

**CODE-SWITCHING, ATTITUDES, AND IDENTITY
AMONG CANTONESE-ENGLISH BILINGUALS**

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ABSTRACT

Code-switching is the spontaneous switching from one language to another within a single speech event (Appel & Muysken, 1987). It is often performed by bilinguals who have mastered a communicative competence in their two languages; it is a communicative as well as social strategy, using linguistic cues as a means to index social categories and group solidarity. Though historically perceived negatively, it has been documented as acceptable in certain contexts, particularly multilingual communities. It has also been suggested that bilinguals are able to recognize different structural patterns in code-switched speech and consequently, use such speech patterns to validate their ingroup membership and identity (Chen, 2008). The present research program seeks to be an interdisciplinary work in analyzing the relationship between code-switching attitudes and cultural identity, with the adoption of different methodologies and inclusion of both sociolinguistic and social psychological perspectives.

The first study examined the implications of code-switching on bilinguals' language attitudes and identities using a qualitative approach. Although code-switching was frequently used by bilinguals, it elicited mixed emotions for its users. It was a reminder of bilinguals' weak heritage language skills, but it was also used by others as a means to judge the bilinguals' linguistic abilities and group membership. Code-switched speech, thus, could undermine bilinguals' cultural identities, emphasizing the implication of language on social psychological dimensions. The second study investigated the relationship between cultural identity and code-switching attitudes directly by adopting the bidimensional model of acculturation to characterize bilingual biculturals (Berry, Kim, Power, Young, & Bujaki, 1989). Biculturals were differentiated according to their relative strength of cultural identification and as a result, bicultural subgroups were found to be significantly different in code-switching attitudes and

preferences, with strong biculturals most preferring code-switching in communication. The third study used the matched-guise technique to empirically assess the effects of different degrees of code-switching on evaluative reactions. There were significant effects of language and degree of code-switching on bilinguals' evaluative reactions, but differentially for status, solidarity, and perceptions of Canadian and Chinese identity. Bilinguals were cognizant of different code-switching patterns and their subsequent speaker evaluations highlighted that structural linguistic differences had social effects, implying a direct association between linguistic structures and social perception. Altogether, the present research program offers an integration of sociolinguistic and social psychological perspectives and elucidates the complex relationship between code-switching attitudes and cultural identity.

DEDICATION

To my parents, Alex and Yolia, for your unwavering support, constant love, and frequent visits to Ottawa—for simply being there for me always.

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TABLE OF CONTENTS

ABSTRACT	ii
DEDICATION	iv
ACKNOWLEDGEMENTS	v
TABLE OF CONTENTS	vi
LIST OF TABLES	ix
LIST OF FIGURES	x
General Introduction	1
Attitudes, Language, and Social Psychology	1
An Introduction to Code-switching	4
Attitudes towards Code-switching	7
Identity	13
The Present Research Program	15
Study 1	
“ <i>You’re a Juksing</i> ”:	
Examining Cantonese-English Code-Switching as an Index of Identity	17
Introduction	19
Statement of the Problem	19
Implications of Code-switching	20
Toronto: A Unique Multilingual Context	22
The Present Study	23
Method	23
Participants	23
Procedure	24
Analysis	26
Results	28
Theme 1: Favourable Attitudes Towards Code-switching	29
Theme 2: Code-switching Reflective of Language Proficiency	31
Theme 3: Code-switching as Cultural Identity Marker	33
Discussion	35
References	42

Study 2	
Cultural Identification and Attitudes towards Code-switching:	
A Bidimensional Framework	46
Introduction	49
Code-switching	50
Attitudes	51
A Framework for Cultural Identity	55
The Present Study	58
Method	59
Participants	59
Materials	60
Procedure	62
Results	65
Background	65
Descriptives	65
Code-switching	66
Multicultural Attitudes	68
Group Comparisons	68
Discussion	74
Conclusion	79
References	81
Study 3	
Evaluational Reactions to Degrees of Code-switching	87
Introduction	89
Social Motivation for Code-switching	90
Degrees of Code-switching: Implications of Structural Differences	91
Language Attitudes and Evaluations: The Social Psychology of Language	94
The Present Study	97
Method	98
Participants	98
Design	100
Materials	101
Procedure	104
Results	104
Order Effects	104
Covariate	105
Effects of Language, Code-switching Level, and Speaker Identity	105
Discussion	111
References	117

General Discussion	122
The Role of Code-switching	122
The Relationship between Code-switching and Identity	125
The Impact of Code-switching Variations	127
Limitations and Future Prospects.....	131
Conclusion.....	133
References.....	135
Appendices.....	142
Appendix A Study 1: Informed Consent Form	142
Appendix B Study 1: Interview Guide.....	143
Appendix C Study 2: Demographics	149
Appendix D Study 2: Vancouver Index of Acculturation.....	156
Appendix E Study 2: Code-switching Attitudes.....	157
Appendix F Study 2: Code-switching Questionnaire.....	158
Appendix G Study 2: Miville-Guzman Universality-Diversity Scale – Short Form	159
Appendix H Study 2: Informed Consent Form	160
Appendix I Study 2: Debriefing Form.....	161
Appendix J Study 3: Study Design	162
Appendix K Study 3: Speaker Identity Conditions.....	163
Appendix L Study 3: Demographics	167
Appendix M Study 3: Speech Passages.....	174
Appendix N Study 3: Randomized Ordering	176
Appendix O Study 3: Speaker Ratings.....	177
Appendix P Study 3: Informed Consent Form	179
Appendix Q Study 3: Debriefing Form.....	181

LIST OF TABLES

Table 1. Mean Scores (and Standard Deviations) for Cantonese and English Proficiency on a Scale of 0–100 (No Proficiency to Native-like Proficiency)	25
Table 2. Major Themes and Sub-categories	30
Table 3. Rotated Factor Matrix from Principal Components Analysis with Oblimin Rotation of 14 Code-switching Questions.....	63
Table 4. Mean Scores (and Standard Deviations) for Cantonese and English Proficiency on a Scale of 0–100 (No Proficiency to Native-like Proficiency).	64
Table 5. Mean Scores and Spearman’s rho Correlation Matrix for Code-switching Factors and Attitudes	67
Table 6. Mean Scores (and Standard Deviations) of Canadian and Chinese Identification by Group	70
Table 7. Mean Scores (and Standard Deviations) for Cantonese and English Proficiency on a Scale of 0–100 (No Proficiency to Native-like Proficiency)	99

LIST OF FIGURES

Figure 1. Mean Code-switching Preference Scores by Canadian and Chinese Identification	73
Figure 2. Status and Solidarity Ratings as a function of Base Language and Code-switching Level	107
Figure 3. Canadian and Chinese Identities as a function of Base Language and Code-switching Level	109
Figure 4. Canadian Identity as a function of Base Language, Code switching level, and Speaker Identity	110

General Introduction

Borne out of language contact research, code-switching is defined as the spontaneous switching from one language to another or mixing elements from two languages within a single speech event (Appel & Muysken, 1987). It has traditionally been rejected as an acceptable mode of communication even though this may not be the case when norms and cultures place value on code-switching as a personal and social asset. In the present research program, code-switching is considered as a form of language variation with its own structural characteristics and specific social value, dependent on the sociolinguistic community in which it is used. Moreover, as a unique language variety, code-switched speech is linked to attitudes with individuals responding to it cognitively, affectively, and behaviourally. Within social psychology and sociolinguistics, it has, however, yet to be determined empirically whether attitudes towards code-switching are associated with individual variables, such as cultural identity and strength of cultural affiliation. The ubiquity of the phenomenon and its impact on intra-group and inter-group communication justifies a more intensive and systematic examination, especially in multilingual contexts, such as Canada. In the spirit of an interdisciplinary rapprochement between social psychology and sociolinguistics, the present research program, therefore, delves into attitudinal reactions to code-switching, as they relate to social identity.

Attitudes, Language, and Social Psychology

Attitudes are among the most widely studied topics in social psychology (Allport, 1935). Their importance and popularity has endured since the birth of the research area in the early 20th century when social psychologists sought to pinpoint and measure this basic social phenomenon. Allport (1935) offered a definition which has proven to prevail over all others; he postulated attitudes as “a mental and neural state of readiness, organized through experience, exerting a

directive or dynamic influence upon the individual's response to all objects and situations with which it is related" (p. 810). From his definition, it easily followed that the study of attitudes has remained a cornerstone of contemporary social psychology as attitudes are essentially "predispositions to act favourably or unfavourably" (Banaji & Heiphetz, 2010. p. 350). They have such a comprehensive and pervasive influence because, at its core, are preferences, including their dynamic nature and their susceptibility to individual experience; they are the foundation of related social constructs such as person perception and social relations because they are "elastic enough to apply either to the dispositions of single individuals or to broad patterns of culture" (Allport, 1935, p. 798).

Within the vast research field and abundant literature on attitudes, it can be argued that it is the discrete domain of language attitudes, which truly captures the essence of social psychology (Clément & Laplante, 1983). It is language, which permeates every dimension of one's social world. For example, it is often in exchanges and interactions that individuals first form thoughts, feelings, and impressions of others, leading ultimately to their perceptions and preferences. Though largely ignored in mainstream social psychology, language is a social activity and in order to appropriately understand and interpret this activity, there needs to be a consideration of its social psychological bases (Holtgraves, 2014; Moscovici, 1967). Language attitudes, however, truly exemplify the nature of social psychology because it appropriately highlights and brings attention to the social context as integral in explaining and understanding individual behaviour, highlighting the significance of the social milieu in which attitudes take place. The study of language attitudes is the study of individuals' evaluative reactions to and preferences for different language varieties. Language varieties may come in many guises, such as languages, dialects, regional accents, or non-standard pronunciation. Consistent with the

components of attitudes in general, individuals first have beliefs and opinions about these varieties, they then have feelings towards them, and finally, they act accordingly. They are a fundamental aspect of an individual's identity; they are overt linguistic characteristics of the individual, reflective of their social being (Holtgraves, 2014).

In the present discussion of language varieties, it is fitting to start with the discipline of sociolinguistics, as it is included as the core of its definition. Fishman (1970) defined sociolinguistics as “the study of the characteristics of language varieties, the characteristics of their functions, and the characteristics of their speakers as these three constantly interact, change, and change one another within a speech community” (p. 3). It has for many years explored and dissected the social qualities related to language varieties and approximately during the period of 1980s and 1990s, the phenomenon of code-switching began to soar as a topic of study in linguistics, with its productivity in sociolinguistics having long-lasting impact (Appel & Muysken, 1987; Auer, 1984; Gumperz, 1982; Milroy & Muysken, 1995; Myers-Scotton, 1993; Poplack, 1980; Romaine, 1995). Specifically, studies in sociolinguistics and applied linguistics were able to offer an alternative yet complementary view to studying attitudes towards code-switching and its social consequences. For example, sociolinguistic studies have demonstrated that not only can code-switching be an ingroup practice within multilingual communities, but also symbolic of ingroup membership, topics which are relevant and pertinent to social psychologists as well.

Although theories of code-switching and sociolinguistic findings have been acknowledged in social psychology, linguistic variations have not necessarily been incorporated nor applied in research. Whereas there have been important contributions from social psychology to the study of language use and language behaviour, there have not yet been any

durable efforts in establishing a truly stable connection between the disciplines of social psychology and sociolinguistics (Giles, 1979). Giles (1979), therefore, suggested that in order to gain an understanding of language varieties, there needs to be a clear appreciation and comprehension of the *individual* and their “dynamics of attitudes, motivations, identities, and intentions, that is, social psychological phenomena” (p. 2). Additionally, Allport (1968) proposed that “[any] attempt to understand how the thoughts, feelings, and behaviours of individuals are influenced by the actual, imagined, or implied presence of others” (p. 3), highlighting the individual’s existence within and influence by social psychological processes and social context.

As a unique language variety, code-switching is first and foremost a linguistic construct. Individuals are likely to use their languages, separately or together, to present themselves, and code-switching is one way of how bilinguals present themselves (Gardner-Chloros, 2008 as cited in Dewaele & Li, 2014). By examining code-switching within the context of language attitudes in social psychology, it, however, allows for an interdisciplinary investigation that contributes to the expansion of both disciplines. As such, it is beneficial for any study of language varieties to be an interdisciplinary feat and warrant a true integration of the definitions, methods, and interpretation of both sociolinguistic and social psychological perspectives. Such linguistic practices are, therefore, an important avenue of research for linguists as well as psychologists.

An Introduction to Code-switching

Bilingualism has become an important area of study in recent decades (Grosjean, 1998) and many descriptions of bilinguals also take into account an individual’s fluency and proficiency in speech: “people who are able to speak two (or more) languages, to some level of proficiency” (Bialystok, 2001, p. 5). As a result, bilinguals’ use of their two languages can be

viewed along a continuum: they can be in a monolingual mode when they use one language exclusively or in a bilingual mode when they communicate in their two languages and have a high likelihood of mixing the two (Grosjean, 1982; Grosjean & Miller, 1994). The bilingual mode, therefore, enables a natural product of bilingual speech called code-switching and as a result, it is a common occurrence in daily life. Importantly, even though each language has its own value, their individual prestige may not extend to their combination. It cannot be presumed that the perceptions associated with individual languages within a speech community are maintained when those languages are in contact with each other. As such, when mixed together as in code-switching, it is unlikely that languages will hold the same status and garner the same evaluations.

Within language contact research, some terms can be used interchangeably to describe the code-switching process (Romaine, 1995). Some authors reserve “code-switching” for switching across sentence boundaries (intersentential switching) and use “code-mixing” for switching within sentence boundaries (intrasentential switching). Both types are motivated by social-psychological factors but code-mixing is additionally constrained by grammatical principles. For example, Auer (1999) regarded code-switching as “the juxtaposition of two codes (languages) [that] is perceived and interpreted as a locally meaningful event by participants” (p. 310), while similar processes such as language mixing and fused lects held different extralinguistic interpretations. This research and other attempts at defining code-switching (e.g., Auer, 1999; Muysken, 2000; Poplack, 1980) sought to identify the linguistic characteristics and grammatical constraints surrounding its presence in discourse, as the sociolinguistic approach traditionally focuses on explaining code-switching in connection with linguistic norms and rules dictating communication in specific situations (Hymes, 1972).

From a more social perspective, switching languages has previously been viewed as a sign of weakness, a lack of full language proficiency by the bilingual speaker, hindered by interference (Weinreich, 1953). Bilinguals who perform code-switching are often evaluated as having an insufficient knowledge or control in using their languages and code-switching is not only perceived negatively by the community, but also by its bilingual users. In addition, code-switching can be seen as a deviation from the standard norm and a result of bilinguals' lack of proficiency in the languages and/or solidarity with the language groups. Despite it being closely tied to stigma and negative attitudes in certain contexts, it has, in fact, been documented as an acceptable way of speaking in certain speech communities (Heller, 1988). This is because it essentially acts differently—structurally and functionally—in each bilingual context. Importantly, code-switching and bilingual discourse act uniquely in different bilingual communities (Heller, 1988; Poplack, 1987). In certain occasions and environments, norms and cultures may promote code-switching as a personal and social asset.

In the context of this social psychological foray, code-switching will be used as a general label for bilingual speech when two languages come into contact, “reserved for the rapid succession of several languages in a single speech event” (Muysken, 2000, p. 1).¹ Thus, as it represents the interchanging of languages from a single sentence to a single speech event, it is necessary to adopt some strategy to distinguish different degrees of code-switching. Close to the perspective of the present research, Muysken (2000) proposed a structural typology to distinguish levels of code-mixing, which he used as a cover term for “all cases where lexical items and grammatical features from two languages appear in one sentence” (Muysken, 2000, p.

¹ The present research focuses on code-switching as a linguistic phenomenon. It bears resemblance to translanguaging, a concept from bilingual education: “an approach to the use of language, bilingualism and the education of bilinguals that considers the language practices of bilinguals not as two autonomous language systems as has been traditionally the case, but as one linguistic repertoire with features that have been societally constructed as belonging to two separate languages” (García & Li Wei, 2014, p. 2). It is acknowledged that translanguaging is a related and fruitful topic, though it will not be the purpose to examine it in the present research.

1). The taxonomy differentiates between three distinct processes: insertions, alternations, and congruent lexicalization. Insertions are often single constituents, usually content words such as nouns and adjectives, which are incorporated into a base language. The constituents are nested structures which exist within a base language. Alternations include several constituents which have greater length and complexity than insertions. They are non-nested sequences so it is difficult to identify a base language, implying the speaker must know both languages and grammars well. Congruent lexicalization occurs on rare occasions when the switching has become something different; there is a shared grammatical structure that can include lexical items from both languages, similar to style shifting and dialectal variation.

From a psychological perspective, similar to the typology proposed above by Muysken (2000), the present research program evaluates different degrees of code-switching by concentrating on insertions, reserving the term single-item insertions for individual items, usually content words such as nouns and adjectives, which are incorporated into a base language and multi-item insertions for longer stretches inserted into a base language which have greater length and complexity (cf. alternations defined by Muysken, 2000). This is in line with Poplack's (2015) account that the bulk of "other-language" content is represented by two major forms, lone content words and multiword fragments. The present classification of code-switching allows for an investigation into what would be socially relevant levels of code-switching.

Attitudes towards Code-switching

Studies of attitudes towards mixed language and code-switching have focused on examining the perception of its use and its association with social categories and social attributes. Early social psychology had taken an interest in language attitudes and language

varieties, and used experimental methods to investigate their social significance in intergroup contact, emphasizing the effects of the sociocultural context on language use and communication. These studies from the 1970s and 1980s have employed the matched-guise design to examine the attitudes towards languages in bilingual communities. The matched-guise technique created by Lambert and his colleagues (Lambert, Hodgson, Gardner, & Fillenbaun, 1960) has become the primary paradigm used in language and code-switching attitudes research to study speaker evaluations and covert attitudes towards speakers and language varieties. Participants first listen to speech passages of different language varieties, without knowing the speaker's identity, and then rate the speaker on various personality and social attributes. As the speaker's identity remains hidden, the same bilingual speaker typically records the same passage in different language varieties (i.e. guises), allowing for extraneous variables which may influence the listener's evaluations to be controlled, such as speech rate and pitch. The participants, therefore, judge the same speaker conversing in different language varieties, which enable the conclusion that any differences in ratings would be a result of the different guises.

The seminal study by Lambert et al. (1960) was one of the first experimental studies studying language attitudes. Using the matched-guise approach, the authors investigated evaluative reactions to English and French speech in Montreal. Results showed that both English-speaking and French-speaking participants were more favourable to English and attributed the English speaker as having higher status or more desirable personality traits. This was interpreted as reflecting the significance of the sociocultural context, at a time when English was preferred over French, representative of Anglophones' dominant position over Francophones in Montreal. In the years that followed, social psychological research using the matched-guise tradition studied the social significance of code-switching in intergroup relations.

For example, Genesee and Bourhis (1982, 1988) extended Lambert et al.'s (1960) findings by incorporating the matched-guise technique into a segmented dialogue procedure (i.e. turn-taking conversation) to examine the significance of French-English code-switching following sociolinguistic shifts in Quebec. The researchers found shifts in evaluations towards code-switching, in that the participants attributed language choice earlier in the conversation according to situational norms and subsequent language choices as interpersonal accommodation.

Although these studies used person perception scales to assess participants' impressions of speakers, it was Genesee and Holobow (1989) who measured the evaluation of speaker impression using the two independent dimensions of status (competence traits such as educated) and solidarity (personal character traits such as friendliness). The researchers found that both English speakers and French speakers attributed greater solidarity to their own respective languages, but additionally, although the perceived status of French remained low, the French speakers were less likely to evaluate Quebec French as unfavourable, compared to the participants from Lambert et al.'s (1960) study, demonstrating progressive shifts in perception during this period of sociocultural changes in Quebec.

As implied above, code-switching and language choice can also impact the attribution of social characteristics. Gibbons (1987) applied the matched-guise paradigm to the Hong Kong context, in an attempt to explain the negative attitudes towards Cantonese-English code-switching despite its frequent use. Both Cantonese and English have a high linguistic value and social status in Hong Kong (Yau, 1993), but only if the distinction between them is maintained; when Cantonese-English code-switching occurs, the code-switched speech garners an overall negative impression (Gibbons, 1987). The results show that, indeed, Cantonese-English code-switching elicited negative attitudes compared to English or Cantonese speech separately;

speakers who used code-switching were viewed as impolite and showing off. The evaluations elicited by Cantonese-English code-switching were, however, inconsistent across different dimensions. For instance, code-switching speakers were evaluated similarly to Cantonese speakers on the dimensions of knowledge and attractiveness, but in contrast, code-switched and English speech had similar ratings for being ambitious, proud, confident, and modern. Additionally, code-switching was rated between Cantonese and English for the dimensions of success and Chinese-Western orientation. Gibbons (1987), therefore, suggested that code-switching is a strategy used by Hong Kong individuals who seek to maintain a compromise between Eastern and Western cultures. It seems that evaluations of code-switched speech can at times resemble attitudes towards one language, attitudes towards the other language, or differ from both (Gibbons, 1987). From Genesee and Holobow (1989), it was apparent that attitudes towards a language depend on the social dimensions; from this study, it was evident that perceptions associated with code-switching also have implications for social evaluation.

There have been relatively few studies of attitudes towards code-switching since the first wave of language attitudes research. For this reason, papers published within the past 20 years can be considered relatively current and these recent studies of code-switching attitudes have been distinguished by them being situated in multilingual contexts. Studying Tunisian Arabic-French code-switching, Lawson and Sachdev (2000) found code-switching to be associated with negative attitudes, but it was also an unmarked ingroup practice in the community, representative of the individuals' bilingualism. As such, code-switching can be viewed as a linguistic variety unique to the community and it is possible that in stable multilingual contexts, the switching of languages is not as significant as the use of both languages. If code-switching can become an ingroup practice for bilinguals, as Lawson and Sachdev (2000) suggests, then the language

attitudes associated with code-switching would be based on the status of the languages together, and not dependent on the prestige of each language within the community. Similarly, Gardner-Chloros, McEntee-Atalianis, and Finnis (2005) found that code-switching was a common ingroup practice for the Greek-Cypriot community in London with the use of both Standard Modern Greek and the Greek-Cypriot dialect supported by community members. In this instance, code-switching attitudes were not evaluated unfavourably as community members did not view English as a threat to their identity. Moreover, code-switching was valued as a part of the younger generation's cultural identity.

As discussed above, code-switching contributes to the *expression* of social group and membership. In addition, recent papers in sociolinguistics have also emphasized that it can be a pragmatic tool for *assigning* social categories, such as group membership and ethnicity (Cashman, 2005; Gafaranga, 2005; Poplack, 2018; Su, 2009). For example, Atkinson and Kelly-Holmes (2011) highlight how language mixing in Irish radio comedy can contribute to the legitimization of a hybrid identity. However, directly measuring code-switching attitudes and cultural identity is the exception rather than the norm in this discipline. Furthermore, research assessing code-switching attitudes has employed direct data collection methods, such as surveys and questionnaires (e.g., Dewaele & Li Wei, 2014), with indirect methods measuring covert attitudes, such as the matched-guise technique, being rarely applied (e.g., Guzzardo et al., 2019).

Using a structural approach, Chen (2005) postulated that individuals would be aware of their speech as different from others, even when it is only a slight variation of the norm. Adopting Muysken's (2000) typology, Chen (2005) documented two structurally distinct patterns of code-switching within subgroups of the Hong Kong community: a mainstream style characterized specifically by single English constituents inserted into Cantonese and a non-

mainstream style which included bidirectional single constituents as well as multi-word Cantonese and English constituents mixed at an intersentential level. The two code-switching styles were found to be associated with different subgroups, the former with locals and the latter with “returnees” (i.e. those who had left Hong Kong for education overseas and/or spent a significant amount of time elsewhere, usually at an English-speaking country, and returned subsequently). The findings suggested that linguistic differences in code-switching styles could be used by their speakers to create social categories; the returnees attempted to explicitly adapt to their speech to the local style, aware that their own speech style using “excessive” English was associated with negative stereotypes.

As evidenced above, bilinguals who distinguished differing levels of code-switching may not only evaluate the bilingual speech itself, but also its social value. As code-switching can be an ingroup practice unique to a bilingual community, there may be instances when it is evaluated favourably by bilinguals in multilingual contexts, in contrast to the negative perceptions commonly associated with its use (Gardner-Chloros et al., 2005). Chen (2008) further investigated bilinguals’ identity negotiation and observed that the sociolinguistic functions of code-switching can be distinguished based on their structurally distinct patterns and this differentiation, akin to organizing code-switching into two different levels, has social implications in intergroup relations. The finding of an association between identity and code-switching patterns by distinguishing insertions versus alternations incorporated into a base language suggested that locals perceive structural differences in the linguistic practices of the returnees and use those differences to legitimize their own Hong Kong identity while “[deauthenticating] the returnees’ Hong Kong identities and illegitimate their linguistic practice” (Chen, 2008, p. 72).

It is apparent that code-switching can be regarded as an acceptable mode of communication at times and in certain environmental contexts. Subgroups within a bilingual community are also distinctly aware of their own code-switching and its social significance, indicating that individuals are also conscious of the attitudes associated with their language use. Linguistic distinctions, therefore, have implications for the social categories constructed in a community as well as the perceptions of those categories. Since the degree of code-switching in conversations can be taken as evidence of the bilingual's group membership, a subsequent question would be whether such structural *linguistic* differences can be viewed continuously with corresponding *social* effects. An in-depth look at individual variables such as identity is warranted because if code-switching is symbolic of ingroup membership and solidarity, it can also impact individual group members' identities.

Identity

Social identity is “part of an individual's self-concept which derives from their knowledge of their membership of a social group (or groups) together with the value and emotional significance attached to that membership” (Tajfel, 1981, p. 255). One component of social identity is ethnic identity. Ethnic identity is defined as the degree to which an individual identifies with an ethnocultural group through shared values, attitudes, and participation in cultural activities (Phinney, 1992). It is dynamic and susceptible to change over time and space (Phinney & Ong, 2007). For example, shifts in identity can be related to language.

Multilinguals often report feeling different when switching between their languages (Dewaele & Nakano, 2013). Ethnic identity is essentially a sense of belonging and commitment to one's ethnic group (Tzuriel & Klein, 1977) and it is often associated in discussions of how individuals relate to their native ethnic culture (Phinney, 1992).

An individual's cultural identity is an important aspect of their social identity, the significance and value of belonging to a social group. Cultural identity can be used as a general term to refer to the affiliation to and internalization of a particular culture (mainstream or ethnic), where individuals can access a set of shared norms that guide their behaviours (Giguère, Lalonde, & Lou, 2010). As Phinney (1992) suggests, membership in one's ethnocultural group is a multi-faceted and dynamic process facilitated by common values, attitudes, and behaviours. Bicultural individuals are in a unique position in that they have developed a multicultural identity, which includes membership in more than one ethnocultural group, through their long-term and intense experiences with two (or more) cultures.

When individuals adopt a new culture, the previous ethnic culture does not, however, necessarily get replaced or abandoned. The bidimensional model of acculturation proposed by Berry and colleagues suggests that the degrees to which immigrants identify with the mainstream versus ethnic culture are independent from one another (Berry, Kim, Power, Young, & Bujaki, 1989). Berry et al. (1989) described two continuums through which individuals navigate: the degree to which they wish to identify with their new culture, and the degree to which they wish to identify with their original culture. In describing the variations in how individuals engage in the acculturation process, the bidimensional framework importantly distinguishes between the orientations towards one's own group versus the orientation towards the other group (Berry, 1980; Berry, 2017). As a result, the combination of these two independent dimensions creates four distinct acculturation strategies: integration (identification with both cultures), assimilation (identification with the new culture), separation (identification with the original culture, and marginalization (identification with neither culture; Berry, 2007). Individuals adopting an

integration acculturation strategy are likely bicultural, having internalized two cultures and being able to negotiate their multiple identities, as described above.

Much research has investigated psychological correlates of the bidimensional framework and there is consensus that integration is the most optimal strategy: integrated individuals (i.e. biculturals) are the most adapted group displaying more positive outcomes in personal well-being and sociocultural adjustment (Berry, 2006). Notably though, there may be contexts where individuals are unable to adopt their preferred acculturation strategy and their navigation between the two cultural dimensions; thus, actual cultural identification may not correspond with preferred strategy (Berry, Kalin, & Taylor, 1977; Bourhis, Moïse, Perreault, & Senecal, 1997). Taking into account the acculturation and identity literature, it remains unclear how cultural identification relates to speech practices such as code-switching. Presuming that the integration strategy is most adaptive and most commonly adopted by individuals within multicultural contexts, then such biculturals' language use and speech practices should parallel their cultural identification, demonstrating an integration of their two cultural identities as well as their two languages in discourse, as in code-switching.

The Present Research Program

The present research, therefore, is founded on the possibility that identity has a reciprocal function with code-switching: it can be a determinant of how bilinguals use their languages, while at the same time, be reinforced by the bilinguals' language use. The dissertation consists of three studies which examine these issues using different methodologies. The inclusion of qualitative interviews, survey design, and experimental manipulation in the present research program aims to explore the topic from different perspectives, to provide a triangulation of findings, and to enable a comprehensive and interdisciplinary discussion.

“You’re a Juksing”: Examining Cantonese-English Code-Switching as an Index of Identity

The first study is a qualitative study which explores the speech practices and cultural identities of Cantonese-English bilingual young adults. Its purpose is two-fold. The first objective is to assess the role of code-switching in the community, the status ascribed to its use, and the perceptions associated with the significance of language knowledge and use.

