THE REVIVAL OF THE
MOHAWK LANGUAGE IN KAHNAWAKE

Michael L. Hoover
Department of Educational Psychology and Counselling
McGill University
Montréal, Québec
Canada, H3A 1Y2

and

The Kanien’kehaka Raotitiohkwa Cultural Center
Kahnawake, Québec
Canada, J0L 1B0

Abstract/Resume

The Mohawks of Kahnawake are in the midst of a real-life experiment in revitalizing their language. To determine the current state of the language, Kahnawake residents completed a detailed questionnaire about the Mohawk skills of family members, about their own use of the language and their attitudes towards the language. Results indicate that efforts to teach the younger generation to speak Mohawk have been successful. Differences across age groups in the four factors revealed by a factor analysis-casual use, tendency to speak, cultural identity, and public promotion-are discussed in terms of the community's efforts to revitalize the Mohawk language.

Les Mohawks de Kahnawake sont en train de faire une expérience sur le vif en revivifiant leur langue. Pour déterminer la condition courante de la langue, les résidents de Kahnawake ont complété un questionnaire en détail des habilités des membres des familles Mohawk à propos de leur usage de la langue et de leurs attitudes envers la langue. Les résultats indiquent que les efforts pour apprendre à la jeune génération à parler Mohawk ont réussi. On a discuté en termes des efforts de la communauté pour revivifier la langue Mohawk, les différences entre les groupes d'âge des quatre facteurs qui se révèlent par une analyse factorielle-usage de conversation, tendance à parler, identité culturelle et promotion publique.
Introduction

In company with many Aboriginal communities in North America, the Mohawk community of Kahnawake had seen a decline in the use of the traditional language over the last hundred years. In the 19th century, Kahnawake was essentially a bilingual community of Native Mohawk speakers who used French to communicate with outsiders. In this century, job opportunities in the United States and the increasing use of English in other Mohawk communities in Ontario and New York State have led to a slow encroachment of English into the community (Kennikaronia:a, 1990).

In many ways, it is remarkable that the Mohawk language was preserved in Kahnawake as long as it was. Kahnawake is by no means an isolated community; it is, in fact, a twenty minute drive from the centre of Montreal. Much of the force behind both the survival of Mohawk inside a major metropolitan area and current efforts to revitalize it come from the role that the language has played, and continues to play, in the community. The Longhouse—the traditional seat of government, the spiritual centre of the community and the Iroquois Confederacy—continues to conduct council meetings, ceremonies, and accompanying social gatherings in Mohawk. Nonetheless, by the 1950s, English had grown to play such a large role both in the community (beyond the Longhouse) and in job opportunities, especially in construction, that most Kahnawake parents were raising their children exclusively in English.

The early 1970s saw an effort to expose elementary school children in the community to the Mohawk language through fifteen minutes a day of Mohawk instruction. It was soon clear that this was not enough to turn these English-speaking Mohawk children into Mohawk speakers. The catalyst for more serious action came in 1978, when the Quebec government enacted Bill 101, the French Language Charter, which severely restricted education and services in languages other than French. Following the enactment of Bill 101, the Kanien'kehaka Raotitiohkwa Cultural Center, the recognized cultural institution of Kahnawake, was established with a mandate to help ensure that future Mohawk generations would continue to survive with their language, culture and traditions intact. The Kanien'kehaka Raotitiohkwa Cultural Center was instrumental in officially changing the name of the community from "Caughnawaga" to its present Mohawk name. It established a Library and Document Centre which today houses more than 3,000 books and documents on Mohawk and Iroquois topics, a photographic archive with more than 3,000 photos, and CKRK, the Mohawk radio station.

The most serious action that the Kanien'kehaka Raotitiohkwa Cultural Center undertook in 1979, the year following the enactment of Bill 101, was
the establishment of an English-language high school, the Mohawk Survival School, in order to ensure that education remained under the control of the community. Concerned parents began to look for ways to increase Mohawk language use in the elementary schools.

In response, the Kanien'kehaka Raotiohkwia Cultural Center undertook a pilot project to use only Mohawk with English-speaking nursery school children. This Mohawk immersion program was modelled on the French immersion programs underway elsewhere in Quebec. The Kahnawake Mohawk immersion program was the first Aboriginal language immersion program in Canada, and has since become a model for other Aboriginal communities. It has proved so successful that today more than half of the community's students study entirely in Mohawk from nursery school to grade 3, then 60% in Mohawk and 40% in English from grades 4 to 6. The others attend the English-language elementary school in the community, where they receive a half-hour a day instruction in Mohawk. Children at both schools learn French as a third language.

