

Maya Ravindranath Abtahian*, Naomi Nagy, Katharina Pabst and Vidhya Elango

Disruptions due to COVID-19: using mixed methods to identify factors influencing language maintenance and shift

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Abstract: Around the world, COVID-19 lockdowns have caused abrupt shifts in the amount of time spent at home versus out of the home for work, school, and recreation. As a result, many individuals have experienced a disruption in the frequency and type of their interactions. Given the importance of intergenerational transmission and intergenerational interaction for promoting language maintenance, and the importance of peer-to-peer interaction for promoting language shift, we ask how these abrupt changes necessitated by social distancing will affect language use and attitudes, specifically short- and long-term language maintenance or shift involving heritage languages. We examine principles of language maintenance and shift in the context of the COVID-19 lockdown for university students, people still involved in critical acts of identity creation. Here we describe a survey designed to learn how the lockdown is affecting young people’s language ecologies and attitudes. Using both quantitative and qualitative interpretive methods, we document the experiences of over 400 students, focusing on changes in their perceptions of their language use and the causes of these changes.

Keywords: COVID-era sociolinguistics; language maintenance; language shift; mixed methods; multilingualism

1 Description and motivation for the project

Like the other authors represented in this issue, we are sociolinguists who study language change and who pay attention to the relationship between short-term, synchronic variation and long-term, diachronic change. We know that what may appear to be relatively minor disruptions in communication patterns and networks can lead to long-term disruptions in language use patterns for individuals and communities, and that the social networks of speakers play a prominent role in the propagation of change as well as the maintenance of linguistic norms (Cheshire 1982; Labov 1973; Milroy and Milroy 1985). While sociolinguists are conducting long-range research projects about (what they think is) speakers’ vernacular, life happens. There are disruptions in people’s lives, things change, and a language variety that was once being used regularly no longer is. In this paper we illustrate a quickly deployable method to capture the effects of such disruptions that offers useful insights in participants’ own words and thus enhances the sociolinguists’ toolkit.

In early 2020, as the COVID-19 pandemic spread worldwide and it became clear that global lockdowns associated with the pandemic would substantively, if temporarily, reconfigure our social networks, we began to wonder what short- and long-term effects these reconfigurations would have for the language ecologies of multilingual individuals, and in particular for multilingual students, many of whom were experiencing abrupt shifts in the amount of time spent at home versus out of home for work, school, and “extracurriculars”, resulting in a radical shift in the frequency and type of social and linguistic interactions. With universities largely closed to in-person classes and activities, many students were and are experiencing fewer peer-to-peer interactions with coworkers, fellow students, and friends. Simultaneously, they may be experiencing more

*Corresponding author: Maya Ravindranath Abtahian, Department of Linguistics, University of Rochester, Rochester, USA,

E-mail: maya.r.abtahian@rochester.edu. <https://orcid.org/0000-0002-3084-0778>

Naomi Nagy, Katharina Pabst and Vidhya Elango, Department of Linguistics, University of Toronto, Toronto, Canada.

<https://orcid.org/0000-0003-1952-9329> (K. Pabst)

intergenerational family interactions, or more online interactions with distantly located friends and family. How does this global event result in a change in the language ecologies of individual students, many of whom have been physically displaced and all of whom have experienced disruption in their daily lives? Our specific research questions are:

- (1) How do disruptions related to the COVID-19 lockdown disrupt multilingual students' language ecologies?
- (2) Have students changed the frequency and use of the languages in their repertoire?
- (3) Have the contexts in which students use particular languages changed?
- (4) How do disruptions in the makeup of social networks – particularly the short-term loss of weak ties – affect language maintenance in the long-term?

Much of the previous work on language shift and maintenance in the context of individuals' lives has focused on disruptive events like cross-national migration, starting school, or moving from one community to another. In this work we expand on this literature by investigating the disruptions of a global pandemic and its effects on language use. Social networks are a useful theoretical concept for linking micro-level interactions to macro-level patterns (Granovetter 1973: 1360) and for considering the relationship between life disruptions and language practices and use. Li Wei (1994), for instance, demonstrates that language choice in multilingual communities is closely correlated with types of social network. In a study of heritage language maintenance among Chinese-English bilinguals in England, he found that membership in a particular church community – a dense network of speakers of multiple generations – led to more maintenance of Chinese among third-generation speakers. Ana Celia Zentella's longitudinal findings from work in a bilingual Spanish-English community similarly demonstrate the corollary relationship between intergenerational ties and language maintenance (Zentella 1997). In her work, the dense, multiplex, intergenerational community of East Harlem largely promoted the maintenance of Spanish-English bilingualism. When social and political changes broke up these dense networks, the bilingual competence of its young members eroded.

