow (1991, 1993a, 1993b) have declared that anxiety is epiphenomenal, proposing that differences in native language linguistic coding create different levels of achievement, and that anxiety is an unfortunate byproduct of poor performance.

A study by MacIntyre and Gardner (1994a) essentially puts the key part of this question to rest, demonstrating that anxiety-arousal can lead to poor L2 performance. Drawing on a model proposed by Tobias (1979, 1980, 1986), MacIntyre and Gardner (1994a) attempted to create anxiety at each of three stages of cognitive processing in order to observe its effects. A video camera was used in order to arouse anxiety during a computer-mediated vocabulary learning session that had been split into the input stage (where material is encountered for the first time), the processing stage (where connections between new material and existing knowledge are made), and the output stage (where knowledge is demonstrated). Experimental groups were created by randomly assigning learners to a control group or one of three anxiety-arousing conditions. During the study, an anxiety-provoking video camera was introduced immediately prior to the input stage, the processing stage, or the output stage. The control group never saw the video camera. Results showed that anxiety increased most, and performance suffered most, immediately after the camera was introduced. As learners adapted to the camera and their anxiety dissipated, some recovery from the effects of anxiety was evident, as expected. This provides support for the idea that anxiety creates disruption in cognitive activity at each of the stages. Further, the study showed that as anxiety dissipated, learners were able to partially compensate for difficulties at previous stages by increased effort, showing the link between emotion and motivation. To be sure, these results do not rule out the possibility that anxiety might result from poor performance, or that both anxiety and poor performance could result from other factors, such as linguistic coding deficits (see Grigorenko, and Skehan, this volume, for further discussion of both of these possibilities). However, these results do clearly indicate that anxiety can play a causal role in creating individual differences in language achievement.

Most of the research into language anxiety has been correlational or qual-

itative in nature. MacIntyre (1999) summarizes research on the effects of language anxiety in four areas: academic, cognitive, social and personal.

### *Academic*

In the academic area, several studies have demonstrated that language anxiety is negatively correlated with language course grades (Aida, 1994; Horwitz, 1986; Young, 1986). MacIntyre and Gardner (1994b) report a correlation of  $r=.65$  between language anxiety and grades in a French course. Ironically, language learners complain of "overstudying" as a result of anxiety arousal (Horwitz, Horwitz, & Cope, 1986). Gardner, Smythe, Clément, and Glikzman (1976) investigated attitudes, motivation, and anxiety in several locations across Canada and found that anxiety was consistently among the strongest predictors of language course grades, particularly as students got older. Language teachers have indicated concern for the reduction of language anxiety and have proposed instructional methods, such as "the natural way," that address the issue (see Koch & Terrell, 1991).

### *Cognitive*

The source of these academic effects can be explained by looking at the disruption in thinking and reasoning caused by anxiety. Eysenck (1979) has proposed that anxiety arousal is accompanied by distracting, self-related cognition — the higher the anxiety levels, the greater the disruption. Eysenck further noted that a frequent response to anxiety, especially at milder levels, is an increase in effort. This explains the inverted "u" function of anxiety arousal (see MacIntyre, 1999), and leads to a distinction between the effects of facilitating and debilitating anxiety (Leibert & Morris, 1967). Facilitating anxiety can lead to better performance as a result of increased effort. The more common use of the term "anxiety," however, is in the debilitating sense where the negative effects of anxiety are harmful to performance (see MacIntyre & Gardner, 1989).

### *Social*

Perhaps the most dramatic social effect of anxiety is a reluctance to communicate. MacIntyre and Gardner (1991) have found that the most anxiety provoking aspect of language learning is the thought of future communication. Communication research (see Daly & McCroskey, 1984) has shown that avoiding communication produces a number of negative social perceptions. Clément (1986) has argued that the social experience of language anxiety is different for members of majority vs. minority groups. We can extend that to sug-

gest that the experience of language anxiety might be different for learners of second vs. foreign languages. One issue that has not been addressed in the literature, but can be observed informally among students, is the extent to which language anxiety provides a common experience and an opportunity for social exchange. After all, if anxiety leads to misery and misery loves company, then it follows that commiserating about anxiety can be a positive experience, even if the anxiety itself is not. This would make for an interesting study.

### *Personal*

The personal effects of anxiety should not be underestimated. Some interesting qualitative research has demonstrated the intense anxiety felt by some students. Students have reported feeling like an idiot, a babbling baby, and a total dingbat. A student in the study by Cohen and Norst (1989) was particularly strong in stating that language learning was “pure trauma” and represented the “smashing of a well-developed self concept” (pp. 68–69). Horwitz et al. (1986) argue that language learning is so anxiety provoking, in part, because learners may have the sophisticated thoughts and emotions of an adult, but the language of a child in which to express them. To some extent language learning itself is prone to creating intense emotion because of the close connection between language, culture, and identity (Noels, Pon, & Clément, 1996).

In reading the reactions of anxious language students provided by Cohen and Norst (1989) and Price (1991) with a critical eye, it seems reasonable to ask whether these students have exaggerated their emotional reactions or overstated the case. However, even if overstated, such a pattern of thought might itself exert an impact on language learning. MacIntyre, Noels, and Clément (1997) demonstrated that anxious language learners tend to underestimate their level of proficiency, and relaxed students overestimate it. If this represents a prevalent tendency, then anxious language learners will tend to remain anxious because they tend to withdraw from situations that might increase their proficiency, creating a self-fulfilling prophecy.

### **Conclusion**

This chapter began by suggesting that language learning is motivated behavior, but that among learners, motives will rise and fall in influence, and several will operate at any given time. Clearly, one of the most important developments in the field has been Gardner and associates' work on the integrative

motive as part of the socio-educational model. The insights gained from this body of work should not be lost in the pursuit of concepts novel to the language learning area. We also owe a debt of gratitude to the authors collectively labeled here as "the critics" (Crookes, Schmidt, Dörnyei, Oxford, and Shearin) for so strongly restating the case in favor of studying motivation as an individual difference variable in language learning. We are now in a position to suggest the consideration of a multiplicity of competing motives, some leading to approach and others leading to avoidance of the L2. If we adopt the assumption that even language learning will tend toward a form of homeostasis, interesting research scenarios begin to suggest themselves. For example, (1) does rewarding successful classroom task performance bring a cost to intrinsic, maybe even integrative, motivation that can be examined, (2) can opponent emotional processes be studied for their motivational or restraining properties, and (3) how do we investigate the effects of choice over learning from a variety of perspectives, at the learning situation level (as in choice of tasks) and at the language level (as in the choice of language to be studied or abandoned). Perhaps the strongest message to be offered in the present chapter is to encourage a detailed study of the motivational properties of the emotions experienced during language learning. Regardless of the avenues chosen for future research, the possibilities are exhilarating.

## Notes

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- 1 For a recent revision to the AMTB see Gardner, Tremblay and Masgoret (1997).
- 2 It should be noted that some authors, including Dörnyei (1994b), have indicated that various uses of the term "integrative" have created confusion in the literature over the years. To clarify, integrative orientation refers only to a set of specific reasons for language learning. Integrativeness refers to a broader concept representing an interest in the target language group, which subsumes the orientation and supports it with positive attitudes and interest. The integrative motive represents self-reported energized behavior specifically combined with integrativeness as the affective support for the effort. Integrative motivation requires all three elements to meet Gardner's definition of the motivated language learner.

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