

Talking in Order to Learn: Willingness to Communicate and Intensive Language Programs

Peter D. MacIntyre, Susan C. Baker,
Richard Clément, and Leslie A. Donovan

Abstract: Immersion and other intensive language programs produce both linguistic and non-linguistic outcomes. A principal non-linguistic outcome would be a willingness to communicate in the second language (L2), given the opportunity. Both increasing perceived competence and lowering anxiety help to foster a willingness to communicate. These variables are related to motivation for language learning and are expected to differ between immersion and non-immersion learners. Among university-level students, this study evaluates differences between immersion and non-immersion students in willingness to communicate, communication apprehension, perceived competence, and frequency of communicating. Also examined are elements of integrative motivation. Differences between immersion and non-immersion groups are observed in the communication-related variables, but not in motivation. Correlations among these variables also differ between the groups. Results are examined in terms of Skehan's notion of talking in order to learn and a model of L2 willingness to communicate

Résumé : L'immersion et d'autres programmes intensifs de langue produisent des résultats non linguistiques aussi bien que linguistiques. Le consentement à communiquer dans la langue seconde (L2) constitue un résultat non linguistique important. L'augmentation de la compétence perçue et la réduction de l'anxiété encouragent à communiquer dans la L2. Reliées à la motivation à apprendre la L2, ces deux variables sont présumées jouer des rôles différents, selon l'intensité du programme (immersion ou non immersion). Cette recherche menée au niveau universitaire compare les étudiant(e)s ayant suivi un programme d'immersion à ceux et celles qui n'en ont pas suivi pour ce qui est de leur consentement et de leur appréhension à communiquer de même que de leur compétence perçue en L2. De plus, la recherche compare des éléments de la motivation intégrative. Les deux groupes se distinguent l'un de l'autre quant aux variables reliées à la communication, mais non en ce qui a trait à la motivation. Aussi, les corrélations entre les variables diffèrent selon le programme. Les résultats sont interprétés en fonction de la théorie proposée par Skehan selon laquelle il faut parler pour apprendre ainsi que d'un modèle du consentement à communiquer dans la langue seconde.

Intensive language programs, such as French immersion, provide students with more second language (L2) contact and greater opportunities to master the language than do non-immersion programs. The non-linguistic outcomes, such as attitudes, motivation, and anxiety (Gardner, 1996) resulting from the second language learning experience, are inherent in language education and are among its long lasting results. It has been proposed that language programs in general should be evaluated in terms of these non-linguistic outcomes (Gardner, MacIntyre, & Lysynchuk, 1990), in addition to the evaluation of linguistic performance. Given that French immersion places strong emphasis on communication in the second language, a focus on the affective variables supporting authentic communication seems especially relevant (Safty, 1988). MacIntyre, Clément, Dörnyei, and Noels (1998) expand on this reorientation of emphasis with respect to evaluating language learning outcomes. They argue that it is not enough for students to become communicatively competent in the classroom, for this is no guarantee that learners will actually use the language. As a result, MacIntyre et al. suggest that a fundamental goal of second language instruction should be to produce students who are *willing* to use the language for authentic communication.

In contrasting linguistic competence with the ability to communicate in a second language, Skehan (1989) hypothesized that '... we may be dealing with the willingness different learners have to *talk in order to learn*, and this as a non-cognitive individual difference (variable), may be altogether more elusive for researchers' (p. 48, emphasis added). We believe that the variable Skehan and others have been looking for is willingness to communicate (WTC), as it applies to the L2. The present study reports on first-year, university-level students enrolled in introductory conversational French courses, some of whom have French immersion or other intensive learning experience, and others in the same courses who have not had previous immersion experience. Non-linguistic variables, such as WTC, perceived competence, communication apprehension in both English and French, and motivation for language learning will be the focus of the present study.

