

**Non-Native English Speakers in Canada: Relationships between Self-Reported Accent
Strength, Self-Determination, Psychological Engagement, and Well-Being**

Maria De Lourdes Garcia Manzano

Department of Psychology, Brandon University

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Dr. Gadbois & Dr. McKenzie

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Abstract

Prior research has documented that non-native English speakers can be subject to discrimination and that non-native English speakers are aware of the biases toward their differing foreign accent strengths. However, few studies have investigated the psychological well-being of speaking English in a foreign accent. The objectives of this study were to explore how perceived accent strength relates to the following perceived accent discrimination, psychological well-being, self-determination (competence, autonomy, relatedness satisfaction), and psychological engagement. Participants were non-native ($n = 89$) English speakers who completed questionnaires assessing the above constructs.

The results showed that, as expected, positive correlations arose between psychological engagement, self-determination factors and well-being, and negative correlations were found between greater perceived accent discrimination and lower psychological engagement, English proficiency, and native-like English accent. Contrary to expectations, no relationships were found between perceived accent discrimination and overall well-being. A linear regression showed that greater psychological well-being was predicted by greater psychological engagement in learning to speak English, and greater self-determination (competence satisfaction). A second linear regression showed that greater perceived accent strength was predicted by how important it was for them to speak English without a foreign accent and their time in Canada. The results have implications for immigrants' successful incorporation into a new English-speaking host country and particularly how psychological engagement and self-perceptions about their accent strength and English proficiency may contribute to their overall experience in English-speaking countries.

Non-Native English Speakers in Canada: Relationships between Self-Reported Accent Strength, Self-Determination, Psychological Well-Being, and Engagement

Acquiring English as a second language (L2) is often difficult. In addition to the complicated and taxing process of learning the language, non-native English speakers also are expected to possess understandable and fluent pronunciation. Ideally, non-Native speakers should mimic a native English speakers' pronunciation and fluency (Formanowicz & Suitner, 2020). However, mimicking a native English speaker's accent can be challenging, and as a result, most L2 English speakers possess a non-native English accent. Because L2 English speakers may sound 'foreign', they are often stigmatized by others (Gluszek & Dovidio, 2010) and, in turn, may develop negative self-assessments. L2 English speakers may experience feelings of inadequacy that can affect their willingness to improve their language and negatively impact their psychological well-being (Formanowicz & Suitner, 2020). The purpose of this study was to establish the relationships between L2 English speakers self-perceptions of speaking English with an accent along with psychological well-being, psychological needs satisfaction, and psychological engagement in learning to speak English.

Conceptualizing Psychological Well-Being

Despite many efforts to understand and summarize psychological well-being, full understanding of this complex concept remains unknown. As discussed by Dagenais-Desmarais and Savoie (2011) despite the absence of consensus regarding the conceptualization of psychological well-being, three main perspectives have been acknowledged to be influential within the psychological community. The *Hedonic approach* conceptualizes psychological well-being in terms of happiness and life satisfaction. This approach defines well-being as arising from positive and negative affect as well as overall life satisfaction. The *eudaimonic approach*

conceptualizes psychological well-being in terms of self-actualization, and optimal functioning. Psychological well-being is operationally defined as consisting of six different dimensions such as “autonomy, environmental mastery, personal growth, positive relations with others, purpose of life and self-acceptance” (Dagenais-Desmarais & Savoie, 2011, p. 661). Overall, psychological well-being is broadly defined as the combination of functioning in an effective manner within your environment accompanied by a sense of feeling good (Vansteenkiste, Ryan & Soenens, 2020).

Each perspective offers a different outlook on the psychological well-being construct and alone neither is sufficient to fully explain the concept. Both conceptualizations of psychological well-being still elicit debate on which one best characterizes well-being. An additional *integrative approach* has been proposed to reconcile the dual perspectives. The *integrative approach* entails combining the hedonic and eudaimonic approaches together to create a multidimensional construct that can provide a fuller and better explanation of an individual’s sense of feeling good (Dagenais-Desmarais & Savoie, 2011).

For this study, psychological well-being was conceptualized using the integrative approach, that is, that psychological well-being is a fundamental factor in the overall health of an individual. A variety of distinct factors can negatively impact psychological well-being, which can, in turn, lead to a series of unfortunate events for an individual, such as decreased overall health and psychological distress (Dagenais-Desmarais & Savoie, 2011; Freynet, Collins & Clement, 2020). Thus, it may be the case that Non-native English speakers may be at a higher risk for poorer psychological well-being, particularly if they experience or are perceived as ‘other’ and/or experience stigmatization and discrimination. The next section discusses

psychological needs satisfaction for L2 English speakers and their contribution to the assessment of overall well-being.

Basic Psychological Needs and L2 Acquisition

Self-Determination Theory identifies three basic needs (i.e., competence, autonomy, relatedness) that, if met, are considered essential for individuals' well-being and for adjustment within their environment as well as their integrity and growth. Vansteenkiste, Ryan, and Soenens (2020) highlighted that, for Self-Determination Theory, the three basic needs may play prominent roles in individuals' development, adjustment to unknown environments, and are associated with overall psychological wellness but are not equal to well-being. The inability to meet these needs may lead to maladjustment and result in a threatening experience for the individual that can harm self-perceptions and self-esteem. Vansteenkiste et al. (2020) defined autonomy as experiencing volition and willingness, where satisfaction entails having one's thoughts and actions self-endorsed and feelings of authenticity. In contrast, not achieving autonomy is associated with feelings of unwanted pressure and feeling "pushed in an unwanted direction" (Vansteenkiste et al., 2020, p. 3). Competence is the experience of mastery and effectiveness; the need is satisfied when individuals can display their skills and expertise effectively. Competence frustration can lead to feelings of not being good enough as well as helplessness. Relatedness is the experience of connecting to others with warmth, bonding, and care. When frustrated, feelings of loneliness and exclusion are felt by the individual.