Now, consider the fact that the goal of social distancing and lockdowns during the pandemic is to eliminate contact between weak ties that can spread the disease. The success of this method for inhibiting the spread of disease may also inhibit the diffusion of social and linguistic changes, as weak ties are typically conduits for the initial diffusion of an innovation, which then progresses through dense, multiplex networks (Valente 1995). In the case of language maintenance and shift, we expect that the loss of weak ties and the strengthening of dense intergenerational networks may promote the maintenance of "home languages" in the short-term, and potentially in the longer-term, particularly if they are accompanied by affective shifts in individuals' attitudes toward their home languages.

More broadly, then, we are also interested in learning about how people talk about the loss of weak ties and domains of use for particular languages and shifts in their own linguistic landscapes. How does this relate to talk about relationships with family and with others? How do they talk about their choices in terms of the situations in which they use different languages? How does it relate to how they see themselves?

We introduce here a survey created to investigate the types of life disruptions that students have experienced and the types of short-term language disruptions they have encountered. This online survey efficiently explores these questions with more students than could have been reached through interviews, especially given pandemic-related restrictions on face-to-face interviews. We also present our initial analysis of one open-ended survey question that asks participants to reflect on how their language practices will be affected in the long run – that is, what do individuals perceive as the relationship between these (hopefully) short-term disruptions in social networks and long-term changes in language practices?

As researchers adapt their data collection methods during the pandemic, they may not be able to foresee all the factors that affect the communities they work with or how these factors are experienced by the participants. A survey-based approach with some open-ended questions provides researchers with a quick, inexpensive way to assess how the people they work with have been affected. At the same time, our analytical approach can easily be extended to different types of data, such as sociolinguistic interviews, to draw out further details.

2 Survey design and distribution of responses

To obtain data to address the questions above, we constructed an online survey and analyzed the responses both quantitatively and qualitatively. The survey was built in Qualtrics (version November 2020, copyright 2020 Qualtrics). Participants were recruited by students and research assistants studying at the University of Rochester (UR) in New York, USA, and the University of Toronto (UofT) in Ontario, Canada. Multilingual students, undergraduate and graduate, were encouraged to respond. The data reported in this paper was collected between June and December 2020. The survey was begun by 488 people, and 392 students completed more than 25% of the questions *and* indicated speaking more than one language. These 392 were retained in the analysis reported here. Their degree of multilingualism (how many languages they speak) is reported in Figure 1 (by school) and Figure 2 (by school and level of study, either undergraduate or graduate).

Figure 2 shows that 179 respondents are bilingual, 135 are trilingual, and 72 report using four or more languages. The majority are from UR, which reports having students from 136 countries (of which 20 have English as an official language) and UofT, which reports having students from 159 countries (<https://www.utoronto.ca/about-u-of-t/quick-facts>). Table 1 lists the languages that the 392 student respondents reported using. Neither university was able to provide a list of the languages spoken by their students, but we expect that the languages listed in Table 1 are reasonably representative of the populations of the two schools which the majority of our participants attend (though we make no claims about the representativity of the sample numerically).

The first seven questions on the survey inquired about where each student was enrolled, what degree they were pursuing, and whether their work or living situation had changed, comparing before and during the pandemic. Subsequent questions asked students to “think back to your university days *before* the COVID-19 pandemic” and respond, via multiple-choice pull-down menus, to the following:

- (1) What languages did you use when you were talking/texting with others? Consider online, phone, and face-to-face conversations, written and spoken.
- (2) Which of those languages did you use EVERY DAY?
- (3) Which of those languages did you use ABOUT ONCE A WEEK?
- (4) Which of those languages did you use but LESS THAN ONCE A WEEK?
- (5) Who did you use each of your languages with? Consider online, phone, and face-to-face conversations, written and spoken.