The second objective is to examine the cultural identification of the Chinese young adults, the different ways they may negotiate their cultural identities (e.g., integration versus affiliation) and how their identities may be reflected in their language use, in private and in public.

Cultural Identification and Attitudes towards Code-switching: A Bidimensional Framework

The second study is an online survey study evaluating the relationship between cultural identification and attitudes towards code-switching and other code-switching factors. The objective of this quantitative study is to examine the role of Canadian and Chinese identification strength in bilinguals’ overt attitudes towards code-switching, attitudes towards multiculturalism, and code-switching factors, such as behaviour, comfort, and preference.

Evaluational Reactions to Degrees of Code-switching

The third study is an experimental study with manipulation. The primary objective is to examine the influence of different degrees of code-switching and speaker identity on evaluative judgments. As stated previously, code-switching patterns can be distinguished by levels of structural linguistic differences (i.e. single code-switches versus multi-item code-switches) and such patterns can be symbolic of social group membership. In addition, when provided with information regarding a speaker’s cultural identity, this study investigates how such knowledge of the speaker impacts covert attitudes and affects social perceptions.

Running head: CANTONESE-ENGLISH CODE-SWITCHING

Study 1

“You’re a *Juksing*”:

Examining Cantonese-English Code-Switching as an Index of Identity*

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Abstract

Code-switching, the spontaneous switching from one language to another, shows unique structural and functional patterns in different bilingual communities. Though historically viewed as negative, it has been documented as an acceptable way of speaking in certain contexts, namely multilingual communities. We investigated the implications of code-switching on bilinguals' language attitudes and identities in Toronto, a distinctly multilingual and multicultural metropolis. Twelve Cantonese-English bilinguals participated in a semi-structured interview discussing their code-switching and language attitudes. Interviews were then evaluated using a critical realist framework and analyzed via first and second cycle coding. Code-switching elicited mixed emotions: it was a source of pride, but also a reminder of weak Cantonese language skills due to others' metalinguistic comments and judgments. Participants' code-switching indexed them as *juksings*, labeling them as Chinese individuals born-and-raised overseas, deauthenticating their Chinese group membership. Results are discussed with respect to ethnic identity and intragroup communication.

Keywords code-switching, identity, bilingualism, ethnic minority, group membership, intragroup communication

Bilingualism is widespread and the norm rather than the exception in many countries (Appel & Muysken, 1987). As shown by Freynet and Clément (2019), contact between languages may give rise to variations which have consequences for self-esteem and identity. Indeed, the patterns of use of the two languages varies widely. They can be viewed along a continuum: at one end is the monolingual mode (i.e. using one language exclusively) and at the other end is the bilingual mode (i.e. communicating in two languages in the same utterance; Grosjean, 1982; Grosjean & Miller, 1994). In fact, switching from one language to another, or code-switching, can be a common occurrence in the daily life of bilinguals. Code-switching is more precisely defined as the spontaneous switching from one language to another or mixing elements from two languages within a single speech event (Appel & Muysken, 1987). The ubiquity of the phenomenon and its impact on intragroup communication justifies a more intensive and systematic examination, especially in multilingual contexts such as Canada. Furthermore, language use and its transmission of an individual's identity become further complicated within special bilingual populations such as one-and-a-half and second-generation immigrants. The present study seeks to examine the phenomenon of code-switching, particularly, as it concerns the consequences and implications of code-switching on bilinguals' language attitudes and cultural identities in a multilingual environment.

Statement of the Problem

Language is closely related to ethnic identity (Gudykunst & Ting-Toomey, 1990; Miller & Hoogstra, 1992). For example, Giles and Johnson (1981) suggested that minority ethnic group members express their group's distinctiveness through the use of their heritage language. In turn, more positive attributes are assigned to users of the more "prestigious" language (Giles, 1970). Although there is copious research on the link between language and ethnic identity,

there have been relatively few psychological studies examining the link between code-switching and identity. Research on code-switching from the fields of sociolinguistics and applied linguistics have shown that code-switching acts uniquely in different bilingual communities. Specifically, although historically viewed as negative (Gibbons, 1987; Weinreich, 1953), it has been documented as an acceptable way of speaking in some communities (Heller, 1988). In such cases, norms and cultures may value code-switching as a personal and social asset. It has yet to be determined whether attitudes towards code-switching are associated with individual variables, such as cultural identity.

A qualitative inquiry into a bilingual community is advantageous in such cases because it allows for a nuanced idiographic examination of the speech practices and related issues of identity within that community. This approach is a useful initial survey of how two languages are balanced, thus enabling direct face-to-face observation of their use and providing linguistically-rich data on code-switching. Our qualitative study further aims to take a thematic analysis approach. Thematic analysis essentially involves finding repeating patterns of meaning within a data set; an approach which offers flexibility as it can be used across different theoretical approaches (Braun & Clarke, 2016).

Implications of Code-switching

In recent decades, studies of language attitudes have re-examined the phenomenon of code-switching in multilingual contexts. For bilinguals who code-switch, the act itself can be meaningful in multiple ways. Lawson and Sachdev (2000) found Tunisian Arabic-French code-switching to be representative of the individuals' own bilingualism. Despite it being associated with negative attitudes, it was also an unmarked ingroup practice, viewed as a linguistic variety unique to the community. Additionally, in a study of code-switching of the Greek Cypriot

community in London, Gardner-Chloros, McEntee-Atalianis, and Finnis (2005) found that the younger generation valued code-switching as part of their cultural identity, symbolic of their ingroup membership and to a certain extent, their identities. These two examples build on the idea of code-switching having a distinct role not only in the speech community, but for the individuals themselves. Code-switching can be an ingroup speech practice for the community while attitudes towards it remain unfavourable. That is, code-switching directly indexes the community members' own bilingualism, their group membership, and most importantly, their identities.

Conversely, bilinguals' code-switching can induce reactions and actions from other people. In such instances, which are beyond the speakers' control, others indirectly influence the speakers' own attitudes, behaviours, and identities. The presence of code-switching in the speech of bilinguals can often be a marker of their competence in both languages, including their grammatical structures and communicative effect. In fact, it has been found that bilinguals who exhibited greater language proficiency preferred intra-sentential switches, which are more difficult than inter-sentential code-switching (Poplack, 1980). Despite this, bilinguals who are exposed to evaluations (likely negative) of their code-switching would likely doubt their own language abilities and feel insecure about their group membership due to the historical misconceptions of code-switching as a sign of language incompetence and lack of group solidarity. An example of others' actions having consequences on the code-switching individuals is Chen's (2008) study of identity negotiation in Hong Kong. She observed that locals perceived structural differences in the speech patterns of non-locals and used such structural differences to legitimize their own Hong Kong identity while de-authenticating the non-locals' claim on a Hong Kong identity. This suggests not only that individuals are conscious

of attitudes associated with their language use, but also that the manner in which the code-switching is received has consequences. Taken together, these studies have shown that code-switching is both initiated by speakers as a marker of identity and subject to the evaluative reactions of their ingroup.

Toronto: A Unique Multilingual Context

Toronto is a fitting context to study Cantonese-English code-switching. Cantonese is reported to be the heritage language most often spoken in Toronto households and is the top immigrant mother tongue, accounting for 9.5% of the 2.7 million people speaking an immigrant language (Statistics Canada, 2016). The city is home to the largest population of visible minorities in Canada, with the Chinese community being the second largest group. The Chinese community, originating from Hong Kong, China, and Vietnam, accounts for 22.4% of the visible minority population and 9.6% of Toronto's total population (Statistics Canada, 2006). Taking into account the demographic characteristics of the city, Toronto is a fitting and conducive environment for code-switching.

A unique characteristic of the Chinese community in Toronto is that it has a high ethnolinguistic vitality (a group's ability to thrive as a collective defined along linguistic characteristics; Giles, Bourhis & Taylor, 1977; see also Bourhis, Sachdev, Ehala, & Giles, 2019), contributing to the city's strong multicultural character. It is robust across the three dimensions of vitality: demographics, status, and institutional support. First, Chinese immigrants are a large and cohesive group concentrated in certain regions within the Greater Toronto Area and as a result, they are highly self-contained. Second, Cantonese-speaking immigrants are likely to be economically self-sufficient and do not rely on English for services or entertainment, such as medical visits and television programs (Man, 1997). Third, the community retains positive

attitudes towards first language maintenance and support for heritage language programs (Chan, 1989). All of these qualities support a high ethnolinguistic vitality for the Chinese community, signifying favourable conditions conducive to language maintenance. All things considered, it is important to Cantonese-English bilinguals in the community to keep and use their heritage language, there are many opportunities for them to do so in supportive environments around Toronto, and it is likely in the form of code-switched speech.

The Present Study

The present study is meant to contribute to the sociolinguistic and social psychological understanding of code-switching via a thematic analysis from a critical realist position (emphasizing the understanding of the causal mechanisms driving social events using rational judgment of these events; Fletcher, 2017). Previous literature shows us that code-switching can indeed be an acceptable mode of communication between ingroup members in the Toronto Chinese community and therefore, the attitudes associated with its use would not be linked to the status of English or Cantonese, but to the prestige of Cantonese-English code-switching in the community. A resulting question, then, is how do Cantonese-English bilinguals in Toronto use their two languages together in ingroup speech? Specifically, the present paper aims to examine the Cantonese-English bilinguals' speech practices, attitudes, and identities with respect to code-switching.

Method

Participants

Twelve Cantonese-English bilinguals (7 males, 5 females) participated in the study. The participants had a mean age of 24.2 years ($SD = 5.8$), ranging from 19 to 36 years old. They were one-and-a-half and second-generation immigrants to Canada, as some were born in Hong

Kong but moved to Canada at a very early age ($n = 3$) and some in the Greater Toronto Area ($n = 9$). They lived in Toronto for most of their lives ($M = 18.7$ years, $SD = 2.4$) and the majority ($n = 9$) considered themselves as belonging to the Toronto Chinese community. Specifically, participants also regarded themselves as belonging to a Chinese Canadian community, specifically a second-generation community. They used a variety of self-labels to describe themselves, including Chinese Canadian, Hong Kong Chinese, Hong Kong Chinese Canadian, Canadian, Canadian-born Chinese, and Canadian Chinese. All participants acquired Cantonese as their first language and learned English as their second language at an early age ($M = 4.8$ years old, $SD = 1.6$) through the school environment. Participants self-reported their Cantonese and English proficiency; their Cantonese oral proficiency was lower than their English proficiency and their Cantonese literacy skills were weak, if any (see Table 1).

Participants were recruited in one of two ways. First, the study was posted on the Integrated System for Research Participation at the University of Ottawa. Undergraduate students taking an introductory course were awarded one credit in exchange for participating in the study. Second, via snowball sampling, recruitment emails were sent to participants to share with their contacts and social networks. The inclusion criteria for the study were that participants must be able to speak and understand Cantonese and must have lived in Toronto for most of their lives.

Procedure

All participants were required to give informed consent prior to the start of the interview. After providing written consent (see Appendix A), participants were interviewed following an interview guide (see Appendix B). The first author acted as interviewer-researcher, given the author's insider status in the Toronto Chinese community and proficiency in Cantonese and

Table 1

Mean Scores (and Standard Deviations) for Cantonese and English Proficiency on a Scale of 0–100 (No Proficiency to Native-like Proficiency)

	Cantonese	English
Speaking	75.7 (23.1)	97.3 (6.2)
Comprehension	81.6 (19.7)	99.2 (2.9)
Reading	36.8 (37.9)	99.2 (2.9)
Writing	19.7 (27.4)	99.2 (2.9)

English. The interviewer encouraged code-switching during the interview by explicitly stating in instructions that responses in both languages were acceptable and by code-switching systematically in the introduction and interview questions. The explicit statement of code-switching being allowed was meant to counteract the influence of being in an English-dominant setting and the negative perceptions associated with code-switching itself. After this brief introduction, the interview consisted of three sections after an initial ice-breaker topic: (i) code-switching practices, (ii) code-switching attitudes, (iii) code-switching reflecting their identity. The interviews lasted approximately 45 to 90 minutes in length, averaging 59.0 ($SD = 12.5$) minutes. To conclude, the interviewer asked the participants several demographic questions and also gave them an opportunity to share additional information that was not discussed previously.

Analysis

Transcription

As stated above, all the interviews were analyzed as narratives. Interviews were transcribed using Express Scribe by NCH Software, an audio player software which facilitates the transcription of audio recordings. Research assistants were trained to transcribe the interviews verbatim: three research assistants transcribed the English portions of the interviews (which were the majority of the interviews) while two Cantonese-English bilingual research assistants transcribed the Cantonese portions. In order to transcribe Cantonese discourse, segments were transliterated (romanized) into English and then also translated for meaning.

Coding

In accordance with our research question, the data were broadly coded for speech practices, attitudes, and group membership/identity. Consistent with Saldaña (2009), the coding process was divided into two stages—first and second cycle coding. First cycle coding can include mixing several coding approaches. In our coding, we included in vivo coding,

descriptive coding, emotion coding, and values coding (for an overview, see Miles, Huberman, & Saldaña, 2014). After reviewing interview notes and transcripts, the interviewer selected each coding method to best fit the data. For example, in vivo coding (i.e. using participants' own language as the code) was the most used method and identified many Cantonese culture-specific terms that were incorporated into the English discourse. In first cycle coding, line-by-line coding was performed to identify initial codes. An initial coding scheme and codes list were created, and then, after coding three participants, the coding scheme was revised and modified as other distinct codes progressively emerged from the data. The coding scheme was open to revision throughout the entire coding process, but further amendments were not needed after the first several participants. Second cycle coding involved each code being sorted into categories identified during the interview process, transcription process, or coding process; prospective categories were noted as they emerged throughout the interview, transcription, and coding. As recommended by Saldaña (2009), new categories were created for codes that did not fit into pre-existing categories and re-coding and re-categorizing was carried out as needed. Within each category, codes were further sorted into thematic sub-categories. Second cycle coding allows for the grouping of the initial codes identified during first cycle coding, allowing for data condensation and categorization into emergent themes and more meaningful units of analysis.

Coders

Using QDAMiner software (Provalis Research, 2013), the two bilingual research assistants who completed Cantonese transcriptions also assisted in coding. Both were provided with a coding guide by the researcher, which outlined the research questions of the present study and explained coding guidelines. The two coders met with the researcher individually to be trained on coding and the qualitative research process. Each coder completed a training session on QDAMiner, learning, for example, how to add, edit, and delete codes. After completing the

first transcript, the researcher examined the codes assigned by the coders and then reviewed the transcript with the coder to discuss their reasoning for using specific codes.

During the coding process, coders were provided with a journal. Journaling encourages reflexivity, allowing researchers to be conscious and self-aware of their role as a researcher (Finlay, 2002). It is important for the researcher to continually evaluate their potential subjectivity at each stage of the qualitative research process and to address their assumptions and interpretations. The journal was provided for self-monitoring, to report any feelings or thoughts that may have obstructed their ability to code subjectively. They were directed to write down any hypotheses that may not be identified through the codes, interesting points and observations, and any limitations or challenges to the study realized while coding. The coders also were asked to provide justification for codes relating to judgment, conflict, and emotions.

Results

All participants, except for one, performed code-switching in the interviews. The one participant who did not code-switch used both Cantonese and English, but kept the languages separate. The frequency of Cantonese code-switches in an English base language ($n = 164$) were greater than English code-switches in a Cantonese base language ($n = 15$) overall. This was expected as the interviews were largely in English. In addition, single-word insertions (e.g., single nouns or verbs; "...like they're afraid, we wouldn't know how to *bo jong* [preserve]?") were more prevalent than multi-word insertions (e.g., longer stretches of speech in a clear base language; "...*sai mm sai gui ow gum yeung* [no need to call me that] and plus I'm communicating Chinese anyways...") as they were easier to incorporate into speech, especially when individuals were not fully comfortable code-switching longer portions of speech.

The present study identified three broad themes relating to speech practices, code-switching, and cultural identity (see Table 2). In the first half of the interview, participants were asked about their speech practices and the implications of own code-switching for themselves. They described the prevalence of their code-switching and their own versus the community's attitudes towards code-switching. The first theme relating to speech practices and attitudes toward code-switching was derived from those data. The second and third themes revolved around the functions served by code-switching in the community: code-switching as indicator of proficiency and code-switching as cultural identity marker.

Theme 1: Favourable Attitudes Towards Code-switching

Comfortable Code-switchers

Participants generally perceived code-switching as acceptable and had mostly positive attitudes towards it. Most of them were comfortable with code-switching and perceived the speech act favourably. They reported switching into Cantonese or English when they wanted to, and then switching back. However, they said there were moments when they did so because of lexical gaps in Cantonese and English, and occasions when they could not maintain a conversation solely in Cantonese (e.g., with grandparents or for academic topics such as politics). They did not hold negative attitudes towards code-switching per se, though they had been exposed to other people's negative perceptions of it.

Table 2*Major Themes and Sub-categories*

Study Themes	
Theme 1: Individual Attitudes towards Code-switching	<ul style="list-style-type: none"> • Comfortable code-switchers • Metalinguistic awareness
Theme 2: Code-switching as Indicator of Proficiency	<ul style="list-style-type: none"> • Mixed emotions • Judgments and exclusion
Theme 3: Code-switching as Cultural Identity Marker	<ul style="list-style-type: none"> • Dual identities but incomplete • “<i>Juksings</i>”

Metalinguistic Awareness

As participants held favourable attitudes towards code-switching, it became a facilitative speech act for them. That is, they were aware of the meaning of speaking Cantonese and using it in code-switched speech. It was often a conscious act to facilitate communication. However, using Cantonese held extralinguistic meaning as well. It allowed participants to minimize distance between themselves and others in the Chinese community, even at the detriment of their communication.

Because the difference is when I speak Chinese it's compromising communication, and like, transferring meaning. But it is extending a hand to like meet them in their culture that is important to them. So it's kind of like which one do you choose. (Amy¹)

Theme 2: Code-switching Reflective of Language Proficiency

Associated with speech practices, participants viewed their code-switching as an indicator of their proficiency. Participants were aware of their code-switching and how it directly impacted their feelings and perceptions of themselves. The mixed emotions that the participants felt is an example of how code-switching influenced individuals' own bilingualism, as in previous findings in the literature. Additionally, code-switching did not only impact the bilinguals' own perceived proficiency, it had an indirect effect on them via others' comments. The metalinguistic comments from others about their code-switched speech led them to feel judged and, at times, excluded.

Mixed Emotions

Aside from code-switching being viewed as a gauge of the participant's language proficiency, it elicited both positive and negative emotions, demonstrating the importance of heritage language fluency. Code-switching served as a reminder to participants that they could still use their heritage language and still had a relatively high proficiency in Cantonese. They

were proud of their abilities in Cantonese and saw their Cantonese usage as a sign of their heritage language maintenance.

I do know a lot of friends who do not know, well Cantonese at all...when I speak it, especially with [them], I'm proud of the fact that I can do it. Yeah. (Adrian)

However, some of the same participants also felt frustration, disappointment, and sadness from their code-switching because it represented their perceived low proficiency in Cantonese, implying their fluency is not at a level they wish it was at. This contrast suggested that individuals have mixed emotions towards their code-switching; their code-switching served as a reminder of their heritage language maintenance.

So if it's just like *gong siu* [joking] and stuff like that I would speak in Cantonese. But I also think because like now that I'm in Ottawa [pause] like I don't have that much like Cantonese exposure, so I'm speaking a lot of English now, and I think I'm slowly losing my Cantonese, which is like really sad...I don't know want to say I'm like losing a part of myself, but like [pause] it's just not the same. (Vivian)

Judgments and Exclusion

Code-switching often led to negative emotions, not only because it reflected a low perceived proficiency in Cantonese, but also it elicited explicit metalinguistic comments and judgments from others in the Chinese community.

“Speaking English, half English half Chinese, that's not cool. If you speak in front of Chinese people you should speak Chinese.” I've heard those comments before. And it might have, you know—but I think I'm comfortable doing that now. (Paolo)

My aunt was under the impression that my Chinese was really bad, because the last time I saw them was like five years ago...and so, we went out to dinner and she, I was the only

one in my entire family to whom she kept translating to English. And so she would speak Chinese and then repeat it to me in English. And um, it was my parents actually, my Dad who was like, “*mm ho tai siu kui ah*” [don’t look down on her] like, like trying to tell my aunt that actually she can understand everything you’re saying. And I was trying to prove, at that point I, continually, that over the course of that meal, I was very conscious of how I was trying to prove myself and my proficiency...Um, that was actually a little upsetting. (Amy)

Although some actions are intended to linguistically accommodate, they instead become an indirect judgement on the participants’ proficiency, marking their linguistic inadequacy.

Theme 3: Code-switching as Cultural Identity Marker

The last theme arose when participants described their cultural identity and their connections to the Chinese and Canadian cultures, specifically through language. This theme revolved around how participants self-identified and the factors that facilitated or hindered their connections to the Canadian and Chinese cultures.

Dual Identities But Incomplete

Most participants self-identified as biculturals, individuals belonging to both Chinese and Canadian cultures through long-term and intense exposure. They used labels such as Chinese Canadian, Canadian Chinese, or Canadian-born Chinese. However, they were cognizant of the limits of these labels through the identity labels others have also assigned to them.

While when I’m speaking Chinese here in Canada suddenly even though I’m born in Canada, I—they don’t see me as a full Canadian cause it’s “oh you’re Chinese.” So therefore you’re Chinese. (William)

The idea of not being a “full Canadian” also extended to their discussion about their ethnic identity. Although they embraced being biculturals and being a part of both cultures, the participants realized that there were things they were missing.

I want to say that I’m like almost full-fledged Chinese just because like the upbringing, I grew up in a pretty traditional, but I can’t really comment on that because I go to an English speaking school, and like there’s also like subtle like Canadian influences and there’s the media, and stuff like that, so not exactly—so like I guess when we speak in both in English and Chinese, like Cantonese, then [pause] it’s almost as if like we want—or I feel like it’s almost as if I want to identify with being full Chinese but also being full Canadian, if that makes sense. (Vivian)

This inner conflict of wanting to identify with both cultures—being full Canadian and full Chinese—was exacerbated by explicit labels given to them by others due to their code-switching.

“*Juksings*”

Many participants reported that others labeled them as *juksings* when using Cantonese-English code-switching. “*Juksing*” is a Cantonese colloquial derogatory term, which designates a bamboo that does not allow water to flow through. The inside of a bamboo is hollow and compartmentalized, representing the Chinese and Western cultures that are kept separate and *juksings* are not part of either culture. It represents an individual who does not connect with either culture or a Westernized (overseas-born) Chinese. Though this label is derogatory and has historically been used as such, its meaning may have diluted to become an encompassing general term to refer to overseas born-and-raised Chinese. For the participants, this label indexed a second-generation status that was embraced by or forced upon them. Some participants nevertheless embraced this label.

...they would later find out I'm from Canada, and like "Oh, you're a *juksing*, you're like no good." Wow! So like in those situations they're clearly attacking me, but like otherwise I think I embrace it. (Vivian)

Therefore, there was a very mixed reaction overall regarding the term. Although some participants used the *juksing* term to label themselves, participants also assigned other, notably stronger, derogatory terms (such as "banana", "whitewashed", "fob", and "fresh off the boat") in reference to others who they considered more Westernized or Chinese.

Discussion

The present study of code-switching among Cantonese-English bilinguals has revealed several important findings. To begin, it is important to note that the prevalence of code-switching in the interviews themselves can be considered an indication of the participants' comfort level with mixing Cantonese and English, though decidedly hesitant and unsure speaking about their own speech practices. In our coding, we noted a high frequency of Cantonese single-word insertions. It is likely that the participants were using these insertions as discourse markers, often to establish common ground and develop an informal relationship between speakers. For example, in the first theme, we found that participants were aware of the meaning of their code-switching. Although it may or may not facilitate their communication, it, nonetheless, allowed them to create a connection with their interlocutor. This is similar to the concept of convergence from communication accommodation theory, which Giles, Coupland, and Coupland (1991) conceptualized as a strategy individuals adopted in order to adapt to each other's communicative behaviours and thus reducing social distance. As described by a participant, someone could consciously choose to code-switch and/or use Cantonese, suggesting that language was used to strengthen their intragroup identity.

We observed that code-switching had direct consequences for the participants. Notably, it influenced their perceptions of their oral language skills and the strength of and identification with their ethnic culture. For example, as evidenced in the second and third themes, when participants discussed code-switching, including experiences in which they code-switched themselves, they considered it as evidence of their own language abilities, specifically the perceptions of their own oral language skills and level of bilingualism (e.g., Lawson & Sachdev, 2000). For example, their own awareness of their code-switching led them to view it as a reflection of their lacking proficiency in their heritage language. Although they were comfortable code-switchers and had neutral to positive perceptions towards the act, the sheer presence of code-switching in their speech brought about a negative reminder of their weak Cantonese abilities.

One of the immediate consequences of code-switching was the participants' mixed feelings towards their language skills and cultural identity. This presented a paradox—they code-switched because it was difficult for them to solely use Cantonese, however their code-switching was also an indicator that they have “kept up” their Cantonese and can still use it. Their mixed emotions reflected this conflict—they were upset and disappointed that they could not communicate more fully in Cantonese with others (e.g., family members such as parents and grandparents) while still feeling pride for what they had retained. Therefore, their code-switching was a source of frustration as they did not see it as a speech practice independent of their Cantonese and English proficiency and yielded both positive and negative emotions. Though the practice of code-switching was not independent of their proficiency, it was an ingroup practice which served a role in the community (similar to the London Greek Cypriot

community; Gardner-Chloros et al., 2005) and that role is its representation of their connection to their Chinese and Canadian cultures.

Moreover, code-switching was a direct reflection of the participants' Chinese group membership. Our participants described themselves using self-labels that incorporated two terms, suggesting that they identified as biculturals. It was a reflection of both of their cultural backgrounds, comparable to their use of their two languages in discourse. Interestingly, several participants specified their (or their families') precise Chinese origin by explicitly inserting Hong Kong in their self-labels, suggesting that including this information was meaningful for them.

Similar to Gardner-Chloros et al. (2005), code-switching was an act that was symbolic of ethnic membership and cultural identity. The participants recognized the links between their speech practices and how they represented their cultural identity, yet they also revealed mixed feelings about their identity, specifically their biculturalism. In their self-descriptions, they emphasized their dual identities such as being Canadian-born, but being raised with Chinese customs and traditions. Nevertheless, analogous to their code-switching being representative of their heritage language proficiency (or lack thereof), their dual self-labels not only reflected their biculturalism, but also prompted the idea of being incomplete. These individuals were juggling their two cultural identities, their Canadian identity and their ethnic identity, regardless of how they negotiate them. As one participant with mixed feelings highlighted, culturally they are both Canadian and Chinese so they can never be fully either.

In the present study, it was clear that there were also indirect consequences for code-switching. Our findings demonstrated it yielded remarks and actions from others which, in most cases, disparaged the participants' own linguistic skills and/or claim on their cultural identity. The implications of others' actions may have skewed the participants' perceptions of their own

linguistic skills, and especially, their cultural identity. Our findings highlight a novel point: a subgroup of the Chinese community, the one-and-a-half and second-generation Chinese immigrants, were confronted with information which insinuated that their identity is divided, disconnected, and in a state of conflict, *despite* how they viewed their own bicultural identity (cf. bicultural identity and identity negotiation; Benet-Martínez & Haritatos, 2005; Benet-Martínez, Leu, Lee, & Morris, 2002). Regardless of what individuals believed or asserted their cultural identity to be, their code-switching prompted others to make judgments which challenged their own position. This finding suggests that others' remarks about our participants' Cantonese-English code-switching can delegitimize their claim to a specific identity (i.e. Chinese, bicultural), similar to Chen (2008). Thus, it suggests that one of the sociocultural consequences of code-switching is that it will paradoxically become a source of pride and belongingness to a community while at the same time creating a chasm with ethnic identity.

In the participants' discussion of their code-switching and cultural identity, they code-switched and used the Cantonese term *juksing* in their discourse as well as recounted how they have been labelled as *juksings*. Although this is a popular everyday term frequently used to refer to a Chinese young adult who is Westernized, it is also coincidentally apt in conveying their conflictual cultural identification. The water in the bamboo is stuck; culture is not able to flow through. They embrace both their cultures, but they are unable to be "full Chinese" or "full Canadian" due to their heritage and their upbringing. Furthermore, they identified themselves as biculturals using integrated self-labels, but their own code-switching indexes them as *juksings*, symbolizing a segregated identity. This is also exacerbated when family members and others in the bilinguals' social networks openly express their comments and criticize their speech practices, leading to implicit *and* explicit judgments on their identity. Such metalinguistic

comments highlight the differences, both linguistic and cultural, between the bilinguals and those who would be exclusively Chinese (e.g., participants' reference to being "full Chinese"), creating distance and deauthenticating their Chinese group membership. That is, the bilinguals cannot claim their dual (especially Chinese) identity; they are a distinct outgroup and they must come to terms with the imposed identity associated with their code-switching.