With respect to L2 English speakers, autonomy may be achieved when they willingly choose to communicate in English and do not feel strange when speaking it. In L2 English speakers, language competence is displayed when they can effectively communicate with others in a way that displays their knowledge of the language. L2 English speakers' relatedness can be

displayed by them socializing with L1 English speakers and forming positive and nurturing relationships. Davis (2018) evaluated the relationships between basic psychological needs and L2 acquisition, by conducting a survey in which participants described whether they had had a personally satisfying or unsatisfying learning experience from their foreign language class. Participants included high school students taking part in Spanish, French, or German language studies who completed measures of psychological needs and intrinsic motivation, as well as their subjective experiences in their foreign language class. The results demonstrated that satisfaction of the three basic psychological needs predicted the students' intrinsic motivation for the in-class language learning experience. Specifically, greater reported need satisfaction was associated with greater intrinsic motivation in their learning. The results of this study showed that for L2 learning, an association exists between students feeling that their basic psychological needs are being satisfied and experiencing higher intrinsic motivation throughout the learning experience.

Another study (Birdsell, 2018) also evaluated the relationship between well-being, basic psychological needs, and English language learning. In this study, importantly, satisfaction and frustration of the three basic needs also were measured as indicators of L2 English students having reached ideal and proficient functioning within the English language. Birdsell also included novelty as a fourth need, having argued that it is a defining component of intrinsic motivation that could influence optimal functioning. L2 English students completed measures of functioning within their language learning context, as well as measures of satisfaction and frustration of competence, relatedness, autonomy, and novelty. Participants also reported whether they had accessed the self-access learning space available at their university. The results showed, as expected, that participants' self-reported satisfaction with competence, autonomy and relatedness was strongly related to positive language learning experiences and the students'

overall psychological well-being. Additionally, when L2 speakers feel that their psychological needs have been met, this motivates them to work on their language proficiency and fluency. Thus, developing their language skills so that, if they believe language proficiency/fluency is crucial to their well-being, they may be more likely to try to adapt so that they sound like native speakers of the language.

Overall well-being, from the perspective of Self-Determination Theory, is fostered through feelings of vitality, experienced by individuals as feeling alive, vigorous, and energetic within their environment. Martela and Ryan (2021) also highlighted in their review that while a variety of different conceptualizations of well-being exist, the Self-Determination Theory's basic psychological needs have demonstrated their importance in hundreds of empirical studies and are valued across a variety of different cultures. While simply focusing on the satisfaction and frustration of the basic psychological needs may give a too narrow approach to overall well-being, satisfaction and frustration of the psychological needs highlight the importance of fulfilling the basic psychological needs especially when it is important to measure human flourishing. Basic psychological needs can be used as indicators for well-being since they signal that aspects of a person's life are good and, therefore are indicative of individuals experiencing well-being.

Given that the current study conceptualizes psychological well-being using the integrative approach and that psychological need satisfaction may be used as an indicator of well-being (Martela and Ryan, 2021), it is crucial to incorporate need satisfaction into the comprehension of overall well-being in an examination of L2 learners experiences. Therefore, this study examined need satisfaction as it relates to speakers self-perceptions of speaking English. Specifically, it may be the case that Non-Native English speakers experience a lower

degree of competence, relatedness and autonomy satisfaction associated with being exposed to stigmatization and discrimination due to speaking English with a foreign accent. In the next section, the psychological engagement as related to L2 learning and speaking are discussed.

Psychological Engagement Influences and L2 Acquisition

Engagement connects a person to an activity and plays a critical role in the commitment and importance of the activity to the individual (Ramey et al., 2015). Engagement is a dynamic and multidimensional construct comprised of cognition, affect and behaviours (Hiver, Al-Hoorie, Vitta & Wu, 2021). Engagement has also been described as consisting of cognitive, affective, and relational dimensions (Ramey et al., 2015). *Cognitive engagement* is the investment in learning in relation to self-regulation and willingness to exert effort to learn and master skills. *Affective engagement* refers to individuals' positive and negative reactions concerning the activity (e.g., enjoyment), and *Relational engagement* is the meaningfulness and connection to others with the activity. Another way of talking about engagement as a multidimensional concept is that engagement has been conceptualized as being made up of four subtypes: academic, behavioral, cognitive, and psychological, which are all treated as separate but interrelated types of engagement, each with their own unique combination of dimensions and indicators (Appleton, Christenson, Kim, & Reschly, 2006).

Psychological and cognitive engagement are less observable than behavioral and academic engagement, however they provide a more complete view of the construct. In the context of L2 learning, engagement may refer to how actively involved individuals are in the learning task and the extent to which physical and mental activity is goal-directed and purpose-driven. According to Hiver et al. (2021), the three core engagement dimensions present in language learning are behavioural, cognitive, and relational. In an L2 learning context, displays

of behavioural engagement are indicated through the amount and quality of individuals' active participation in learning. L2 English speakers' behavioural engagement with English can be observed when they voluntarily speak and begin interactions with other English speakers, whereas cognitive engagement is L2 learners' mental effort and mental activity in the process of learning. An example of L2 English speakers' cognitive engagement is illustrated when they participate in English conversations during which they offer and accept feedback when errors in speech are made. This showcases their cognitive investment in learning (Hiver et al., 2021).

Relational engagement is made up of two components, emotional and social engagement.

Positive emotional engagement is observed in L2 learners through displays of emotions such as enjoyment, enthusiasm, and anticipation at engaging with the learning task. L2 English speakers display positive emotional engagement when they enthusiastically choose to participate in a conversation that requires them to speak in English. Disengagement in L2 English speakers could be displayed through feelings of anxiety, boredom, and frustration when put in a situation where they must speak in English. Social engagement is also present in language learning in the form of prosocial behaviour. L2 learners explicitly engage in relational behaviour where they can form connections and meaningful relationships with peers who are present in the L2 environment.

Kim and Suarez-Orozco (2014) conducted an accelerated longitudinal study that examined the role of behavioural, relational, and cognitive engagement in explaining the influence of English proficiency on the academic performance of newcomer immigrant youth in the United States. Participants completed interviews as well as measures of English proficiency, engagement, verbal activities, and provided grade point average information. The results showed

that all three dimensions of engagement significantly predicted(?) the academic performance of immigrant youth.