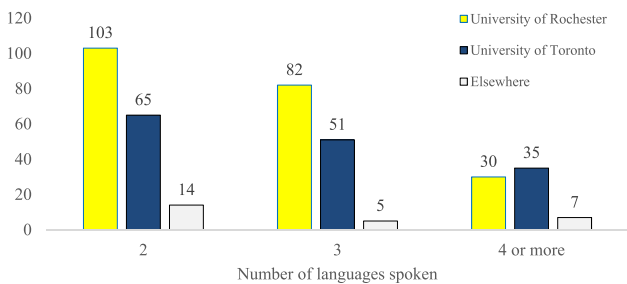


Figure 1: The total number of participants speaking two, three, or four or more languages at each university ($n = 392$).

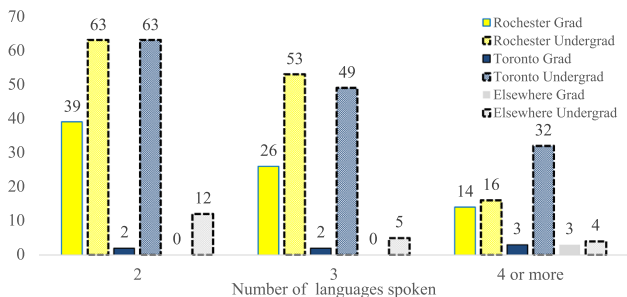


Figure 2: The number of participants, by number of languages spoken, school, and level of study ($n = 386$, excluding “Other” types of degrees).

Table 1: Languages that students reported using daily before and during the pandemic, together with the number of students who used each language on a daily basis.

Languages	Number of students who used this language daily before the pandemic	Number of students who used this language daily during the pandemic
English	319	229
Mandarin	110	97
Spanish	25	23
Cantonese	19	18
Korean	13	10
Arabic	9	7
Hindi	9	7
French	6	6
Turkish	5	4
Persian	4	3
Bengali	3	5
Shanghainese	2	2
Azerbaijani	1	1
Nepali	1	0
Tamil	0	1
Taiwanese	1	0
Japanese	1	1
Jamaican Creole	1	0
Another language or dialect ^a	78	72
Total responses	607	486

^aThe only written-in languages reported by more than 10 respondents are Russian and Tagalog/Filipino.

- a. Rank the languages by how often you used to use them WITH YOUR FRIENDS.
- b. Next, rank the languages by how often you used to use them WITH YOUR FAMILY.
- c. Now, rank the languages by how often you used to use them WITH PEOPLE AT WORK.

The same set of questions was then repeated, with this prompt: “Now, let’s talk about your language usage *during* the COVID-19 pandemic.”

For the above questions, pull-down menus listed official languages from the countries that send the most university students to Rochester and Toronto, according to information provided by the university administrations. As that approach misses many languages that students speak, especially languages with no official status or label, we encouraged write-in responses. English, Mandarin, and “another language or dialect” (any not provided in the pull-down menus) remain the top three selections. Table 1 shows that fewer students reported using almost *every* language¹ during the pandemic than before.

Figures 3 and 4 speak to disruptions in students’ lives caused by the pandemic, and to the linguistic outcomes of changes to students’ living and work situations. Overall, students experienced a large-scale shift from living on campus before the pandemic to living at home with a partner or family during the pandemic (Figure 3).

Figure 4 shows the linguistic outcomes of these changes in living situation on the left and the outcomes of changes in work situation on the right. There are slightly (but not significantly) more respondents who noted a language disruption among those whose living situation changed than among those whose did not. Additionally, significantly more respondents ($p < 0.05$, Fisher’s exact test) noted a language disruption if their work

¹ Two minor exceptions are Bengali and Tamil, whose reported use slightly increased during the pandemic. Numbers for French, Shanghainese, Azerbaijani, and Japanese were stable.