Finally, as mentioned previously, code-switching acts differently—structurally and functionally—in each bilingual speech community. For example, our participants frequently used Cantonese in their English and alternated between Cantonese and English in such a manner that a clear base language could not be identified (cf. Muysken, 2000). This speech practice may be unique to the Toronto Chinese community, but it is also reminiscent of a style of code-switching evidenced by a subgroup of Hong Kong young adults, studied by Chen (2008). She noted that Hong Kong "returnee" young adults, those who had been educated overseas and subsequently returned to Hong Kong, displayed a distinct type of code-switching (i.e. using Cantonese within English or alternating between Cantonese and English in the same utterance), that was unlike the typical speech norm demonstrated by Hong Kong locals. The finding that the individuals in the present study show a pattern similar to Chen's Hong Kong "returnee" young adults needs to be explored further in the future. It is plausible that this distinct type of code-switching is associated with a bicultural/Westernized Chinese young adult group and has become an acceptable speech practice for them.

As code-switching acts differently in different bilingual communities, it is likely that the typical style of code-switching acceptable in Hong Kong is distinct from the code-switching style acceptable in Toronto. However, it is undetermined whether this difference is associated with the context of the speech community or the speakers themselves. It is possible that

individuals who have lived abroad and one-and-a-half and second-generation Chinese immigrants may have identity orientations different from Hong Kong locals (i.e. those who are “fully” Chinese). While studies in sociolinguistics have concentrated on the structure and composition of code-switching in the community, it is not necessarily the case that they have concentrated on evaluating aspects like cultural identity as we have done here. Future research can surely benefit from investigating the aforementioned ideas further and addressing the relative contribution of identity on code-switching style.

The present qualitative study revealed that there are mixed reactions and conflicting feelings overall for the one-and-a-half and second-generation Chinese young adults in Toronto. They experience a linguistic and cultural dissonance: they embrace their degree of bilinguality and bicultural identity, yet their emotions and experiences expose the downside of maintaining multiple languages and identities. For example, they tolerated derogatory remarks about their identity and faced dismissive comments from others about their heritage language proficiency. Although there is this “push and pull”, balancing the favourable with the unfavourable consequences of code-switching, this paradoxical situation may not be exclusive to the Chinese community in Toronto. Rather than being unique to the Chinese ethnic minority group, it may be a typical set of circumstances experienced by bilingual biculturals. In other immigrant communities, such as the second-generation South Asian-Canadian youth, they are able to capitalize upon their ethnic identity as situations dictate and also pare it down in other contexts, for instance, to avoid social exclusion (Sundar, 2008). Future studies on other ethnic minority communities in Canada can provide a clearer picture of the second-generation immigrant experience.

We have sought to identify code-switching practices and its consequences for Chinese-English bilingual young adults in Toronto and we have found that the phenomenon of code-switching has implications for these bilinguals' language attitudes and cultural identities. We demonstrated that code-switching was an acceptable speech practice among young adults in the Toronto context. Cantonese-English bilinguals were aware of the weight that code-switching carries—it became a direct indicator of language proficiency (or lack thereof), and importantly, an indirect symbol of their cultural identity via language. Furthermore, the presence of code-switching in speech is significant. Unfavourable attitudes towards code-switching persist: individual are overtly criticized regarding their code-switching and are consequently labelled with derogatory labels such as *juksing*. These conclusions contribute to the literature on the relationships between language, code-switching, and identity; yet much work remains to be done to better understand the reciprocal nature of code-switching and cultural identity. As a consequence of bilingualism, code-switching has social implications. As shown here and elsewhere in this special issue of *JLSP*, it impacts bilingual interactions and influences social behaviours such as prejudice and discrimination, ultimately affecting intra- and intergroup relations and communication. Notably though, code-switching may serve a specific role in bilinguals' identity negotiation and may be key in the promotion of bilingualism and integration of ethnic minority communities.

Notes

¹ All names have been replaced with pseudonyms to protect the privacy of the participants.

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Running head: ATTITUDES TOWARDS CODE-SWITCHING

Study 2

Cultural Identification and Attitudes towards Code-switching:

A Bidimensional Framework*

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*Yim & Clément, accepted

Abstract

Aims and Objectives/Purpose/Research Questions: Code-switching, the spontaneous switching from one language to another within a single speech event (Appel & Muysken, 1987), is often performed by bilinguals who have mastered a communicative competence in two languages. It is also a social strategy—using linguistic cues as a means to index social categories and group solidarity. Code-switching is, therefore, linked to attitudes, seen as a reflection of the speaker and their values and identities (Myers-Scotton, 1993). Traditionally perceived negatively, attitudes towards code-switching has been shown to be acceptable in certain cases, such as in multilingual contexts. However, it has yet to be determined empirically whether attitudes towards code-switching is associated with individual social characteristics, including cultural identity and identity negotiation. Adopting the bidimensional model of acculturation, the goal of the study was to investigate the relationships among cultural identity and code-switching attitudes. Specifically, we sought to examine whether the bidimensional framework can be used to characterize and distinguish biculturals and whether such distinctions result in differences in code-switching attitudes and behaviours.

Design/Methodology/Approach: We used a 2 x 2 ANOVA to examine identity group differences in code-switching attitudes and factors.

Data and Analysis: Participants were 67 Cantonese-English bilinguals who reported their language background and completed questionnaires relating to identity and code-switching.

Findings/Conclusions: The findings suggest the bidimensional model was successful in classifying non-biculturals versus biculturals, and additionally, biculturals could be differentiated according to their strength of cultural identification, which we designated as strong biculturals, Canadian-oriented biculturals, Chinese-oriented biculturals, and weak biculturals. Findings also revealed significant group differences in code-switching attitudes and other factors, such as

code-switching comfort and preference, among the bicultural subgroups.

Originality and Significance/Implications: Results conclude that a more nuanced classification of biculturals is meaningful, as individual differences in cultural identity lead to significant differences in code-switching attitudes and other sociolinguistic factors.

Keywords bilingualism, code-switching, cultural identity, ethnic identity, attitudes,
 biculturalism

“*Si tu eres Puertorriqueño* [if you’re a Puerto Rican], your father’s a Puerto Rican, you should at least *de vez en cuando* [sometimes], you know, *hablar español* [speak Spanish].” (Poplack, 1980, p. 594)

Considering the above quote at face value, it is likely that everyone has experienced in one way or another some form of language switching in conversation. Bilingualism is so widespread around the world that even for monolinguals, it can be commonplace to encounter and hear two languages mixed together in the same sentence or conversation. For individuals who speak two (or more) languages, the above example may simply be a reflection of everyday life. When bilinguals communicate in both of their languages and switch between them, they are code-switching. It is defined as the “juxtaposition within the same speech exchange of passages of speech belonging to two different grammatical systems” (Gumperz, 1982, p. 59), the spontaneous switching from one language to another or mixing elements from two languages within a single speech event (Appel & Muysken, 1987).

Despite it being a common way of speaking for many bilinguals, it is usually linked to negative perceptions of the speaker, and such negative attitudes stem from the community as well as the speaker themselves. This may not, however, always be the case because languages (and hence code-switching) co-exist differently in each speech community.

It is, therefore, possible that some language communities consider code-switching to be acceptable, and perhaps even an asset. While much research has documented the negative perception and stigma attached to code-switching, few studies have reported when code-switching is perceived favourably or accepted, and also the attitudinal dimensions of code-switching (Lawson & Sachdev, 2000). The present study, therefore, seeks to examine the attitudes towards code-switching in a multilingual Canadian context. Referring to the content of

the above quote, our research question specifically asks, how is identity associated with language, especially code-switching? Moreover, we seek to investigate the relationships among existing code-switching attitudes and individual differences in cultural identification.

Code-switching

Bilinguals who code-switch are able to manipulate their languages and integrate them together because they have developed a communicative competence in both their languages, in contrast to the cross-linguistic transfer experienced by language learners. As mentioned above, they are, however, also often viewed as having an insufficient knowledge of either of their languages. This view stems from the misconception that code-switching is a compensatory strategy, derived from the speaker having insufficient language proficiency or a lack of solidarity with the language group. Citing Cantonese-English in Hong Kong as an example, Gibbons (1987) suggested that there are many bilingual “communities in which mixed languages are both disliked and widely used” (p. 145). Similarly, Chana and Romaine (1984) found prominent negative attitudes towards Punjabi-English code-switching despite its frequent use as a speech mode. Attitudes towards code-switching have historically been linked to negative perceptions and at times, strong negative stigma in certain contexts. Traditionally, switching languages has, therefore, been viewed as a sign of weakness, a lack of full language proficiency by the bilingual speaker, hindered by interference (Weinreich, 1953).

Code-switching is not only negatively perceived by its users, but also by the community in general. It has even been linked to social and political discussion, with people holding prescriptivist attitudes, considering it as an improper use of language (Low & Lu, 2006). Such disapproving attitudes towards the use of code-switching stems from the belief that the code-switching process can hinder first and second language learning (Low & Lu, 2006). Its use has

been criticized by government officials and educational policy makers who strive for language standardization, easily making it a political topic in bilingual communities (e.g., Barcelona: Woolard, 1989). However, code-switching cannot simply be regarded as the bilingual's insufficient control or ability in using one of the languages.

One of the pioneering researchers to bring forth a reconsideration of this belief was Poplack (1980), who suggested that code-switching to be a linguistic skill requiring a strong competence of more than one language, as opposed to a lack of. Poplack (1980) also noted that bilinguals who tend to code-switch without effort also tend to be fairly proficient; in fact, bilinguals who exhibited greater language proficiency preferred intrasentential switches, which are more difficult than intersentential code-switching because linguistic boundaries are not overtly apparent. This "reassessment" of code-switching was furthered by Woolard (1998) who described code-switching as "honoured in sociolinguistic analysis as a skilled and strategic performance that respects the discreteness of languages and their hard-edged boundaries, in contradistinction to the messy and aberrant chaos of interference and other interlingual phenomena" (p. 6). Furthermore, code-switching acts differently—structurally and functionally—in different contexts (Heller, 1988; Poplack, 1987); therefore the presence of code-switching in the speech of a bilingual can, therefore, be a marker for the individual's competence in both languages, evidence for their understanding of the grammatical structures of their respective languages and their communicative effect (Gardner-Chloros, 2009).

Attitudes

The profound cognitive anchoring of code-switching is not without social correlates. As bilinguals, individuals have garnered a wealth of unique and specific experiences that distinguish them from their monolingual peers. At the very least, bilinguals have the opportunity to

communicate and interact using another language, possibly with a distinct ethnolinguistic group and become exposed and included in another culture. The significance of these experiences is that it has a direct impact on their thoughts and attitudes. Language attitudes are defined as the evaluative reactions to different language varieties (Dragojevic, 2017). This can include different languages, accents, or registers, for example. However, attitudes towards code-switching, or code-switching attitudes, need to be considered separately from the vast literature on language attitudes. This is because code-switching is not simply the sum of the individual languages together. Code-switching attitudes are distinct in that they are based on the status of the languages when brought together and not on the individual prestige of each of the languages. For example, in the Hong Kong context, both Cantonese and English have high linguistic value and social status, but only if the distinction between them is maintained; when Cantonese-English code-switching occurs, the code-switched speech garners an overall negative impression (Gibbons, 1987). As such, rather than comparing the evaluations between two (or more) language varieties, the focus is on a bilingual speech community's evaluations towards a specific way of speaking which happen to include two different languages.

There have been relatively few studies on code-switching compared to the bulk of the literature on attitudes towards accents, dialects, and languages. For this reason, papers published within the past 20 years can be considered *relatively* current, compared to the first wave of code-switching research in the 1980s. The early work on code-switching focused mostly on describing and establishing its stigmatized and negative associations, which we discussed briefly above. However, the climate has evolved so much with globalization, immigration, and shifts in language ideologies that the recent literature on code-switching attitudes has focused on re-examining this phenomenon in multilingual contexts. For example, Lawson and Sachdev (2000)

studied Tunisian Arabic-French code-switching and found that although it remained associated with negative attitudes, it was also an unmarked ingroup practice in the community when two languages are conventionally used together without language switches being salient or noteworthy (Myers-Scotton, 1988). This suggests that despite its negative perception by the community, it can, as well, be a linguistic variety unique to that community.

Building on code-switching having a distinct role in a speech community, Gardner-Chloros, McEntee-Atalianis, and Finnis (2005) studied the Greek Cypriot community in London. They found that code-switching was a common ingroup practice and the use of Standard Modern Greek and the Greek-Cypriot dialect were both supported by the community. In particular, code-switching attitudes were not evaluated unfavourably; in fact, the younger generation valued code-switching as a part of their cultural identity. Code-switching may, therefore, show and possibly be employed as a marker of group membership by the younger members of the community who value it.

In recent years, Dewaele and his colleagues aimed to quantify the relationships among code-switching and various sociodemographic variables. In a comprehensive study of over 2000 multilinguals, Dewaele and Li (2014a) found that more positive attitudes towards code-switching was linked to gender and educational level. Additionally, they found that self-reported code-switching frequency was linked to many individual differences. For example, more frequent code-switchers tended to be female, extroverted, and also *multilingual*. Dewaele and Li (2014b) further investigated the attitudes towards code-switching and individual differences, such as personality traits. They found that more positive attitudes towards code-switching to be significantly linked to lower levels of neuroticism and higher levels of tolerance of ambiguity and cognitive empathy, but code-switching attitudes was only weakly related to being

multilingual and having a high level of extraversion. These findings suggest that although self-reported code-switching frequency and code-switching attitudes are closely related, they are indeed discrete concepts that, when examined in greater detail, each show distinct relationships with sociodemographic variables.

Code-switching is a communicative and social strategy used by bilinguals, consciously or subconsciously. They are using these linguistic cues as a means to index social categories and group solidarity. Thus, code-switching is naturally linked to attitudes, seen as a reflection of the speaker and their values and identities. As discussed above, if code-switched speech can be a linguistic variety unique to a community, it can also show group membership and be used as a marker of group membership. And, if code-switching can be symbolic of membership and solidarity, it can also represent individual group members' identities.

Studies on language attitudes have concluded the importance of language in the maintenance and expression of cultural identity. This is especially true for ethnic minority group members because it contributes to their acculturation and socialization (Gudykunst & Ting-Toomey, 1990; Kuo & Roysircar, 2004; Miller & Hoogstra, 1992). For example, minority group members can show distinctiveness from the majority through using their heritage language. Although there is copious research on the association between language and identity, there have been few studies focused on examining the link between code-switching and identity (Yim & Clément, 2019). One such study, conducted by Dewaele and Nakano (2013), found that multilinguals reported to feel differently when switching between their languages, suggesting that shifts in identity were linked to language. Moreover, our previous qualitative investigation on this specific topic found that the act of code-switching elicited both positive and negative reactions, producing conflicting feelings for the bilingual *despite* how they viewed their own

bicultural identity (Yim & Clément, 2019). If this is the case, it is possible that individual differences in identification would be linked to variations in code-switching attitudes and perceptions.

A Framework for Cultural Identity

Cultural identity can be considered an individual's affiliation to and internalization of a particular culture, where one can access a set of shared norms that guide their behaviours (Giguère, Lalonde, & Lou, 2010). The *shared* norms which influence the degree to which individuals identify with a particular culture stem arise from shared values, attitudes, and behaviours (cf. ethnic identity; Phinney, 1992), creating a sense of belonging and commitment to the ethnocultural group. Cultural identity is dynamic, susceptible to change over time and space. Those who immigrate to a new setting and embrace a new way of life, may, therefore, develop a sense of belonging and affiliation with the new, dominant culture, but not necessarily at the expense of losing their heritage and ethnic culture. In such cases, then, cultural identity is the attachment an individual may develop to the mainstream and the ethnic culture.

The idea that immigrants would favour maintaining their ethnic culture while developing an attachment to a new culture is not new. In fact, this notion was proposed by John Berry and his colleagues in their bidimensional model of acculturation over thirty years ago (Berry, Kim, Power, Young, & Bujaki, 1989). They used the term *acculturation strategies* to describe the variations in how individuals engage in the acculturation process, distinguishing between the orientations towards one's own group versus the orientation towards the other group (Berry, 1980). Recognizing the existence of an interplay between the maintenance of one's ethnic group culture and the need to create contact with the new culture, Berry et al. (1989) identified two continuums that bicultural individuals navigate through: the degree to which they wish to

identify with their new culture (cultural contact), and the degree to which they wish to identify with their original culture (cultural maintenance). As a result, these two independent dimensions, a preference for maintaining the heritage culture and identity and a preference for engaging and participating in the dominant culture, creates four distinct acculturation strategies: integration, assimilation, separation, and marginalization (Berry, 2007). For example, there can be overt behavioural changes (e.g., clothing and food preferences) and/or internal psychological shifts (e.g., values and self-esteem). Importantly though, there is a presupposition here that individuals are freely able to choose how they wish to acculturate, but this is not always the case. The linguistic policies and cultural ideologies of the society-at-large may impose restrictions on how individuals navigate between the two dimensions (Berry, Kalin, & Taylor, 1977; Bourhis, Moise, Perreault, & Senecal, 1997). Thus, an individual's acculturation strategy may not necessarily correspond to their actual cultural identification.

Conveniently, an individual's own cultural identification can be similarly conceptualized using a bidimensional framework (Phinney, 1990); that is, one's identification with the heritage culture as independent from one's identification with the dominant culture. For example, these two dimensions have been labelled ethnic identity and national identity (Berry, Phinney, Sam, & Vedder, 2006). Camilleri and Malewska-Peyre (1997) labelled these orientations as *identity strategies* and differentiate between an individual's ideal identity versus their actual identity, which may be similar or vastly different. We acknowledge that it is possible for an individual's ideal identity, or the identity strategy they wish to be, to be different from their "real" identity, but it is beyond the scope of this paper to discuss this important differentiation here. Following Clément & Noels (1992; see also Clément, Gauthier & Noels, 1993; Damji, Clément & Noels,

1996), our focus in the present paper is the *actual* cultural identity of the individual, according to how they see themselves, in the context of Berry's bidimensional model.

The bidimensional model has been tested in numerous studies examining psychological topics such as personality traits, social cognition, and mental health and well-being. Research suggests integration as the most optimal strategy; individuals with an integration acculturation strategy were the most well adapted group in many facets, showing more positive outcomes in personal well-being, greater psychosocial and socio-cultural adjustment, and least acculturative stress such as anxiety and uncertainty (Berry, 2006). Additionally, greater cross-cultural contact has been shown to be positively correlated with more favourable multicultural attitudes and openness to diversity (Fuertes, Miville, Mohr, Sedlacek, & Gretchen, 2000), which may, in turn, influence code-switching attitudes and acceptance. Although the model has been used as a framework in numerous psychological studies, it has only been seldom integrated into the area of language (e.g., Clément & Noels, 1992) and yet to be applied to the study of code-switching. Understandably, the integration strategy has been established to be associated with more positive psychological and socio-cultural adaptation (Berry, 2006); that is, people who prefer integration, had positive links to both cultural groups, and were able to speak both languages were simply better adapted. In a similar vein, it is, therefore, possible that individuals with *integrated identities*, such as biculturals, be better adapted "linguistically", that is, be able to freely speak both languages and hold more positive attitudes in using both languages, as in code-switching. Although the bidimensional model of acculturation proposed by Berry and colleagues has been widely accepted and has been supported by many empirical research studies, it remains uncertain whether those with different cultural identities, as classified by the model, would demonstrate differences in the area of code-switching, namely in attitudes and perceptions.

The Present Study

The present study focuses on the relationships between cultural identity and code-switching. As discussed, it is possible that some communities perceive code-switching positively because it marks an association with integrated identities for its members. However, it has yet to be determined empirically whether attitudes towards code-switching are associated with individual variables such as cultural identification and individual differences in cultural identity, despite the established links between language and identity.

We adopt the framework of the bidimensional model previously used in the study of acculturation and identity strategies and apply it to our bilingual sample. Our research questions include examining the attitudes towards Cantonese-English code-switching in a multilingual Canadian context and investigating the relationships between such attitudes and cultural identification, as classified by the bidimensional framework. That is, are existing code-switching attitudes with distinct cultural identities? We hypothesize that individuals with the most integrated identities (i.e. biculturals) will exhibit more positive attitudes towards code-switching and possibly have more positive multicultural attitudes in general. Furthermore, we seek to examine the influence of cultural identity on various code-switching factors, such as its frequency of use and its contribution/disruption in conversation, and hypothesize that bicultural individuals will demonstrate a greater preference towards code-switching. We ground the present research in Canada where multiculturalism ideologies promote equal status among cultural groups, yet English has status as an official language in Canada while Cantonese, despite being one of the most robust heritage languages spoken, does not.

Cantonese-English Bilingualism in Canada

Canada's multicultural ideals promote linguistic diversity (Nettle & Romaine, 2001; Williams, 2003). Three percent of its entire population indicated a Chinese language as their

mother tongue (i.e. Cantonese, Mandarin, and other Chinese dialects, as defined by Statistics Canada). Cantonese is one of the top heritage languages spoken in many Chinese communities across Canada and the Chinese community is the second-largest ethnic group in Canada. In Toronto alone, Cantonese is reported to be the heritage language most often spoken in its households (Statistics Canada, 2011) and is the top immigrant mother tongue, accounting for 9.5% of the 2.7 million people speaking an immigrant language (Statistics Canada, 2016). On a national level, Cantonese is the second most prevalent immigrant mother tongue with over 594,000 speakers and remains one of the top immigrant mother tongues across Canadian cities (Toronto, Vancouver, Calgary, Edmonton, and Ottawa; Statistics Canada, 2016). Although individuals within the Chinese community come from different regions, Cantonese is the main spoken language. Many first- and second-generation Cantonese speakers living in Canada originate from Hong Kong and the nearby southeastern region of China. Of relevance here, Hong Kong has historically been a site of language contact. With its colonial history, English is prevalent from spoken discourse to written text. English is socially valued in Hong Kong and approximately 43% of residents are communicatively competent in that language (2001 Hong Kong Census as cited in Chen, 2005). This results in circumstances promoting code-switching being as a common social practice. Cantonese-English bilinguals who have emigrated from this environment and are living in Canada may, therefore, likely have similar linguistic practices.

Method

Participants

Sixty-seven Cantonese-English bilinguals (24 males, 43 females) participated in the study. Participants had a mean age of 23.41 years ($SD = 7.81$), ranging from 17 to 49 years old. Most of the sample was born in Canada versus being born elsewhere ($n = 42$ and $n = 25$

respectively). The majority of those born elsewhere were born in Hong Kong ($n = 17$; China: $n = 5$; Denmark: $n = 2$; Malaysia: $n = 1$). For the participants who were born overseas, 80% had lived in Canada for longer than 5 years and the mean length of residence was $M = 13.38$ ($SD = 9.95$). The participants in our sample were mostly one-and-a-half and second-generation immigrants; they were from immigrant families, as their parents (fathers: $n = 65$, 97%; mothers: $n = 67$, 100%) were not born in Canada. Using parental education as a proxy for socioeconomic status, the participants' parents were typically high school graduates with a college diploma or some college experience (mothers: $M = 2.70$, $SD = 1.23$; fathers: $M = 3.01$, $SD = 1.25$), suggesting that participants also had a modest socioeconomic status.

Participants were recruited in one of two ways. First, the study was posted on the Integrated System for Research Participation at the University of Ottawa. Undergraduate students taking an introductory course were awarded one credit in exchange for participating in the study. Second, via snowball sampling, recruitment emails were sent to participants to share with their contacts and social networks. The inclusion criteria for the study were that participants must be able to speak and understand Cantonese.

Materials

Background and Language

Sociodemographic variables were assessed using a demographic and language questionnaire (see Appendix C), which included questions on socioeconomic status and language learning history. Participants self-reported their language proficiency in speaking, comprehension, reading, and writing for Cantonese and English using a scale from 0 to 100, representing no proficiency to native-like proficiency. There was also a question regarding the participants' bilingualism. They self-rated their bilingualism level on a 5-point Likert scale, ranging from non-fluent bilingual to fluent bilingual.

Identity

Cultural identity was measured using the Vancouver Index of Acculturation (VIA; Ryder, Alden, & Paulhus, 2000; see Appendix D). This questionnaire included 20 questions relating to lifestyle, behaviours, and participation in cultural activities for each culture, allowing for a bidimensional measure of acculturation by generating separate subscores for the heritage culture and mainstream culture. For example, “I would be willing to marry a person from my native culture” and “I would be willing to marry a Canadian person”. The questions were presented randomly and responses were on a 7-point Likert scale. Reliability was measured using Cronbach’s alpha and was strong for both Canadian items, $\alpha = .81$, and Chinese items, $\alpha = .87$.

Code-switching

Code-switching attitudes. Attitudes towards code-switching was measured in two ways. The first was derived from a single question, “In my opinion, it is okay to switch between Cantonese and English”. This was labelled as the *personal code-switching attitudes* index, as it was self-referential and personal in nature. Second, five questions developed by Dewaele and Li (2014b) were included to assess broader code-switching attitudes (see Appendix E). The nature of the questions was theoretical and global in nature, often referring to individual values and beliefs. The responses were recorded on a 5-point Likert scale and the reliability for this set of questions was moderate at $\alpha = .51$. The score derived from this set of questions was labelled as *general code-switching attitudes*.

Code-switching factors. A 14-item questionnaire assessed code-switching behaviours, motivations, and preferences (Appendix F). The questionnaire was developed to directly assess the code-switching practices of Cantonese-English bilinguals, as a published systematic and comprehensive measure of code-switching was not available (Yim, 2010). This questionnaire surveyed topics such as code-switching frequency and functions attributed to code-switching and

drew on the participants' own experiences, being specific and concrete in nature. Participants responded by indicating their responses using a sliding scale from 0 to 100, representing the percentage of time the statement applied to them. The numeric responses became the participants' score for the corresponding question.

A principal components analysis with Oblimin rotation was performed on the questions relating to various perceptions of their code-switching (see Table 3). Three components were identified, which accounted for 65.82% of the total variance: Behaviours (4 items; $\alpha = .86$), Comfort (6 items; $\alpha = .83$), and Preference (3 items; $\alpha = .78$). One item did not directly map onto any of the factors without reducing internal reliability and was removed from analyses since it was a reverse-phrased item of another item ("I prefer to use one language when communicating with other bilinguals"). The above three code-switching components, therefore, served as the code-switching factors used in subsequent analyses.

Multicultural Attitudes

The Miville-Guzman Universality-Diversity Scale – Short Form (Fuertes et al., 2000; see Appendix G) was used to assess positive multicultural attitudes and openness to diversity. The 15-item questionnaire consisted of three dimensions: Diversity of Contact (5 items), Relativistic Appreciation (5 items), and Comfort with Differences (5 items). Responses were measured on a 6-point Likert-type scale from strongly disagree to strongly agree, with higher scores denoting greater openness to diversity ($\alpha = .77$).

Procedure

The Qualtrics online survey platform was used for the present study. Participants first provided informed consent (see Appendix H) before completing the set of questionnaires described above. To finish, participants were provided with a debriefing form (see Appendix I).

Table 3

Rotated Factor Matrix from Principal Components Analysis with Oblimin Rotation of 14 Code-switching Questions

	Component		
	Behaviours	Comfort	Preference
I use Cantonese and English everyday.		.664	
Generally, I switch between Cantonese and English.	.690		
I switch between Cantonese and English when I'm speaking.	.861		
I switch between Cantonese and English in the same sentence.	.883		
I switch between Cantonese and English between sentences (e.g., one sentence in one language, then the next one is in the other language).	.890		
I switch between Cantonese and English easily.		.879	
It takes effort for me to switch between Cantonese and English.*		.910	
I like to switch between Cantonese and English.			.833
I like it when other people speak to me using both Cantonese and English.			.952
I prefer to switch between Cantonese and English.			.677
I prefer to use one language when communicating with other bilinguals.*†			
I am comfortable switching between Cantonese and English in public (e.g., in front of strangers).		.447	
I am comfortable switching between Cantonese and English in private (e.g., in front of people I know well).		.482	
Overall, I am comfortable switching between Cantonese and English.		.528	
Total variance (%)	42.77	13.23	9.82
Reliability (α)	.86	.83	.78

* reverse-scored item

† removed item

Table 4

Mean Scores (and Standard Deviations) for Cantonese and English Proficiency on a Scale of 0–100 (No Proficiency to Native-like Proficiency).

	Cantonese	English
Speaking	79.13 (22.84)	93.66 (10.30)
Comprehension	85.73 (16.81)	95.98 (7.70)
Reading	55.31 (37.42)	94.80 (8.94)
Writing	48.60 (35.31)	91.80 (12.70)

Results

Background

Participants were highly proficient in oral Cantonese and English (see Table 4) and they self-rated themselves as having a high level of bilingualism, $M = 4.21$ ($SD = .82$). Cantonese was the first language of most of the participants ($n = 52$). Other first languages include English ($n = 10$) and other Chinese dialects ($n = 5$). In a related question, 20 participants also indicated that they had learned Cantonese and English at the same time. Participants reported to be fluent in other languages as well, with French ($n = 28$) and Mandarin ($n = 19$) being the most common. It was important for the participants (or their families) to maintain their Cantonese language proficiency as many were enrolled in Cantonese heritage language classes at a young age ($n = 45$) and continued these classes for many years ($M = 7.54$, $SD = 4.33$). Despite such efforts, most participants indicated English as their dominant language ($n = 51$). English was the language they used most often and most regularly ($n = 42$), but some participants also indicated they used both Cantonese and English most often and regularly ($n = 17$).