Willingness to communicate

Willingness to communicate is defined as the probability of initiating communication, specifically talking, when the opportunity arises (McCroskey, 1992; McCroskey & Baer, 1985). McCroskey and Richmond (1987, 1990) provide evidence that related variables, such as communication apprehension, are not isomorphic with WTC. In their view, WTC

represents a conscious intention to seek out communication and may be based on a synthesis of communication apprehension, perceived competence, social norms, attitudes, motivation, and other factors (see Beatty, 1987; Burgoon, 1976; McCroskey, Richmond, & McCroskey, 1987; McCroskey & Richmond, 1987, 1990). WTC expresses an individual's global, personality-based orientation toward talking.

Underlying WTC are two key communication-related variables, communication apprehension and perceived competence (MacIntyre, 1994), shown to be important in both native (MacIntyre, Babin, & Clément, 1999; McCroskey & Richmond, 1991) and second language (Clément, 1986) communication. Communication apprehension refers to the anxiety that people experience in association with real or anticipated communication (McCroskey, 1977), and in the L2 is also known as language anxiety (see Horwitz and Young, 1991). Perceived competence refers to the self-evaluation of one's ability to communicate appropriately in a given situation (McCroskey, 1982). The perception of being able to complete a communication task may be more important than actual, objectively defined competence in generating a willingness to initiate communication (Baker & MacIntyre, 2000). 'Since the choice of whether to communicate is a cognitive one, it is likely to be more influenced by one's *perceptions* of competence (of which one is usually aware) than one's *actual* competence (of which one may be totally unaware)' (McCroskey & Richmond, 1991, p. 27). Variations in actual skill level certainly play a role, but the perception of communication competence will more directly determine WTC (see McCroskey & Richmond, 1990).

These variables help explain why some learners who achieve high levels of L2 linguistic competence remain reticent L2 speakers, as well as those with limited competence who speak incessantly. Theoretically, levels of anxiety and perceived competence coalesce to create a state of L2 self-confidence that, when combined with the desire to speak to a particular person, result in WTC in a given situation (MacIntyre et al., 1998). Clément (1986) considers L2 self-confidence to be a motivational process, one that links WTC to a broad literature on motivation.

Motivation

During L2 learning, a number of social psychological variables, including intergroup factors such as attitudes toward the target language and motivation to acquire the language, take on a higher level of importance than they possess in L1 situations (Clément & Gardner, 2001). Integrative motivation, a broad complex of affective variables, has

been the most widely studied conceptualization of motivation for L2 learning (Dörnyei, 2001). Components of the integrative motive include attitudes toward the learning situation, integrativeness, and motivation (Gardner, 1985). In the present study, we examine the components of the integrative motive in their own right, as three separate variables. Attitudes toward the learning situation refer to the learner's evaluation of the L2 teacher and course. Integrativeness refers to the willingness and interest in social interaction with members of the target language group. Motivation, in this conceptual context, includes positive attitudes, desire to learn, and effortful behaviour.

Effects of intensive language learning programs

Intensive learning experiences, including immersion, have been shown to impinge on affective variables, including WTC and motivation. In terms of L2 WTC, MacIntyre and Charos (1996) found that increased contact with the L2 was associated with reduced communication apprehension among adult learners in a conversational French course. Wesche, Morrison, Ready, and Pawley (1990) found higher levels of French proficiency and lower levels of communication apprehension among university students with previous immersion experience. More complex results were reported by MacIntyre, Baker, Clément, and Donovan (2002) who found evidence of an increase in L2 communication apprehension among males, and a decrease among females, as students progressed through a junior high immersion program. The effects of immersion on perceived competence have shown more consistent results than those for communication apprehension. Immersion students tend to indicate higher perceptions of competence in the L2 than do non-immersion students (Genesee, 1984; Baker & MacIntyre, 2000). Wesche (1992) argues that immersion study offers more out-of-classroom activities that provide greater contact with the target language and its native speakers, thus offering students the opportunity to gain L2 proficiency.