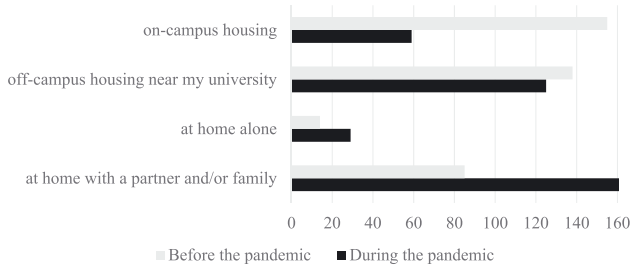


Figure 3: Disruption in students' living situations due to the pandemic (*n* = 392).

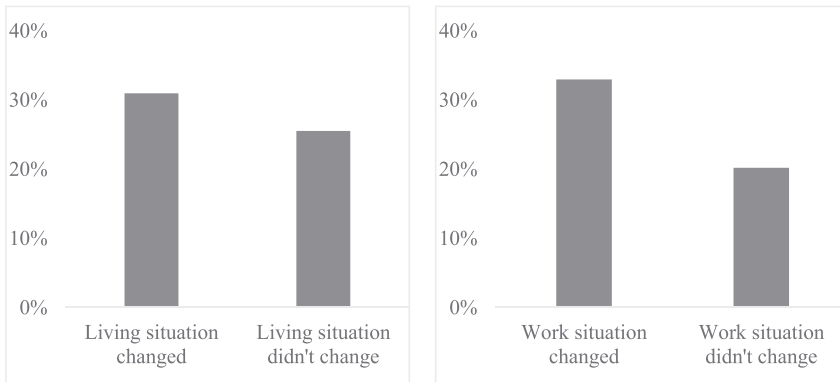


Figure 4: Percentages of students experiencing language disruption (i.e., changes in reported language use) according to whether they reported (left) a change in their living situation (*n* = 296) and (right) a change in their work situation (*n* = 289).

situation changed than if it did not.² As we will see below, access to particular interlocutors as well as mode of interaction (phone vs. online vs. face-to-face) also affected respondents' language choices.

The survey then asked two open-ended questions. The first was:

- (6) Next, think to the future, after the COVID-19 pandemic ends. How do you think your language practices will change? Consider online, phone, and face-to-face conversations.

Next, we invited participants to audio-record additional responses, through this prompt:

- (7) People are interested to know about each others' experiences. Please consider recording your thoughts about your own experience here. We would like to know things like: What have been some of your biggest challenges, as a bi- or multilingual speaker during the COVID-19 pandemic? Have you found any unexpected advantages to being a bi- or multilingual speaker during the COVID-19 pandemic? Have you experienced discrimination or different treatment that you think is related to racism/stereotyping brought out by the COVID-19 pandemic? Do you think that changes in your living situation have changed what languages you use? Are you talking with some people more or less than you were before?

Participants were asked to record a response on their phone or computer and upload it to the survey website. Finally, we asked participants to indicate whether they wished to share their recordings, participate further in the project, or learn about the outcomes. We will share this paper with those saying yes to the latter.

Distributions of responses to the quantitative questions were determined; responses to question (6) were coded qualitatively, as described in Section 3; and responses to (7) were automatically transcribed via Otter (<https://otter.ai>). We have not yet received enough of these recordings to analyze or present them, but we intend to share them, with appropriate permission, in a public archive, as proposed also by Carmichael et al. and Sneller et al. in other papers in this collection.

² Because of missing responses, the number of students reported in these graphs is smaller than the number who completed (most of) the survey.

3 Methods: qualitative content analysis of one open-ended question

This paper documents the beginning of a longer-term study of language use among multilingual students as the pandemic progresses. As we anticipate longer-term effects, our aim was to capture the initial disruption of the first round of lockdowns. In our analysis here we focus on participants' responses to the question in (6), designed to elicit qualitative data to elucidate responses to the questions in (1)–(5). Previous work has shown that this kind of mixed methods approach is important in studies of multilingual speakers' language practices as their circumstances tend to be diverse, so grouping them into predefined categories – although important for generalizations – often abstracts away from the nuances of their experience (Włosowicz 2014). Multilingual students are not a monolithic group. Some were born and raised near their university, others moved there for their studies and are now far from family and friends. Students also vary in terms of language combination, proficiency, attitudes, and so on, all of which affect language choice (Włosowicz 2014). Our goal is to illustrate how a mixed methods approach can complement and enrich the kind of (variationist) work discussed in this issue, building on the growing tradition of using speakers' interview content to understand their linguistic behavior (see, for example, Carmichael 2017; Roberts 2016; Talmy 2010).