Psychological engagement has also been evaluated in terms of its influence on L2 foreign accent strength. Moyer (2014) suggested that 'exceptional' outcomes in L2 phonology (sounding native-like) may be influenced by L2 learning engagement. Moyer (2014) indicated that since exposure to the target language is not enough to achieve native-like proficiency, L2 learners must be influenced by a variety of factors that enable exceptional L2 phonology proficiency. Specifically, there are a variety of factors that contribute to whether L2 learners achieve native likeness within a language including strong intrinsic motivation, extensive exposure to the target language being authentically spoken, good phonetic knowledge, and the belief that one has control on the progress of learning. These contributing factors showcase the fact that L2 learners must be highly engaged with their target language to achieve native-like proficiency and fluency, because they help the L2 learner achieve the desired L2 phonology outcomes.

Given the fact that psychological engagement may be a fundamental contributor to the overall positive experience for an individual in a given learning activity (Hiver et al., 2021), it is important to consider psychological engagement when studying L. As previously discussed, L2 learners need to be highly engaged with their target language in order to achieve the desired outcome of a native-like proficiency and fluency (Moyer, 2014). In the next section experiences of stigmatization and discrimination are discussed as it relates to Non-Native English speakers.

Accented English and Experiences of Stigmatization and Discrimination

In Canada, there is evidence of persistent everyday discrimination across multiple social groups. Godley (2018) examined data from the 2013 Canadian Community Health Survey in

which participants answered questions about their health. The survey also included an Everyday Discrimination Scale in which participants over the age of twenty-five reported whether or not they had been subjected to discrimination. Results from this survey indicated a prevalence of self-reported everyday discrimination in Canada. This study did not explicitly analyze whether L2 English speakers experience discrimination as a result of their accent, however we can infer that L2 English speakers are subjected to discrimination due to sounding different and therefore part of the out-group. Importantly, data from Heim, Hunter, and Jones (2011) indicated that a relationship exists between minority groups' physical and psychological well-being and their experiences of discrimination.

A variety of studies have shown that non-native English speakers experience stigmatization due to their accented English. The outcomes of these studies indicated that immigrants may not have a smooth adjustment to a new country if they believe they have a strong non-native English accent that may identify them as foreign. For example, Kim, Wang, Deng, Alvarez, and Li's (2011) study advanced the understanding of the relationship between accented speech and discrimination. They examined how mental health is negatively impacted, but they did not indicate which factors were associated with the negative consequences. For the current study, the focus was on an examination of the speakers' self-perceptions, rather than the listeners', because....and showed how a non-native accent can impact the self-evaluation of those who possess them.

Dovidio, Gluszek, John, Dittmann and Lagunes. (2010) assessed individuals' stigmatization experiences while evaluating intergroup relationships for Latino, Asian, and European non-native English speakers. The authors examined these individuals' stigmatization experiences in order to establish the degree to which participants associated their self-perceptions

of discrimination to their accent strength. Their results showed a positive correlation in that Asian and Latino participants experienced more perceived discrimination due to appearing more foreign (compared to typical Caucasian Americans) than European individuals. Furthermore, their results highlighted how perceived discrimination increased as accent strength increased. This relationship could be due to L2 English speakers' feelings of inadequacy when speaking English influencing their perceptions of how others view them.

Kim et al.'s (2011) study also examined how accented English related to self-perceptions of discrimination. In addition, they sought to examine whether self-perceptions of English proficiency related to being perceived as a foreigner and whether this association impacted depressive symptoms differently over time in male and female Chinese American adolescents. The researchers found that self-reported lower English proficiency among pre-adolescents in middle school was related to low self-esteem reported in high school. Their results also indicated that depressive symptoms (feelings of inadequacy, low-self-esteem, and low self-worth) were significantly related to the adolescents perceiving themselves to be stereotyped as foreigners. As for a gender difference, both experienced an increased risk of depressive symptoms due to low perceived English proficiency. They only differed in the source of the depressive symptoms. That is, for girls perceptions of chronic daily discrimination increased risk whereas for boys discriminatory victimization experiences increased risk.

Cavicchiolo, Manganeli, Girelli, Chirico, Lucidi & Alivernini (2020) showed in their study that most immigrant children are exposed to psychological distress due to the challenges faced when immigrating to a new country. Cavicchiolo et al. (2020) evaluated the impact of first and second-generation immigrant children's proficiency in the host country language on their psychological well-being one year later. In order to control for other variables that could affect

the results, they also evaluated the effects of gender, family social-economic status, and classmates' characteristics. The authors found that children's language proficiency significantly predicted their psychological well-being one year later, better than any other factors in both first- and second-generation immigrant children.

The current study helps to establish the relationship between proficient English skills and immigrants' psychological well-being. Furthermore, English as a second language may appeal to individuals to avoid stigmatization and discrimination, factors which could affect well-being. However, as discussed in the following section, it may also appeal to individuals for the other extrinsic benefits.

English: An Attractive Language for Immigrants

As discussed by Reeve (2018), extrinsic motivation may not be enough to motivate individuals to achieve their desired outcomes. Therefore, it is not enough to say external rewards motivate individuals to achieve native-like fluency. As a result, intrinsic motivation could be the necessary component in addition to extrinsic motivators that produces a more native-like English accent. Intrinsic motivation stems from several factors, such as enjoying an activity because it is exciting and engaging (Dincer, Yesilyurt, Noels & Vargas Lascano, 2019), and the satisfaction of all three basic psychological needs (Reeve, 2018). Aside from psychological need satisfaction and intrinsic motivational factors, another reason non-native English speakers may want to sound as native English speakers could be that imitating other human behavior has specific social functions. Imitation, as discussed by Farmer, Ciaunica, and Hamilton (2018), entails observing behavior and copying the observed behavior. Imitating the way native English speakers speak could eventually lead non-native English speakers to incorporate English in a way that becomes proficient and lacks a foreign accent (Famer et al., 2018).