Descriptives

Most participants considered themselves part of or belonging to the Chinese community ($n = 48$; 71.6%). Identity was assessed using the VIA scale and participants exhibited high acculturation to both Canadian culture, $M = 5.77$ ($SD = .68$) and Chinese culture, $M = 5.59$ ($SD = .81$). When given the opportunity to self-select or input an ethnic self-label to describe themselves, the most frequently used terms were Canadian-born Chinese ($n = 20$), Chinese Canadian ($n = 15$), and Hong Kong Chinese ($n = 9$). In the participants' self-identification, participants preferred two-term labels, which incorporated their dual Canadian and Chinese identities (68.7%), compared to a Chinese-only label (26.9%) and a Canadian-only label (1.5%).

This is in contrast to their report of their parents' ethnicities; the labels most frequently used by the participants for their mothers and fathers were Hong Kong Chinese ($n = 28$ and $n = 24$ respectively) and Chinese ($n = 24$ and $n = 25$ respectively).

Code-switching

Code-switching Attitudes

The participants' personal code-switching attitudes score was high ($M = 81.42$, $SD = 26.69$), as well as their general code-switching attitudes score ($M = 3.59$, $SD = .56$). The two scores were significantly correlated with each other (see Table 5).

Code-switching Factors

The three identified code-switching factors were code-switching behaviours, comfort, and preferences.

Participants were moderate in their code-switching behaviours ($M = 54.76$, $SD = 29.26$), suggesting that, on average, they code-switched only half of the time in their daily lives.

Behaviours was significantly correlated with the other two factors, comfort and preferences.

Code-switching behaviours was also significantly correlated with the participants' general code-switching attitudes score, but only as a trend with their personal code-switching attitudes score.

Participants found code-switching to be an effortless task and felt at ease code-switching in private as well as in public settings, as their code-switching comfort score was high ($M = 72.62$, $SD = 23.47$). It was also significantly correlated with their code-switching preferences, personal code-switching attitudes score, and general code-switching attitudes score.

Participants moderately liked or preferred using code-switching in their discourse, especially when others use code-switching ($M = 59.95$, $SD = 25.89$). Preference was also significantly correlated with personal code-switching attitudes, but only a trend with general code-switching attitudes.

Table 5*Mean Scores and Spearman's Rho Correlation Matrix for Code-switching Factors and Attitudes*

	Mean (SD)	Code-switching Factors			Code-switching Attitudes	
		Behaviours	Comfort	Preference	Personal	General
Behaviours	54.76 (29.26)	-	.478***	.530***	.215 [†]	.316**
Comfort	72.62 (23.47)		-	.388**	.580***	.444***
Preference	59.96 (25.89)			-	.269*	.229 [†]
Personal	81.42 (26.69)				-	.396**
General	3.59 (.56)					-

* p < .05, ** p < .01, *** p < .001, [†] p < .10

Multicultural Attitudes

Participants exhibited favourable attitudes towards multiculturalism and were open to diversity, with a mean score of 4.57 (SD = .53). However, this score was not correlated with any of the code-switching attitudes scores or factors.

Group Comparisons

We asked participants to self-label their cultural identity because we consider self-labelling to be important as it is a reflection of cultural identity using the participants' own words. In a point-biserial correlation, the participants' self-labelling was significantly correlated to their Canadian VIA scores only, $r = .34, p < .01$. This confirmed that their cultural identity (as measured by the VIA, focusing on concrete behaviours and experiences) closely paralleled their self-labels and were a reliable proxy for cultural identification.

We classified participants into the subgroups derived from the bidimensional model of acculturation by using participants' VIA scores and splitting each cultural dimension (i.e. their respective Canadian and Chinese VIA scores) by performing a median split. As a result, four identity subgroups (integration, assimilation, separation, and marginalization) were created. Although this method elicited groups of comparable sizes, the mean VIA scores did not necessarily reflect the identity orientations. For example, the marginalization group who was supposed to be low in Canadian and Chinese identification actually had mean VIA scores of 5.28 (SD = .52) and 5.35 (SD = .32), out of a possible maximum score of 7, respectively. This was unexpected, as that group would be presumed to exhibit low scores on both identification scales. However, it is possible for responses on scales (e.g., racial identity; Fischer, Tokar, & Serna, 1998) to be negatively skewed due to self-presentation biases and socially desirable responding (Paulhus, 1991).

For these reasons, we then split the sample according to the scale midpoint (i.e. using 4 as the cut point in the 7-point Likert scale), in order to elicit a more accurate categorization of the subgroups. Using the midpoint split method, three different groups were created, integration/biculturals ($n = 62$), assimilation ($n = 3$), and separation ($n = 2$), according to their Canadian and Chinese VIA scores. No participants were classified in the marginalization category. Although the midpoint split elicited more accurate divisions for the subgroups, it did not produce subgroups of comparable sizes. Since the majority of the participants were classified as biculturals, we decided to only use this group in analyses and omit the five participants classified as non-biculturals.

To further take a closer look at our biculturals, we applied a median split to that group's Canadian and Chinese VIA scores, resulting in four bicultural subgroups: integration ($n = 14$), assimilation ($n = 17$), separation ($n = 16$), and marginalization ($n = 14$). This bidimensional classification was confusing as these participants were all *biculturals*, but only differed in the strength of identification to the Canadian and Chinese cultures (see Table 6). We, therefore, labelled the four bicultural subgroupings as: (i) Strong biculturals, participants who are the biculturals with the strongest identification to both cultures, $n = 15$; (ii) Canadian-oriented biculturals, participants who are biculturals but show stronger identification towards Canadian culture, $n = 17$; (iii) Chinese-oriented biculturals, participants who are biculturals but show stronger identification towards Chinese culture, $n = 16$; and (iv) Weak biculturals, participants who are biculturals but have do not have a strong affiliation to both cultures, $n = 14$.

Table 6*Mean Scores (and Standard Deviations) of Canadian and Chinese Identification by Group*

Participants	<i>n</i>	Canadian identity	Chinese identity
Biculturals	62	5.81 (.56)	5.71 (.55)
Strong biculturals	15	6.21 (.29)	6.18 (.27)
Canadian-oriented biculturals	17	6.30 (.36)	5.25 (.40)
Chinese-oriented biculturals	16	5.37 (.28)	6.13 (.31)
Weak biculturals	14	5.31 (.39)	5.29 (.31)
Assimilation	3	6.29 (.53)	2.83 (.21)
Separation	2	3.65 (.35)	6.00 (.71)

Code-switching Attitudes

Running a 2 x 2 ANOVA on attitudes towards code-switching among the bicultural subgroups, there were no significant interactions between Canadian and Chinese identity on personal code-switching attitudes or general code-switching attitudes, $F_s < 1$, *ns*, although a trend was evident for personal code-switching attitudes, $F(1,56) = 2.64$, $p = .11$. There was no main effect of Canadian identification on either code-switching attitudes measure, but there was a main effect of Chinese identification on personal, $F(1,56) = 7.26$, $p < .01$, and general code-switching attitudes, $F(1,58) = 6.43$, $p < .05$. Biculturals who identified strongly with Chinese culture showed more positive personal code-switching attitudes ($M = 90.07$, $SD = 16.85$) and general code-switching attitudes ($M = 3.73$, $SD = .49$) compared to their counterparts who did not identify strongly with Chinese culture ($M = 71.17$, $SD = 32.25$ and $M = 3.39$, $SD = .55$ respectively). This suggests that bicultural participants who show a high Chinese identification exhibit more positive attitudes towards code-switching, irrespective of the strength of their Canadian identification.

Code-switching Factors

A series of 2 x 2 ANOVAs were conducted to test whether there were significant differences in each of the code-switching factors: behaviours, comfort, and preferences.

For behaviours, no significant differences were obtained, $F_s < 1$, *ns*.

For code-switching comfort, there was no significant interaction, though a trend was evident, $F(1,58) = 3.00$, $p = .08$, but there was a main effect of Chinese identity, $F(1,58) = 7.87$, $p < .01$, with those high in Chinese identification ($M = 80.62$, $SD = 18.91$) being more comfortable with code-switching than those low in Chinese identification ($M = 64.64$, $SD = 24.43$). There was also a main effect of Canadian identity, $F(1,58) = 4.29$, $p < .05$, but it was in

the opposite direction, as those high in Canadian identification ($M = 66.83$, $SD = 27.29$) were less comfortable compared to those low in Chinese identification ($M = 78.83$, $SD = 15.84$).

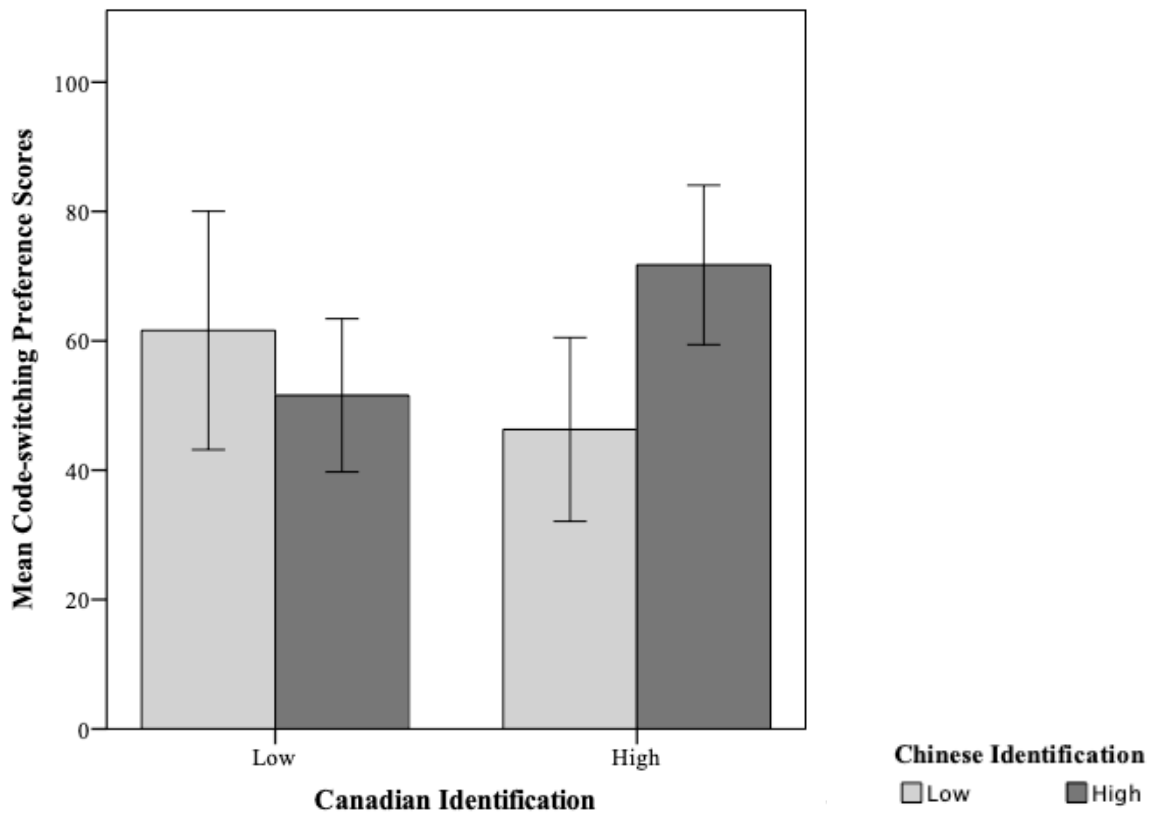
Last, for code-switching preference, there was a significant interaction between Canadian and Chinese identity, $F(1,52) = 7.48$, $p < .01$, with strong biculturals most preferring code-switching in communication ($M = 71.72$, $SD = 22.25$; see Figure 1). Tests of simple main effects show that there were significant effects for Chinese and Canadian identities. Biculturals with a strong Chinese identity showed a significantly greater preference for code-switching than those with a weak Chinese identity when showing high Canadian identification (strong biculturals vs. Canadian-oriented biculturals; $p = .007$), but no differences at low Canadian identification (Canadian-oriented biculturals vs. weak biculturals; $p = .281$). The simple main effects analysis also showed strong biculturals significantly preferred code-switching compared to Chinese-oriented biculturals ($p = .024$), but no differences between Canadian-oriented biculturals and weak biculturals ($p = .119$).

Multicultural Attitudes

In a 2 x 2 ANOVA to test the influence of Canadian identity and Chinese identity on multicultural attitudes among the biculturals, no significant interaction nor main effect of Chinese identity was found, $F_s < 1$, *ns*. For Canadian identity, there was a significant main effect, $F(1,56) = 4.47$, $p < .05$, suggesting that irrespective of Chinese identity, biculturals who identify strongly with Canadian identity (i.e. strong biculturals, Canadian-oriented biculturals) were more open to diversity and held positive multicultural attitudes.

Figure 1

Mean Code-switching Preference Scores by Canadian and Chinese Identification



Discussion

The present study investigated the linguistic practices of Cantonese-English bilinguals, in particular, their attitudes towards code-switching. We examined the relationships between cultural identity and code-switching attitudes and other code-switching factors within a multilingual setting. Overall, there were positive attitudes towards Cantonese-English code-switching; in this context, it was far from being a stigmatized speech practice. Participants held neutral to favourable attitudes towards code-switching and variations in their attitudes were influenced by their degree of cultural identification. Specifically, Chinese cultural identity, showed a significant relationship with both personal and general code-switching attitudes: participants who identified more strongly as Chinese also showed more positive attitudes towards Cantonese-English code-switching.

It was hypothesized that individuals with the most integrated identities would exhibit the most positive code-switching attitudes and most positive multicultural attitudes; this was confirmed but there were more nuanced distinctions among the individuals with integrated identities. The strong biculturals group, who identified most strongly with Canadian and Chinese culture, indeed held strong positive attitudes towards code-switching, but additionally, the Chinese-oriented biculturals also showed positive code-switching attitudes. Although unexpected, the fact that the Chinese-oriented bicultural participants demonstrated equally positive attitudes revealed that the driving force behind holding favourable code-switching attitudes was Chinese identity strength. It appears that maintaining a strong Chinese cultural identity can be the key to being more linguistically accepting, open to the different language practices of other members in the speech community. A bicultural who strongly identifies with their ethnic identity not only views their own code-switching as positive, but is also more

accepting of code-switching in general. On the other hand, the strong biculturals also held the most favourable multicultural attitudes and were most open to diversity, along with the Canadian-oriented biculturals. This is not completely unexpected as Canada's ideologies encourage the multicultural diversity and acceptance; however, our findings here indicate that, in the Canadian context, the strength of Canadian identification and strength of Chinese identification is conducive to boosting different attitudes (i.e. code-switching versus multicultural). It is strikingly clear that the results demonstrate strong biculturals as the most open and accepting, holding the most favourable code-switching and multicultural attitudes. Moreover, these results with both the code-switching and multicultural attitudes suggest the same alignment for the effects of individual differences in identity, indicating that they drive more favourable linguistic and sociocultural attitudes.

Situating our findings within the code-switching literature, it may be that previous studies of bilingual communities which have been shown to be favourable to code-switching and view it as a positive act, may actually reflect contexts which are both linguistically *and* culturally supportive (e.g., Yim & Clément, 2019). These communities likely allow their members to use and maintain their heritage languages in addition to being protective of their ethnic identity. Taking a holistic view, when biculturals are allowed and encouraged to preserve and reinforce their ethnic identity, the consequences are sociocultural as well as linguistic. Certainly, the degree of cultural identification towards the broader, dominant culture remains important, as it is often the focus for immigrants as they adopt a different way of life and embrace the new mainstream culture. However, ethnic identity strength produces more favourable and constructive attitudes that, consequently, may enable more diverse cross-linguistic practices, such as code-switching. In order for environments to encourage bilingualism and code-

switching, it is, therefore, essential for them to also promote ethnic identity maintenance and development.

In addition to code-switching attitudes, the present findings expanded to encompass three code-switching factors: behaviours, comfort, and preference. Code-switching behaviours was the only factor that did not exhibit any significant group differences. As the results showed, the participants had reported to code-switch about half of the time in their daily lives and they were highly comfortable code-switchers who often preferred it in communications. However, despite these findings, the frequency of the bicultural groups' code-switching use simply did not reflect this. One reason for this is perhaps there are not enough occasions in their daily lives for them to use code-switching, even in multilingual and multicultural contexts where code-switching would be commonplace. Thus, it is possible that due to the limited opportunities for using code-switching, we were unable to find any differences in code-switching behaviours among the bicultural subgroups. It is also probable that it is difficult for the effects of code-switching behaviours to become apparent because these are concrete actions that bilinguals must take, unlike attitudes and preferences.

Turning to the comfort and preference factors, our results revealed that, overall, participants were very comfortable using code-switching, they reported that they used Cantonese and English every day most of the time, they were comfortable code-switching in private almost always, and were also comfortable code-switching in public. They simply did not find code-switching to be a difficult task. Code-switching was easy for them, and likely because of this, they also liked to code-switch and preferred to code-switch about half of the time. They also reported to sometimes prefer code-switched speech, suggesting that code-switching added value to their communications. Importantly, there were significant differences in code-switching

comfort among the biculturals. Participants who strongly identified with Chinese culture were more comfortable code-switchers who found code-switching to be easy, compared to those who identified less with the Chinese culture. However, the significant main effect of Canadian identity demonstrated that the opposite was true for biculturals and their degree of Canadian identification. Bicultural participants with a strong Canadian identity were actually significantly less comfortable code-switching and viewed it as a more effortful task. It was not entirely surprising that a stronger identification towards Canadian versus Chinese culture elicited different code-switching comfort results. It has been well-established that the two cultural dimensions which immigrants, or biculturals, negotiate in their identification are independent. However, the effect of Canadian identity was interesting, as it suggested that there may be indirect disadvantages to developing and/or maintaining a high degree of identification towards the dominant, mainstream culture. Depending on the ideologies and policies of the society-at-large, perhaps additional bolsters are needed to support immigrants' ethnic culture, either implemented by formal institutions or informal community practices, in order for biculturals to be comfortable code-switchers who use their heritage language with ease.

We also confirmed our hypothesis of biculturals showing greater preference towards code-switching. The significant interaction between Canadian and Chinese identity on code-switching preferences revealed that biculturals high in Chinese identification preferred code-switching more than biculturals low in Chinese identification, but only if they also had a strong Canadian identity. That is, strong biculturals most preferred code-switching in communication, followed by the weak biculturals, and the Chinese-oriented and Canadian-oriented biculturals preferred code-switching the least (approximately only 50% of the time). Unlike code-switching

comfort, the Chinese-oriented biculturals did not prefer code-switching in communication (despite them being comfortable to do so).

It may be that the Chinese-oriented (and Canadian-oriented biculturals) not preferring code-switching could be linked to them being uneven biculturals. We were able to identify these subgroups within a seemingly homogeneous bicultural group, suggesting that individual differences in cultural identity can reveal further differentiations among biculturals. Adopting the bidimensional framework, our classification does not focus on the extent to which the two cultures are integrated within the individual (cf. bicultural identity integration; Benet-Martínez & Haritatos, 2005); rather, we emphasize the manner in which the two cultures are negotiated and how even though an individual may be a bicultural, their strength of identification towards each culture are independent and can vary. Although all participants in our analyses were classified as biculturals, we understand that this label can constitute a wide range of individuals (Cheng, Lee, Benet-Martínez, & Huynh, 2014). However, the results revealed our bicultural individuals to be highly homogeneous—one-and-a-half and second-generation immigrants who grew up modestly in Canada with parents whom they perceived to identify as primarily (Hong Kong) Chinese. We can argue that the sheer homogeneity of our sample makes our conclusions exceptionally striking; it was meaningful and plausible to assess cultural identity strength using the bidimensional framework as independent variables to produce *distinct* subgroups, which we established resulted in significant differences in code-switching attitudes and preferences.

On the topic of measuring cultural identity strength, our attempts at reducing the skewness present in the scores of the VIA measure allowed us to uncover the nuances within the bicultural group. Our decision to first carry out a midpoint split followed by a median split stemmed from our effort to correct the skewness often present in identity and other measures

used in social psychology. Using self-reports, there is always a risk of self-presentation bias with participants implicitly leaning towards more positive responses, and hence, producing negatively skewed results. In such cases, it is to be expected that the initial midpoint splits used in our analyses produced a larger bicultural subgroup than what it would have, if not for such skewness. However, we cannot presume this was the case either with our sample, and we rectified this by then applying median splits on our bicultural group. It is simply a caveat for researchers who use social psychological methods and instruments and the importance of being aware of potential biases.

Conclusion

The present study is the first, to our knowledge, to demonstrate sociolinguistic consequences as a result of biculturals' cultural identification; namely, the findings showed that differences in code-switching and multicultural attitudes, along with code-switching preference, was a function of the strength of cultural identification among biculturals. Cultural identity strength had a definite impact: strong biculturals exhibited more positive code-switching and greater code-switching preference, as well as more positive multicultural attitudes and greater openness. There has yet to be a study on attitudes towards code-switching which directly assesses the subtle distinctions among bilingual biculturals and the present paper contributes to the literature in its focus on the *cultural identities* of the bilingual. It is fitting that the bidimensional framework was applied as a novel method in addressing and assessing the individual differences among biculturals. Foremost, we successfully applied the bidimensional model of acculturation and employed this framework as a strategy to differentiate *biculturals*, which has yet to be carried out in previous studies. This is noteworthy as there has been little research examining the individual differences across bicultural individuals, aside from the work

by Benet-Martínez and colleagues. Rather than focusing on the integration or compatibility of the biculturals' relative cultural identities, however, we believe it is crucial to highlight the respective strength of the co-existing, yet independent, cultural identities as a means to differentiate and classify a group of biculturals. Moreover, we highlight the significance of the defined subgroups, within a seemingly homogeneous bicultural sample, consequently exhibiting differences in *language attitudes*. One of the primary goals of this study was to highlight the relationship between cultural identity and code-switching attitudes, specifically underlining the specific linguistic concept of code-switching and its association with social psychological variables. In addition, our findings open the path to further examinations of the social correlates of biculturality for intergroup communication and its correlates such as social harmony and cohesion in multicultural contexts.

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Running head: EVALUATING STRUCTURAL DIFFERENCES IN CODE-SWITCHING

Study 3

Evaluational Reactions to Degrees of Code-switching*

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Abstract

Code-switching is described as the spontaneous switching from one language to another, essentially different juxtapositions of two languages within the same speech exchange (Appel & Muysken, 1987; Gumperz, 1982). Linguists have further distinguished code-switching based on their structural properties, such as insertions and alternations (Muysken, 2000). Despite being associated with negative attitudes in the past, recent studies demonstrate code-switching to be used in multicultural communities where it is acceptable and valuable to its members (Gardner-Chloros et al., 2008; Yim & Clément, 2019). Moreover, it has been suggested that bilinguals are able to recognize different structural patterns in code-switched speech and consequently, use such speech patterns to validate their ingroup membership and identity (Chen, 2008). The present matched-guise experiment, therefore, seeks to be an empirical investigation examining the effects of different degrees of code-switching on evaluative reactions.

Ninety-one Cantonese-English bilingual participants listened to audio speech excerpts containing no code-switches, single code-switches, or multi-item code-switches in either an English or Cantonese base language prior to making evaluative ratings on personality attributes using semantic differentials. Results revealed a significant interaction between base language and degree of code-switching, but differentially for status and solidarity ratings. Higher status was attributed to excerpts using an English base language, but only when no code-switching was present. In contrast, greater solidarity was attributed to Cantonese excerpts, but especially those with multi-item code-switches, suggesting that participants found Cantonese with code-switching to be most favourable and likely most representative of their own ingroup. Implications are discussed in the context of intragroup communication and ethnic identification.

Keywords bilingualism, code-switching, identity, attitudes, perception, matched-guise

Evaluational Reactions to Degrees of Code-switching

There are many reasons as to why bilinguals code-switch, but the most common explanation is that they simply use the language item most salient or accessible to them at the time (Grosjean, 1982). This explanation is partly related to the presumption that bilinguals switch languages because they do not have access to a particular lexical item and must *resort* to another language for successful communication. The rationale is derived from the traditional idea of bilingual code-switchers not being fully proficient in either language. Stable and balanced bilinguals do, however, still code-switch. It is, in fact, a reflection of a skilled and strategic performance: code-switches are seldom performed in a random manner; they are rule-governed linguistic devices which are intentionally used (Poplack, 1980, 2001).

Despite code-switching being representative of bilinguals' communicative competence, it exists in many bilingual "communities in which mixed languages are both disliked and widely used" (Gibbons, 1987, p. 145). However, this negative attitude associated with code-switching is shifting and some studies have described communities where this is not the case—where code-switching is acceptable. Specifically, code-switching attitudes have been reported to be favourable and valued by young adult community members because they are conscious of its significance for their cultural identification (Gardner-Chloros, McEntee-Atalianis, & Finnis, 2008; Yim & Clément, 2019). Similarly, individuals are also cognizant of different patterns of code-switching (i.e. the extent the languages are mixed together in conversation) and their use in validating their identity (Chen, 2008). A key question that follows, then, is whether different *degrees* of code-switching would interact with cultural identification and how these variables impact attitudes towards code-switching. Given the dearth of evidence related to this issue, the

goal of the present study was, therefore, to examine the significance of different speech patterns and speaker identity on evaluative reactions.

Social Motivation for Code-switching

For the speaker, there are multiple reasons behind the act of code-switching, some conscious and some not. For instance, a code-switch can be an explicit linguistic response to implicit cues in the environment (i.e. the interaction, conversation topic, or interlocutor). More interestingly, though, it can be symbolic of not only the bilinguals' language preferences or communicative strategy, but also their social roles. Language carries social meaning and has social functions (Appel & Muysken, 1987); as a result, the presence of a language switch would also have social significance. Indeed, code-switching has a social function, in that the choice of language indexes particular values and identities (Myers-Scotton, 1993). The act of code-switching, therefore, has implications beyond the conventional use of language. Code-switching allows bilinguals to redefine interactions and negotiate relationships, emphasizing it as “a response to the interaction as it has progressed...[and dissociating] the interaction from the arena in which the interaction was taking place” (Myers-Scotton & Ury, 1977, p. 14).

Code-switching has apparent sociolinguistic advantages for the bilingual. However, it is also closely tied to a strong negative stigma in certain contexts. Code-switching is not only negatively perceived by its users, but also by the community in general. Budach, Roy, and Heller (2003) investigated the discourse strategies of Franco-Ontarians and found that “a ‘good bilingual person’ [was only one who was] able to speak both English and French in their unilingual forms; being bilingual meant being unilingual twice over, with each variety used in a standard, normative form” (Budach et al., 2003, p. 619). As such, code-switching presents a

paradox: it serves multiple roles for bilingual individuals, but it is also associated with the viewpoint that it is an *unfavourable* consequence of bilingual language use.

One of the reasons for viewing code-switching negatively is it can be considered a marker of a lack of group solidarity. Notably though, Heller (1988) highlighted the fact that code-switching was also considered as an acceptable way of speaking in some communities because the role of code-switching differs across contexts, that is, the structural manifestations and discourse functions of code-switching are unique to the community in which it occurs. Several code-switching studies demonstrated this as code-switching was found to be valued in multilingual contexts (Gardner-Chloros et al., 2005; Lawson & Sachdev, 2000). More recently, Yim and Clément (2019) studied Cantonese-English code-switching in Toronto and found that young bilingual adults viewed their code-switching as favourable and associated it with their own cultural identities, specifically a bicultural identity. Their code-switching, however, was also a source of negativity for the bilinguals because it allowed others to invalidate their Chinese ethnic identity. These findings build on the notion of code-switching being an ingroup speech practice for the community while attitudes towards it remain neutral or were moderately positive. Code-switching also plays a distinct role for the individuals themselves. In particular, code-switching directly indexes the community members' own bilingualism, their group membership, and most importantly, their identities.

Degrees of Code-switching: Implications of Structural Differences

It is evident that code-switching is not a static entity. As Gumperz (1982) described, it is the “juxtaposition within the same speech exchange of passages of speech belonging to two different grammatical systems” (p. 59). Linguists often distinguish between levels of code-

switching and Muysken (2000) created a structural typology differentiating three code-mixing² patterns: insertions, alternations, and congruent lexicalization³. Similar to borrowing, insertions are often single constituents that are single-item code-switches (usually content words specifically nouns and adjectives) incorporated into a clear base language. Alternations are likely to include multi-item constituents that have greater length and complexity than insertions, implying the speaker must know both languages and grammars well. Certainly such structural linguistic differences have been shown to be significant in language contact research; however, the distinct insertions and alternation patterns have also been found to be impactful on an individual level as well (described below; Chen, 2005).

Chen (2008) studied Cantonese-English code-switching in Hong Kong and observed two distinct varieties; importantly, each code-switching variety held different social implications. The researcher described a mainstream style of code-switching that was considered an acceptable speech norm among the younger bilingual population. This style typically occurred when English terms were intrasententially incorporated into a Cantonese base language. In contrast, a non-mainstream style was perceived negatively, when Chinese items were inserted into an English base language or when Chinese and English were mixed at an intersentential level (cf. alternations characterized by Muysken [2000]). Besides the linguistic differences between the two patterns, the former was performed by locals who were lifelong Hong Kong residents, while the latter was associated with a minority group of “returnees”, such as those who had left Hong Kong for education overseas and/or spent a significant amount of time elsewhere, and returned

² Muysken (2000) used the term code-mixing to reference instances where elements from two languages are combined within a sentence. We acknowledge the differentiation, but we do not deem it necessary from a psychological perspective and will remain using code-switching as a general label for bilingual speech when two languages come into contact, “reserved for the rapid succession of several languages in a single speech event” (Muysken, 2000, p. 1).