Our qualitative content analysis (Selvi 2020) began by establishing recurring patterns in the data. Then the research assistant for this project, Erin Toohey, coded each participant's response according to the coding frame we developed, allowing us to determine the relative frequency of different response types. While this process is generally completed by one analyst, bringing multiple perspectives to the data mitigates individual biases (Cornish et al. 2014). To ensure that the coding schema was applied consistently and captured nuances in the responses, we revised the themes and codes iteratively. The final coding frame is provided in Table 2, along with information about the distribution of responses (which we return to in Section 4). Percentages are rounded to the nearest whole number, and do not add up to 100% because some responses fit more than one theme or code and were therefore coded several times. Moreover, some students did not discuss changes in language choice or talked about languages other than English and their home language (for example, a language they were studying in university). Table 2 compares the distribution of the themes represented among those participants who discussed current changes ($n = 88$) and those who discussed long-term changes in their responses ($n = 197$).

Some responses focused on how participants' language practices had changed during lockdowns caused by COVID-19, while others predicted future behavior. As a consequence, we divide answers into three categories: focus on language use during lockdown, captured in the middle column of Table 2, with examples such as (8); focus on language use post-pandemic (i.e., the intended meaning of the question), captured in the rightmost column of Table 2, with an example given in (9); and ambiguous, as in (10).

- (8) I have started talking to my family more often during the pandemic in my native language. (UR graduate student)
- (9) My language practices will go back to the way it was before the pandemic. I will use English primarily with my friends, in class, at work. With my family, I'll use English and Portuguese, usually going back and forth during conversation. (UR undergraduate student)
- (10) Not changing at all. (UofT undergraduate student)

Comments that refer to both current and future changes, as in (11), were coded as both. More generally, comments were coded for more than one code or theme, if appropriate. To ensure consistency in coding, we reviewed each response and systematically checked them for whether they fit any theme. Comments that did not are not included in the tallies in Table 2.

- (11) Since I'm mostly spending time with my family, I'm speaking Bengali more frequently than English. I only use English when I speak to my friends online. After the pandemic, I will most likely speak more English than Bengali as I would spend more time outside. (UofT undergraduate)

Table 2: Content analysis **themes** and *codes* found in the comments relating to language use during the pandemic and predicted language use after the pandemic, together with the percentage of responses that mention each theme or code compared with the total number of responses that discuss language use during the pandemic ($n = 88$) or after the pandemic ($n = 197$).

Themes and codes	Percentage of responses relating to language use during pandemic that include this theme/code ($n = 88$)	Percentage of responses relating to predicted language use after pandemic that include this theme/code ($n = 197$)
No change	5	18
Theme 1: There has been/will be a change in my English use	20	21
Code 1.1: Use of English more often	7	20
Code 1.2: Use of English less often	14	1
Theme 2: There has been/will be a change in my home language use	24	19
Code 2.1: Use of home language more often	17	8
Code 2.2: Use of home language less often	7	11
Theme 3: My language choice has changed/will change due to a change in the use of certain media	1	6
Code 3.1: Change due to talking more	0	0
Code 3.2: Change due to texting or writing online more	0	1
Code 3.3: Change due to phone calls	0	2
Code 3.4: Change due to more face-to-face conversation	0	4
Code 3.5: Change due to less face-to-face conversation	1	0
Theme 4: My language practices have changed/will change due to a change in living situation	11	7
Code 4.1: Increase in the use of English	0	4
Code 4.2: Decrease in the use of English	3	1
Code 4.3: Increase in the use of home language	7	1
Code 4.4: Decrease in the use of home language	1	2
Theme 5: My language choice is dependent on access to particular interlocutors	19	13
Code 5.1: Change in rate of use of a particular language due to increased access	8	8
Code 5.2: Change in rate of use of a particular language due to decreased access	11	6
Theme 6: I experience an emotional response regarding my language use	3	3
Code 6.1: Anxiety about English	1	0
Code 6.2: Anxiety about home language	1	1
Code 6.3: Anxiety about language use	0	1
Code 6.4: Positivity about English	1	0
Code 6.5: Positivity about home language	0	1
Code 6.6: Positivity about language use	0	0

The bold rows are the themes. The non-bold rows below each theme (and indented below them) are the codes related to that theme.