Initially, the Mohawk immersion program was chosen by a minority of parents. Concerns about the detrimental effects of Mohawk immersion on English language skills have been allayed by several studies which have shown that the English skills of Mohawk immersion students do not suffer in the long run (Genesee and Lambert, 1986; Holobow, Genesee and Lambert, 1987). These findings parallel those of studies of English-speaking children in French immersion programs. The Mohawk immersion program is now oversubscribed, and only the lack of trained teachers prevents more children from attending Mohawk immersion.

One effect of the Mohawk immersion program is the creation of a lost generation of people now in their 20s, 30s and early 40s, who were not given the opportunity to learn to speak Mohawk, and find themselves surrounded by Mohawk speakers. It is not uncommon in Kahnawake to hear people conversing with their grandchildren in Mohawk, then switching to English to speak to their own children.

In the summer of 1990, a chain of events occurred which profoundly affected many Kahnawake residents' attitudes about being Mohawk and speaking the Mohawk language. The Mohawk community of Kanesatake, near Oka, Québec, was the scene of an armed confrontation between members of the community and the Sureté du Québec (the Québec provincial police). This led to civil disobedience by members of the Kahnawake community, which led in turn to the government laying seige to both Kanesatake and Kahnawake. The standoff, which lasted most of the summer, had the effect of solidifying the sense of community in Kahnawake and further strengthening the feeling of solidarity with other Mohawk communities. It also had the effect of increasing the amount of
Mohawk spoken in Kahnawake, as overheard conversations in Mohawk were less likely to be understood by the besieging forces.

This heightened sense of community, together with the success of the Mohawk immersion program, has increased the awareness of the importance of the Mohawk language in Kahnawake. The present study was undertaken in order to determine the community's needs and wishes by investigating the patterns of Mohawk language use in Kahnawake, and attitudes towards the language, and by gauging community support for a series of initiatives to promote the use of Mohawk.

Method

Data on Mohawk language ability, the use of Mohawk, and attitudes towards the Mohawk language, were collected by means of a questionnaire in the late spring of 1991.

The Sample

107 residents of Kahnawake completed the questionnaire for their households. The respondents ranged in age from 16 to 76, with a mean age of 45.58 years. Household members ranged in age from one to 78. Because the present study is concerned with language abilities, infants (those aged three and younger) are excluded from the discussion of household members.

The Questionnaire

The questionnaire was sixteen pages long and was divided into six sections, which asked respondents to indicate (1) the ages and the Mohawk language abilities of all members of their households; (2) the importance of the role of the Mohawk language in their own lives and in the community; (3) how often the respondent used Mohawk in a variety of situations in the community; (4) the situations in which they heard Mohawk being spoken; (5) the situations in which they themselves spoke Mohawk; and finally (6) whether they supported a series of proposals for increasing the use of Mohawk in the community.

The third and fifth sections (use versus speaking) may seem at first glance to be the same. However, one pattern of language use that has developed among many non-fluent (and some fluent) Mohawk speakers in the community is the use of Mohawk greetings, words, phrases and expressions in otherwise English conversations. This pattern is recognized by members of the community to be quite different from either speaking
Mohawk or speaking entirely in English.

Procedure

Students from the Mohawk Survival School distributed the questionnaire to every household in Kahnawake. Further instructions on completing the questionnaire were broadcast on the community radio station, CKRK. 107, or 11%, of the questionnaires were completed and returned.

Results

The results from the questionnaire will be dealt with in two parts. First the data concerning the Mohawk language skills of the 369 household members will be presented, and then the analyses of the data about the 107 respondents’ own use of and attitudes towards Mohawk. These analyses consist of a factor analysis to determine the underlying patterns of responding, and a multivariate analysis of variance of the changes in these patterns over the different age groups. The statistical analyses are described in Appendix 1.

Mohawk Speaking Ability of Respondent’s Household Members

The completed questionnaires provide information on the age and Mohawk language abilities of 369 household members ranging in age from four to 78. As can be seen from Figure 1, there was a steady decline in the percent of Kahnawake residents who could speak Mohawk, from those 60 and older-among whom 88% spoke the language- to those in their 20s and 30s, among whom just over 20% were able to speak Mohawk. For those aged 10-19 and those under ten, there is a reversal of this trend, with more than 50% of people in these age groups able to speak Mohawk.

Respondents’ Use of and Attitudes Towards Mohawk

Whereas the first section of the questionnaire yielded information on all 369 household members’ Mohawk language skills, the remainder of the questionnaire consisted of 100 questions about the 107 respondents’ own use of and attitudes towards the Mohawk language. Of more interest than the responses to individual questions are the patterns of responses across respondents. Specifically, one wants to know which questions tended to
be answered in the same way by groups of respondents. A factor analysis summarizes a set of data using as few descriptors as possible (Wilkinson, 1989). The effect of a factor analysis is to reduce the number of variables being examined to a small set of meaningful variables, the factors. The factor analysis groups questions that tended to be answered in the same ways by groups of subjects. (For details of this and other statistical procedures, see Appendix 1.)