³ Much less frequent is congruent lexicalization, which suggests that the switching has become something different; there is a shared grammatical structure that can include lexical items from both languages, similar to style shifting and dialectal variation.

subsequently. Chen (2008) concluded that the use of the distinct non-mainstream speech style by returnees, in contrast to their local peers, allowed the locals to index their own Hong Kong identity as well as “deauthenticated the returnees’ [own] Hong Kong identities and illegitimated their linguistic practice...empowered through ideologies of language, people, and territory” (p. 72). These findings clearly indicated that subgroups within a bilingual population were aware of their own code-switching and its social significance and also conscious of the attitudes associated with their language use. Therefore, the sociolinguistic functions of code-switching can be differentiated by structurally distinct patterns and this differentiation, akin to organizing code-switching into different levels, had social implications in intergroup relations.

Furthermore, the *perceived* identity of the speaker can have important implications. The concept of cultural accommodation (and the theoretical framework of cultural frame switching) is an explanation for the priming effects when participants are presented with culturally relevant stimuli and biculturals accordingly shift their values and attributions towards the norms of the primed culture and accommodate their responses to align with the patterns of the specific culture (Hong, Morris, Chiu, & Benet-Martínez, 2000). Chen and Bond (2007) proposed that cultural accommodation does not actually arise from the culture-specific content though, but rather, the cultural priming is derived from the participants’ own *expectations*. For example, an individual may anticipate an individual to be a speaker of a particular language and thus, shift their responses to align with the norms of that cultural group (cf. Aboud, Clément, & Taylor, 1974).

To our knowledge, there has not yet been a study to investigate the research areas described above and incorporate them together in an empirical investigation on the social psychological consequences of different linguistic patterns of code-switching, that is, the effects of different speech patterns *and* perceived speaker identity on evaluations towards the speaker

and their cultural identity. Furthermore, a key question arises: how do different code-switching patterns affect bilinguals' *attitudes* towards code-switching and their *social perceptions* towards the code-switching speaker?

Language Attitudes and Evaluations: The Social Psychology of Language

Language attitudes are defined as “evaluative reactions to different language varieties”, with varieties possibly being accents, dialects, or languages themselves (Dragojevic, 2017, p. 1). Within language attitudes research, studies have highlighted the distinctions that are found between languages which co-exist within a community. For example, different languages may have a majority or minority status or be linked to high or low prestige. It cannot be assumed, however, that the perceptions associated with individual languages within a speech community are maintained when those languages are in contact with each other. Each language variety, therefore, has its own value but it does not suggest that the languages, when combined together (as is the case with code-switching), will hold the same status. For example, in Hong Kong, both Cantonese and English have a high linguistic value and social status (Yau, 1993), but only if the distinction between them is maintained; when Cantonese-English code-switching occurs, the code-switched speech garners an overall negative impression (Gibbons, 1987).

Early studies of attitudes towards language have focused on examining the perception of its use and its association with social categories and social attributes. None have been as influential as the seminal study by Lambert, Hodgson, Gardner, and Fillenbaun (1960) where they developed the matched-guise paradigm for language attitudes research. Although Lambert et al. (1960) did not study mixed language or code-switching, they conducted one of the first experimental studies on language attitudes by creating a matched-guise design to study *covert* attitudes. This technique involves participants judging speech passages without knowing the

speaker's identity and then rating the speaker on various personality and social attributes.

Unbeknownst to the participants, they judge the same speaker conversing in different languages (or varieties) because the speaker's identity remained hidden. Similar to the studies of covert prestige by William Labov (1966), covert attitudes frees individuals from closely monitoring their speech (or in our case, perceptions and judgments) and present themselves in a way that is representative of their own group membership or cultural identity. Therefore, the matched-guise technique allows researchers to assess *covert* language attitudes (or code-switching attitudes, in the present case), as opposed to overt attitudes, which can be affected by a myriad of factors, from self-presentation biases to language ideologies. The ingenious matched-guise technique created by Lambert and his colleagues *sixty years ago* has since become the primary paradigm in the study of language attitudes for it indirectly assesses the "more private reactions" of the individuals, the underlying attitudes that may not be uncovered when using direct attitude measures (Lambert, 1967).

Several studies in the 1980s have employed the matched-guise design to examine how code-switching and language choice can impact the attribution of social characteristics in bilingual communities. Genesee and Bourhis (1982) studied French-English code-switching in Quebec after French was restored as the province's official language. Their findings showed that there were changes in evaluations towards code-switching, in that the participants attributed language choice earlier in the conversation according to situational norms and subsequent choices according to interpersonal accommodation, demonstrating the impact of the sociocultural context on intergroup relations and perceptions of code-switching, especially at a time when there was intergroup conflict. In an attitudinal study of Cantonese-English code-switching in Hong Kong, Gibbons (1987) found Cantonese-English code-switching elicited negative attitudes

compared to English or Cantonese separately; speakers who used code-switching were viewed as impolite and showing off. For instance, code-switching speakers were evaluated similarly to Cantonese speakers on the dimensions of knowledge and attractiveness; in contrast though, code-switching and English had similar ratings for being ambitious, proud, confident, and modern. Depending on the social dimension under study, evaluations of code-switched speech at times resembled attitudes towards Cantonese, at times resembled attitudes towards English, and at times differed from both, leading Gibbons (1987) to postulate that code-switching was likely a strategy used by Hong Kong individuals who sought to maintain a compromise between Eastern and Western cultures.

In a replication of Lambert et al. (1960), Genesee and Holobow (1989; see also Giles & Marlow, 2011) introduced the evaluative dimensions of status and solidarity. Status (e.g., intelligent, hardworking) is often attributed based on perceptions of socioeconomic status (Fiske et al., 2002; Woolard, 1985). Speakers of standard varieties or majority languages are often associated with dominant social groups within a community; thus, and higher status ratings would be given to speakers who speak in a standard way or spoke in the majority language, compared to those who did not (Fuentes, Gottdiener, Martin, Gilbert, & Giles, 2012). For example, more positive attributes are assigned to users of the more “prestigious” language (Giles, 1970). In contrast, solidarity (e.g., sympathetic, warm) is a reflection of ingroup membership and commitment (Ryan, 1983). For example, minority ethnic group members have been shown to express their group’s distinctiveness through the use of their heritage language (Giles & Johnson, 1981). Although the use of a non-standard style or minority language may not incur high status in the community, they are likely to be linked to high solidarity ratings as using the “less prestigious” style symbolizes a social identity and enhance feelings of solidarity within

one's own linguistic community (Giles, Bourhis, & Taylor, 1977). Research on language attitudes has focused on documenting the evaluations towards majority versus minority languages, standard versus non-standard language varieties, and regional versus foreign accents. No research as of yet conducted an empirical investigation of evaluative reactions towards systematic structural differences in code-switched speech, which is the focus this article.

The Present Study

The present study sought to explore the effects of distinct code-switching patterns and cultural identity on evaluations towards code-switching. The primary objective was to examine the attitudes associated with code-switching and how the cultural identification of the speaker played a role in evaluative judgments. At this time, it remains unclear what are the possible effects of *perceived* speaker identity – when provided with information regarding a speaker's cultural identity, in what way does such knowledge impact their attitudes towards the speaker's speech and consequently, evaluations on the speaker's social attributes? Furthermore, the present study aimed to directly examine the effects different code-switching patterns; whether different degrees of code-switching are perceived differently and if they ultimately *affect* their evaluative reactions and social evaluations towards the speaker. As stated previously, code-switching patterns can be distinguished by levels of structural linguistic differences (i.e. single-word versus multi-word items) and these patterns were symbolic of ingroup membership, according to Chen's (2008) sociolinguistic findings. Thus, we systematically manipulated the degrees of code-switching to be the first study to directly address the *social* effects of varying *linguistic* patterns in bilingual speech. Our study accomplished this by presenting code-switching differences as a continuum with both English and Cantonese as base languages and test how such code-switching differences affected bilinguals' attitudes and social perceptions.

Method

Participants

Participants were 91 Cantonese-English bilinguals (37 males, 54 females) who were between 18-37 years old ($M = 20.81$, $SD = 4.00$). The majority of them were born in Canada ($n = 64$). From those not born in Canada ($n = 27$), individuals were born in Hong Kong ($n = 15$) and China ($n = 12$). The mean length of residence in Canada for the sample was 15.32 years ($SD = 7.79$). They were bilingual adults who were highly orally proficient in both Cantonese and English, but lacking strong literacy skills (see Table 7). On a 5-point Likert scale, they considered themselves to be practical bilinguals who were fluent in their second language but may not use it everyday ($M = 3.88$; $SD = .90$). Many participants have taken Cantonese heritage language classes ($n = 49$), for a mean of 6.62 years ($SD = 3.87$). Cantonese was the primary language used at home with family members, while English was dominant in their other life domains. When asked which language they presently use most often and which language they chose to communicate in, the majority selected English ($n = 54$ and $n = 69$ respectively). Participants were asked to self-identify their ethnicity by choosing a term that was previously identified as prevalent (Yim & Clément, 2019; Boatswain & Lalonde, 2000), or providing their own. The most frequently used terms were Canadian-born Chinese ($n = 24$), Chinese Canadian (or Canadian Chinese; $n = 20$), Hong Kong Chinese ($n = 17$), and Chinese ($n = 14$). In terms of belonging, participants, for the most part, considered themselves a part of or belonging to a Chinese community (80.0%). Specifically, they identified themselves to be part of the Toronto Chinese community ($n = 61$) as most of them had lived in the Greater Toronto Area ($n = 72$). Another Chinese community that was identified was not a location per se, but a community of

Table 7

Mean Scores (and Standard Deviations) for Cantonese and English Proficiency on a Scale of 0–100 (No Proficiency to Native-like Proficiency)

	Cantonese	English
Speaking	73.87 (23.55)	87.84 (16.26)
Comprehension	79.13 (19.99)	89.39 (15.15)
Reading	51.90 (37.64)	88.35 (15.23)
Writing	46.29 (36.38)	85.53 (16.86)

the Chinese Canadian cohort, that is, the Canadian-born 1.5 generation and second-generation immigrant ($n = 15$).

Recruitment was conducted in three ways. First, the study offered undergraduate students taking an introductory course in psychology to receive one credit in exchange for participation. Thus, the study was posted on the Integrated System for Research Participation at the University of Ottawa and the Undergraduate Research Participant Pool at York University. Second, through snowball sampling, the researcher emailed Chinese student clubs and departmental associations in various Canadian universities and asked whether they were willing to share the study information with their members and networks. Individuals who volunteered to participate in the study were given an opportunity to enter into a draw for one of five \$20 gift cards. Recruitment emails were also sent to all participants who indicated they were willing to share the study information with their contacts. The inclusion criteria were that participants must be able to speak and understand Cantonese.

Design

We adapted the matched-guise paradigm created by Lambert et al. (1960) into a $2 \times 3 \times 4$ factorial design including base language and degree of code-switching as repeated measures and speaker identity as a between-group factor (see Appendix J). Participants were randomly assigned to one of four identity conditions: (i) speakers identifying as Chinese, (ii) speakers identifying as Canadian, (iii) speakers identifying with both cultures, and (iv) no information given (control condition). We manipulated speaker identity by presenting participants with fabricated background information about the speakers of the audio stimuli they would subsequently hear (see Appendix K).

As described below, participants were exposed to speech samples depicting the insertion of three different degrees of code-switches to English and Cantonese in Cantonese and English base language speech samples.

A covariate was selected to control for differences in cultural identity and acculturation across participants. Participants' length of time living in Canada was used as a covariate, as it has been previously identified as a predictor of acculturation (Noels, Pon, & Clément, 1996; Kuo & Roysircar, 2004).

Materials

Background Measures

Sociodemographic variables were assessed using a background questionnaire, which included questions on topics such as education level and language learning history (see Appendix L). Participants self-reported their language proficiency in Cantonese and English across four domains: speaking, comprehension, reading, and writing. Responses were given on a sliding scale from 0 to 100, representing no proficiency to native-like proficiency. There was also a question regarding the participants' bilingualism. They self-rated their bilingualism level on a 5-point Likert scale, ranging from non-fluent bilingual to fluent bilingual.

Audio Stimuli

A set of 18 code-switching excerpts was created. There were 6 conditions (2 base languages \times 3 code-switching levels). The two base languages were Cantonese and English which constituted the main languages of the excerpts. To each was grafted three levels of insertion of the other language: (i) no code-switching, (ii) code-switching single insertions (e.g., only one code-switch), and (iii) code-switching with multi-item insertions (e.g., longer stretches

of code-switching within a clear base language). There were 3 excerpts created for each condition, resulting in 18 unique excerpts (see Appendix M).

The code-switching excerpts were one to two sentences long and were based on interview data from Yim and Clément (2019). The excerpts were controlled for content; one excerpt was task-based, one was related to a social situation, and one was of a random nature. This pattern was repeated for each of the 6 conditions. Additionally, in the conditions which included code-switches, they were adapted to match for location in sentence and parts of speech. For example, if a Cantonese *verb* was used as a single insertion in English, then it was ensured that an English *verb* was used as a single insertion in Cantonese.

Three Cantonese-English bilingual women independently recorded each of the 18 excerpts. The mean age of the speakers were 29.33 years old ($SD = 6.4$) and Cantonese was the native language for all speakers and English was their second language. Our decision to use only female speakers was to maintain the consistency as female speakers tend to be rated higher in attractiveness and within the solidarity dimension, especially speaking the minority language (Lambert, 1967). Eighteen excerpts recorded by each of the 3 speakers, resulted in a total of 54 audio stimuli.

The primary reason for creating a set of 54 audio stimuli was to ensure to properly account for the extraneous variable of speaker voice quality by creating a randomization of excerpts and speakers in our trials. First, we performed a quasi-randomization of assigning speakers to presentation trials. The assignment of speakers to a trial was random except that the speaker could not be presented in two consecutive trials. This resulted in two speaker orders. Second, we performed a quasi-randomization of assigning code-switching excerpts to presentation trials. The assignment of excerpts to a trial was random except that excerpt within

the same condition could not be presented in two consecutive trials; this resulted in two excerpt orders. As a result, 4 presentation orders with 18 audio trials were created (see Appendix N). In summary, the audio stimuli presented underwent randomization with the following rules applied: (i) audio stimuli within the same category were not presented in consecutive trials (i.e. an English code-switching single insertion trial cannot be followed by another English code-switching insertion trial) and (ii) the same speaker did not speak in consecutive trials (i.e. a trial with Speaker A will not be followed by another trial featuring A). Each participant listened to 18 audio stimuli presented in random order and with a combination of different speakers.

Evaluative Reactions

The evaluations made by the participants represented their covert attitudes towards the speakers' speech practices. Participants rated the audio stimuli by using 7-point semantic differential scales, which are commonly used in language attitudes studies (Cargile, Giles, Ryan, & Bradac, 1994; Giles & Ryan, 1982). Five pairs of semantic differentials were based on the status dimension (i.e. intelligent, modest, hardworking, rational, competent) and five pairs of semantic differentials were based on the solidarity dimension (i.e. sympathetic, tolerant, friendly, honest, warm). A score for status and solidarity was calculated by averaging across the 5 trait ratings in each dimension by condition. The reliability was high across all conditions, ranging from 0.81 to 0.85 for status and 0.75 and 0.89 for solidarity.

Two additional questions asking participants to evaluate the extent of the speakers as being Canadian or Chinese produced an index for the perception of Canadian identity and perception of Chinese identity, respectively. As a result, for each of the conditions, there were four indices of interest: two averaged scores for status and solidarity and two scores for perceived Canadian and perceived Chinese identity (see Appendix O).

Procedure

All participants gave their consent prior to starting the online study (see Appendix P). They completed demographics questions about themselves and their language background. Following this, they were presented with the speaker identity information, followed by the audio stimuli and the semantic differentials. Participants listened to the audio stimuli once and subsequently completed 12 ratings for each stimuli. For each trial, they were asked to rate each stimuli based on the voice in the speech utterances, similar to when they hear a voice on the radio or telephone and have to come up with a picture in their mind of the person speaking. To conclude, a debriefing form was presented and they were thanked for their participation (see Appendix Q).

Results

A $2 \times 3 \times 4$ mixed ANCOVA was conducted to investigate the within-subjects effects of base language (English, Cantonese) and degree of code-switching (none, single insertions, multiple insertions) as well as the between-subjects effects of speaker identity (bicultural, Canadian, Chinese, or control) with length of residence as a covariate.

Order Effects

A multivariate one-way analysis of variance was conducted comparing the effects of the 4 orders of speech samples on the dependent variables. Even though the overall test reached significance, $F(12, 258) = 1.87, p = .04$, no significant univariate effects were found for status, $F(3, 90) = 1.75, ns$, solidarity, $F(3,90) = .54, ns$, Canadian identity, $F(3, 90) = .93, ns$, and Chinese identity, $F(3, 90) = 2.48, ns$.

Covariate

The length of time participants had spent living in Canada interacted with none of the factors. Main effects were, however, found for each of the four dependent variables: status, $F(1, 84) = 4.70, p = .03$, solidarity $F(1, 84) = 4.47, p = .04$, perceived Canadian identity, $F(1, 84) = 4.89, p = .03$, and perceived Chinese identity, $F(1, 83) = 3.95, p = .05$.

Effects of Language, Code-switching Level, and Speaker Identity

Status

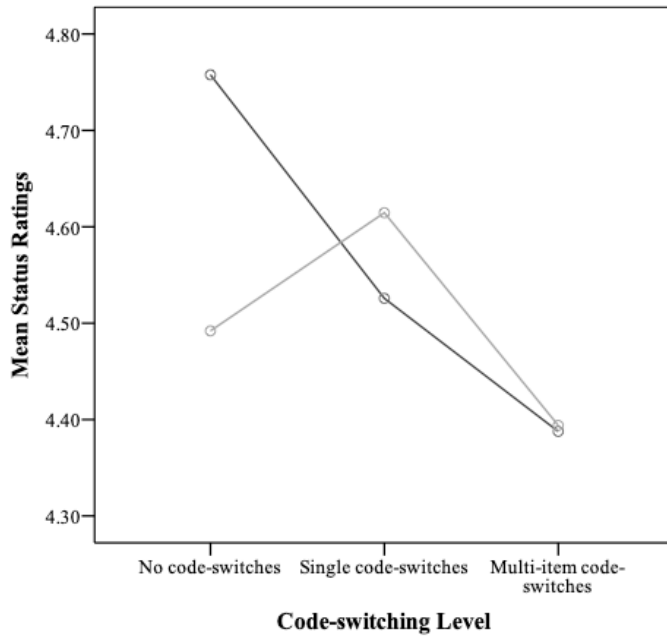
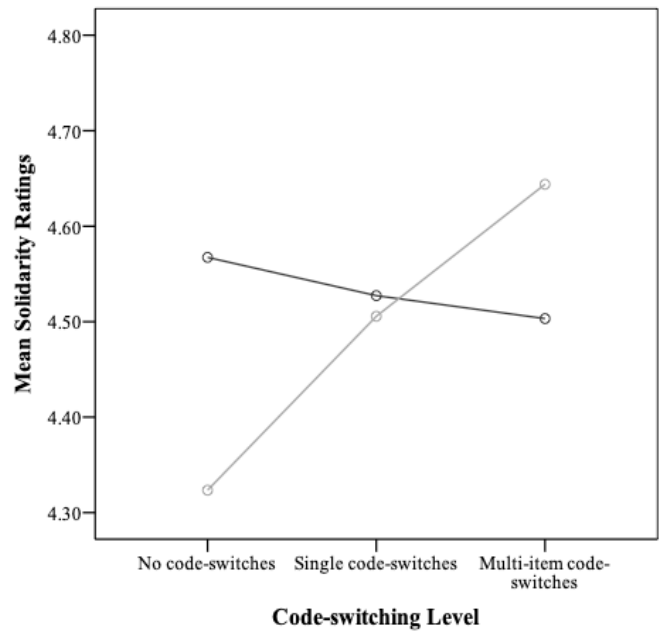
There was a significant main effect for base language, $F(1, 84) = 4.16, p = .05$, suggesting that English excerpts received significantly greater status ratings ($M = 4.55, SD = .56$) than Cantonese excerpts ($M = 4.49, SD = .61$). In addition, there was a significant interaction between base language and degree of code-switching, $F(2, 168) = 4.24, p = .02$ (see Figure 2a). Status ratings were significantly different for English and Cantonese but only when there was no code-switching present. Test of simple main effects revealed English had significantly higher status ratings than Cantonese when there were no code-switches present, yet there were no differences in status when code-switches were present (single and multi-item insertions). In addition, status ratings significantly decreased from English excerpts with no code-switches, to excerpts with single insertions, to excerpts with multi-item insertions. In contrast, Chinese excerpts with single insertions were rated significantly higher in status than those without code-switches and those with multi-item code-switches. The speaker identity manipulation did not garner any significant effects on status.

Solidarity

There were no significant main effects for the solidarity dimension. Similar to status, however, there was a significant interaction between base language and code-switching level, $F(2, 168) = 5.00, p < .001$ (see Figure 2b). The significant interaction indicated that higher solidarity ratings were given as more code-switching to English was inserted into Cantonese speech, but there were no differences across the code-switching levels for English excerpts. Test of simple main effects also showed that there were significant differences in solidarity ratings between English and Cantonese for excerpts without code-switching and for excerpts with multi-item code-switching while English and Cantonese excerpts with single insertions were rated similarly. That is, English base language excerpts largely remained steady across the code-switching levels, but Cantonese base language excerpts with no code-switches had lower solidarity ratings (compared to the English excerpts with no code-switches) and progressively increased to surpass the English excerpts in solidarity ratings, at the multi-item code-switch excerpts. Last, there were no differences across speaker identity conditions for solidarity.

Perception of Canadian Identity

For perceived Canadian identity, there was significant main effect of base language, $F(1, 84) = 44.11, p < .001$, revealing overall, that English base language excerpts resulted in higher Canadian identification ratings ($M = 5.56, SD = .76$) compared to Cantonese base language excerpts ($M = 4.18, SD = .93$). A significant interaction was also found between base language and code-switching level, $F(2, 168) = 17.93, p < .001$, suggesting that as more Cantonese is included into an English base language, a weaker Canadian identity was attributed to the speaker (see Figure 3a).

Figure 2*Status and Solidarity Ratings as a function of Base Language and Code-switching Level**(a) Status**(b) Solidarity***Base Language**

— English — Cantonese

In contrast, the Chinese base language excerpts garnered lower Canadian identity ratings overall, but Canadian identity increased as more English code-switches were inserted, with ratings for Cantonese with English multi-item code-switches ($M = 4.97$, $SD = .98$) being comparable to English excerpts with Cantonese multi-item code-switches ($M = 5.19$, $SD = 1.08$). Additionally, perceived Canadian identity was the only dependent variable which produced a significant 3-way interaction between base language, code-switching level, and speaker identity, $F(6, 168) = 3.55$, $p = .003$ (see Figure 4). This interaction is due to that fact in the English base language condition, only Canadian condition in the speaker identity manipulation results in no variation across degrees of code-switching (Figure 3a). Similarly, in the Cantonese base language condition, only the Canadian condition excerpts with no code-switches and single insertions result in as much Canadian identity ratings as the multi-item insertions (Figure 3b). For ratings of Canadian identity, the Canadian identity manipulation seems to have pre-empted the impact of code switches.

Perception of Chinese Identity

Similar to Canadian identity, there was a significant main effect for base language, $F(1, 83) = 57.62$, $p < .001$, demonstrating that Cantonese base language excerpts receive higher Chinese identification ratings ($M = 4.96$, $SD = .79$) than English base language excerpts ($M = 3.38$, $SD = .97$). A significant interaction between base language and code-switching level for perceived Chinese identity was also found, $F(2, 166) = 10.42$, $p < .001$ (see Figure 2b). A test of simple main effects demonstrated that there was a significant difference between English and Cantonese across all levels of code-switching (no code-switches, single insertion, and multi-item code-switches). Additionally, there were significant differences across the code-switching levels for English excerpts. A similar pattern was found for Cantonese, except there was no significant

Figure 3

Canadian and Chinese Identities as a function of Base Language and Code-switching Level.

(a) *Canadian identity*

(b) *Chinese identity*

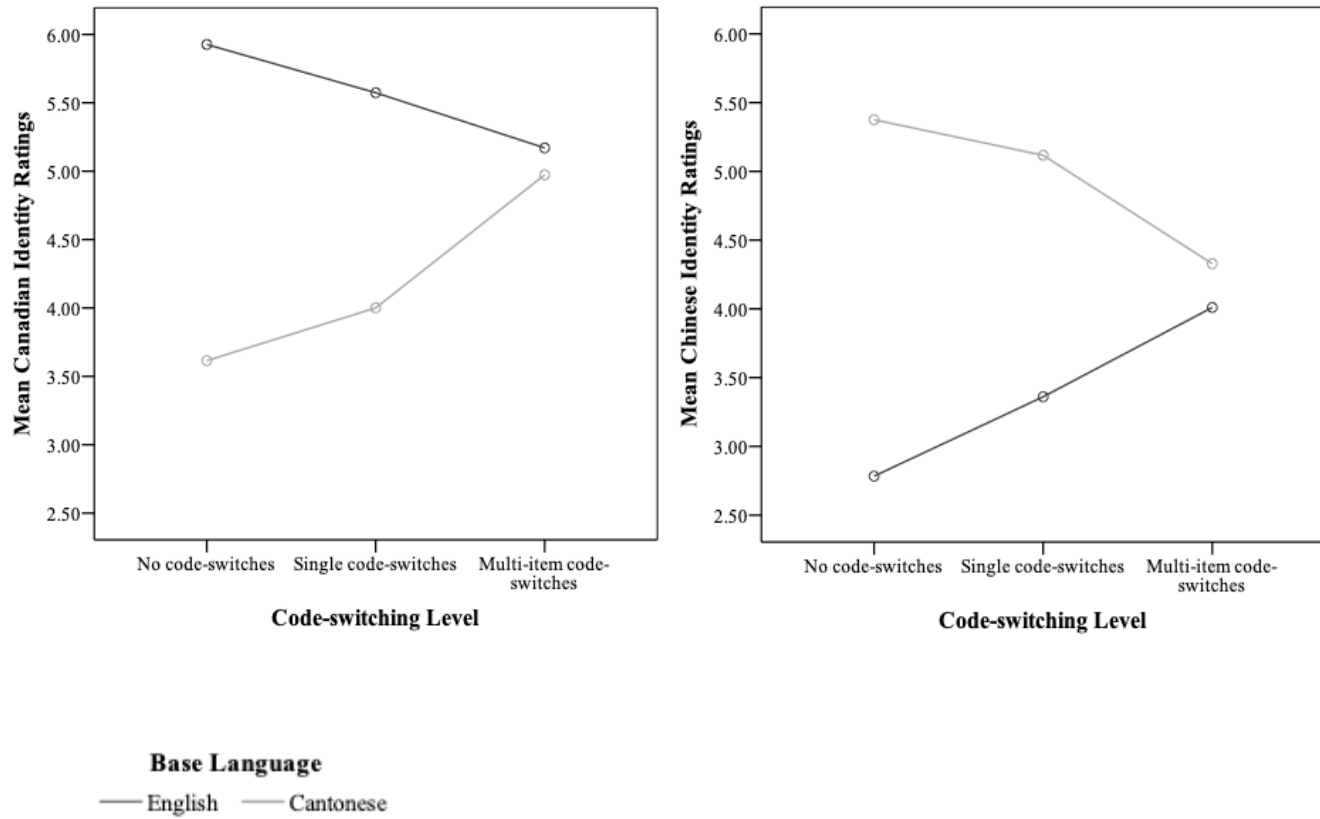
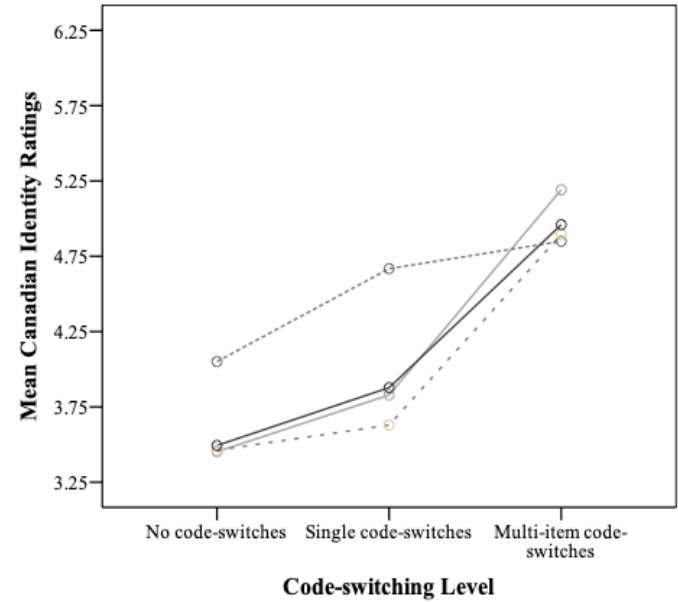
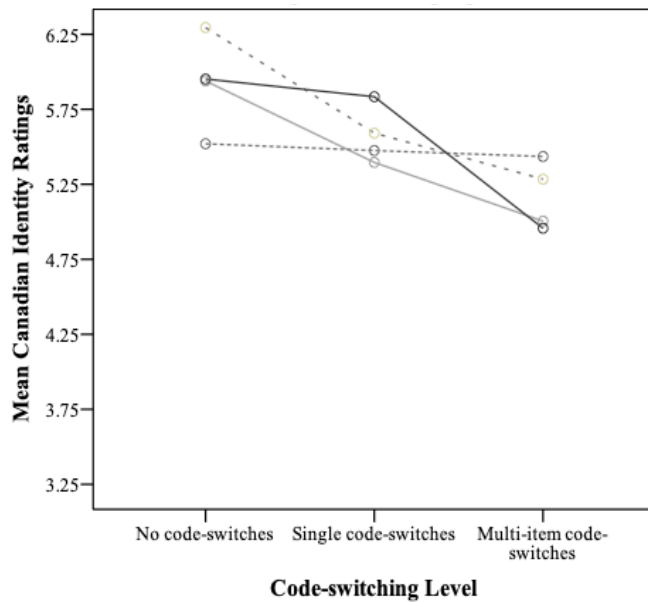


Figure 4

Canadian Identity as a function of Base Language, Code switching level, and Speaker Identity

(a) *English Base Language*

(b) *Cantonese Base Language*



Conditions

- Control
- Canadian
- - - Chinese
- Bicultural

difference between no code-switches and single insertions. Finally, the speaker identity manipulation did not have any significant effects on perceived Canadian identity.