We illustrate our approach using three responses (12)–(14). Response (12) relates to three themes: 1, 2, and 6. Specifically, the student anticipates using English more often after the pandemic is over (1.1), presumably at the expense of their home language, Marathi (2.2). At the same time, they make it clear that they have positive feelings toward their home language and will be sad to use it less often once things change (6.5). Response (13) also exemplifies Theme 1. This participant reports a decrease in the use of English (1.2) due to less contact with English-speaking friends (5.2). The participant mentions regular phone calls with friends in Nepal. As these calls are not presented as a new development, this comment was not coded for Theme 3. Response (14) mentions the importance of media choices. Again, phone conversations in the home language are mentioned, but portrayed as something that the participant has always done. The student mentions that they anticipate a change in their rate of English (1.1) due to increased in-person interactions (3.4).

- (12) I might start speaking English full-time again! And I will miss my mother tongue, Marathi! I feel like I'm a different person when I speak Marathi. (UofT undergraduate)
- (13) I think I might be a little out of touch with English because having stayed on campus this whole summer with no jobs or internships has immensely diminished my contact with my friends. I do talk to some of my friends on phone but they are mostly my old friends back from Nepal and I mostly use Nepali to speak with them. It feels like ages since I have last used English fully to communicate my feelings and emotions. (UR undergraduate)
- (14) There will definitely be more face-to-face conversation in English, but other than that I don't expect my practices to change. I'll keep having phone conversations in Russian with my family and some of my friends, and will keep having online and phone conversations with my English-speaking friends who are in different countries right now. The only difference will be that I'll have more face-to-face conversations in English with my English-speaking colleagues and in grocery stores/cafes/etc. (UR graduate)

4 Results

The responses regarding the participants' practices during the pandemic illustrate that many students have increased the use of their home language. Of the responses, 24% mention a change in the use of home languages, with 17% reporting an increase in the use of the home language. These increases in home language use are concomitant with a decrease in the use of English: 20% of the responses mention a change in the use of English, with 14% reporting a decrease.

Of the 197 comments that mention long-term effects, 19% predict a change in home language use, although the predictions are split between an increase or a decrease in home language use. Fifty-eight percent of those predict that it will decrease once the pandemic is over, with many comments such as (15) and (16) suggesting a return to the pre-pandemic status quo:

- (15) I will go back to using english as my main language for communication (UR undergraduate)
- (16) I think it will return to my language practices before covid 19. (UofT undergraduate)

Twenty-one percent of the 197 comments about long-term effects predict a change in English use once the pandemic is over (in this case, almost all predict an increase). Thirty-six responses (18%) do not anticipate long-term changes in their language use.

Many students believe that their language choices will be influenced by differential access to particular interlocutors (13%), but there is no agreement about whether there will be increased or decreased access. In many cases, students' current living situation favors greater use of the home language, but they largely expect to return to greater use of English after the pandemic. Students also note that other communicative practices have changed. Four report feeling isolated now and anticipate having more contact after the pandemic. Here are two examples of reported changes in communicative practices (media choice):

- (17) I am talking to less people and interacting less, so I have limited interactions with people who speak different languages (the ones I learned outside my family). (UR undergraduate)

- (18) I think that because of the shift to more socializing and communicating online, I'll be speaking more English and less Spanish in general because I won't have as much time to spend talking to my Spanish speaking friends. And while I'll be speaking Spanish and Portuguese at home, my language used at home is relatively very broken. (UR undergraduate)

Fourteen responses (7%) foresee that changes in living situation will affect them; half of these anticipate an increase in the use of English. Changes in the manner of interaction (face-to-face vs. online) also play a role here: 6% anticipate that such changes will influence their language choice post-pandemic.

In sum, different participants anticipate quite different long-term outcomes. Given the diversity of respondents, this is not unexpected. Many speakers report access to interlocutors as a key factor in determining their language choice. Changes in living situation and the use of different media (especially the ability to stay in touch remotely) also play a role. As the qualitative coding of the responses in (12)–(14) shows, these factors are often interrelated, with students reporting changes in access to particular interlocutors because of changes in the use of certain media.