The factor analysis of respondents' data about themselves revealed four underlying factors:

1. Casual use of Mohawk (often within an otherwise English conversation).
2. Tendency to speak Mohawk across a variety of situations.
3. Mohawk as central to cultural identity.
4. Public promotion of Mohawk.

The first two factors concern two aspects of the use of Mohawk in Kahnawake, the third, the role that the language plays in the culture, and
Each question from the survey was assigned a factor loading for each of the four factors, which indicate how well that question patterns with the four underlying factors. The significant (p<<.0001; see Appendix 1 for details) factor loading for all questions, as well as a summary of the responses to that question, can be found in Appendix 2.

Analysis of the Factors by Age Group

The 107 respondents were then described as to where they stood on each of these factors. This was accomplished by computing a unit standardized factor score for each respondent for each of the four factors (see Appendix 1 for details). The respondents were divided into six groups by age: (1) 16-19, (2) 20-29, (3) 30-39, (4) 40-49, (5) 50-59, (6) 60 and older.

The factor scores were then subjected to a repeated measures multivariate analysis of variance (see Appendix 1 for details) which revealed a significant between-subjects effect of age group (F=6.109, p<<.001), indicating differences in the patterns of responding among the different age group; and a significant multivariate interaction of age group by factor (Wilks' lambda F=2.087, p=.008), indicating differences in the patterns of responding for the four factors by the different age groups.

In the sections below, each of the four factors is described in more detail, the patterns of responding across the six age groups are described, and finally, the responses are summarized. The complete list of items from the questionnaire used in the factor analysis, their factor loadings and the summary of results are found in Appendix 2.

Casual Use of Mohawk Factor

Respondents who are high on the casual use factor tend to use at least some Mohawk in all situations presented in the questionnaire (see Appendix 2 for a complete list of the questions that loaded onto the casual use factor). These respondents also tended to find themselves hearing Mohawk spoken at home, on the phone, and at the hospital, and they tended to have more family members in the household who spoke Mohawk.

As can be seen from Figure 2, there is a significant (univariate F=11.614, p<<.001) decline in the casual use of Mohawk as the group gets younger. However, among those 16-19, the only group young enough to have grown up during the language revival, there is significant reversal in the trend (t=2.23, p<<.05).
Across all age groups, Mohawk tended to be used more often in private situations—at home, on the phone and with friends—than in public situations, such as at church and in organized recreation.

**Tendency to Speak Mohawk Factor**

Whereas the casual use factor describes variation of the use of Mohawk words and phrases (often intermingled with English), the Mohawk-speaking factor describes variation in the speaking of the Mohawk language.

Respondents who score high on the Mohawk speaking factor tended to hear Mohawk in many situations and to speak Mohawk across all situations presented in the questionnaire, save one. Speaking and hearing Mohawk in the Longhouse, the traditional centre of Mohawk culture, was best described by the cultural identity factor, rather than by the Mohawk speaking factor. In other words, those high on the cultural identity factor...
were more likely to hear and speak Mohawk at the Longhouse than were those high on the Mohawk speaking factor.

Figure 3 depicts the general decline in the tendency to speak Mohawk as age decreases. Older respondents spoke Mohawk more often across a variety of situations than did younger respondents (univariate F=4.126, p=.002).

There is a slight rise in the tendency of those 16-19 to speak Mohawk compared to those in their twenties which parallels the rise in their ability to speak Mohawk and the rise in their casual use of Mohawk factor scores. They are significantly more likely to speak Mohawk in private situations: among friends, on the phone and at home; although in public situations, they spoke Mohawk as infrequently as those in their 20s and 30s. They were even less likely to speak Mohawk in child rearing (probably because...
they have no children), and when greeting groups of people, a troubling trend which is discussed below.

Across all age groups, the situations in which people at Kahnawake speak and hear Mohawk is parallel to those in which they use it. The Mohawk language is spoken more often in private situations: with family and friends and on the phone, than in more public situations, like church, recreation, school, and shopping.

**The Centrality of the Mohawk Language to Cultural Identity Factor**

Respondents high on the cultural identity factor have a strong sense that the Mohawk language is important to their cultural identity as Mohawks. They feel that it is important to speak and understand Mohawk and to use it in normal every day business, in socializing, and in community decision making; they support individual efforts to promote the Mohawk language.

The centrality of cultural identity to this factor is shown in the fact that the one language use question which loads onto the cultural identity factor is hearing Mohawk spoken at the Longhouse, the traditional centre of the Mohawk community.