Motha and Lin (2014) theorized that speaking English proficiently and fluently evokes an array of attractive associations, which serve as extrinsic motivators. One of the attractive associations that fluent and proficient English can be associated with is ‘capitalistic power,’ as Motha and Lin (2014) described. The attractive appeal that speaking in English has on non-native English speakers serves as a goal. L2 English speakers learn and become proficient in the language because L2 English speakers believe speaking English will yield better job opportunities. These authors argued that individuals’ needs for learning the English language stem from various economic, historical, and social contexts, since English has come to be associated with wealthy and powerful first-world countries. Park (2011) hypothesized that English for L2 English speakers is often assumed to be key to material success and social inclusion. They evaluated the ‘Promise of English’ fallacy in terms of the South Korean job market and highlighted that English language skills play a significant role in determining individuals’ access to white-collar jobs. Both Motha and Lin (2014) and Park (2011) highlighted the desirability effects that may influence individuals in acquiring proficient English. The desirability effects are thus, intrinsic, and extrinsic motivational factors that provide L2 English learners with the necessary drive to guide and pursue goal-directed behaviour.

As discussed in the previous two sections, the current study may help extend the current literature in examining whether a relationship exists between proficient English skills (acquired through extrinsic and intrinsic motivators) and immigrants' psychological well-being. In the following section, previous research on the evaluation of accented speech discrimination and its relationship to psychological well-being is examined.

Evaluating Accented Speech Stigmatization and Psychological Well-Being

As a result of being stigmatized, a non-native English speaker may experience poorer psychological well-being. Using the pre-existing survey data of 2,059 Asian immigrants, Choi, Weng, Park and Kim (2020) evaluated whether Asian immigrants' group membership (i.e., generational status, age, and ethnic subgroup) moderated the relationship between perceived racial discrimination and psychological well-being. Re-evaluating the pre-existing survey data yielded results that indicated the immigrants' generational status did not moderate the relationship between perceived discrimination and psychological well-being. However, age and ethnicity were moderators of this relationship. Young Vietnamese individuals, ages 18-24 years, displayed the most vulnerability since they reported the lowest well-being scores if they perceived they had experienced discrimination. The highest well-being was obtained by middle-aged Chinese individuals aged 35-40 years who displayed a sense of having achieved the most acceptance.

Another study that examined psychological well-being associated with possessing a non-native English accent was conducted by Freynet, Collins, and Clément. (2020). They evaluated the relationships between perceived accent discrimination and psychological adjustment and resilience. First language (L1) French speakers who spoke accented English completed a series of questionnaires measuring the variables of interest. Their results demonstrated that L1 French speakers who strongly identified with their francophone identity did not perceive themselves as discrimination victims when speaking in accented English. In comparison, L1 French speakers who did not strongly identify with their francophone identity perceived themselves as victims of discrimination when speaking accented English. These individuals also reported experiencing lower self-esteem.

Both of the aforementioned studies have implications regarding which groups are more vulnerable to the harmful effects of perceived discrimination related to psychological well-being. Choi et al.'s (2020) study found that certain Asian ethnicities and age groups are more vulnerable to perceived discrimination and require specific, targeted interventions to maintain their psychological well-being. Freynet et al. (2020) determined that certain factors such as possessing a strong identification with one's first language ethnicity can help protect against the detrimental effects of perceived discrimination. As Choi et al. (2020) implicated, affirmative action can decrease racial discrimination incidents and prove beneficial to victims of discrimination promoting a more inclusive environment for all.

In one case study using interviews (Aslan, 2017), perceptions, attitudes, and experiences about an individual's L2 pronunciation and accents were assessed by considering the speaker's cognitive processes and social context. Through an interview with "Alex," a Turkish male graduate student who self-reported as being perceived as someone who possessed an American accent, the author showed that second language speech production and improvement relied on individual and social factors. One of the surprising outcomes that this study provided is that this L2 learner rejected the idealized 'native speaker' speech manner. Instead, they relied on a self-reported idealized version of an accent, which means having an accent that was understandable by all but not necessarily native English sounding.

Speaking accented English affects individuals personally as they try to adjust to a new setting. Dewaele and Pavelescu (2021) examined whether a relationship existed between foreign language involvement, foreign language anxiety, and willingness to communicate in English. These possible relationships were studied through qualitative data (i.e., lesson observations, a written task, and semi-structured interviews) from two L2 high school English learners, who

transferred from Romania. The data were examined to understand better the participants' willingness to communicate in English over time and if it increased as they became better adjusted. The results showed that willingness to communicate in English was related to foreign language enjoyment and anxiety. More efforts to share their language learning tended to increase enjoyment and reduce anxiety, which demonstrates that psychological engagement played a role in their L2 learning experience. Both the Aslan (2017) and the Dewaele and Pavelescu (2021) studies showed that individuals who migrate to different countries, and who achieve a successful transition into a new country, try to exercise control in their new environments. Ultimately, adapting to their new surroundings benefit them through feelings of empowerment and increased willingness to communicate in English.

The Proposed Study

Though the perceptions of listeners of accented English have been studied a great deal, few studies have examined the factors related to individuals' *self*-perceptions of accent strength. More specifically, there is limited research examining the relationship between perceived accent strength and L2 English speakers' well-being, and no known study has examined the relationships among psychological engagement in L2 English speakers in Canada, perceived accent discrimination, and psychological well-being. Exploring the existence of these relationships is crucial as it will contribute to the existing limited research conducted on self-perceptions and evaluations of accented L2 English speakers. The purpose of this study was to examine the accent self-perceptions of L2 English speakers related to overall well-being, psychological needs satisfaction (competence, autonomy, and relatedness), psychological engagement in L2 speaking, and perceived accent discrimination.

This study differs from previous research in that it focused on self-perception factors that contribute to immigrants' experience in English-speaking countries and how these experiences are related to their psychological well-being. The outcome of this research may offer some information on factors related to immigrants' successful integration into a new, English-speaking, host country. It was expected that greater self-reported accent strength would be correlated with higher reported psychological well-being, competence, relatedness and autonomy satisfaction, and psychological engagement, and lower self-reported accent discrimination. It was also expected that overall well-being would be positively correlated with psychological engagement, and competence, autonomy, and relatedness satisfaction, and negatively correlated with self-reported accent discrimination. Since well-being for L2 English speakers may be affected by how they think about their abilities, as well as how committed they are to learning English, and meeting their needs associated with L2 speaking, it also was hypothesized that overall psychological well-being would be predicted from psychological engagement, accent strength, and accent discrimination, and by all three basic psychological needs.