It has been well established that individual differences in integrative motivation also are associated with L2 proficiency (Gardner, 1985), including L2 retention following an immersion program (Gardner, Moorcroft, & Metford, 1989). Genesee (1984) found that immersion students tend to have more positive attitudes than non-immersion students. MacFarlane and Wesche (1995) also report that university students having undergone immersion have a more positive attitude toward French and French speakers than do non-immersion students. Accordingly, students from intensive language programs would be

expected to show more positive attitudes, integrativeness, and motivation than other students.

Conceptually, WTC and integrative motivation share a common theme but the relation between them may be complex, possibly involving skill level as a moderating influence. MacIntyre and Charos (1996) obtained no significant path coefficient between WTC and motivation in a path analysis, despite a significant and moderately strong correlation between the two variables. This finding invites the question: is there a relation between WTC and components of the integrative motive, and does the degree of correlation differ based on prior learning experiences with the language? It is likely that L2 intensive and immersion students' contact with the target language will help to create a closer connection between WTC and components of integrative motivation, if indeed the students are talking in order to learn.

Just as the relationship between WTC and integrative motivation might vary with L2 program experience, so might the relationship between WTC and the variables that underlie it, specifically, perceived competence and anxiety. For students in intensive programs, their relatively high competence should be less of an issue in their willingness to talk than it is for their less experienced peers. Therefore, among those with intensive or immersion experience, we expect communication apprehension to predict L2 WTC, but that for those without such experience, perceived competence is hypothesized to be a stronger predictor of L2 WTC. MacIntyre et al.'s (2002) study of junior high immersion students suggests that the correlates of L2 WTC can change as students gain experience with the L2.

The relationship between L1 and L2 WTC

Given the importance of the various social and motivational factors discussed above to L2 learning, it is possible that L1 and L2 WTC are independent. It has been proposed that WTC does not simply transfer from one language to another (see MacIntyre et al., 1998). That is, one cannot assume that global L1 WTC will generalize to L2 WTC, though empirical support for this notion has not yet been published. Furthermore, it is possible that the relationship between L1 and L2 WTC could change with experience. MacIntyre et al. (2002) suggest that inexperienced language learners may use their L1 self-confidence to support their WTC in the L2. Thus, L1 and L2 WTC might correlate differently for those who have immersion experience and those who do not.

The present study

Participants in the present study are Anglophone university students studying conversational French in first-year, university-credit courses. The first objective of the study is to test for differences among those with immersion and other intensive learning, and traditional French-as-a-second-language (FSL) experience on non-linguistic outcome variables: WTC, communication apprehension, perceived competence, and frequency of communication in French. We predicted that students with French immersion and other intensive learning experience would be more willing to communicate in their second language, have higher perceived competence and lower communication apprehension, and use French more frequently than their FSL counterparts. For comparison, these same communication-related variables were measured with respect to English (the L1), though language learning experience is not expected to affect L1 communication variables (Baker & MacIntyre, 2000; Genesee, 1991). The second objective of the study is to examine differences in the components of integrative motivation (integrativeness, motivation, and attitudes toward the learning situation) between those with prior intensive or immersion language experience and those without such experience. The intensive/immersion group is expected to show more positive attitudes, higher integrativeness, and stronger motivation for language learning. The third objective is to examine the correlations among WTC, communication apprehension, perceived competence, and integrative motivation, to see whether these relationships differ with experience

Method

Participants

Fifty-nine university student volunteers (44 females, 15 males, mean age = 20.5 years) participated in this study. These students were enrolled in first-year conversational French courses at an undergraduate university in a unilingual, Anglophone community. Twenty-seven participants reported having experience with intensive programs; 14 reported participation in intensive summer immersion programs; 11 had full-time late immersion; and two had partial immersion. The remaining 32 non-immersion participants studied in core FSL programs in Sydney, Nova Scotia. Sydney itself is a predominantly Anglophone community with a strong Scottish and Irish ethnic heritage, though Acadian French communities exist nearby, within a two-hour drive. The French program

begins in Grade 8 with the immersion program beginning in Grade 7. Summer immersion programs are offered to students in area schools primarily through Université Ste. Anne in Nova Scotia. In terms of the overall number of years studying French, the immersion group ($M = 10.1$, $s.d. = 3.2$) was not significantly different ($t[56] = 1.68$, *n.s.*) from the non-immersion group ($M = 8.5$, $s.d. = 4.2$). Ninety-five per cent of the sample reported that they planned to continue taking French courses in the future.