Discussion

The present study showed that the matched-guise technique was successful in eliciting different evaluative reactions as a function of base language and code-switching level. For both status and solidarity, there was, however, an absence of any effects due to speaker identity manipulation and this is noteworthy. The perceived identity of the speaker or any information relating to their group category or membership did not seem to matter once the bilingual participants started listening to speech. Once involved in a verbal exchange, it seems that the social information provided previously is not important anymore. Participating in a live exchange focuses attention on what is said and how it is said; it is online language processing, constructing real-time social perceptions of the speaker.

For the perception of Canadian identity only, did the identity manipulation interact with code-switching. In the case of English base language, Canadian identity diminished with Cantonese insertions, in all cases except when the speaker was identified as Canadian. In contrast, with the Cantonese base language, Canadian identity increased with English insertions except when the speaker was identified as Canadian. In both cases, assignment of a Canadian identity appeared to trump the impact of language variations. Furthermore, participants in the Canadian condition rated speakers as high in Canadian identity when listening to Cantonese excerpts without code-switches and single code-switches, suggesting that speaker identified as Canadian was perceived as Canadian even when they use Cantonese only or with minimal English insertions. With the insertion of a *single* English item, ratings for perceived Canadian identification jumped by approximate half a point, resembling the ratings for the multi-item

English code-switches. This suggests that irrespective of code-switching in the Cantonese base language, participants consistently rated the speaker who was identified as Canadian as high in Canadian identification. On the contrary, the inclusion of Cantonese in the English base language did not incur any effects; the participants were told the speaker was Canadian and no amount of Cantonese inserted into English changed their perception of the speaker's Canadian identification.

The findings for perceived Chinese identity appeared to be in direct contrast to Canadian identity, as there was no comparable effect of the identity manipulation. This distinction between the two perceived identities could be an indication that our Cantonese-English participants are familiar with the “Canadian” speaker profile—the bilingual speakers use English with their Cantonese, but they identify as Canadian because they are one-and-a-half and second-generation Chinese immigrants. The inclusion of English in a Cantonese base language can be regarded as remnants of their birth and/or upbringing while they strive to maintain their heritage language. Additionally, in the current context, a Canadian identity is more salient; identification to the Canadian culture is more powerful, no matter how strong Chinese identification is and despite its strong vitality in Canada.

At the core of this study were the evaluational reactions related to status and solidarity as a function of base language and degree of code switching. Status ratings were significantly higher for English-only than Cantonese-only excerpts, suggesting that participants attributed overall greater covert status to English than Cantonese. Additionally, there was a trend of decreasing status as more code-switches were included into English; that is, English excerpts with no code-switches had significantly higher status than when there were either single or multi-item Cantonese insertions. This finding was expected as English is the dominant language with

official status in the Canadian context; its high status would be threatened if any deviations were present (i.e. any other-language code-switches). Moreover, code-switching was not perceived uniformly in Cantonese; excerpts with single insertions were significantly greater in status compared to no code-switches and multi-item code-switches (and even English excerpts with code-switches). It is likely that Cantonese with English insertions is deemed more acceptable because of its prevalent and widespread use from its role as being a speech norm in Hong Kong, as Chen (2008) described. From the present findings, Cantonese does yield a high status for Cantonese-English bilinguals when there is a little English code-switching inserted, but not too much.

In contrast to status, solidarity is not traditionally linked to standardization or dominance within the community; rather, it is a gauge of the strength of a group via the group members' membership and commitment (Ryan, 1983). The covert solidarity that was attributed to Cantonese was notable, with the unexpected finding of Cantonese multi-item code-switching excerpts garnering the greatest solidarity. The significant interaction between language and degree of code-switching revealed that there were no solidarity differences attributed to English excerpts; for Cantonese, there were, however, significant differences between excerpts with no code-switches, single insertions, and multi-item insertions. As more English items were inserted into Cantonese, there was a progressive increase in solidarity ratings. There are two notable findings here: first, Cantonese with no code-switches elicited the *lowest* solidarity ratings, and second, Cantonese with multi-item code-switches elicited the *greatest* solidarity. This suggests that the participants perceived the speakers of the excerpts who used Cantonese with multiple English insertions to be most *appealing* – these speakers were the most sympathetic, tolerant, friendly, honest, and warm.

Previous studies have revealed that people tend to attribute more solidarity to members of their *own* linguistic community (Ryan, Giles, & Sebastian, 1982), which lead us to question the linguistic community of our study participants. Our sample greatly identified with their ethnic identity and many identified as belonging to a Chinese community – if there was such strong value towards ingroup membership and solidarity with the Chinese sociocultural group, one would expect the highest solidarity ratings for Cantonese excerpts *without* any code-switches. It, however, was the opposite. Cantonese-English bilingual young adults who do code-switch in their daily lives as a result of being one-and-a-half and second-generation immigrants and being exposed to two cultures, found the speakers who inserted English in their Cantonese to be the most similar to them, implicitly or explicitly. The participants identified with the code-switching speakers because that is what they do as well, especially when speaking to their Cantonese-speaking family members. The findings of Yim and Clément (2019) confirmed that one-and-a-half and second-generation immigrants did not consider themselves to be “full Chinese”; the Chinese community was not their ingroup. Rather, Cantonese-English bilingual young adults were a distinct subgroup of the Chinese community; they were “*juksings*”, neither Canadian nor Chinese but who are biculturals, integrating a Chinese ethnic identity with a Canadian upbringing (Yim & Clément, 2019).

The present paper provides further evidence that bilinguals are able to perceive fine structural linguistic differences present in the speech of their conversation partner. Moreover, evaluational reactions derived from such linguistic differences were significantly different across the four indices of status, solidarity, Canadian identity perception, and Chinese identity perception. Bilinguals, implicitly or explicitly, evaluated audio excerpts across the six code-switching conditions differently and subsequently, yielded different judgments towards the

speaker's personality and social attributes. Our incorporation of the linguistic concept of code-switching into a psychological research methodology was successful in *uncovering social effects from linguistic differences*. The systematic grading of code-switching adapted from a structural typology within sociolinguistics and the manipulation of speaker identity classic to social psychology experiments allowed us to link the lines of research from each respective area within a single experimental study. We empirically demonstrated the effects of degrees of code-switching in evaluative reactions, providing evidence for how individuals' covert attitudes towards code-switching eventually lead to the validation of their own (or invalidation of others') group membership and identity (cf. Chen, 2008; Yim & Clément, 2019).

There are important implications for both sociolinguistics and social psychology. The experimental methodology we used was likely a departure from that used in sociolinguistics and other studies on code-switching. The present findings directly contribute, however, to how code-switching is valued in bilingual communities by providing concrete labels to the traits and dimensions that are deemed important by its members. Our study was able to add causality and directionality to the sociolinguistics literature, demonstrating that Cantonese with multi-item English code-switches elicited the greatest solidarity, compared to Cantonese without any code-switching. It will be vital to further evaluate the sociolinguistic characteristics of Cantonese-English bilinguals and other one-and-a-half and second-generation immigrant bilinguals to fully understand the value of code-switching for this demographic.

In turn, for social psychology, the absence of an effect for perceived speaker identity highlighted the importance of the *actual* linguistic exchange, indicating that there are occasions where social identity and social categories are not significant in an individual's perception of a speaker and the evaluation reactions made. The power and presence of the speech exchange

eclipses categorical information. In a live and dynamic verbal exchange, social and linguistic information is consistently being updated and assessed by the listener in order to gauge an accurate portrait of the speaker, thus engulfing the field of social perception (Heider, 1958).

Code-switching patterns, like other structural patterns in language, allow for the differentiation of speakers within a bilingual community, with ingroup membership and belonging attached to the use of a specific style. It is clear that code-switching is a unique speech phenomenon with its own characteristics and social impact. It is, therefore, an essential part of any foray into intergroup perception, evaluation, and identity.

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General Discussion

The phenomenon of code-switching, traditionally viewed as inappropriate and flawed language variation, has emerged as a potentially adaptive form of speech in multilingual contexts. It acts differently in each bilingual community and in the present research, the settings of interest are a handful of Chinese communities within a Canadian context, such as the multicultural Greater Toronto Area, with specific interest in the Cantonese-English bilingual young adult. Code-switching serves an important role for these individuals, in addition to being generally perceived as an acceptable discourse mode. It is uniquely associated with their identity: in its social function, it is indexical of cultural identification, notably endorsing or challenging the bilinguals' actual or implied identity. Moreover, code-switching is not a static nor uniform entity; different degrees of code-switching are remarkably linked to social evaluations and person perception. From the present social psychological investigation, a clearer picture of the Cantonese-English bilingual and, more generally, of bilinguals is emerging along with an understanding of their identities and attitudes.

The Role of Code-switching

Attitudes towards code-switching were favourable overall among Cantonese-English bilinguals. They did not perceive Cantonese-English code-switching as a threat to their identity. In contrast and similar to other bilingual communities (Gardner-Chloros et al., 2005), the Cantonese-English bilinguals valued code-switching use as part of their cultural identity and ethnic group membership. From the first study, participants perceived it as acceptable and held positive attitudes towards the speech practice, evident from their comfortable code-switching and explicit discussion of it. Regardless of its use as a communicative strategy at times, code-switching was flexibly used, with participants switching into Cantonese or English and then

switching back when they wanted. With a metalinguistic awareness of its functions and meaning, code-switching facilitated communication as well as minimized social distance with the Chinese community.

Findings from the second study confirmed the above theme: there were neutral to positive attitudes towards code-switching. It was far from a stigmatized speech practice. Specifically, ethnic identity played a significant role in participants' personal and general code-switching attitudes; those who identified more strongly as Chinese also showed more positive attitudes towards Cantonese-English code-switching. Likewise, the covert attitudes evaluated in the third study demonstrated that such overt favourable attitudes towards code-switching were indicative of participants' inner and private attitudes and perceptions as well. The Chinese communities under study viewed code-switching as a positive act and it is likely that many bilingual communities in Canada are favourable to code-switching as its ideologies encourage multicultural diversity and linguistic acceptance, suggesting these contexts are both linguistically *and* culturally supportive. Through code-switching, bilinguals in these communities maintain their heritage languages in addition to protecting their ethnic identity.

Despite code-switching being a valued asset, it does not eclipse the negative associations with its use. The traditional perception of code-switching being an improper use of language and a reflection of the participants' lack of proficiency remains entrenched in mainstream society. From the first study, it was shown that code-switching held direct consequences – it was an index of oral language skills and strength of identification with the ethnic culture. For example, awareness of their own code-switching prompted participants to perceive themselves as weak and lacking in their heritage language abilities. As a result, participants had mixed feelings towards their language skills. Code-switching allowed them to “keep up” with their Cantonese,

showing that they remain proficient, yet it was a reminder that they could not solely use the language for long stretches of conversation or on specific topics, due to an insufficient vocabulary. Indirect consequences, such as comments and judgements from others, compounded the emotions and insecurities experienced by the participants. They tolerated derogatory remarks about their identity and faced dismissive comments from others about their heritage language proficiency. Feelings exhibited by the participants ranged from frustration to disappointment, but also pride. These bilinguals experience a linguistic dissonance: they embrace their bilinguality, however their feelings and experiences reveal associated drawbacks.

Considering the diverse and individual experiences participants encountered through the findings of the first study, it was the second study which revealed individual attitudinal profiles. The participants were successfully categorized into four distinct subgroups by applying a bidimensional framework: strong biculturals, Canadian-oriented biculturals, Chinese-oriented biculturals, and weak biculturals. Moreover, these divisions resulted in significant differences in code-switching preferences, code-switching attitudes, and multicultural attitudes, suggesting that the relative cultural identities and their strength are associated with *linguistic* differences. It was surprising that such nuances in code-switching attitudes could be differentiated among highly bicultural subgroups.

Though the bidimensional framework was traditionally used for acculturation strategies, its adoption and application to a bicultural population indicates that a classification of biculturals does not necessarily need to center on the extent to which the two cultures are integrated within the individual (cf. bicultural identity integration; Benet-Martínez & Haritatos, 2005). The bidimensional classification emphasizes the manner in which the two cultures are negotiated and biculturals' strength of identification towards each culture is independent and can vary. For

example, the relative strength of Canadian and Chinese identification is conducive to boosting different attitudes, with strong bicultural participants as the most open and accepting, holding the most favourable code-switching and multicultural attitudes. Code-switching appears as an ingroup practice which serves a distinct role for bilinguals in the community so it is reasonable to find such a relationship between language attitudes and social identity. Moreover, the positive results with linguistically and culturally accepting attitudes suggest a similar alignment for the effects of individual differences in cultural identity.

The Relationship between Code-switching and Identity

Code-switching was indexical of the Cantonese-English bilingual participants' ethnic identity and biculturalism. Throughout the present research, a recurrent finding across all three studies was that the cultural identification of bilingual participants had a strong impact on their code-switching use and attitudes. Across all three studies, it was evident that code-switching was a reflection of the participants' cultural identity. It was, however, clear from the first qualitative study that the bilinguals struggled – implicitly or explicitly – in claiming their preferred identity. Although there were many variations in self-labelling, the majority of self-labels included two terms, suggesting that participants identified as biculturals; the self-label was a reflection of both of their cultural backgrounds, comparable to their use of their two languages in discourse.

It was in the first study that arose the theme of *dual but incomplete*: despite using bicultural self-labels describing their belonging to both Canadian and Chinese cultures, the participants were acutely aware of the limits of their own labels. The first study highlighted a novel paradox: despite how individuals view their own biculturalism, it must be “agreed upon” by those who perceive them as such because it was the participants' code-switching use which

prompted others to make judgments challenging their identity. Bilinguals use code-switching as an avenue to construct their own cultural identities as well as other bilinguals' cultural identities. Regardless of how individuals asserted their bicultural identity, others' remarks about their Cantonese–English code-switching can deny their claim to a specific identity, preventing them to be “full Canadian” or “full Chinese”, as in the case of “*juksings*” (cf. Chen, 2008).

This finding from the first study directly links to our adoption of the bidimensional model of acculturation in the second study. It was employed as a strategy to differentiate the Cantonese-English bilingual participants. From the first study, it was clear that assessing the integration or compatibility of the biculturals' two cultural identities (i.e. Benet-Martínez & Haritatos, 2005) would not be appropriate; therefore, it was crucial to uncover an alternative method to differentiate among members of a seemingly homogeneous group. The highlight of the second study was the focus on the individual differences among the bicultural participants by measuring the relative strength of their co-existing, yet independent, cultural identities. Rather than fixating on the integration or compatibility of the biculturals' cultural identities, it was crucial to highlight their respective strength as a means to differentiate and classify bilingual biculturals, leading to the direct and novel assessment of subtle code-switching distinctions such as attitudes and preferences.

One of the surprising findings from the third study was that the participants attributed the highest solidarity to Cantonese excerpts with multi-item code-switches. As discussed above, the Cantonese-English bilingual participants did not view themselves as “full Canadian” or “full Chinese” – a subsequent question, then, is to which community do these individuals belong? As part of the qualitative interview from the first study, the participants identified as being a part of or belonging to the Chinese community. Many also identified, however, as belonging to a

subgroup of Chinese-Canadian biculturals or a subgroup of second-generation immigrants. These one-and-a-half and second-generation Cantonese-English young adult participants were present in the third study as well and it was evident that the community they considered to be their ingroup was not the Chinese community per se, but a subset of that community characterised by mixed language practices. If the participants placed a high importance on membership and solidarity to the Chinese community, the Cantonese excerpts without code-switching would garner the highest ratings. On the contrary, it was clear that they considered themselves as a part of the Chinese community in “name only”, likely as a result of a numerous factors, such as birthplace, ethnic background, physical appearance, and heritage language proficiency. They did not view themselves as core ingroup members of the Chinese community; they belonged to a subset of that community, as evidenced explicitly in the first study and implicitly in the third study. As a result, the participants found the speakers who inserted English in their Cantonese to be the most similar to them, identifying with the code-switchers because they code-switch in their daily interactions as well, as a result of being one-and-a-half and second-generation immigrants and embodying two cultures.

The Impact of Code-switching Variations

The qualitative interviews from the first study validated the use of code-switching in bilingual discourse and communication. Though there was no specific sociolinguistic analysis of the data, it was apparent that the frequency of Cantonese code-switches in an English base language were greater than English code-switches in a Cantonese base language overall. In particular, single-item insertions were more prevalent than multi-item insertions as they were easier to incorporate into speech. Expanding on this, it is in the third study where specific fine-grained linguistic structures were manipulated in order to examine how bilinguals evaluate and

react to different linguistic forms. Across all the variables of status, solidarity, and perception of Canadian and Chinese identity, there was a significant interaction of base language and degree of code-switching, suggesting an awareness of minute structural linguistic differences, and resulting differential evaluative reactions from participants who seemed to identify more with individuals who did multi-item English code-switches in a Cantonese base language. Although these two results appear to be contradictory, the higher *frequency* of Cantonese code-switches in an English base language (compared to English code-switches in a Cantonese base language) is due to the fact that the context supports English use as it is the dominant language for the participants and also the dominant language in a Canadian environment. However, in terms of *identification*, bilinguals identified more with speakers who used multi-item English code-switches in a Cantonese base language (as these speech excerpts received the highest mean solidarity ratings) because this form of speech is indexical of their identity. It is an identity marker, and a symbol of who they are when they are with the people closest to them – their family and friends – when they are using Cantonese with English code-switches, *despite* themselves most frequently using Cantonese code-switches in an English base language.

It was expected that English would garner a higher status than Cantonese and although Cantonese received lower status ratings, it was notable that Cantonese with single insertions was highest in status for excerpts with a Cantonese base language, suggesting it is deemed more prestigious than Cantonese with multi-item insertions and Cantonese *only*. It is evident that more does not equal better in this situation: a greater amount of code-switches did not correspond to more positive evaluations for the dimension of status, only single English insertions within Cantonese was associated with elevated status. The pattern is reminiscent of the mainstream code-switching style in Hong Kong used by the younger generation described by

Chen (2005, 2008). Historically, the Hong Kong speech community was described as a case of “diglossia without bilingualism” (Luke & Richards, 1982); however, starting around the 1980s, the growth in bilingualism among its citizens led to a mainstream code-switching style of English terms intrasententially inserted into a Cantonese base language to become a speech norm in conversation and in writing, and a recognition of Hong Kong English (Bolton, 2000; Chen, 2008; see also Bolton & Kwok, 1990; Gibbons, 1987; Li, 2000). The pervasive use of “*just enough*” English incorporated within Cantonese is likely to have transferred to the Canadian context. As the Chinese communities of Toronto and other Canadian cities are comprised of members who are immigrants or second-generation immigrants from Hong Kong, Cantonese with English insertions would be most familiar to the Cantonese-English bilinguals and warrant the highest status.

Moreover, it was the solidarity findings in the third study which directly confirmed the findings from the first study. There were no differences between different levels of code-switching for excerpts with an English base language; however, for those with a Cantonese base language, there was a progressive increase in solidarity with the highest ratings given to Cantonese with multi-item English insertions. This was noteworthy as it suggested that the participants most identified with those speakers and found them to be the most appealing. The speakers who spoke in a Cantonese base language with multi-item insertions were the participants’ ingroup – the community with which they are members of and are committed to – because they were neither “full Canadian” nor “full Chinese”, reminiscent of the theme from the first study.

Further reinforcing the importance of language variations, the second study distinguished subgroups of bicultural participants, suggesting that there are significant linguistic distinctions

(i.e. code-switching preferences) among biculturals who differ in cultural identity strength.

Thus, recognizing the impact of cultural identity, the third study included a manipulation which provided information on the speakers' cultural identification. The speaker identity information was not, however, a significant factor in any analyses, except for the perception of Canadian identity. Overall, the matched-guise technique from the third study elicited contrasting evaluative reactions as a function of base language and level of code-switching. Any information about the speaker, such as perceived identity or their group membership, was not important once the bilinguals listened to speech. Once a verbal exchange starts, provided social information does not matter anymore because the bilingual's attention is focused on the conversation and live exchange of information, allowing the listener to form real-time social perceptions of the speaker.

The present classification of single-item versus multi-item code-switches was successful in eliciting different evaluations from bilinguals. It provided additional evidence that bilinguals perceive such subtle structural linguistic differences and are cognizant of their correspondence to different social meanings and functions (Chen, 2005, 2008). Building on Muysken (2000) and Chen (2008), a finer differentiation of insertions is likely needed as it has been demonstrated here that single-item versus multi-item code-switches are meaningful in the perception of personality and social attributes, and particularly significant for evaluations of status, solidarity, and perceptions of identity. The present research program successfully revealed that there are social effects emerging from linguistic differences. It is apparent that the present distinct code-switching levels are meaningful from a psychological analysis, yet notably, according to Muysken's typology, both single code-switches and multi-item code-switches would be sociolinguistically classified as insertions. The occurrence of insertions, as nested structures,

raises the possibility that the degree of integration in the Cantonese base language of a single English item may, in fact, be responsible for a higher status evaluation. The speaker, inserting integrated single items (i.e. following morphosyntactic and phonological properties of the base language) would then be acknowledged as an educated and skillful user of the two languages. Alternatively, it could be the non-integrated single item (i.e. retaining its linguistic properties) that procures this outcome. Thus, if such minute sociolinguistic gradations are influential in social impressions, then it is likely that distinctions between insertions and alternations, as described by Muysken, would warrant important implications for personal social evaluation and person perception. Using a social psychological experimental methodology, the third study, therefore, contributes directly to the field of sociolinguistics by identifying and labelling the social dimensions that are significant to the bilingual community as well as determining the relative social value attributed to different degrees of code-switching.

Limitations and Future Prospects

The present research has contributed to the understanding of code-switching and its correlates, but it is not without limitations. Across all three studies, participants were limited to Cantonese-English bilingual young adults, due to convenience sampling, an effort to maintain consistency, and a specific interest in the one-and-a-half and second-generation immigrant cohort. It would certainly be valuable for future studies to investigate the code-switching practices and attitudes of bilinguals in other generational cohorts with different status. It would also prove useful for researchers to continue exploring and analyzing the nuances and intricacies of other language pairs amidst different contact settings, especially those languages and dialects considered at risk or vulnerable. Additionally, the code-switching stimuli produced for the present research may be a departure from the methods traditionally used by sociolinguists;

however, it was ensured that all representations of code-switching were grounded into actual and spontaneous code-switching used in bilingual speech. This procedure of using code-switching data produced in conversations and making slight and systematic modifications in order for it to be used as stimuli in subsequent studies would undoubtedly be beneficial for any future studies, be they in psychology and sociolinguistics. A synthesis of sociolinguistic bilingual stimuli and social psychological methods such as the matched-guise technique and other experimental investigations would surely be fruitful (cf. Anderson & Toribio, 2007). Furthermore, it can be argued that this strategy will allow language researchers to maximize the applications of their data, including in experimental designs and controlled studies.

A potential avenue for future research, hinted at in the discussion of status evaluations from single-item insertions above, would also be to incorporate greater sociolinguistic distinctions in its analysis. For example, sociolinguists distinguish between code-switching (i.e. an alternation between the grammars of the two respective languages with both languages applying constraints to the code-switch) and lexical borrowing (i.e. an item from one language is integrated into another language, where it is constrained by its grammatical rules; Poplack, 1980; Poplack & Meechan, 1998). Although this distinction is recognized theoretically (Poplack, 2001), it remains difficult to classify lone lexical items in bilingual speech. As single-item and multi-item insertions are nested structures, however, it introduces the premise that degree of integration (i.e. item as code-switch, lexical borrowing, or loanword) in the base language could influence evaluation. As well, it would be interesting to contemplate how non-nested structures with no clear base language or integration (i.e. alternations) would be perceived. If future examinations on social evaluations recognize the integration of the lexical item into the base

language, that is the extent of whether an item is a code-switch or lexical borrowing, it would certainly be a progressive and interdisciplinary study for both disciplines.

Conclusion

It would be expected that the study of language variations induced by code-switching would warrant interdisciplinary collaborations, as it is inherently inclusive in nature with widespread relevance and application across many related fields. There has, however, been relatively little interdisciplinary research and cross-fertilization in approach and perspective; specifically linguistic distinctions were not necessarily incorporated nor applied in psychological research during the time of first wave of language attitudes research, and have not been since then. The present research program purposefully sought to integrate and consolidate the understanding of sociolinguistics and social psychology, uniting its theories, analyses, and interpretations.

The present research highlighted the importance of code-switching and its social effects on bilinguals, contributing to sociolinguistics by directly assessing identity and characterizing the code-switching bilingual and their individual characteristics. On an individual level, its impact was pervasive; a source of mixed emotions and a stimulant for others' comments and judgments. The implications of code-switching for cultural identity were robust, at times endorsing their identity and at other times, devaluing it. Amidst the Canadian context, code-switched speech is a distinct language variety and strategic tool for Cantonese-English bilinguals in their construction of social identity, personal relations, and social space. On an interaction level, code-switching as a distinct language variety was shown to overtake the entire linguistic exchange, dominating over other psychological information present in the communication, including cultural identity and social categories. The overarching strength of the linguistic information in a live and dynamic

exchange holds important consequences for person perception and social evaluations, contributing to the present understanding and relevance of social psychology in a communicative context.

The adoption and treatment of the linguistic concept of code-switching into the present psychological investigation produced an interdisciplinary examination within the context of language attitudes in social psychology, contributing to the growth of both disciplines. Moreover, the current interdisciplinary endeavour contributed to the promotion of bilingualism and strengthening of ethnic minority communities, ultimately increasing the understanding and knowledge of social and cultural issues, namely how individuals and communities in Canadian society interact with each other and the world.

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Appendix A

Study 1: Informed Consent Form

[letterhead]

School of Psychology
136 Jean Jacques Lussier
Ottawa, ON K1N 6N5

Title of Study: A qualitative study on the experiences and identities of Chinese individuals in Canada

Researchers: Odilia Yim and Richard Clément, PhD

I understand to participate in one (1) interview. The interview will last about 1 hour and will be audio-recorded. In addition, during the interview the researcher will take hand-written notes. The interview will examine my experiences. After the conclusion of the project, if I am interested, I can request a brief overview of the findings.

I understand that there are no anticipated risks from participation in this study. Some people may feel uncomfortable or embarrassed talking about themselves or their experiences during an interview. However, the researcher will do her best to make sure I am comfortable during the interview process.

I will remain anonymous and all my contributions to this study will be kept confidential. A number code will be placed on all materials associated with the interview, and my name and signed consent form will be filed separately from these materials in a secure place. No comments made during the interviews will be personally attributed to me in any report associated with this project. Data will be kept for 5 years and will be destroyed thereafter.

I understand my participation is voluntary. However, I can end my participation at any time. I do not have to answer any question I do not want to answer. There will be no consequences for me now or in the future if I choose not to participate.

I _____ agree to participate in the research study conducted by the researchers listed above of the School of Psychology, Faculty of Social Sciences, University of Ottawa.

I agree to have the interview audio-recorded.

Participant's signature: _____
Researcher's signature: _____

Date: _____
Date: _____

If I have any questions regarding the ethical conduct of this study, I can contact the Office of Research Ethics and Integrity at 550 Cumberland, Tabaret Hall 154; Tel.: (613) 562-5387; ethics@uottawa.ca. Researcher contact information: Odilia Yim (136 Jean Jacques Lussier, Vanier 5045; [omitted]@uottawa.ca) and Richard Clément (70 Laurier Ave East; [omitted]@uottawa.ca).

Appendix B

Study 1: Interview Guide

[English base language, Cantonese code-switches in italics]

[Intra-sentential insertions in interview questions]

[Intra- and inter-sentential alternations in first prompts]

Introduction

Hello, thank you for volunteering to participate in my research study. For my study, I am interested in learning about how individuals use their languages and how these languages are viewed by the community. Therefore, the interview will include different questions that relate to your own experiences.

Before we start, I would like you to read this informed consent form and sign at the bottom if you agree to participate. I will give you a copy of the consent form as well. The entire interview will take approximately 45 minutes and at the end, you will have an opportunity to ask any questions and discuss any concerns you may have.

Your participation is completely voluntary so you can stop the interview at any time or not answer any questions you do not want to. Feel free to use either of your languages during our discussion, English or Cantonese or *Chinese and English together*, whatever is most comfortable for you. The interview will be recorded using a digital recorder and I will be taking notes. I will start the recorder now, and I will ask again whether you give your verbal consent to participate in this research study.