Respondents high on the cultural identity factor support private (versus public) means of promoting the Mohawk language: insisting on speaking Mohawk to other Mohawk speakers, wearing a button proclaiming that one speaks Mohawk, using one's Mohawk name, using Mohawk dates on correspondence, speaking Mohawk at businesses on the Reserve, and putting a sign on one's door saying "Mohawk spoken here."

Respondents high on the cultural identity factor, like those high on the public promotion factor, also support certain public means of promoting the Mohawk language: organizing community and cultural events to promote Mohawk, arranging a summer Mohawk immersion camp, and having signs in Mohawk.

There were no differences among the age groups on this factor: people in all age groups overwhelmingly felt that the language was central to their identity as Mohawks. Almost all respondents said that the Mohawk language was important or very important for cultural identity (94%), and spiritual expression (85%). 98% of all respondents said that it was important to speak and/or understand Mohawk.
Public Promotion of the Mohawk Factor

Respondents who were high on the public promotion factor tended to support public (or community-based) approaches to the promotion of the Mohawk language, as opposed to the private (or individual) approaches which loaded onto the cultural identity factor. In particular, they tended to support classes for passive understanders of Mohawk, for non-speakers and speakers. They also tended to support the use of CKRK, the Mohawk radio station which serves to promote the language, with yearly radiothons, stories and legends in Mohawk, and children story-telling. They also favoured programs such as the formation of language clubs, learning a Mohawk word a day, and using Mohawk greetings on the phone. Respondents high on cultural identity and on the public promotion factors supported immersion summer camp, using Mohawk on signs and in advertising, using one's Mohawk name, and the organization of community events to promote the use of the Mohawk language. There were no differences across the age groups in support for the public promotion of Mohawk. All nineteen of the ideas presented to the respondents met with majority approval. The questions having to do with educational schemes elicited the most positive responses. 90% supported language courses for persons who do not speak Mohawk, 88% language courses for persons who can understand but cannot speak Mohawk, 84% learning a Mohawk word a day and using it, and 84% language courses for speakers who cannot read or write Mohawk. The least popular of the formal educational schemes was a summer camp for immersion students, which had a 71% approval rate.

Discussion

The Mohawk community in Kahnawake is twelve years into an effort to revitalize the Mohawk language, which had been facing a slow death as each succeeding generation was less able to speak Mohawk. Through the control of its school system, which enabled the community to introduce a Mohawk immersion program for elementary school children, this effort has proven largely successful by three measures: (1) a rise in the ability to speak Mohawk, (2) an increase in the admixing of Mohawk with English, and (3) an increase in the private speaking of Mohawk among the youngest people surveyed.

Furthermore, there is widespread support in the community for promotional schemes to encourage and facilitate the speaking of the Mohawk language. The analyses reveal that these fall into two broad categories of promotional schemes: public, or community-initiated, and
those that are private, or individually-initiated. Although both types of schemes enjoy majority approval, the base of support for each is different. Those high on the cultural identity factor support the public ones. (Of course, many individuals are high on both factors.)

The Mohawk language now enjoys a central place in the soul of the community—an indication both of the success of the revitalization efforts and of the tight link between language and cultural identity in this community. The vast majority of respondents indicated that the Mohawk language is central to their identity as Mohawks—no matter their age or ability to speak it. There is now an interest in learning Mohawk across all age groups. This interest is strongest among the "lost generation" in their 20s, 30s, and early 40s who were denied the opportunity to learn Mohawk as children. The interest in learning to speak and understand Mohawk is stronger than the interest in learning to read and write the language. Literacy in Mohawk is a recent phenomenon; very little, apart from school materials developed for the immersion schools, is written in Mohawk. It is therefore unsurprising that the age group which showed the greatest interest in Mohawk literacy is in the 16-19 year olds—the only ones young enough to have been exposed to written Mohawk at school.

The return rate of 11% (although not particularly low for questionnaires of this length) admits the possibility of response bias in the data reported above. It would seem reasonable that those residents of Kahnawake most concerned with the language would be more apt to complete the questionnaire, and so these data might be biased towards a pro-Mohawk stance. Two specific results argue against a completely biased sample. First, the reported Mohawk language skills both of respondents and of their household members are in accord with the intuitions of several community leaders about the incidence of Mohawk speaking in the community, so there does not seem to be a bias in favour of Mohawk speakers. Second, there was no overrepresentation of households with children who had been in Mohawk immersion among those who completed the questionnaire. Approximately half of those surveyed with children in the appropriate age range had children who had been in Mohawk immersion, the same rate as in the community at large. If the questionnaire had been biased in favour of those who were seriously committed to the revival of Mohawk, one would have expected those with children in Mohawk immersion to be overrepresented in the sample.