Materials

Each of the communication-related measures described below (1-4) presents all possible combinations of talking in dyads, small groups, large meetings, or public situations with audiences of friends, acquaintances, or strangers.

- 1 *Willingness to Communicate in French* ($\alpha = .95$) and *English* ($\alpha = .94$). Twelve items plus eight 'filler' items (McCroskey and Baer, 1985) assessed the percentage of time respondents would choose to communicate in French (English) in twelve situations. A score of 0% indicates never being willing to communicate, a score of 100% indicates a respondent is always willing to communicate, and a score of 50% indicates willingness half of the time. The crossing friends, acquaintances, and strangers with dyads, small groups, meetings, and public presentations form the 12 situations. An example item is 'Talk with a friend.'
- 2 *Communication Apprehension in French* ($\alpha = .92$) and *English* ($\alpha = .93$). Twelve items from McCroskey, Richmond and McCroskey's (1987) scale were administered, using the same 12 situations as the WTC scale. Instructions asked students to estimate how nervous they would feel, expressed as a percentage of time (0% to 100%), when communicating in a variety of situations. An example is anxiety experienced 'in a small group of strangers.'
- 3 *Perceived Competence in French* ($\alpha = .96$) and *English* ($\alpha = .97$). Twelve items, adapted from McCroskey, Richmond, & McCroskey (1987) and using the same approach as the WTC scale, assessed the percentage of time (0% to 100%) that respondents felt competent using French (English). An example is 'presenting a talk to a meeting of acquaintances.'
- 4 *Frequency of Communication in French* ($\alpha = .96$) and *English* ($\alpha = .91$). Twelve items used by MacIntyre & Charos (1996), modeled after the WTC scale, were administered. Instructions asked students to

indicate how often they had engaged in each of the speaking activities. Responses were given on a seven point Likert scale with the anchors 'Never' and 'Many, many times.'

The following items are taken from Gardner and MacIntyre (1993) where single-item, Guilford-style items measured the major components of the Gardner's Attitude Motivation Test Battery.

- 5 *Integrativeness* ($\alpha = .69$). Three items, measuring integrative orientation, attitude toward French Canadians, and interest in foreign languages, were administered with a seven-point response scale with the anchors 'weak' and 'strong.' These three items were combined to assess the degree to which respondents were learning French for the purpose of interacting and communicating with Francophones. An example item is 'My feelings about learning French in order to interact with French Canadians are: weak - strong.'
- 6 *Attitude toward the learning situation (ALS)* ($\alpha = .81$). Two items, each rated on a seven-point scale with the anchors 'unfavourable' and 'favourable', measured attitude toward the French teacher and attitude toward the French course. An example item is 'My attitude toward my French course is: unfavourable - favourable.'
- 7 *Motivation* ($\alpha = .79$). Three items, each rated on a seven-point scale ranging from 'very much' to 'very little,' assessed the desire to learn French, motivational intensity (effort), and attitude toward learning French. An example item is 'If I were to rate how hard I work at learning French, I would say that it is: very little - very much.'

Procedure

Instructors of first and second year French language courses were contacted and asked for permission to conduct the research in their classes. Participants were informed via consent form that participation was anonymous, voluntary, and would not affect their course grades. Testing was carried out during regularly scheduled class times and took approximately 20 minutes to complete.

Results

The objectives of this study were: (a) to examine the effects of prior immersion experience and language (L1 and L2) on WTC, perceived competence, communication apprehension and frequency of communication; (b) to observe the effects of prior immersion experience on integrativeness, motivation, and attitudes toward the learning situation; (c) to assess whether the correlations among the communication vari-

ables and the attitude/motivation variables differ between those with and those without previous immersion experience; and (d) to examine the relationship between L1 and L2 WTC and to determine whether this relationship varies with immersion experience.