Methodology

Participants

A total of ninety-four individuals participated in this study; 71 (76 %) participants were Brandon University students, and 23 (24%) were from the Brandon community. Five participants were eliminated from the sample (n=89) because four were born in Canada and therefore did not qualify for the participant criteria of being a first-generation immigrant. The fifth participant was removed from the sample because they had lived in Canada longer than any other participants. Their time in Canada was 39 years compared to the average of the sample population, which was an average of 9 years (see Table 2). Therefore, they may have had a distinct experience than the

rest of the population sample. For this study, a majority of the participants identified as being female and from Central and Southern America (see Table 1). Participants were approximately 22 years of age ($M= 22.2$, $SD= 4.26$), had immigrated to Canada at an average of 14 years of age ($M= 13.6$, $SD= 7.28$) and had spent approximately 9 years in Canada ($M= 8.7$, $SD=5.52$) (see Table 2). In terms of their self-perceptions about the importance of English, their English proficiency, and accent strength, participants generally reported it was important to speak English without a foreign accent, self-rated as being proficient in English and as sounding almost Native-like when they spoke English (see Table 2).

Measures

A combination of scales was used to collect data that assessed the constructs of interest. When appropriate participants were instructed to respond in terms of scenarios when they spoke or used English.

General and Demographical Information

Participants completed a series of general and demographical questions. These questions included: the participant's age, gender, and ethnicity, whether they are enrolled in a Psychology introductory course at Brandon University, how long they have lived in Canada, the age they immigrated to Canada, the number of years they have spoken English, their first language, and a list of all the languages they speak. Participants were also asked to rate the degree to which it was important to them to be able to speak English without an accent (1=*not very important* 5=*very important*)

English Accent Strength

Non-native English accent strength was self-reported using the English Accent Strength Scale (EASS). Participants indicated their perceptions about their accents. Everyone self-rated

themselves on the two-item measure: “Overall Proficiency” (EASS1) and “Foreign Accents” (EASS2), which use a 1–7 Likert scale. The descriptors for EASS1 were *speaks English poorly* (1), *speaks English well* (4), and *native English speaker level* (7). Low scores on the EASS1 scale indicated that individuals perceive their overall proficiency to be poor, high scores indicated that individuals perceive their overall proficiency to be above average. For EASS2, the descriptors were *strong foreign accent* (1), *some foreign accent* (4), and *native English speaker sounding* (7). Lower scores on the EASS2 scale indicated that individuals perceive their accent to be very foreign sounding, higher scores indicated that individuals perceive themselves as not having a foreign accent when they speak English. This self-report measure has good validity and internal consistency with a Cronbach’s alpha $\alpha = 0.79$. (Huang, Alegre, & Eisenberg, 2016).

Perceived Accent Discrimination

Participants’ experiences of discrimination were evaluated using the Perceived Accent Discrimination Questionnaire (PADQ) which uses a 1-7 Likert scale (1= *strongly disagree* and 7= *strongly agree*). This scale contains twelve items that reflects self-perceived discrimination against an individual because of her/his/their accent (e.g., “Most people would not hire someone who speaks with an accent like mine, even if he or she were competent in English”). Higher scores indicate that individuals perceive themselves as being subjected to discrimination because of their accent. Lower scores indicate that individuals perceive themselves as not being subjected to discrimination because of their accent (Freynet & Clément, 2019). This questionnaire was adapted from Link (1987) to account for accent discrimination. Six of the questions are reverse scored. In terms of psychometric properties, the questionnaire is shown to have good validity and good internal consistency. In their study, Freynet and Clément (2019) determined the survey had a Cronbach’s alpha $\alpha = 0.87$.

Basic Psychological Needs

To assess the satisfaction of the three basic psychological needs, participants responded to the Basic Psychological Need Satisfaction and Frustration Scale (BPNSFS). While responding, participants were asked to relate their answers to their English proficiency, willingness to speak English and their interactions with others when speaking English. In terms of the psychometric properties, the BPNSFS scale has been extensively and successfully used. The scale has been shown to be a valid measure of basic psychological needs satisfaction and frustration (Van der Kaap-Deeder, Soenens, Ryan & Vansteenkiste, 2020). The BPNSFS is a 24-item scale that measures the satisfaction (12-items) and frustration (12-items) of the three basic needs, equivalent to six subscales.

The six subscales of the BPNSFS (Autonomy satisfaction, Autonomy frustration, Relatedness satisfaction, Relatedness frustration, Competence satisfaction and Competence frustration) are each composed of 4-items (Autonomy satisfaction e.g., “I feel a sense of choice and freedom in the things I undertake” (Van der Kaap-Deeder, Soenens, Ryan & Vansteenkiste, 2020). The BPNSFS scale uses a 1-5 Likert scale (1 = *Not true at all* and 5 = *Completely true*), with higher scores on autonomy, relatedness, and competence satisfaction items indicate that the individual perceived their actions to be volitional, having a strong social connection to others, and that they experienced mastery over the language. High scores on autonomy, relatedness and competence frustration items indicated that individuals perceived their actions to be controlled by others and have no sense of volition or choice, feel socially disconnected from other people and feel inadequate and unskilled with English. Only the need satisfaction subscales were calculated for this study.

Psychological Well-Being

To assess overall well-being, the World Health Organization-5 Well-Being Index (WHO5W) (WHO, 1998), a short 5-item questionnaire, was used. The WHO5W has been employed successfully and extensively across a wide variety of studies (Topp, Østergaard, Søndergaard, & Bech, 2015). It has adequate validity in screening for depression and in measuring outcomes. Item response theory analyses in studies of different age groups indicate that the measure has good construct validity (WHO, 1998). Participants responded to the items using the following scale, *at no time* (0), *some of the time* (1), *less than half of the time* (2), *more than half of the time* (3), *most of the time* (4) and *all of the time* (5) (e.g., “I have felt cheerful in good spirits.”). A higher score (on a range from 0-25) indicated that participants are experiencing the best imaginable well-being and lower scores (on a range from 0-25) indicated that participants are experiencing the worst imaginable well-being.