The upsurge in Mohawk language skills is concentrated in those less than 20 years old, who made up a small part of the respondents to this questionnaire, as respondents tended to be heads of households. Further investigation of the situations and frequency of Mohawk among the younger members of the community (those aged 4 to 19) is warranted, as
it is the group on whom the community has pinned much of its hopes for the continued vitality of the Mohawk language.

Conclusion

The effort by the members of the Mohawk community of Kahnawake to revive the Mohawk language has had an auspicious beginning. The trend over the last 50 years of each succeeding generation speaking less Mohawk has been reversed. The community has a strong sense of the importance of the language to their cultural identity, and supports a range of schemes to further promote the learning and use of the Mohawk language. One somewhat disturbing result is that the teenagers surveyed, though they spoke more Mohawk than their immediate elders, tended to speak it only in private situations, particularly in the family and with friends; and spoke Mohawk as infrequently as those in their 20s and 30s in public situations—when doing business, when meeting people in a group and so forth. One explanation that several teenagers have given for this is that it would be disrespectful or rude to speak Mohawk in front of an immediate elder who did not speak Mohawk, so they use English rather than risk insulting their elders.

If Mohawk is once again to become the standard language in Kahnawake, this situation must be overcome. The Kanien'kehaka Raotitiohkwa Cultural Center has proposed two lines of attack: a series of Mohawk classes aimed at adult non-speakers of Mohawk, and a push for community insistence on the use of the Mohawk language whenever possible. The Kahnawake community has no illusions about the ease with which Mohawk can be completely restored. However, the results of this study indicate that the first steps have been successful, and that community support for further steps is very strong indeed.

Note

1. The authors would like to thank Frank Jacobs and Jessica Hill (of the Kanien'kehaka Raotitiohkwa Cultural Center) and Victoria Murphy, for their help in coding the questionnaire responses, interpreting those responses, and running the factor analysis, respectively. The first author thanks Paul Andreassen for his invaluable help on the more arcane points of factor analysis, and Jessica Hill, Robert J. Bracewell and especially Ben Shaer for comments on earlier drafts of this paper.
Appendix 1: Statistical Analyses

1. Factor Analysis:

A factor analysis begins by correlating the responses to all questions against each other. Sets of questions that correlate highly with one another are assumed to be tapping the same underlying dimension or factor. A hypothetical underlying factor is then computed from these intercorrelations. A second factor (then a third and so on) is then computed to describe as much as possible of the remaining variances in responses.

All of the questions—except those about the Mohawk language ability of household members—were subjected to a principle components factor analysis. Of the 107 returned questionnaires, only the 95 that had completed all of the last section were used in the factor analysis. The handful (37 out of 9,500) of other unanswered questionnaires were replaced with the mean response for that question.

Inspection of the resulting scree graph indicated that there were four factors with significant Eigenvalues. Together these four factors accounted for 34.2% of the variance. The four factors were then subjected to a varimax rotation to aid in interpretation. The names assigned to each of the four factors come from an inspection of the questions that loaded most highly onto that factor. The Eigenvalues and the percent of variance explained by each factor can be found in Appendix 2.
2. Factor Loading

Once the factors were computed, each question was correlated with each of the factors to determine how well that question was described by each factor. Each correlation between a question and a factor is called a factor loading, and can range from +/- 1.00, where a positive or negative 1.00 would indicate that the factor describes the variance of the question perfectly and 0.00 would indicate that the factor captures none of the variance of the question.

3. Significance of Loadings

As there were 100 questions and four factors, 400 factor loadings were calculated. To avoid artificially increasing the experiment-wise alpha (the probability of incorrectly including a question which does not actually load onto the factor), only those factor loadings with a probability of occurring by chance less than one time in ten thousand (p<<.0001) were considered significant, and are discussed in the present study. This results in an experiment-wise alpha of .039 (1 - .9999 to the 400th power). Appendix 2 contains all factor loadings with a probability of occurring by chance less than 1 time in a hundred (p<<.01), with those factor loadings significant at p<<.0001 marked with asterisks.

4. Standardized Unit Factor Scores

While the factor loading describes how well a factor captures the variance of a given question, a factor score describes how high or low on a factor an individual respondent is. A standardized unit factor score for each of the four factors was calculated for each subject by standardizing (i.e. computing the Z-score for) the responses to each question, and then multiplying that standardized score by a positive one (i.e. the unit) for questions that loaded significantly (i.e. had a factor loading with p<<.0001) positively onto the factor, and a negative one (-1) for questions that significantly loaded negatively onto the factor. Each subject’s standardized unit factor score is the average of the standardized unit scores for all questions that loaded onto that factor.