Interview Questions

Ice-breaker/Situate interview

1. To start off, as you may know, Chinese New Year just passed. What did you do, if anything, to celebrate Chinese New Year? Do you do anything to celebrate *New Year*?
 - a. Prompt 1: Do you do anything special with your family? *Does your family sometimes cook anything special?*
 - b. Follow-up 1: How similar or different is it from how others celebrate?
 - c. Prompt 2: What do you think are some things that other people do? Are there some traditions that people follow?

Code-switching in private [situating how language affects them]

2. For Chinese New Year, or when you are with your family [and friends], do you use *Cantonese* or *English*? How much Cantonese/English do you speak usually?
 - a. Prompt 1: Are there times that you notice you use both together, or *you start in Cantonese and then switch to English*?
 - b. Prompt 2: Have you noticed if there are some people that you would usually use both Cantonese and English with?
 - c. Follow-up 1: Do you think it is also related to the circumstances in the environment, or topic of the conversation, or something else?
 - d. Follow-up 2: Thinking back over those times, how do you feel when you switch your languages? What does it mean to you when you switch between your languages?

Code-switching in public [giving another environment to reflect on]

3. It seems that you are comfortable [or not] using Cantonese and English with your family and friends. And you speak *Cantonese* pretty well too. How much Cantonese do you use in your daily life, generally?
 - a. Prompt 1: *We discussed some times with your family*; can you think of some other occasions when you usually use Cantonese?
 - b. Follow-up 1: At these times, do you sometimes use Cantonese and English together? During those times that you use Cantonese, does English come into the conversation?
 - c. Prompt 2: Do you have many opportunities to use Cantonese in your everyday life?

Code-switching attitudes [asking about contrast]

4. Thinking back over the times when you use Cantonese and English in your everyday life, do you notice a difference when you use Cantonese and English together with *your family* [and friends] compared to in public or other situations?
 - a. Prompt 1: Do you feel different *when you switch your languages*?
5. Does it mean something to you when you switch between Cantonese and English? Do you like it when you do that, or is it something you try to *not do*?
 - a. Prompt 1: When *you switch between Cantonese and English*, does it impact you or do you feel a change?
6. Are there times when you hear other people use Cantonese and English together? What do you think about *other people*, when they do that?
 - a. Prompt 1: Thinking back over those times, *you may have heard other Chinese people use* both Cantonese and English when they talk. Is this way of speaking acceptable in the Chinese community, do you think?
 - b. Follow-up 1: In the Chinese community, is there a commonly accepted way of communicating between people?

Code-switching reflecting identity [how language relates to how you see yourself]

7. Thinking back over the times that you use Cantonese and English *together*, does using both languages reflect who you are?
 - a. Prompt 1: *For example, as a Cantonese speaker*, does using Cantonese make you feel connected to being Chinese?
 - b. Follow-up 1: Do you see yourself connected to being Chinese when speaking Cantonese? What about being around other people who speak Cantonese?
 - c. Prompt 2: How do you see yourself when you use Cantonese and English together?

8. How would you generally identify yourself then? *That is*, you might feel stronger towards being Chinese or being Canadian?
 - a. Prompt 1: If someone asked you to describe your cultural identity, what would you say? *Perhaps some people may say*, Hong Kong Chinese, Chinese, Canadian, or there is also Chinese Canadian, Asian, Asian Canadian. What would you say?
 - b. Follow-up 1: You describe yourself as a [label]. What are some different times when you feel [label]?
 - c. Prompt 2: Are there times when this changes? Are there circumstances that you see yourself differently, or might use another term to describe yourself?
 - d. Follow-up 2: So it seems that how you describe yourself may change from time to time, do you think there are some things that influences it, maybe the circumstances you are in or people you are with?

9. We talked about before when you switch between speaking Cantonese and English. *Thinking back*, the times when you use both Cantonese and English, do you feel like you are [label]?
 - a. Follow-up 1: Does the language you use, *Cantonese, English, or Cantonese and English together*, influence or change how you identify yourself, or how you describe yourself?
 - b. Follow-up 2: Or the other way around, when you identify as [label], would you usually use Cantonese, English, or both together?

Code-switching reflecting identity perceptions

10. Thinking back over the things you just said, do you think *sometimes* the way people use Cantonese and English together [or not] is related to how connected they are to their culture?
 - a. Prompt 1: For example, *if you see someone using Cantonese and English together*, do you get any ideas about how connected they are to the Chinese or Canadian cultures?
 - b. Follow-up 1: Does using or knowing Cantonese important for someone's "Chineseness"? For them to be "Chinese"?

Conclusion

Thank you so much for allowing me to interview you about your experiences. What did you think about the interview? I want to give you an opportunity to share any other information that we did not discuss. Was there any other information about this topic that you want to share but we did not talk about? To finish, I want to also ask you some demographic questions.

1. How old are you?	
2. Where were you born?	
3. How long have you lived in Toronto?	
4. Do you consider yourself a part of the Chinese community in Toronto?	
5. Have you lived anywhere else? For how long?	
6. Do you know any other languages? When/where did you learn each of your languages?	
7. Did you learn Cantonese and English at the same time?	
8. Do you identify with any other cultures?	

9. Relative to a native speaker, how would you rate your language proficiency?

No proficiency

Native-like proficiency

0 100

	Speaking	Comprehension	Reading	Writing
Cantonese				
English				

10. How would you describe your level of bilingualism?

Not bilingual

Fluent bilingual

1

2

3

4

5

1 – Not bilingual: Only know a bit of vocabulary in the other language.

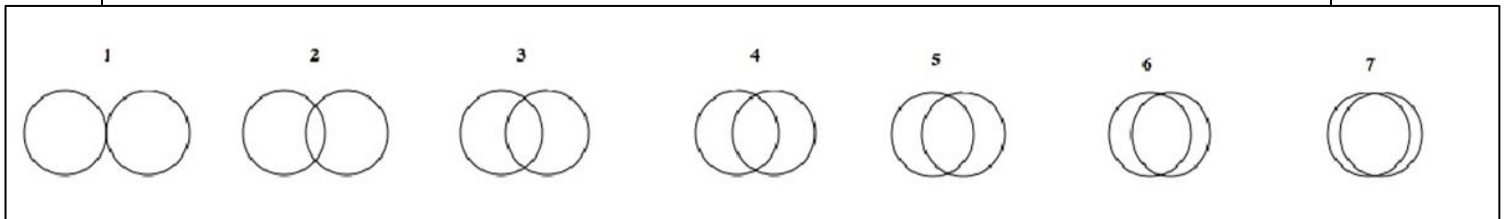
2 – Weak bilingual: Know enough to carry out some conversations to a very limited extent; need to listen to sentences more than once before understanding.

3 – Unbalanced bilingual: Able to carry out basic conversation with minor errors; can understand without other person repeating the sentence.

4 – Practical bilingual: Can carry out conversations fluently, but does not use other language everyday.

5 – Fluent bilingual: Able to converse fluently and actively use two languages everyday.

11. Below you see seven images. They represent the relationship between your heritage identity and the Canadian identity within yourself. Please select the image that best represents this relationship.



Thank you again for participating. Please feel free to contact me if you have questions or if you would like to discuss the results of this study in the future.

I am still looking for a couple more participants. Do you think you know anyone that would be willing to participate? Can I send you an email that you can share with your contacts?

Email: _____

Appendix C

Study 2: Demographics

[Demographics – Background]

Age: _____

Sex:

- Male
- Female
- Other _____

What is your current employment status?

- Full-time Student
- Working
- Other _____

What is the highest degree you have earned?

- High school diploma
- College diploma
- Bachelor's degree
- Graduate or professional degree

Were you born in Canada?

- Yes
- No

If No, where were you born? (please be as specific as possible)

City/Town, Province/State, Country _____

If No, what year did you move to Canada? _____

What is your current citizenship status in Canada?

- Canadian
- Landed immigrant
- Refugee
- Student visa
- Other _____

How long have you lived... (please indicate number of Years
in Canada? _____

in a Chinese country? _____

Where have you lived the longest or most of your life? (please be as specific as possible)

City/Town, Province/State, Country _____

Have you ever lived in Toronto or the Greater Toronto Area?

- Yes
- No

If Yes, how many years have you lived in Toronto or the Greater Toronto Area?

Do you consider yourself part of or belonging to the Chinese community in Toronto?

- Yes
- No

Where have you lived longer - Toronto or Ottawa?

- Toronto
- Ottawa

Display This Question: If Ottawa Is Selected

How many years have you lived in Ottawa?

Do you consider yourself part of or belonging to the Chinese community in Ottawa?

- Yes
- No

Do you consider yourself part of or belonging to a Chinese community elsewhere?

- Yes
- No

If Yes, please specify the Chinese community you consider yourself part of or belonging to. (e.g., another location: Hong Kong, Vancouver; with a specific group: second-generation immigrants, Canadian born)

In Canada, people come from a lot of different cultures and there are many different words to describe the different backgrounds or **ethnic groups** that people come from. Some examples of the names of ethnic groups are Mexican-American, Hispanic, Black, American Indian, Anglo-American, and White.

Every person is born into an ethnic group, or sometimes two groups, but people differ on how important their **ethnicity** is to them, how they feel about it, and how much their behaviour is affected by it.

You may identify yourself in terms of your ethnic culture (defined in terms of one's ancestral heritage, such as the culture of your birth or culture(s) of origin of one's parents and grandparents), the mainstream culture, or both. It can be fluid and dynamic, possibly changing over time and different settings.

In terms of ethnicity, you consider yourself to be: (please select the term you most prefer)

- Hong Kong Chinese [options randomized]
- Chinese
- Canadian
- Chinese Canadian
- Canadian Chinese
- Canadian-born Chinese
- Asian
- Asian Canadian
- Other _____

Do you plan to move to the country from which your ethnic group originated?

- Yes
- No
- Not sure

If Yes, and you plan to move to the country from which your ethnic group originated, how much longer do you think you will stay in Canada? (please write the number of years)

Was your mother born in Canada? If No, where was she born?

(please be as specific as possible: City/Town, Province/State, Country)

- Yes
- No _____

Your mother's ethnicity is

- Hong Kong Chinese
- Chinese
- Canadian
- Chinese Canadian
- Canadian Chinese
- Asian
- Asian Canadian
- Other _____

What is the highest level of education for your mother?

- No high school diploma
- High school diploma
- Some college or college diploma
- Bachelor's degree
- Graduate or professional degree

Was your father born in Canada? If No, where was he born?

(please be as specific as possible: City/Town, Province/State, Country)

- Yes
- No _____

Your father's ethnicity is

- Hong Kong Chinese
- Chinese
- Canadian
- Chinese Canadian
- Canadian Chinese
- Asian
- Asian Canadian
- Other _____

What is the highest level of education for your father?

- No high school diploma
- High school diploma
- Some college or college diploma
- Bachelor's degree
- Graduate or professional degree

[Demographics – Language]

What is your native language? (first language learned and still understood)

- Cantonese
- English
- Other _____

How many languages do you know?

- 1
- 2
- 3
- 4
- 5+

Please write down all your languages.

	Start from the one you learned earliest (birth) to the most recent.	When did you learn this language?	Where did you learn this language? (please check all that apply)			
	Language	Age	Home	School	Community	Work
Language 1			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Language 2			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Language 3			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Language 4			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Language 5			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Did you learn Cantonese and English at the same time or one after another?

- Cantonese and English at the same time
- Cantonese first, then English
- English first, then Cantonese

At what age did you begin to use your second language (Cantonese or English) regularly?

Have you taken Cantonese in heritage language classes (i.e. Chinese school)?

If Yes, for approximately how many years?

- Yes _____
- No

At what age did you begin to use **both Cantonese and English** actively?

What language(s) do you use when speaking to your mother? (please check all that apply)

- Cantonese
- English
- Other _____

What language(s) do you use when speaking to your father? (please check all that apply)

- Cantonese
- English
- Other _____

What language(s) do you use when speaking to your friends? (please check all that apply)

- Cantonese
- English
- Other _____

What language(s) do you presently use most often/regularly? (please check all that apply)

- Cantonese
- English
- Other _____

If we ask you to choose a language to communicate in, which language would you choose?

- Cantonese
- English
- Other _____

How would you describe your level of bilingualism?

Non-fluent bilingual Fluent bilingual
 1 2 3 4 5

1 – Non-fluent bilingual: Only know a bit of vocabulary in the other language.

2 – Weak bilingual: Know enough to carry out some conversations to a very limited extent; need to listen to sentences more than once before understanding.

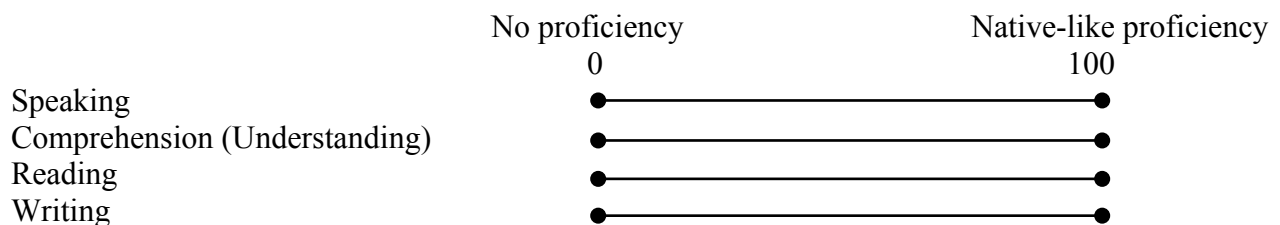
3 – Unbalanced bilingual: Able to carry out basic conversation with minor errors; can understand without other person repeating the sentence.

4 – Practical bilingual: Can carry out conversations fluently, but does not use other language everyday.

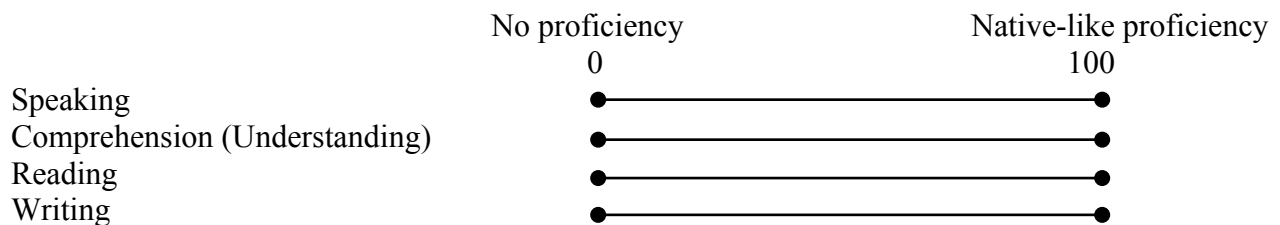
5 – Fluent bilingual: Able to converse fluently and actively use two languages everyday.

[Demographics – Language Proficiency and Use]

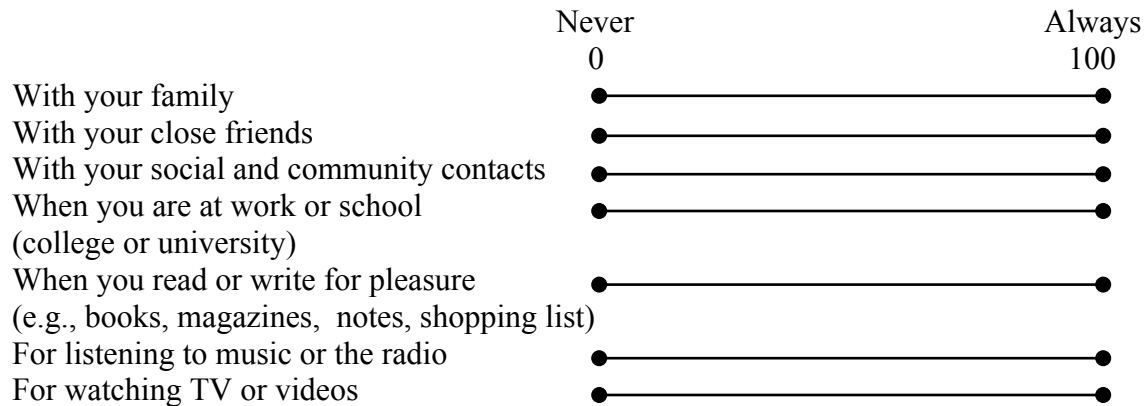
Relative to a native speaker's performance, rate your proficiency level in **Cantonese**.



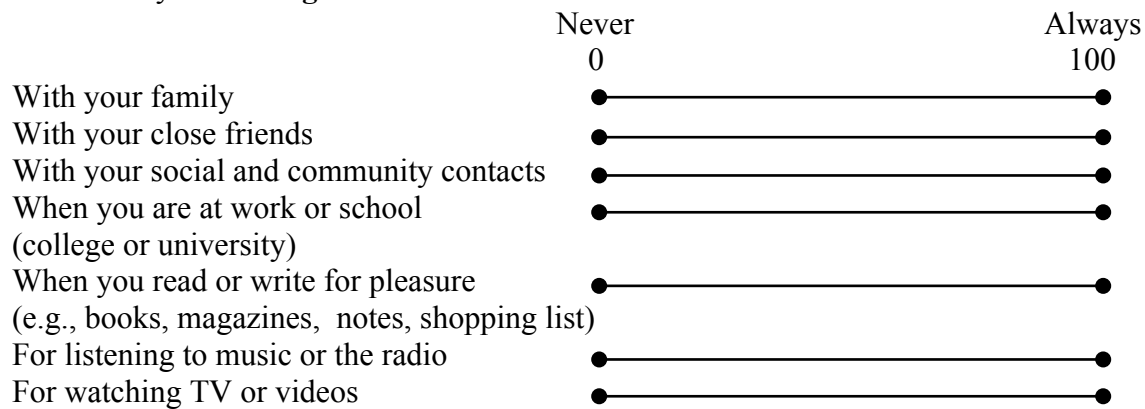
Relative to a native speaker's performance, rate your proficiency level in **English**.



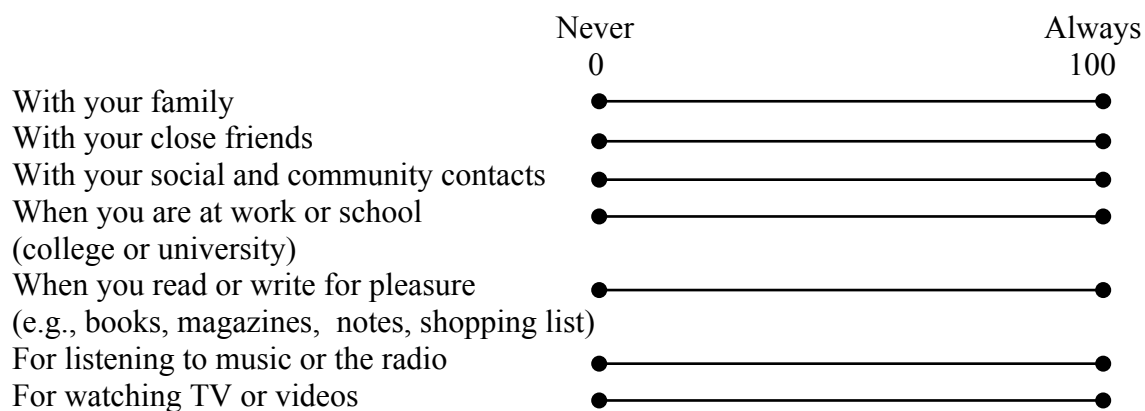
How often you use **Cantonese**?



How often you use **English**?



How often you use **Cantonese and English together**?



Appendix D

Study 2: Vancouver Index of Acculturation (Ryder, Alden, & Paulhus, 2000; adapted wording)

In Canada, people come from a lot of different cultures and there are many different words to describe the different backgrounds or ethnic groups that people come from. Every person is born into an ethnic group, or sometimes two groups, but people differ on how important their ethnicity is to them, how they feel about it, and how much their behaviour is affected by it. Many of these questions will refer to your ethnic culture, meaning the culture that has influenced you most (other than Canadian culture). It may be the culture of your birth, the culture in which you have been raised, or another culture that forms part of your background.

The following questions are about your ethnicity or your ethnic group and how you feel about it or react to it. Please answer each question as carefully as possible by choosing one of the choices below each question to indicate your degree of agreement or disagreement.

Strongly disagree	Disagree	Slightly disagree	Neutral	Slightly agree	Agree	Strongly agree
----------------------	----------	----------------------	---------	-------------------	-------	-------------------

1. I often participate in my ethnic cultural traditions.
2. I often participate in mainstream Canadian cultural traditions.
3. I would be willing to marry a person from my ethnic culture.
4. I would be willing to marry a Canadian person.
5. I enjoy social activities with people from the same ethnic culture as myself.
6. I enjoy social activities with Canadian people.
7. I am comfortable working with people of the same ethnic culture as myself.
8. I am comfortable working with Canadian people.
9. I enjoy entertainment from my ethnic culture.
10. I enjoy Canadian entertainment.
11. I often behave in ways that are usual of my ethnic culture.
12. I often behave in ways that are typical of Canadians.
13. It is important for me to maintain or develop the practices of my ethnic culture.
14. It is important for me to maintain or develop Canadian cultural practices.
15. I believe in the values of my ethnic culture
16. I believe in Canadian values.
17. I enjoy the jokes and humor of my ethnic culture.
18. I enjoy Canadian jokes and humor.
19. I am interested in having friends from my ethnic culture.
20. I am interested in having Canadian friends.

Appendix E**Study 2: Code-switching Attitudes**
(Dewaele & Li, 2014)

To what extent do you agree with the following statements about language switching?

Strongly disagree	Disagree	Neutral	Agree	Strongly agree
----------------------	----------	---------	-------	-------------------

1. It is a sign of incomplete linguistic competence
2. It annoys me when people switch between languages I don't know in my presence
3. It displays a multicultural identity
4. It is a sign of arrogance
5. It is a way to show solidarity with a particular culture

Appendix F

Study 2: Code-switching Questionnaire

Please answer the following questions about your language use to the best of your ability. Indicate on the scale the percentage of time the statement applies to you. Some questions refer to the term "language switching". Below is a definition:

Language switching: When a bilingual person switches between his/her languages. This can happen when a word or phrase is used in one language while communicating in the other language during a single speech event (e.g., in a conversation or message). The person can then continue using that language or switch back to the other language. The person may be switching their languages unconsciously or on purpose. The other person in the interaction usually knows both languages too.



1. I use Cantonese and English everyday.
2. Generally, I switch between Cantonese and English.
3. I switch between Cantonese and English when I'm speaking.
4. I switch between Cantonese and English in the same sentence.
5. I switch between Cantonese and English between sentences. (e.g., one sentence in one language, then the next one is in the other language)
6. I switch between Cantonese and English easily.
7. It takes effort for me to switch between Cantonese and English.
8. I like to switch between Cantonese and English.
9. I like it when other people speak to me using both Cantonese and English.
10. I prefer to switch between Cantonese and English.
11. I prefer to use one language when communicating with other bilinguals.
12. I am comfortable switching between Cantonese and English in public (e.g., in front of strangers).
13. I am comfortable switching between Cantonese and English in private (e.g., in front of people I know well).
14. Overall, I am comfortable switching between Cantonese and English.

Appendix G

Study 2: Miville-Guzman Universality-Diversity Scale – Short Form (Fuertes et al., 2000)

The following questions have several terms which are defined below. Please refer to them throughout the rest of the questionnaire.

Culture – the beliefs, values, traditions, ways of behaving, and language of any social group. A social group may be racial, ethnic, religious, etc.

Race or racial background – a sub-group of people possessing common physical or genetic characteristics (e.g., White, Black, American Indian).

Ethnicity or ethnic group – a specific social group sharing a unique cultural heritage (i.e. customs, beliefs, language, etc.). Two people can be of the same race (e.g., White), but be from different ethnic groups (e.g., Irish American, Italian American).

Country – groups that have been politically defined; people from these groups belong to the same government (e.g., France, Ethiopia, United States). People of different races (e.g., White, Black, Asian) or ethnicities (e.g., Italian, Japanese) can be from the same country (e.g., United States). Please indicate how descriptive each statement is of you by filling in the number corresponding to your response.

Strongly disagree	Disagree	Slightly disagree	Slightly agree	Agree	Strongly agree
----------------------	----------	----------------------	-------------------	-------	-------------------

1. I would like to join an organization that emphasizes getting to know people from different countries.
2. Persons with disabilities can teach me things I could not learn elsewhere.
3. Getting to know someone of another race is generally an uncomfortable experience for me.
4. I would like to go to dances that feature music from other countries.
5. I can best understand someone after I get to know how he/she is both similar and different from me.
6. I am only at ease with people of my race.
7. I often listen to music of other cultures.
8. Knowing how a person differs from me greatly enhances our friendship.
9. It's really hard for me to feel close to a person from another race.
10. I am interested in learning about the many cultures that have existed in this world.
11. In getting to know someone, I like knowing both how he/she differs from me and is similar to me.
12. It is very important that a friend agrees with me on most issues.
13. I attend events where I might get to know people from different racial backgrounds.
14. Knowing about the different experiences of other people helps me understand my own problems better.
15. I often feel irritated by persons of a different race.

Appendix H

Study 2: Informed Consent Form

[letterhead]

Title of Study: Attitudes and Language

Researchers: Odilia Yim, MA, and Richard Clément, PhD, University of Ottawa

Participation Eligibility: You are able to speak and understand Cantonese.

I am invited to participate in the abovementioned research study. The purpose of the study is to examine the attitudes that are associated with languages. The study will consist of one (1) session and last approximately 20 minutes. At the end of the study, I will be debriefed. If I am interested, I can request a brief overview of the findings.

I understand that there are no anticipated risks from participation in this study. Some people may feel uncomfortable answering questions about themselves or their experiences. However, I can choose to refuse to answer any questions or withdraw from the study.

I will remain anonymous and all my contributions to this study will be kept confidential. A number code will be assigned to all materials associated with my session, and my name and consent form will be filed separately from these materials in a secure place. No responses made in the questionnaires or during the session will be personally attributed to me in any report associated with this project. The data will be securely stored in a locked laboratory and only accessed by the researchers. Data will be kept for 5 years after results are published and will be destroyed thereafter.

I understand that my participation is voluntary. However, I can end my participation at any time. I do not have to answer any question I do not want to answer. If I choose to withdraw, my data will be deleted immediately. There will be no consequences for me now or in the future if I choose not to participate.

If I have any questions regarding the ethical conduct of this study, I can contact the Office of Research Ethics and Integrity at 550 Cumberland, Tabaret Hall 154, K1N 6N5; Tel.: 613-562-5387; ethics@uottawa.ca. Researcher contact information: Odilia Yim (136 Jean Jacques Lussier; [omitted]@uottawa.ca) and Richard Clément (70 Laurier Ave East; [omitted]@uottawa.ca).

Please print a copy of this form for your personal files. If you would like a summary of the Results, once the study is complete, please write your email below. _____

By checking the first box below, I accept to participate in the study described above.

- Yes, I consent to participate in this study
- No, I do not consent to participate in this study

Appendix I

Study 2: Debriefing Form

[letterhead]

Study Title: Attitudes and Language

Researchers: Odilia Yim, MA, and Richard Clément, PhD, School of Psychology, University of Ottawa

This study investigated code-switching and cultural identity.

Code-switching is when bilinguals alternate between their languages. This can happen when a word or phrase is used in one language while using the other language in a single speech event (e.g., in a conversation or message). When bilinguals choose to use a particular language, it can also signal a particular identity or affiliation to a social group and listeners develop attitudes towards the speaker depending on the language used.

Past research has looked at people's attitudes towards languages separately, but not when the languages are mixed together. The present study examines the perceptions that are associated with Cantonese-English code-switching and specifically, how people's attitudes may be related to personal characteristics, such as cultural identity.

The Cantonese-English bilingual group was chosen because the Chinese community has a strong presence in many of Canada's urban centres and the Chinese languages (e.g., Cantonese, Mandarin, and other dialects) are the fastest growing and third most prevalent mother tongue in Canada after English and French.

Please do not share this information with any other individuals who may be potential participants in the study. Knowing the details before participating may influence performance and/or results. Please direct any further questions you have to the researchers and feel free to get in touch with them in the future using the contact information on the consent form.

Thank you for your participation in the study!

If you would like, please print a copy for your personal files.

We are still looking for more participants!

We would appreciate it if you can share our study information with your contacts! Would you be open to us contacting you to share our study information or inform you about a future study?

If you are willing, please write your email below: _____ **Thank you!**

Appendix J

Study 3: Study Design

			Perceived cultural identity of speaker			
			Chinese	Canadian	Bicultural	Control
Code-switching	English base language	No code-switches				
		Single-item code-switches				
		Multi-item code-switches				
	Cantonese base language	Multi-item code-switches				
		Single-item code-switches				
		No code-switches				

Appendix K

Study 3: Speaker Identity Conditions

[Bicultural Condition]

The following is some information about the speakers you will be listening to in the next section. It may be things that they have said about themselves or aspects about their daily life.

Previously, we interviewed some Cantonese-English bilinguals and asked them to talk about their experiences, such as work habits, family structure, and hobbies.

Some of the individuals were born in Hong Kong and moved to Canada when they were little, but most of them were born in Canada. These individuals are proud of their Chinese and Canadian upbringing and how they are a part of their values and lifestyle.

The following are some excerpts from the transcripts of the interviews:

"Well I know, it's just about being involved in both cultures. Like a typical Canadian would be like, oh Canadian watch hockey and other Canadian things and then you are doing Chinese things, you are doing the line dance, you are doing the drums."