Psychological Engagement

Participants self-reported psychological engagement by completing the Engagement Snapshot Survey (ESS, Ramey et al., 2015). Participants were instructed to respond while thinking about their psychological engagement when speaking English. The survey originally contains 23-items but only fourteen items were used to assess the opinions individuals had about the positive features and impacts of the activity (speaking English). The 14-items measures specific aspects of psychological engagement within an activity using a 1-4 Likert scale, where responses range from *Not at all* (1) to *A lot* (4). It is composed of three subscales, a six-item subscale that measures individual's opinions about the positive features of the activity (PEQ Positive Features) (e.g., “Do you have the right amount of structure and guidance when you do this activity?”) where higher scores represent participants having positive opinions about their engagement within an activity and lower scores represent the opposite. Another six-item

subscale measures the positive impact of the individual's involvement within the activity (PEQ Positive Impact) (e.g., "How good you feel about yourself and how positive you feel about life?") where higher scores indicate that the individual perceived involvement within the activity as having a positive impact on their life and lower scores indicate the opposite.

The last psychological engagement subscale used is a two-item measure where participants indicated the frequency and duration of their participation in the activity (Ramey et al., 2015). Since in the general information questionnaire participants were asked to disclose how long they have spoken English for, they were not asked the duration-item component of this subscale. Only one item measurement was used, the item that measures the frequency of the activity. This measure uses a 1-6 Likert scale where 1= *few times a year* and 6= *Several times a day* (modified to reflect English speaking frequency). Higher scores on this item reflect that individual's use English often and is their main language for communication. Low scores indicate that they rarely use English, and it is not the main language they use for communication.

Procedure

Following ethics approval by Brandon University's Research Ethics Committee (BUREC), in the first month of the winter semester, Brandon University students were recruited through class presentations for a study on Non-Native English speakers' self-perceptions about self-reported accent strength, self-determination, psychological well-being, and engagement. Participants could be of any gender, but they had to be over the age of eighteen. Furthermore, volunteers could be of any ethnicity to observe the relationship between L2 English speakers' accents, self-perceptions, and psychological well-being. However, they must have immigrated to Canada, and their first language could not be English. One of the primary ways participants were recruited was through Brandon University psychology classes. Those who were able and wished

to participate were directed to their courses Moodle page, where they could access the consent form document, which contained a course unique link to the Microsoft Forms online survey. All participating students were given a 1% bonus mark towards their final grade with their professor's permission. In addition, participants were also recruited through the authors' and Westman Immigrant Services' social media platforms (Instagram and Facebook) with a post and link that directed participants to the study's consent form and Microsoft Forms online survey link. A random draw was conducted to choose one of the participants recruited through social media as the \$50.00 Gift Card winner.

At the time of data collection, participants were asked to confirm their participation and agree to partake in the study by reading the informed consent form and clicking on the MS Forms survey link. Participants could close the survey if they felt uncomfortable answering any of the questions, at which point they could exit the study, and no information would be gathered. The order of the survey measures was counterbalanced with a different order of measures for each course that allowed recruitment, except for the *General and Demographical information*, which was always presented first. An additional order was used for all those individuals from the community, who participated in the study. On average, participants required approximately 20 minutes to complete the measures. Once participants completed the measures, all participants' responses were saved in MS Forms, and participants were thanked once they completed the survey. To ensure anonymity, participants were not asked their names. University student participants provided their student numbers to receive their bonus percentage mark. Participants who from the general community were asked to enter their phone number, only, to be contacted if they won the \$50.00 Visa gift card. Upon completion of recruitment, all data was transferred to Excel and then SPSS files.

Results

First, an order effects analysis was conducted to determine whether the unique orders of the survey had an impact on any of the variables of interest. The analysis yielded no statistically significant order effects. Second, subscale scores were determined for each participant for all variables of interest. The descriptive statistics were calculated for all variables of interest and across the sample (see Table 2). In general, participants reported higher mean scores on L2 importance, EASS1, and EASS2. Meaning that they generally thought it was important to speak English without a foreign accent, having native-like proficiency and somewhat of a native-like accent when speaking English (see Table 2). Participants mean scores also reported not perceiving severe accent discrimination.

Next, because there were participants from campus and from the community, mean comparisons were conducted to examine groups differences. Group differences were found only in age and time spent in Canada. Afterward, a Pearson correlation analysis was conducted to determine the nature of the relationships between all the variables of interest. While conducting the Pearson correlational analysis, on and off-campus participants were separated to examine whether belonging to a particular group yielded different correlations. However, when the groups were analyzed separately with on-campus $n=68$ and off-campus $n=22$, no significant differences were found other than time in Canada and BPNCS, with off-campus participants having a higher correlation. However, these outcomes were not statistically meaningful group differences with respect to the linear regression results that were based of the correlations. Therefore, as shown in Table 3, the correlations were calculated across all participants. High positive correlations were observed, as expected, with WHO5W, PEQ positive features, PEQ positive impacts and higher BPNAS, BPNRS and BPNCS. Furthermore, as expected, high positive correlations were also

found between greater English proficiency (EASS1), a stronger native-like accent (EASS2), and greater positive features of psychological engagement. Moderately high negative correlations were observed as expected, between PADQ, EASS1, and EASS2. Surprising negative correlations were found between PADQ, time in Canada and PEQ positive. Other noteworthy correlations were found between longer time in Canada and higher scores on EASS1 and EASS2. As well as higher PEQ positive features, EASS2, and WHO5W. A correlation of particular intrigue was found between PADQ and greater L2 importance.

The last step of the current study's data analyses involved conducting two separate linear regression analyses to determine the variables that best predicted WHO5W and PADQ. For the first regression (see Table 4), three predictor variables that were used to predict WHO5W included BPNCS, PEQ positive features and PEQ positive impacts. As Table 4 indicates, these three variables accounted for a significant proportion of the variance (i.e., 39.8 percent), with BPNCS and PEQ positive impact being significant predictors of well-being. Specifically, participants reported greater well-being if they perceived their competence needs were met when learning and when they experienced the positive impacts of learning English. A second regression analysis was conducted predicting PADQ scores. Though it was not originally intended, upon examining the correlations for PADQ it was determined that more could be understood about perceptions of accent discrimination from this analysis. For this second linear regression (see Table 5), five predictor variables were used including PEQ positive features, EASS1, EASS2, L2 importance, and time in Canada. As Table 5 indicates, these variables accounted for 25.9 percent of the variance in PADQ, with L2 importance and time in Canada as the significant predictors. This regression showed that individual who reported greater perceived

accent discrimination perceived greater importance associated with learning English and had spent less time in Canada.