5 Ethical considerations for online surveys

Several ethical considerations have arisen during this project. With respect to survey methods, we found it important to include open-ended questions, rather than only including forced-choice questions that limit responses to types expected by the researchers. There is some trade-off: the analysis of these questions, particularly reiteratively selecting representative codes and themes, is time-consuming for the researchers. However, it allows us to ensure that participants' views are well represented.

The resulting responses raise ethical considerations for studies of language shift, specifically responses related to Theme 6. As (19) and (20) show, the pandemic has taken an emotional toll on students. Response (20) discusses experiences with racism.

- (19) Very bad. I had to come home because of the pandemic and basically no one speaks English here. I am glad that I made friends when I was in the U.S. so I can kind of practice with them. But not be able to actually speak it every day it is hard. I am pretty sure that my ascent is going to be bad, and I already started forgetting some words. (UR undergraduate student)
- (20) As a native Korean speaker, I used to mostly use Korean during a conversation with my Korean friends, but after reading so many articles about racist hate crimes that happened during the pandemic, my friends and I started to talk to each other with English when we're outside. I don't know if I'm just paranoid but the racist and hostile incidents that happened to me and my friends kinda traumatized me and I realized that I have been consciously reducing the usage of non-English language especially when I'm outside. I feel like even in the future, after the pandemic dies down, I might still use English more when I'm outside so at least no one'll yell "Learn English or go back to your Ching Chong virus home" or "shut up with your whiny language" at me in the public. :((UR undergraduate student)

As the survey is online and anonymous (except for participants who offered contact details for follow-up or debriefing), we did not have opportunities to connect with participants who expressed anxiety or negative feelings. While this was not frequent (only six comments mentioned negative emotional responses), these responses to an online survey serve to highlight the fact that questions that researchers may perceive as straightforward, such as how participants' language use has changed, can be emotionally loaded for respondents. Especially in cases where (immediate) follow-up is not possible, it may be important to acknowledge this possibility to participants.

There were additional ethical considerations around compensating participants, which we did not do. We felt that inviting students, particularly international students who may have been feeling the isolation more than others, to communicate about their experiences during the pandemic was an opportunity rather than a burden. The survey provided a chance to give multilingual students a "voice" at a crucial time and was not

funded. Furthermore, the survey was short. It was estimated (by Qualtrics) to take only 10 min. For all of these reasons, we did not offer compensation. Perhaps as a result, many participants (over 400) answered the “quick” forced-choice parts of the survey but only 12 contributed audio-recordings. However, 70% indicated that they might be willing to do so in the future and 72% expressed interest in our findings. For future work we will consider whether the benefits to the participants of having their voices documented through a brief and relatively low-risk survey outweighs the fact that compensation might increase the participation rate.

6 Conclusion

We framed our research questions around the notion that the inhibition of weak tie interactions to curb the spread of COVID-19 and the consequent strengthening of dense intergenerational networks is likely to have short-term effects and perhaps long-term effects for the maintenance of home languages for multilingual students. Tellingly, our participants report that the pandemic lockdowns have led to more interaction with interlocutors in their dense networks and fewer with weak tie interlocutors. Participants perceive the importance of this shift for their current language practices as well as their future language use.

Follow-up with participants, via additional surveys, is anticipated to see how expectations match future practices. It remains to be seen whether these predictions about language use will be borne out, or whether short-term increases in home language use will in fact lead to increased heritage language maintenance in the future when “normal” life resumes (We expect that permanent changes for international students who return to their home country after finishing their studies are less likely). We are also exploring ways to address the ethical considerations that our survey methodology raised and using our findings to benefit the communities we work with (Wolfram et al. 2008); this may take the form of outreach talks at our universities to raise awareness for the challenges faced by multilingual students and how these might be addressed.

We are confident that the methodology introduced here, specifically the qualitative analysis of students’ responses, can also contribute to the analysis of more traditional interview data gathered during the pandemic (e.g., Nesbitt and Watts 2022) or self-recordings (see Hall-Lew et al. this issue; Sneller et al. this issue), and look forward to future work along those lines.

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