Effects of prior experience and language on communication variables

In order to examine the effects of language learning experience on four communication variables, two multivariate analyses of variance (MANOVA) were conducted (Tabachnick & Fidell, 2001). The groups were defined as full immersion ($n = 11$), summer immersion ($n = 14$), and FSL ($n = 32$). The two partial immersion students were not included in this analysis.

The four L2 communication variables used as dependent variables in the MANOVA were WTC, communication apprehension, perceived competence, and frequency of communication. At the multivariate level, a significant main effect of immersion experience was observed (Hotelling's $s = 1.009$, $F(8, 100) = 6.31$, $p < .001$). At the univariate level, significant differences among the three groups were observed for WTC ($F(2, 54) = 7.35$, $p < .01$), perceived competence ($F(2, 54) = 4.76$, $p < .05$), and frequency of communication ($F(2, 54) = 21.2$, $p < .001$). Post hoc tests of means are shown in Table 1. It is clear that full immersion experience is associated with increased WTC, perceived competence, and frequency of communication, especially as compared with FSL experience. Differences in communication apprehension are not significant across the three groups ($F(2, 54) = 1.54$, $p < .224$, n.s.), but the means are included for completeness.

Means for the three groups on the four L1 communication variables were analyzed using a MANOVA similar to the preceding one. There were no significant group differences at the multivariate level (Hotelling's $s = .079$, $F(8, 100) = 0.495$, $p < .857$, n.s.) or at the univariate level (all F 's < 1.40 , p 's $< .26$). For comparison, the means are presented in Table 1.

Effects of prior experience on attitudes and motivation

A one-way MANOVA with immersion experience as a between-subjects factor was conducted to test for effects of prior immersion experience on integrativeness, motivation, and attitudes toward the learning situation. The effect of immersion experience on these variables was not significant at either the multivariate level (Hotelling's $s = .144$, $F(6, 102) = 1.23$, $p < .299$, n.s.) or at the univariate level (all F 's < 2.4 , p 's $> .13$, n.s.).

TABLE 1
Tests of Means for Communication Variables by Immersion Experience

	Full immersion	Summer immersion	FSL	Significant differences
<i>Second Language</i>				
WTC	634.3*	487.5	279.4*	Full vs FSL
(SD)	(381.1)	(257.6)	(254.4)	
PC	855.5*	625.0	535.3*	Full vs FSL
(SD)	(274.5)	(312.1)	(297.5)	
FREQ	49.4*	34.1*	16.4*	All 3 means
(SD)	(20.7)	(15.8)	(12.6)	
CA	424.1	570.9	557.2	-
(SD)	(183.3)	(233.0)	(249.2)	
<i>First Language</i>				
WTC	959.3	900.7	846.4	-
(SD)	(81.1)	(71.8)	(47.5)	
PC	1,019.5	873.4	864.2	-
(SD)	(99.7)	(88.3)	(58.4)	
FREQ	60.6	56.9	54.7	-
(SD)	(3.87)	(3.43)	(2.27)	
CA	199.5	292.8	342.8	-
(SD)	(74.4)	(66.0)	(43.7)	

* Means differ significantly ($p < .05$), within a table row

CA - communication apprehension

PC - perceived competence

WTC - willingness to communicate

Effects of prior experience on the sources of WTC

Before computing correlations among the communication-related variables, the data for the full and summer immersion groups were combined, and the partial immersion students were added. These groups were combined (total $n = 27$) because they all have had some degree of concentrated language learning experience over and above the FSL curriculum, and therefore will be referred to as the intensive experience group. Adding to our confidence that the groups could be combined was the lack of significant differences in the means of those groups in the preceding analyses. This allows for comparable sample sizes between the groups. This allows for an examination of the structure of the relationships among the variables *within* each group, an issue not dealt with by ANOVA techniques.