Discussion

The current study examined non-native English speakers' self-perceptions of accent strength and its relationships with perceived accent discrimination, psychological need satisfaction, psychological engagement while speaking English, L2 importance, and overall well-being. As predicted, overall well-being was positively correlated with basic psychological needs satisfaction, and psychological engagement. Furthermore, higher perceived accent discrimination was related to stronger foreign accents as well as lower English proficiency. Contrary to the hypotheses, no relationship was found between a greater perceived accent discrimination and lower overall well-being. In addition, overall well-being was not related to accent strength, nor could well-being be predicted from foreign accent strength and perceived accent discrimination.

In addition to the hypothesized results, the study also yielded unique outcomes. The study extends previous research findings by showing that perceived accent discrimination is related to how important it is for a non-native immigrant to speak English without a foreign accent, their time in Canada and the positive features of their psychological engagement with English (e.g., the benefits that speaking English gives the individual). Additionally, while overall well-being was not significantly predicted from foreign accent strength and accent discrimination factors as hypothesized it was significantly predicted from the positive impacts of psychologically engaging with English (e.g., positive changes that occurred because of speaking English), and competence satisfaction. Finally, perceived accent discrimination was significantly correlated with several variables but was predicted only by how important it was for them to speak without a foreign accent and their time in Canada.

The results of this study showed that, as predicted, overall well-being was positively correlated with autonomy, relatedness, and competence need satisfaction. Overall well-being was also positively correlated with the positive features, and positive impact of psychological engagement, which may imply that while these factors may not equal well-being, they are indicators that the individual is experiencing overall well-being. These findings are consistent with previous research, which indicate that psychological need satisfaction and engagement are vital components in experiencing feelings of vitality, health, and flourishing (e.g., Hiver et al., 2021; Martela & Ryan, 2021; Vansteenkiste et al., 2020). While it was predicted that a stronger native-like English accent would be related to overall well-being, no such relationship was found for this study's sample. This may have reflected the sample, as they may not experience the degree of accent discrimination needed to affect overall well-being given the fact that the mean reported scores for English proficiency and accent strength reflect individuals with more native-like English abilities.

This study also examined the relationships between perceived accent discrimination and a variety of distinct factors. The results of this study showed that, as predicted, lower native-like accent strengths were related to a higher degree of perceived accent discrimination, which may indicate that possessing a stronger foreign accent may put non-native English-speaking immigrants at a higher risk of experiencing discrimination and stigmatization due in part to their foreign accent. This finding corroborates the findings of previous research (e.g., Dovidio et al., 2010; Kim et al., 2011). In addition, higher degrees of perceived accent discrimination were also associated with lower English proficiency. Which further indicates that individuals with stronger foreign accents and low English proficiency may be exposed to higher degrees of accent discrimination. Perceived accent discrimination was also related to speaking English without an

accent, which may indicate that individual who experience accent discrimination may place a higher importance in sounding native-like and as a result care more about how they sound like and might make them more sensitive to criticism and stigmatization that a strong foreign accent may lead the individual to encounter. Finally, perceived accent discrimination was also inversely related to the positive features of psychological engagement, which may indicate that immigrants who perceive themselves as being discriminated against because of their accent may also feel that their English abilities do not benefit them in their new English-speaking host country. As the new host country does not care enough to provide structure and opportunities safely. In addition, since positive features of psychological engagement were highly correlated to overall well-being and may indicate a particular aspect of well-being being fulfilled, the finding gives reason for concern and should be explored further to determine whether such a relationship exists. When taken together, all of our findings that involve perceived accent discrimination show that non-native English-speaking immigrants are influenced in their perception of accent discrimination by a variety of factors.

An important focus of the study was well-being. As the results of our linear regression showed (see Table 4) overall well-being could be predicted significantly only from the positive impacts of psychological engagement and competence satisfaction. This finding could perhaps be explained by higher well-being reports related to non-native English speakers who may perceive themselves as being more competent with their use of English accompanied by feeling that their English speaking has changed their lives for the better in terms of their relationships with others, and their self-esteem, which in turn could be indicative of successful incorporation into the new host country. While it was not one of the aims of this study, upon examining the results, it was decided that perceived accent discrimination was correlated with enough variables

of interest that closer examination was warranted. As our Linear regression analyses showed (see Table 5) perceived accent discrimination could be predicted from how important it was for them to speak without a foreign accent and their time in Canada. We can speculate that these findings display that an immigrant's time in Canada may affect whether they have learned how to speak English without an accent. The importance given to the second language may be an essential factor in how they perceive instances of accent discrimination.

This study extends the findings of previous research because the results showed significant relationships between an immigrant's time in Canada and the importance they gave to speaking English without an accent. As the results showcase, immigrants who have been in Canada for a shorter amount of time may encounter (or at least perceive) more instances of foreign accent discrimination and stigmatization. This may be explained by new immigrants being new to the language and not knowing enough vocabulary as well as not knowing the correct pronunciation to mimic a native-English speaker's accent properly, however this is only speculation that requires further evaluation. This explanation is given more weight because the study found a positive correlation between more prolonged periods in Canada associated with stronger native-like English accents and higher reported English proficiency. It is reasonable to assume that new immigrants simply require time in the new host country to be able to perceive a lower degree of accent discrimination. Furthermore, immigrants who have spent a longer time in Canada may have grown familiar with their new environment and therefore may have grown more confident and more able to disregard or ignore instances of stigmatization and discrimination.