5. Multivariate Analysis of Variance (Manova)

Because of the difference in age-group size, a multivariate analysis of variance was run using the General Linear Model function of SYSTAT®, in order to obtain an unbiased estimate of the effects. The model tested was:
Y = CONSTANT + AGE-GROUP + FACTOR + FACTOR*AGE-GROUP

in which AGE-GROUP was between-subjects and FACTOR (the subject's four standardized unit factor scores) was within subjects.

There was a significant between-subjects effect of AGE-GROUP (F=6.109, p<<.001), indicating that the factor scores were not the same for the different age groups, and an significant multivariate interaction of FACTOR*AGE-GROUP (Wilks' lambda F=2.087, p=.008), indicating that the patterns of the factor scores were different for the six age groups.

Univariate tests of each of the four factors indicated that there were significant age-group differences on the casual use factor (univariate F=11.614, p<<.001) and on the tendency to speak Mohawk factor (univariate F=4.126, p=.002). There were no age-group differences on either the cultural identity factor or the public promotion factor.

6. Test For Reversal of the Trend in the Casual Use of Mohawk

The casual use factor scores were regressed on age for all respondents except the teenagers, and the resulting regression equation

\[ \text{USE}' = -1.134 + .025 \times \text{AGE} \]

was used to predict the mean casual use factor score for the teenagers from their mean age (17.57 years). If the same trend towards declining casual use of Mohawk was continuing with the teenagers then this predicted mean should have been close to the actual mean. In fact, the teenagers' actual mean score (-.159) was significantly (t=2.23, \(p<<.05\)) greater than the predicted mean score (-.694), indicating a reversal in the declining trend in the use of Mohawk.

7. Post-Hoc Tests on 16-19 Year-olds' Tendency to Speak Mohawk Factor

Given the upsurge in the ability of those under 20 to speak Mohawk (see Figure 1) and in the casual use of Mohawk (see Figure 2) of those 16-19, it surprising not to find a parallel in the tendency to speak Mohawk (see Figure 3). Instead, there is only a light rise from those in their 20s to those 16-19. A post-hoc examination of the individual questions that loaded onto the tendency to speak Mohawk factor revealed that the teenagers were more likely than those in their 20s to speak Mohawk at work (t=3.86, \(p<<.05\)), with friends (t=3.60, \(p<<.05\)), and on the phone (t=4.37, \(p<<.05\)). They were much less likely to speak Mohawk with their children (t=4.91, \(p<<.05\))-probably because they don't have any-and when greeting people (t=2.73, \(p<<.05\))-probably because this might be perceived as rude, as noted in the discussion section.
## Appendix 2: Factor Loadings and Data Summary

<table>
<thead>
<tr>
<th>Item</th>
<th>Question</th>
<th>Tendency</th>
<th>Cultural</th>
<th>Public</th>
<th>% of variance explained</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Use to speak</td>
<td>Identity</td>
<td>Promote</td>
<td></td>
</tr>
<tr>
<td>Q1</td>
<td>Number of people in household</td>
<td>17.02</td>
<td>4.61</td>
<td>7.64</td>
<td>4.36</td>
</tr>
<tr>
<td>Q2</td>
<td>Number in family who speak only M.?</td>
<td>-3.71***</td>
<td>-0.07</td>
<td>-0.32</td>
<td>-0.32</td>
</tr>
<tr>
<td>Q3</td>
<td>Number in family who speak M. and English/French.</td>
<td>-3.32***</td>
<td>-0.06</td>
<td>-0.31</td>
<td>-0.31</td>
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<tr>
<td>Q4</td>
<td>Number in family who speak other native language.</td>
<td>-4.75***</td>
<td>-0.07</td>
<td>-0.34</td>
<td>-0.34</td>
</tr>
<tr>
<td>Q5</td>
<td>Age</td>
<td>-4.75***</td>
<td>-0.07</td>
<td>-0.34</td>
<td>-0.34</td>
</tr>
</tbody>
</table>

### Important Items

- **B1**: M. is important for cultural identity.  
  -5.41*** -3.22 mean = 3.72

- **B2**: M. is important for spiritual expression.  
  -4.07*** -3.56 mean = 3.56

- **B3**: M. is important for socializing.  
  -3.32*** -3.22 mean = 3.22

- **B4**: M. is important for everyday business.  
  -5.33*** -3.29 mean = 3.29

- **B5**: M. is important for community decision-making.  
  -5.55*** -3.56 mean = 3.56

- **B6**: M. is important for strengthening our identity.  
  -6.55*** -3.56 mean = 3.56