Correlations among L2 WTC, L2 perceived competence, and L2 communication apprehension were computed separately for intensive and FSL participants. After verifying that there were no outliers, all

correlations were found to be significant ($p < .05$) except for the correlation between L2 anxiety and L2 WTC in the FSL group (see Table 2). The correlations were significant, but not so high as to warrant concern about multicollinearity; that is, the variables were not so highly correlated as to be redundant with one another (Tabachnick & Fidell, 2001).

Given that L2 communication apprehension and L2 perceived competence are proposed to be the two most relevant influences on L2 WTC, multiple regressions were performed to test whether these two variables predict L2 WTC differently among intensive and FSL groups (see Table 2). Both L2 communication apprehension and L2 perceived competence were forced to enter the equation as predictors of L2 WTC and their standardized regression coefficients (betas) were tested for significance. In the FSL group, the resulting equation produced a significant multiple correlation ($R = .547, p < .001$). Of the two predictors, only L2 perceived competence showed a significant regression coefficient ($\beta = .607, t = 3.30, p < .002$). The coefficient for L2 communication apprehension, having been adjusted for the presence of L2 perceived competence in the regression equation, was not significant ($\beta = .141, t = 0.77, p > .44$). In the intensive group, a similar forced-entry regression procedure was used to predict L2 WTC based on L2 communication apprehension and L2 perceived competence. The resulting equation produced a significant multiple correlation ($R = .629,$

TABLE 2
Correlations among Communication Variables by Immersion Group

	Immersion Group			Non-Immersion Group		
	CA-F	PC-F	WTC-F	CA-F	PC-F	WTC-F
<i>Correlation</i>						
CA-F	-			-		
PC-F	-.51*	-		-.52*	-	
WTC-F	-.62*	.40*	-	-.18	.53*	-
<i>Regression</i>						
Beta ^a	-.565*	.112	-	.141	.607*	-
Mean	515.5	711.9	536.0	557.2	535.3	279.4
SD ^b	215.1	307.1	313.6	249.2	297.5	254.4*

$p < .05$

^a Regression Criterion: WTCF, Method = Enter

^b Standard deviations between groups are not significantly different

CA-F - communication apprehension in French

PC-F - perceived competence in French

WTC-F - willingness to communicate in French

$p < .001$). Of the two predictors, only L2 communication apprehension showed a significant regression coefficient ($\beta = -.565$, $t = 3.06$, $p < .005$). The coefficient for L2 perceived competence was not significant ($\beta = .112$, $t = 0.61$, $p > .55$).

Correlations among attitude and communication variables

Correlations between the attitude and motivation variables and L1 and L2 communication variables are shown in Table 3. Of particular interest are the correlations between elements of integrative motivation and WTC. Among those with intensive experience, motivation was significantly positively correlated with L2 WTC and negatively correlated with L2 communication apprehension, but these correlations were non-significant in the FSL group. Integrativeness was significantly positively correlated with L2 WTC among intensive, but not among FSL students. A test for differences between correlations from independent samples (Ferguson, 1981) shows that the correlation between motivation and L2 WTC is significantly higher among the students from intensive programs than among the FSL students ($z = -5.77$, $p < .01$).

Relationship between L1 and L2 WTC

The correlation between L1 and L2 WTC was computed and was found to be non-significant in both the intensive ($r = .213$, $p > .05$) and FSL ($r = .280$, $p > .05$) groups. This indicates some degree of independence between WTC in L1 and WTC in L2.

Discussion

Among the present sample of university students studying French, there appears to be a positive outcome of previous French immersion and other intensive experiences in terms of non-linguistic facets of language learning. Previous immersion experience among these university students seems to promote an increased willingness to communicate and frequency of communication in French. If an appropriate goal of immersion education is to increase students' willingness to engage in L2 communication (Safty, 1988), more specifically to initiate L2 conversation (MacIntyre et al., 1998), then the evidence obtained here is encouraging for advocates of immersion education.