One of the primary limitations of the current study revolves around the measures used. Finding no relationship between our specific measure of perceived accent discrimination and our

general measure of overall well-being may indicate that when attempting to examine and compare a general measure, another general measure might be better suited as it will typically relate and vice versa. A more general measure of discrimination could have been used in order to examine a relationship with well-being because a more general sense of discrimination may evoke more negative feelings that as a result may be more damaging to the individuals well-being. Future research may wish to employ a more general discrimination measure as has been done in prior research (e.g., Choi et al., 2020, Freynet et al., 2020, Weng, Park and Kim, 2020). Another limitation of the current study revolves around our sample population, whose mean reported scores reflect a highly proficient and native sounding immigrant sample. They may have different experiences than those of other immigrants who have lower proficiency and stronger foreign accents who may experience greater accent discrimination and more adverse effects. With respect to future directions of research, future studies may wish to examine how time in particular affects immigrants' self-perceptions about accent strength and how their views on perceived accent discrimination changes over time. Furthermore, future studies could gather larger sample sizes to examine group differences more closely. Particularly if they wish to examine how different genders, ages, ethnicities, and education level affect their perceptions of accent discrimination.

The results of this study show that new non-native English-speaking immigrants to Canada in addition to being visible minorities and experiencing discrimination because of their appearance, may also intersect with experiencing discrimination because of what they sound like. Furthermore, an immigrant's flourishing in a new English-speaking host country may depend on the positive impacts and advantages that they perceive their English-speaking abilities yield. The results also indicate that non-native English speakers who attribute a high importance to

speaking English without a foreign accent may be more sensitive to criticism and as a result experience more stigmatization and discrimination, which could lead the immigrant to think that the host country is not providing enough structure, support and opportunity in a safe manner that allows them to flourish.

Overall, the results provide a new examination of the concept of foreign accent strength and its relationships to perceived accent discrimination and factors related of well-being (such as positive features of psychological engagement and competence need satisfaction). Although no direct association could be found between perceived accent discrimination and overall well-being, other factors related to perceived accent discrimination may need further exploration. Specifically, how an immigrant's time in Canada, their psychological engagement, and the importance of English as a second language may influence how immigrants experience well-being. This study also showcases that a variety of complex factors may ultimately influence the ability of non-native English-speaking immigrants, to successfully incorporate into a new English-speaking country.

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Table 1.*Demographical characteristics of participants*

Variable	n	%
Total	89	100.00%
Gender:		
Female	67	75.28%
Genderqueer	1	1.12%
Male	21	23.60%
Region of the World:		
African	20	22.47%
Central and Southern American	22	24.72%
Central Asian	6	6.74%
East Asian	15	16.85%
Eastern and Western European	17	19.10%
Middle Eastern	2	2.25%
South Asian	7	7.87%

NOTES: Original sample size was n=94; 5 participants were removed because 4 did not qualify as participants and the fifth participant has been an immigrant for an extremely longer time than the rest of the sample. New sample n=89.

When n=94, on campus participants; 71 (76%), off campus; 23 (24 %).

Table 2.*Descriptive Statistics for All Variables and Participants*

Columns	N	Mean	SD	Minimum	Maximum
Age	89	22.21	4.23	18	45
Immigration Age	84 ¹	13.55	7.28	0.33	33
Time in Canada (Current Age - Immigration Age)	84 ¹	8.71	5.72	0.33	21
L2 Importance	88 ²	3.72	1.29	1	5
EASS1	88 ²	5.86	1	4	7
EASS2	89	5.3	1.55	1	7
PEQ Positive Features	87 ³	3.55	0.45	2.17	4
PEQ Positive Impact	87 ³	3.01	0.71	1.17	4
WHO 5W	89	14.69	5.29	3	25
BPNAS	89	15.3	3.2	6	20
BPNRS	87 ³	16.77	2.91	8	20
BPNCs	87 ³	15.97	3.09	9	20
PADQ Total	88 ²	28.78	11.19	12	54

NOTES:¹ Five data points were removed for normalcy

² One data point removed for normalcy

³ Two data points were removed for normalcy

Possible total Ranges: L2Importance (1-5), EASS 1 & EASS 2 (1-7),

PEQ positive features & PEQ positive impact (1-4), WHO5W (0-25), BPNAS, BPNRS & BPNCs (0-20), PADQ total (12-84)

Table 3.*Correlations between all variables of interest*

	1	2	3	4	5	6	7	8	9	10	11	12
1. On/Off Campus	-											
2. Time in Canada	.220*	-										
3. L2 Importance	-.036	-.051	-									
4. EASS1	.000	.302**	-.040	-								
5. EASS2	.056	.339**	.071	.421**	-							
6. PEQ Positive Features	.093	-.023	-.118	.455**	.211*	-						
7. PEQ Positive Impact	-.021	-.045	-.010	.137	.083	.437**	-					
8. WHO 5W	.158	-.141	-.188	-.108	-.088	.365**	.571**	-				
9. BPNAS	.011	-.200	.078	.030	-.074	.263*	.547**	.481**	-			
10. BPNRS	.138	-.106	.040	.024	-.021	.417**	.430**	.459**	.531**	-		
11. BPNCS	.234*	-.099	.018	.153	.136	.542**	.560**	.564**	.689**	.618**	-	
12. PADQ Total	-.019	-.258*	.282**	-.243*	-.214*	-.303**	-.186	-.042	-.062	-.032	-.019	-

NOTES: n ranges from 82 to 89. *0.05 significance level (2-tailed). ** 0.01 significance level (2-tailed).

Table 4.*Linear Regression Predicting Well Being*

Variable(s) entered	R^2	F	$Beta$	p value
Model Summary	0.398**	18.09	-	0.000**
BPNCs			0.373	0.001*
PEQ Positive Features			0.018	0.864
PEQ Positive Impact			0.33	0.002*

NOTE: *.05 significance level.

Table 5.*Linear Regression Predicting Perceived Accent Discrimination*

Variable(s) entered	R^2	F	$Beta$	p value
Model Summary	0.259**	5.26	-	0.000**
PEQ Positive Features			-0.227	0.055
EASS1			-0.004	0.976
EASS2			-0.16	0.159
L2 Importance			0.272	0.09*
Time in Canada			-0.233	0.037*

NOTE: *.05 significance level.