- **B7**: Are schools solely responsible for survival of M.?  
  -3.32*** -3.22 mean = 3.22

### Least Important Items

- **B10**: Does M. help you understand customs?  
  -4.75*** -3.22 mean = 3.22

- **B11**: Does M. help you understand principles of good living?  
  -5.33*** -3.29 mean = 3.29

- **B12**: Does M. help you understand principles of peace?  
  -6.33*** -3.29 mean = 3.29

- **B13**: Cultural events organized to help you speak M.?  
  -5.33*** -3.29 mean = 3.29

- **B14**: Community events organized to help you speak M.?  
  -5.33*** -3.29 mean = 3.29

- **B15**: Use of M. helps understand environment.  
  -5.33*** -3.29 mean = 3.29

- **B16**: Important to you to speak M.?  
  -5.33*** -3.29 mean = 3.29

- **B17**: Should community services be offered in M.?  
  -5.33*** -3.29 mean = 3.29

- **B18**: Are you interested in learning to understand M.?  
  -5.33*** -3.29 mean = 3.29

- **B19**: Are you interested in learning to speak M.?  
  -5.33*** -3.29 mean = 3.29

- **B20**: Are you interested in learning to write M.?  
  -5.33*** -3.29 mean = 3.29

- **B21**: Have you had children in M. immersion?  
  -5.33*** -3.29 mean = 3.29

- **C1.1**: Do you speak M. at home?  
  -6.44*** -3.22 mean = 3.22

- **C1.2**: Do you speak M. at child-minding?  
  -5.55*** -3.22 mean = 3.22

- **C1.3**: Do you speak M. with friends?  
  -5.55*** -3.22 mean = 3.22

- **C1.4**: Do you speak M. at work?  
  -5.55*** -3.22 mean = 3.22

- **C1.5**: Do you speak M. when causing people?  
  -5.55*** -3.22 mean = 3.22

- **C1.6**: Do you speak M. at church?  
  -4.55*** -3.22 mean = 3.22

- **C1.7**: Do you speak M. at the Longhouse?  
  -4.55*** -3.22 mean = 3.22

- **C1.8**: Do you speak M. at the hospital?  
  -4.55*** -3.22 mean = 3.22

- **C1.9**: Do you speak M. on meetings with social events?  
  -4.55*** -3.22 mean = 3.22

- **C1.10**: Do you speak M. at work?  
  -4.55*** -3.22 mean = 3.22

- **C1.11**: Do you speak M. at recreation?  
  -4.55*** -3.22 mean = 3.22

- **C1.12**: Do you speak M. in recreational settings?  
  -4.55*** -3.22 mean = 3.22

- **C1.13**: Do you speak M. at club?  
  -4.55*** -3.22 mean = 3.22

- **C1.14**: Do you speak M. while shopping?  
  -4.55*** -3.22 mean = 3.22

Loadings less than p < .01 are omitted. *** p < .0001
## Appendix 2: Factor Loadings and Data Summary (continued)

<table>
<thead>
<tr>
<th>Item/Question</th>
<th>Casual</th>
<th>Tendency</th>
<th>Cultural</th>
<th>Public</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of variance explained</td>
<td>17.70%</td>
<td>4.10%</td>
<td>7.50%</td>
<td>4.30%</td>
</tr>
<tr>
<td><strong>Results</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C1.15 Do you speak M. at a restaurant?</td>
<td>18.02</td>
<td>4.81</td>
<td>7.68</td>
<td>4.36</td>
</tr>
<tr>
<td>C1.16 Do you speak M. on the phone?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C1.17 Do you speak M. always?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C1.18 Do you speak M. closer than?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C2.1 Do you hear M. at home?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C2.2 Do you hear M. in child-rearing?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C2.3 Do you hear M. at church?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C2.4 Do you hear M. at bingo?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C2.5 Do you hear M. when greeting people?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C2.6 Do you hear M. at the Longhouse?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C2.7 Do you hear M. at the Longhouse?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C2.8 Do you hear M. at hospital?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C2.9 Do you hear M. at home?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C2.10 Do you hear M. at work?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C2.11 Do you hear M. at recreation?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C2.12 Do you hear M. at educational settings?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C2.13 Do you hear M. at church?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C2.14 Do you hear M. at bingo?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C2.15 Do you hear M. at restaurant?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C2.16 Do you hear M. on the phone?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C2.17 Do you hear M. always?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C2.18 Do you hear M. elsewhere?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(1 = often, 3 = never)