Skehan's (1989) notion of talking in order to learn implies that WTC should be associated with increased motivation for language learning, especially among immersion students. In the present sample, among the

TABLE 3
Correlations among Communication, Attitudes and Motivation

		INTEGR	MOTIV	ALS
<i>Second Language</i>				
WTC	NI	.082 ^a	.107 ^a	.087
	I	.416*	.718*	-.083
PC	NI	.265	.227	.194
	I	.248	.360	.324
CA	NI	-.103	-.022 ^a	.052
	I	-.095	-.458*	.274
FREQ	NI	.160	.227	.044
	I	.044	.013	-.073
<i>First Language</i>				
WTC	NI	.009	-.098	.100
	I	.359	.259	.014
PC	NI	-.018	-.081	.203
	I	-.010	.077	.291
CA	NI	.008	.074	-.046
	I	-.010	-.106	-.036
FREQ	NI	-.011	.025	.235
	I	.089	-.063	.104

* $p < .05$

^a Significantly different from corresponding correlation in intensive/immersion group

NI - no immersion experience

I - intensive/immersion experience

WTC - willingness to communicate in French

PC - perceived competence in French

CA - communication apprehension in French

FREQ - frequency of communication in French

INTEGR - integrativeness

MOTIV -- motivation

ALS - attitudes toward the learning situation

students with immersion and other intensive experience, WTC correlates very strongly with motivation for language learning. However, among the FSL group, the correlation is significantly lower and does not reach the .05 level of significance. Taken together, these results indicate that there is not a simple relation between WTC and language learning motivation. It would appear that the connection between communication and motivation for learning has been much more firmly established among the intensive group than among the FSL group. The philosophy underlying immersion recognizes the importance of talking in order to learn and it would appear that its former students might be adopting this perspective. Those who are most willing to initiate communication are also most motivated to learn. The lack of association between WTC and elements of integrative motivation among the FSL students might

be related to their experience of learning *about* French as an L2, without the pragmatic use of the language for interaction in the classroom. The results show that the immersion and other groups have similar mean levels of motivation, but the FSL group apparently has not consistently adopted motivation based on the notion that it is necessary to talk in order to learn.

An assessment of the literature indicates that immersion does not appear to have a negative effect on L1 linguistic outcomes. Genesee (1991) notes that the most consistent finding in immersion evaluation studies is that, when compared with control students from English language programs, immersion students suffer no deficits in L1 linguistic outcomes. The evidence in the present study indicates that this assertion may be applied to the affective variables based on L1 communication as well. The present data show no difference in L1 WTC between the immersion and other groups. Also, no difference was observed in frequency of L1 communication. Although one must exercise caution in interpreting any nonsignificant finding, we have obtained no evidence to suggest that immersion has a negative impact on the L1 communication variables assessed here. As well, WTC in L2 does not correlate with WTC in L1, in either the intensive or FSL groups, helping to clarify that WTC does not simply transfer from one language to another (see MacIntyre et al., 1998).

A surprising finding in the present data was the nonsignificant differences in communication apprehension among the three language learning experience groups. Why then would the immersion group be relatively apprehensive about communicating? The answer might lie in the classroom demands placed on students. If teachers generally seek to challenge students as a means to facilitate learning, then students will consistently be placed in situations that surpass their ability, create discomfort, and provoke anxiety. Speaking has been found to be the most anxiety-provoking modality of L2 communication (Horwitz, Horwitz, & Cope, 1986; Koch & Terrell, 1991; MacIntyre & Gardner, 1991), but it is important to emphasize that communication apprehension can have a profound impact on L1 communication as well (McCroskey & Daly, 1984; MacIntyre & Gardner, 1994). It should also be considered that a significant negative correlation between communication apprehension and motivation was observed, but only among the intensive group. Among FSL students, where communication demands in the classroom are lesser, communication apprehension does not show a significant negative relation to motivation. Whereas it is interesting that those with immersion experience indicated levels of communication apprehension similar to those with no prior immersion experience, the

correlates of communication apprehension show that different processes may be occurring between the groups. In particular, future research should investigate whether communication anxiety actually might be heightened by a 'talking to learn' orientation.