"So that's the kind of thing I want to showcase to people, to simplify to people, um because being Canadian one thing is great, but again, being Cantonese or telling people that hey, I'm Cantonese also, it's another, it's another image I would like to show. Uh again it's a nice image because, being Canadian, again Canada being a multicultural place, we got people from India, we got people from Egypt, all these different places. And to be Cantonese and to say that I'm from this part of China or part of Asia, again, it's pretty specific so like to Cantonese, and I would like to teach people about it or show people the beauty of it."

In the next section, you will be asked to complete some rating tasks.

Please answer as quickly as you can; it is your first reaction that counts. Also, please answer diligently; although some tasks may not seem relevant, each task represents an important contribution to the purpose of the study.

[Canadian Condition]

The following is some information about the speakers you will be listening to in the next section. It may be things that they have said about themselves or aspects about their daily life.

Previously, we interviewed some Cantonese-English bilinguals and asked them to talk about their experiences, such as work habits, family structure, and hobbies.

Some of the individuals were born in Hong Kong and moved to Canada when they were little, but most of them were born in Canada. These individuals are proud of their Canadian upbringing and how it is a part of their values and lifestyle.

The following are some excerpts from the transcripts of the interviews:

"I don't make an effort to make Chinese friends, um the number of Chinese friends I have is very low, and like Chinatown for me is like a place to shop or like just do my normal like sort of errands and stuff. I don't make any sort of effort to participate in Chinese community, no. Like I never got Chinese language television when I was growing up. My parents also didn't – chose not to have that. You know, we could have if we wanted to, but like they just didn't subscribe to it. We didn't read Chinese language newspapers."

"I guess it's just like, um exposure. Um, like being like in English school with my friends like we talk about, um for example, we talk a lot about NHL hockey, and NBA, like sports, or even like, other things like TV shows/movies that are taking place, about to come out um like in Canada. So um, and not so much about what's going on in Hong Kong or China, or talking about that stuff. So, but yeah, so it is leaning towards like being more Canadian, and that comes with like being here for most of my life...even like international competition I guess, or when Canada does something really great on the international stage, like hosting the G20 summit...I'm a big Toronto sports fan, I love the Leafs, the Raptors, and the Blue Jays, so it was a proud moment for me. Especially since that you know, Toronto Raptors and Blue Jays are the only Canadian teams in their respective leagues. So that made me really proud, and like, you know – Toronto, the fact that Toronto is really putting its name out there. Putting Canada on the map."

In the next section, you will be asked to complete some rating tasks.

Please answer as quickly as you can; it is your first reaction that counts. Also, please answer diligently; although some tasks may not seem relevant, each task represents an important contribution to the purpose of the study.

[Chinese Condition]

The following is some information about the speakers you will be listening to in the next section. It may be things that they have said about themselves or aspects about their daily life.

Previously, we interviewed some Cantonese-English bilinguals and asked them to talk about their experiences, such as work habits, family structure, and hobbies.

Some of the individuals were born in Hong Kong and moved to Canada when they were little, but most of them were born in Canada. These individuals are proud of their Chinese upbringing and how it is a part of their values and lifestyle.

The following are some excerpts from the transcripts of the interviews:

"I still embrace my roots from Hong Kong, and I still you know, eat Chinese food with my parents. I still love Chinese food, obviously, and a lot of things I – like I still celebrate Chinese New Year, so Lunar New Year – everything. Um, that's definitely part of who I am, and I never want to let it go."

"I would encourage myself to watch some TVB dramas, or listening to some Cantonese music to improve. So again I would try to learn them on my own. I didn't go to Chinese school, so that was kind of like, I think I missed out."

In the next section, you will be asked to complete some rating tasks.

Please answer as quickly as you can; it is your first reaction that counts. Also, please answer diligently; although some tasks may not seem relevant, each task represents an important contribution to the purpose of the study.

[Control Condition]

[No information given.]

In the next section, you will be asked to complete some rating tasks.

Please answer as quickly as you can; it is your first reaction that counts. Also, please answer diligently; although some tasks may not seem relevant, each task represents an important contribution to the purpose of the study.

Appendix L

Study 3: Demographics

[Demographics – Background]

Age: _____

Sex:

- Male
- Female
- Other _____

What is your current employment status?

- Full-time Student
- Working
- Other _____

What is the highest degree you have earned?

- High school diploma
- College diploma
- Bachelor's degree
- Graduate or professional degree

Were you born in Canada?

- Yes
- No

If No, where were you born? (please be as specific as possible)

City/Town, Province/State, Country _____

If No, what year did you move to Canada? _____

What is your current citizenship status in Canada?

- Canadian
- Landed immigrant
- Refugee
- Student visa
- Other _____

How long have you lived... (please indicate number of years)

in Canada? _____

in a Chinese country? _____

Where have you lived the longest or most of your life? (please be as specific as possible)

City/Town, Province/State, Country _____

Have you ever lived in Toronto or the Greater Toronto Area?

- Yes
- No

If Yes, how many years have you lived in Toronto or the Greater Toronto Area?

Do you consider yourself part of or belonging to the Chinese community in Toronto?

- Yes
- No

Do you consider yourself part of or belonging to a Chinese community elsewhere?

- Yes
- No

If Yes, please specify the Chinese community you consider yourself part of or belonging to. (e.g., another location: Hong Kong, Vancouver; with a specific group: second-generation immigrants, Canadian born)

In Canada, people come from a lot of different cultures and there are many different words to describe the different backgrounds or **ethnic groups** that people come from. Some examples of the names of ethnic groups are Mexican-American, Hispanic, Black, American Indian, Anglo-American, and White.

Every person is born into an ethnic group, or sometimes two groups, but people differ on how important their **ethnicity** is to them, how they feel about it, and how much their behaviour is affected by it.

You may identify yourself in terms of your ethnic culture (defined in terms of one's ancestral heritage, such as the culture of your birth or culture(s) of origin of one's parents and grandparents), the mainstream culture, or both. It can be fluid and dynamic, possibly changing over time and different settings.

In terms of ethnicity, you consider yourself to be: (please select the term you most prefer)

- Hong Kong Chinese [options randomized]
- Chinese
- Canadian
- Chinese Canadian
- Canadian Chinese
- Canadian-born Chinese
- Asian
- Asian Canadian
- Other _____

Do you plan to move to the country from which your ethnic group originated?

- Yes
- No
- Not sure

If Yes, and you plan to move to the country from which your ethnic group originated, how much longer do you think you will stay in Canada? (please write the number of years)

Was your mother born in Canada? If No, where was she born?
(please be as specific as possible: City/Town, Province/State, Country)

- Yes
- No _____

Your mother's ethnicity is

- Hong Kong Chinese
- Chinese
- Canadian
- Chinese Canadian
- Canadian Chinese
- Asian
- Asian Canadian
- Other _____

What is the highest level of education for your mother?

- No high school diploma
- High school diploma
- Some college or college diploma
- Bachelor's degree
- Graduate or professional degree

Was your father born in Canada? If No, where was he born?
(please be as specific as possible: City/Town, Province/State, Country)

- Yes
- No _____

Your father's ethnicity is

- Hong Kong Chinese
- Chinese
- Canadian
- Chinese Canadian
- Canadian Chinese
- Asian
- Asian Canadian
- Other _____

What is the highest level of education for your father?

- No high school diploma
- High school diploma
- Some college or college diploma
- Bachelor's degree
- Graduate or professional degree

[Demographics – Language]

What is your native language? (first language learned and still understood)

- Cantonese
- English
- Other _____

How many languages do you know?

- 1
- 2
- 3
- 4
- 5+

Please write down all your languages.

	Start from the one you learned earliest (birth) to the most recent.	When did you learn this language?	Where did you learn this language? (please check all that apply)			
			Home	School	Community	Work
Language 1			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Language 2			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Language 3			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Language 4			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Language 5			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Did you learn Cantonese and English at the same time or one after another?

- Cantonese and English at the same time
- Cantonese first, then English
- English first, then Cantonese

At what age did you begin to use your second language (Cantonese or English) regularly?

Have you taken Cantonese in heritage language classes (i.e. Chinese school)?

If Yes, for approximately how many years?

- Yes _____
- No

At what age did you begin to use **both Cantonese and English** actively?

What language(s) do you use when speaking to your mother? (please check all that apply)

- Cantonese
- English
- Other _____

What language(s) do you use when speaking to your father? (please check all that apply)

- Cantonese
- English
- Other _____

What language(s) do you use when speaking to your friends? (please check all that apply)

- Cantonese
- English
- Other _____

What language(s) do you presently use most often/regularly? (please check all that apply)

- Cantonese
- English
- Other _____

If we ask you to choose a language to communicate in, which language would you choose?

- Cantonese
- English
- Other _____

How would you describe your level of bilingualism?

Non-fluent bilingual Fluent bilingual
 1 2 3 4 5

1 – Non-fluent bilingual: Only know a bit of vocabulary in the other language.

2 – Weak bilingual: Know enough to carry out some conversations to a very limited extent; need to listen to sentences more than once before understanding.

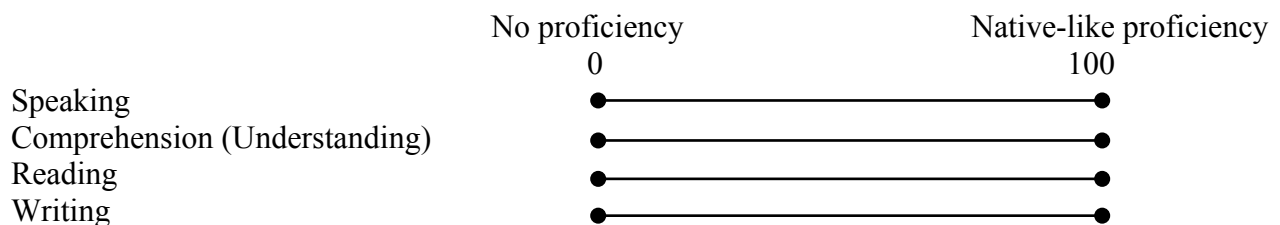
3 – Unbalanced bilingual: Able to carry out basic conversation with minor errors; can understand without other person repeating the sentence.

4 – Practical bilingual: Can carry out conversations fluently, but does not use other language everyday.

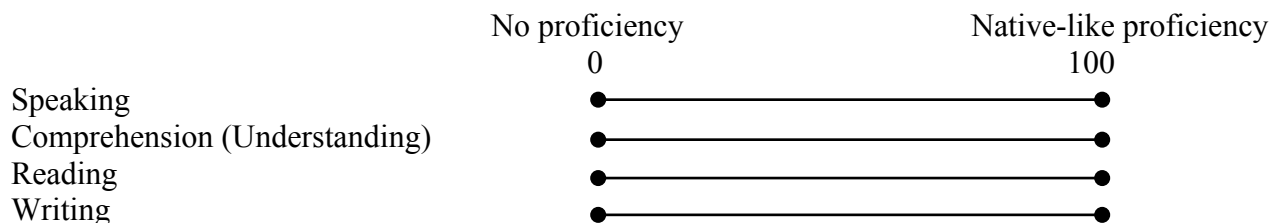
5 – Fluent bilingual: Able to converse fluently and actively use two languages everyday.

[Demographics – Language Proficiency and Use]

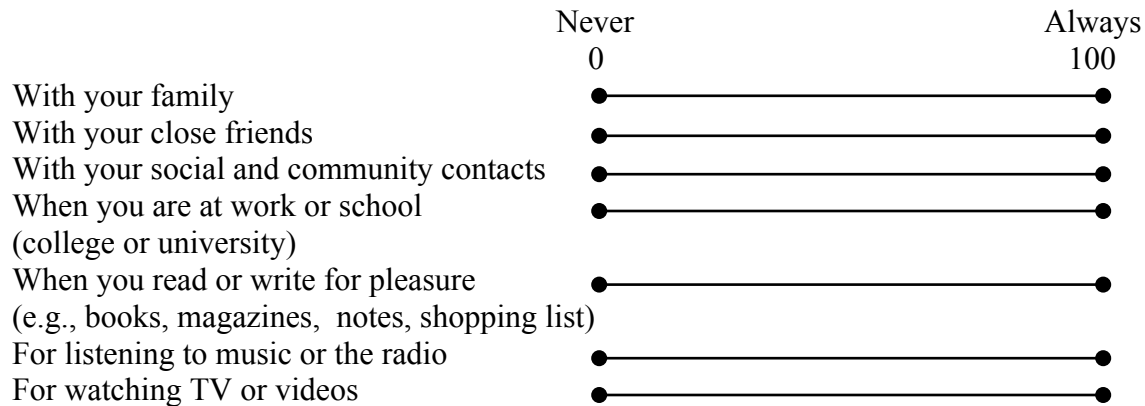
Relative to a native speaker's performance, rate your proficiency level in **Cantonese**.



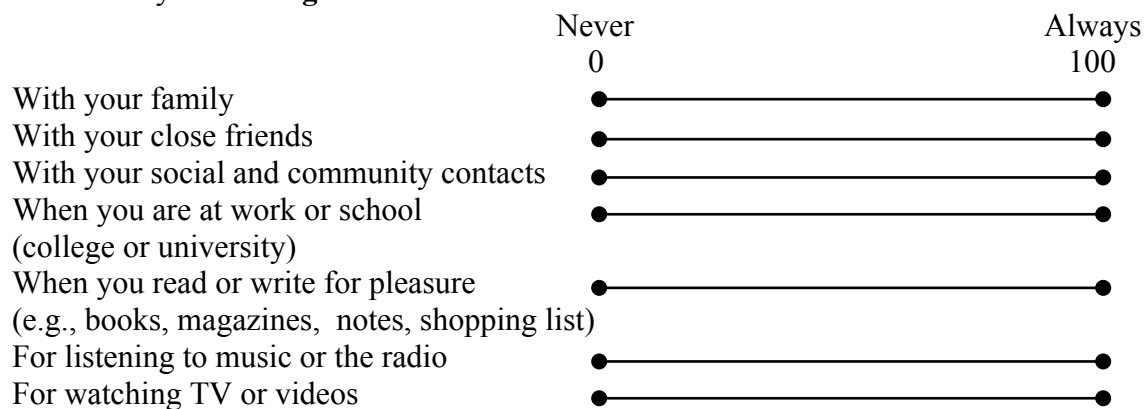
Relative to a native speaker's performance, rate your proficiency level in **English**.



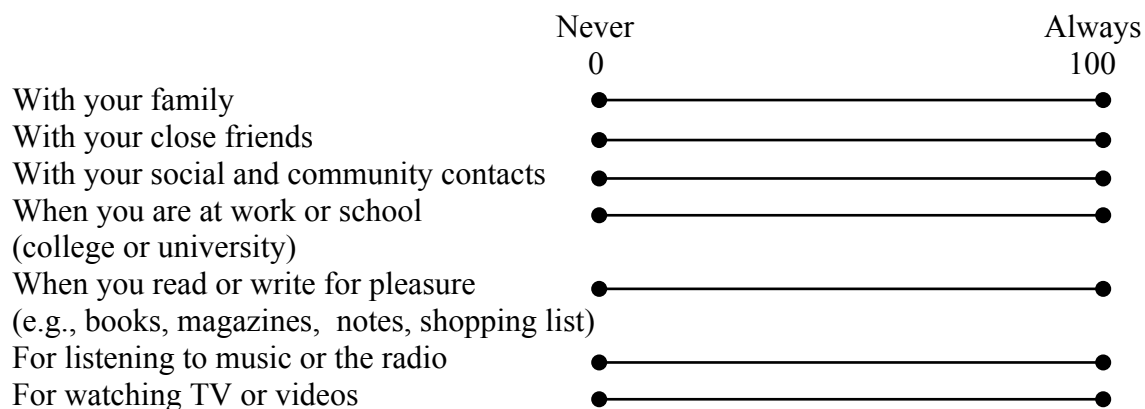
How often you use **Cantonese**?



How often you use **English**?



How often you use **Cantonese and English together or switch between Cantonese and English**?



Appendix M

Study 3: Speech Passages

English (E)

- E1 I have a position at the airport, so that sometimes my manger will put me on shifts, usually during the morning or in the afternoon.
- E2 If you really just try to do a good job for everybody with policies that work well for everybody, everybody gets to participate, you know.
- E3 We know that they're learning, so it's more of a learning perspective, just once in a while.

English – Cantonese insertions (EC)

- EC1 If you like the **TSIU CUP SI CHEUNG** [supermarket], you have to talk to the butcher and ask them for the ground pork.
- EC2 But mostly it is **YUT CHAI** [together] because the next day actually the family is visiting; if it wasn't for the holidays then there isn't much.
- EC3 Like they're afraid, we wouldn't know how to **BOA JONG** [preserve] because they would know how to do it, but for us we wouldn't know, and they would talk about how in some ways, it might become extinct in some ways.

English – Cantonese CS (ECC)

- ECC1 If we are watching TV and we want to talk about a certain series, **DEE HOW SAENG TSAI DOH MM SIC** [the young guys don't know].
- ECC2 **YING GOY CHA MM DOW** [Supposed to be about the same], because when I grew up, my high school was about the same, going to school.
- ECC3 There is a bit of a clash **BUT GOR DAI BO FAN** [but for the most part] it's pretty good.

Cantonese – English CS (CEE)

- CEE1 YU GOH JIU, OW DEY WUI JIU YU [If we cook, we would cook fish] like with everything else.
- CEE2 YOW HO WANG GING, TONG DOC SUI GEH YUN, TONG JOW YEAH GEH YUN [Have a good environment, with school people, with work people], just go with what works, MO MUN TAI [no problem]
- CEE3 I would go out, go around, TSAT HAI HOH TSEE HAI OOK KEI, TSAT HAI OW FAN DO OOK KEI GUM [like similar to at home, like when I go back home].

Cantonese – English insertions (CE)

- CE1 JUT HAI PAY YUE WAH, LEY SEUNG JO YUT GOH [Like for example let's say, you want to do a] debate, LEY MM HOR YEE CHO LOH [you can't be rude].
- CE2 HO DO SEE OW TONG KUI DEY GONG HAI YEE DEE [A lot of the times, I tell them it's easier], than TONG DEY YEE DEE YUN GONG [telling other people].
- CE3 GUM TONG MEI DAI BO FUN OW DEE PUNG YOW, OW DOW WUI [Plus, with the majority of my friends, I would] notice CHUT HAI, GOK DUK SIU SIU SUT LIY JOR [like I feel a little embarrassed].

Cantonese (C)

- C1 YUE GOH HUI GOH GONG SIK TSAN TANG, YIU AI DEE YEH, GUM OW TEI GOH TSAN PAI...GUI DEE YEH LOR. [If we go to the Hong Kong style restaurant, you have to order something, then I take a look at the menu...order something.]
- C2 TSAT HAI YOW DEE TSUN TCIK, TSAT HAI OW DEY DAI YUT TSEE GEEN, TONG OW DEY KING GAI, MM HAI HOH CHING CHOH OW DEY HAI BEIN GOH. [Like there are relatives, like the first time we meet them, conversing with us, they are not very clear on who we are].
- C3 HAI LE DO OW MM WUI GOK DUK YOW HOH DOH GAY WUI FAT FAI, DAN HAI YUN WAI WANG GING GUY CUIT GOH DEE MAN TAI GUM TSOW HOH YING HURN YUT GOH YUN DEEM YEUNG. [Here I do not feel I have a lot of opportunities to show, but because environment takes care of those problems so really affects how a person is].

Appendix N

Study 3: Randomized Ordering

Random selection and presentation of A1/A2/B1/B2 by Qualtrics

TRIALS	ORDER A1		ORDER A2		ORDER B1		ORDER B2	
1	EC1	Speaker 1	EC1	Speaker 3	CE1	Speaker 1	CE1	Speaker 3
2	CEE1	Speaker 2	CEE1	Speaker 1	ECC2	Speaker 2	ECC2	Speaker 1
3	C2	Speaker 3	C2	Speaker 2	CEE1	Speaker 3	CEE1	Speaker 2
4	CEE2	Speaker 1	CEE2	Speaker 3	EC3	Speaker 1	EC3	Speaker 3
5	EC3	Speaker 3	EC3	Speaker 2	CE2	Speaker 3	CE2	Speaker 2
6	E1	Speaker 2	E1	Speaker 1	EC2	Speaker 2	EC2	Speaker 1
7	ECC1	Speaker 3	ECC1	Speaker 2	E3	Speaker 3	E3	Speaker 2
8	CE3	Speaker 1	CE3	Speaker 3	C2	Speaker 1	C2	Speaker 3
9	C1	Speaker 2	C1	Speaker 1	ECC3	Speaker 2	ECC3	Speaker 1
10	CEE3	Speaker 3	CEE3	Speaker 2	E1	Speaker 3	E1	Speaker 2
11	E3	Speaker 2	E3	Speaker 1	CEE3	Speaker 2	CEE3	Speaker 1
12	CE1	Speaker 1	CE1	Speaker 3	C1	Speaker 1	C1	Speaker 3
13	ECC3	Speaker 2	ECC3	Speaker 1	CE3	Speaker 2	CE3	Speaker 1
14	EC2	Speaker 1	EC2	Speaker 3	E2	Speaker 1	E2	Speaker 3
15	E2	Speaker 3	E2	Speaker 2	ECC1	Speaker 3	ECC1	Speaker 2
16	C3	Speaker 2	C3	Speaker 1	CEE2	Speaker 2	CEE2	Speaker 1
17	ECC2	Speaker 3	ECC2	Speaker 2	C3	Speaker 3	C3	Speaker 2
18	CE2	Speaker 1	CE2	Speaker 3	EC1	Speaker 1	EC1	Speaker 3

Appendix O

Study 3: Speaker Ratings

The goal of the following section is to determine your impressions of different speakers using a variety of expressions. In this section, we ask that you classify these expressions using a graded scale.

The following example will demonstrate how the scales are used. At opposite ends of the scales are two words. If the word at one extreme corresponds perfectly to your ideas regarding the expression found at the top of the page, select the box at that end. If the words at either end of the scale do not correspond to your ideas regarding the expression, select the box in the center of the scale.

For example, if you are grading **dog**, your responses may resemble the example below:

Dog

friendly	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	hostile
dangerous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	not dangerous
fast	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	slow
useful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	useless

In this example, **dog** is considered to be friendly, not really dangerous, somewhat fast, and neither useful nor useless.

The purpose of the next section is to understand your ideas.

There are no right or wrong answers. Do not spend time thinking about each item. We are interested in your first and immediate ideas.

You will listen to some speech passages. Please pay careful attention to the audio passages. They will only be played once.

Similar to listening to a voice on the radio or telephone, you may get an idea or come up with a picture about the person who is speaking. We are interested in your overall impressions of different speakers, from their voices rather than what they are saying.

Remember to only pay attention to the **voices** of the speakers.

After you listen to the passage, please rate the speaker by selecting a box in the scale presented, as shown in the example.

Each page corresponds to one speech passage. There are 18 speech passages in total.

Appendix P

Study 3: Informed Consent Form

[letterhead]

Title of Study: Speech and Perception

Researchers: Odilia Yim, MA, School of Psychology, University of Ottawa; Dr. Richard Clément, PhD, School of Psychology, University of Ottawa; Dr. Richard Lalonde, PhD, Department of Psychology, York University

Participation Eligibility: You are able to speak and understand Cantonese.

What You Will Be Asked to Do in the Research: The purpose of the study is to examine individual perceptions about a speaker based on their speech. I will complete questionnaires about demographic and personal characteristics and listen to audio passages of people speaking. The study will consist of one (1) session and last approximately 45 minutes to 1 hour. At the end of the study, I will be debriefed. If I am interested, I can request a brief overview of the findings.

Voluntary Participation and Withdrawal: I understand that my participation is voluntary. However, I can end my participation at any time. I do not have to answer any question I do not want to answer. If I choose to withdraw, my data will be deleted immediately. There will be no consequences for me now or in the future if I choose not to participate. Your decision to stop participating, or to refuse to answer particular questions, will not influence the nature of your relationship with York University either now, or in the future. If you stop participating, you will still be eligible to receive the promised credit for agreeing to be in the project. In the event you withdraw from the study, all associated data collected will be immediately destroyed wherever possible.

Confidentiality: I will remain anonymous and all my contributions to this study will be kept confidential. A number code will be assigned to all materials associated with my session, and my name and consent form will be filed separately from these materials in a secure place. No responses made in the questionnaires or during the session will be personally attributed to me in any report associated with this project. The data will be securely stored in a locked laboratory and only accessed by the researchers. Data will be kept for 5 years after results are published and will be destroyed thereafter. The information which you provide will be kept confidential and anonymous to the full extent possible by the law. Only the research staff associated with this project will have access to the data collected in this study. The researcher(s) acknowledge that the host of the online survey (e.g., Qualtrics, Survey Monkey) may automatically collect participant data without their knowledge (i.e. IP addresses.) Although this information may be provided or made accessible to the researchers, it will not be used or saved without participant's consent on the researchers' system. Further, because this project employs e-based collection techniques, data may be subject to access by third parties as a result of various security legislation now in place in many countries and thus the confidentiality and privacy of data cannot be guaranteed during web-based transmission.

Risks and Discomfort: I understand that there are no anticipated risks from participation in this study. Some people may feel uncomfortable answering questions about themselves or their experiences. However, I can choose to refuse to answer any questions or withdraw from the study. Some of the questions ask about how you feel about yourself and your life (e.g. that you are a person of worth or that you feel like a failure). These kinds of questions, similar to everyday self-reflection, could be upsetting to some people. If you do have any personal concerns that you would like to discuss, please contact your health care provider or a support line, such as Good2Talk (1-866-925-5454) or the Distress Centres of Toronto (416-408-4357).

Benefits of the Research and Benefits to You: For participating in this study, you will be compensated with one (1.0) UOttawa ISPR credit or one (1.0) York URPP credit for your Introduction to Psychology (1010) course if you are registered in this course. If you are a student from another course (e.g., Psych 2510) you will be credited with a bonus mark, assuming that you have not reached the maximal number of bonus marks that can be obtained in your course. If you are not participating for university credit, you will have the option to enter yourself into a draw to win one (1) of five Amazon Canada \$20.00 gift cards.

Questions About the Research: This research conforms to the standards of the Canadian Tri-Council Research Ethics guidelines and has received ethics review and approval by the University of Ottawa Health Sciences and Science Research Ethics Board and the York University Ethics Review Board Human Participants Review Sub-Committee. If you have any questions about this process, the ethical conduct of the study this process, or about your rights as a participant in the study, please contact the University of Ottawa Office of Research Ethics and Integrity (tel.: 613-562-5387; ethics@uottawa.ca) or the York University Office of Research Ethics (Tel.: 416-736-5914; ore@yorku.ca). If you have questions about the research in general or about your role in the study, please feel free to contact Odilia Yim (136 Jean Jacques Lussier; [omitted]@uottawa.ca), Dr. Richard Clément (70 Laurier Ave East; [omitted]@uottawa.ca), or Dr. Richard Lalonde (Tel.: 416-736-2100 ext. [omitted]; [omitted]@yorku.ca).

Please print a copy of this form for your personal files.

If you would like a summary of the Results, once the study is complete, please write your email below. _____

Please consider joining our lab's growing bilingual database!

In addition to contributing to our research, you will contribute to the understanding of heritage languages in Canada. By sharing your contact, you will receive news about our lab and future studies (for credit/compensation). You will only receive info that is relevant to you, in which your participation is voluntary. Please write your email below: _____

By checking the first box below, I accept to participate in the study described above.

- Yes, I consent to participate in this study
- No, I do not consent to participate in this study

Appendix Q

Study 3: Debriefing Form

[letterhead]

Study Title: Speech Perception

Researchers: Odilia Yim, MA, and Richard Clément, PhD, University of Ottawa

This study investigated people's perceptions towards speech, specifically code-switching. Code-switching is when bilinguals alternate between their languages. This can happen when a word or phrase is used in one language while using the other language in a single speech event (e.g., in a conversation or message). When bilinguals choose to use a particular language, it can also signal a particular identity or affiliation to a social group and listeners develop attitudes towards the speaker depending on the language used.

Past research has looked at people's attitudes towards languages separately, but not when the languages are mixed together. The present study examines the perceptions that are associated with Cantonese-English code-switching and specifically, how people's attitudes may be related to personal characteristics, such as cultural identity.

The Cantonese-English bilingual group was chosen because the Chinese community has a strong presence in many of Canada's urban centres and the Chinese languages (e.g., Cantonese, Mandarin, and other dialects) are the fastest growing and third most prevalent mother tongue in Canada after English and French.

Please do not share this information with any other individuals who may be potential participants in the study. Knowing the details before participating may influence performance and/or results. Please direct any further questions you have to the researchers and feel free to get in touch with them in the future using the contact information on the consent form.

Thank you for your participation in the study!

If you have any questions regarding the ethical conduct of this study, you can contact the University of Ottawa Office of Research Ethics and Integrity (Tel.: 613-562-5387; ethics@uottawa.ca) or York University Office of Research Ethics (Tel.: 416-736-5201; ore@yorku.ca). Researcher contact information: Odilia Yim (136 Jean Jacques Lussier; [omitted]@uottawa.ca), Richard Clément (70 Laurier Ave East; [omitted]@uottawa.ca), Richard Lalonde (4700 Keele St., BSB237; [omitted]@yorku.ca).

If you would like, please print a copy for your personal files.

We are still looking for more participants!

We would appreciate it if you can share our study information with your contacts! Would you be open to us contacting you to share our study information or inform you about a future study?

If you are willing, please write your email below: _____