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1.1 How often do you use M. at home?</td>
<td>58***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C1.2 How often do you use M. with a child?</td>
<td>49***</td>
<td>36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C1.3 How often do you use M. with friends?</td>
<td>77***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C1.4 How often do you use M. at bingo?</td>
<td>57***</td>
<td>36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C1.5 How often do you use M. at church?</td>
<td>68***</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>C1.6 How often do you use M. at the Longhouse?</td>
<td>72***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C1.7 How often do you use M. at the hospital?</td>
<td>54***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C1.8 How often do you use M. at the Longhouse?</td>
<td>81***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C1.9 How often do you use M. on meeting at social event?</td>
<td>82***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C1.10 How often do you use M. at work?</td>
<td>95***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C1.11 How often do you use M. at recreation?</td>
<td>62***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C1.12 How often do you use M. at education?</td>
<td>60***</td>
<td></td>
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</tr>
<tr>
<td>C1.13 How often do you use M. at church?</td>
<td>72***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C1.14 How often do you use M. at bingo?</td>
<td>77***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C1.15 How often do you use M. at restaurant?</td>
<td>75***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C1.16 How often do you use M. on the phone?</td>
<td>79***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C1.17 How often do you use M. always?</td>
<td>79***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C1.18 How often do you use M. elsewhere?</td>
<td>64***</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Loadings less than \( p < .01 \) are omitted. \(* * * p < .0001\)
### Appendix 2: Factor Loadings and Data Summary (continued)

<table>
<thead>
<tr>
<th>Question</th>
<th>Use</th>
<th>Identity</th>
<th>Promote</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would learning a word a day promote M. use?</td>
<td>.12</td>
<td>4.05</td>
<td>7.30%</td>
<td>4.36%</td>
</tr>
<tr>
<td>Would singing in M. promote M. use?</td>
<td>.43***</td>
<td>6.01</td>
<td>8.50%</td>
<td>4.40%</td>
</tr>
<tr>
<td>Would using M. name promote M. use?</td>
<td>.41***</td>
<td>6.00</td>
<td>7.30%</td>
<td>4.40%</td>
</tr>
<tr>
<td>Would radio in M. promote M. use?</td>
<td>.31</td>
<td>.30</td>
<td>5.70%</td>
<td></td>
</tr>
<tr>
<td>Would M. phone greetings promote M. use?</td>
<td>.26</td>
<td>.26</td>
<td>8.70%</td>
<td>.51***</td>
</tr>
<tr>
<td>Would legends on radio promote M. use?</td>
<td>.25</td>
<td>.52***</td>
<td>8.70%</td>
<td></td>
</tr>
<tr>
<td>Would better classifying M. speakers promote M. use?</td>
<td>.24</td>
<td>.26</td>
<td>8.70%</td>
<td>.51***</td>
</tr>
<tr>
<td>Would sign on door promote M. use?</td>
<td>.49***</td>
<td>7.00</td>
<td>8.30%</td>
<td></td>
</tr>
<tr>
<td>Would children's story-telling on radio promote M. use?</td>
<td>.56***</td>
<td>7.00</td>
<td>8.70%</td>
<td></td>
</tr>
<tr>
<td>Would a yearly radio on promote M. use?</td>
<td>.32</td>
<td>.56***</td>
<td>8.70%</td>
<td></td>
</tr>
<tr>
<td>Would a class for speaking promote M. use?</td>
<td>.30***</td>
<td>7.00</td>
<td>8.70%</td>
<td></td>
</tr>
<tr>
<td>Would a class for understanding promote M. use?</td>
<td>.67***</td>
<td>7.00</td>
<td>7.90%</td>
<td></td>
</tr>
<tr>
<td>Would a class for non-speakers promote M. use?</td>
<td>.66***</td>
<td>7.00</td>
<td>9.10%</td>
<td></td>
</tr>
<tr>
<td>Would use of M. expressions promote M. use?</td>
<td>.31</td>
<td>.29</td>
<td>8.30%</td>
<td>.51***</td>
</tr>
<tr>
<td>Would a language club promote M. use?</td>
<td>.37***</td>
<td>7.00</td>
<td>7.90%</td>
<td></td>
</tr>
<tr>
<td>Would a summer immersion camp promote M. use?</td>
<td>.42***</td>
<td>.43</td>
<td>6.50%</td>
<td>.51***</td>
</tr>
<tr>
<td>Would attending.on speaking M. promote M. use?</td>
<td>.66***</td>
<td>.66</td>
<td>8.90%</td>
<td></td>
</tr>
<tr>
<td>Would having a M. speaker at businesses promote M. use?</td>
<td>.51***</td>
<td>.51</td>
<td>.90%</td>
<td></td>
</tr>
<tr>
<td>Would using M. due promote M. use?</td>
<td>.61***</td>
<td>.31</td>
<td>9.10%</td>
<td></td>
</tr>
</tbody>
</table>

Loadings less than .01 are omitted.  ***p < .0001