The two key variables proposed to underlie WTC in both L1 and L2 are communication apprehension and perceived competence (McCroskey & Baer, 1985; MacIntyre, 1994). The regression analysis for those with previous intensive experience shows WTC is predicted by communication apprehension but not by perceived competence. The reverse is true for the FSL group; WTC is predicted by perceived competence and not communication apprehension. This also can be observed, albeit less clearly, by inspecting the zero-order correlations among the variables. McCroskey and Richmond (1987, 1991) suggest that apprehension is the strongest predictor of WTC in the L1, and data from the intensive group are consonant with this suggestion as applied to L2 communication. For the FSL group, perceived competence plays a stronger role, likely because of the lower levels of experience and ability. The pedagogical implications of this are interesting. The results might be taken to suggest, possibly counter-intuitively, that anxiety is a greater problem for more advanced learners. Increasing communication opportunities and challenges in the language classroom likely provokes anxiety, which will help to determine whether a student speaks up or remains silent, even if L2 competence is sufficient for the task at hand. Thus, in more competent students, including immersion students, teachers might wish to pay special attention to anxiety reactions and, if necessary, to incorporate anxiety reduction strategies (see Young, 1999) among more advanced learners.

Before offering concluding comments on the present study, some of its limitations should be elucidated. Variables leading to the self-selection of immersion or non-immersion programs for the students might also be related to the communication and attitudinal variables studied here. Strong causal interpretations of the effects of immersion or other intensive language education should be avoided. The fact that the students in our sample were all taking the same introductory-level conversational French class might indicate a sense of language loss among the immersion group, or possibly the desire for an easy credit at university. Alternatively, the mixture of experiences among the students in these courses might simply reflect the restricted range of course offerings in French at the small university where this research was conducted. It is tempting to accept the null hypothesis for some of our results, for example, the absence of differences among the immersion and non-immersion groups in L1 communication. This might be taken

as an encouraging finding. However, one must avoid the temptation to conclude that not finding a difference in the sample means that there is no difference to be found in the population. Given our relatively small sample sizes for the groups, caution is required.

In conclusion, WTC is emerging as an interesting variable in language education. The variables underlying WTC show intriguing, complex interrelations, and evidence suggests these relations change over time (see Baker & MacIntyre, 2000; MacIntyre et al., 2002). Fostering an enhanced WTC is a valid goal of language education and might be incorporated as an explicit criterion for program evaluation. If the notion that students must 'talk in order to learn' has been eluding researchers in this area, WTC might be a useful addition to our conceptual repertoire.

Peter D. MacIntyre is an associate professor of psychology at University College of Cape Breton. He undertook graduate studies at University of Western Ontario, receiving a PhD in 1992. After a two-year postdoctoral stay at the University of Ottawa, he accepted a faculty position at UCCB. His publications are in the area of individual differences in second language learning, communication, and personality. Email: peter_macintyre@ucb.ca

Susan C. Baker is a PhD candidate at the University of Ottawa. She undertook graduate studies after receiving a BA from Université Ste. Anne and a BA (Honours) from University College of Cape Breton. Her research interests are in the area of language acquisition, heritage languages, and intercultural adaptation. Email: sbake047@uottawa.ca

Richard Clément is a full professor of psychology at University of Ottawa. He undertook graduate studies at University of Western Ontario, receiving a PhD in 1976. He is the past director of the School of Psychology at University of Ottawa. He has published widely in the area of second language acquisition, intercultural contact, and communication. Email: rclement@uottawa.ca

Leslie A. Donovan recently completed the BSc (Distinction) in psychology at the University College of Cape Breton. She is currently enrolled in the B.Ed program at St. Thomas University. She has published papers in chemistry and chemical education, as well as studies of second language learning and communication.

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Clément. The authors would like to express their sincere thanks to the students and faculty for participating in this study. Correspondence may be sent to Peter MacIntyre, Dept. of Psychology, University College of Cape Breton, Sydney, Nova Scotia, Canada, B1P 6L2. E-mail: peter_macintyre@uccb.ca, phone 902-563-1315, fax 902-563-1246.

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