Acculturation as the key to the *ultimate* attainment?

The case of Polish-English bilinguals in the UK

Kate Hammer and Jean-Marc Dewaele

*Department of Applied Linguistics and Communication, Birkbeck College, University of London, 26 Russell Square, London WC1B 5DQ*

This chapter focuses on the variables predicting L2 attainment in 149 migrants (L1 Polish and L2 English) who relocated to the UK in early adulthood. They are highly educated sequential bilinguals who have been resident in the UK for an average of eight years following migration. Independent variables analysed in this chapter are divided into three categories: 1) post-migration sociolinguistic aspects, namely, acculturation level and frequency of L2 use following migration; 2) possible temporal predictors of the L2 attainment, namely, age of onset, age at migration and length of domicile in the host country; and 3) socio-biographical variables, namely, context of L2 acquisition, education level, age, gender and motivation behind migration. The results showed that acculturation level is strongly linked to L2 attainment.

**Keywords:** Acculturation; bilingualism; cultural migrants; proficiency; second language acquisition.

**Introduction**

Attainment in the second language is both a fascinating and controversial topic of research in the field of second language acquisition (SLA) (Abrahamsson & Hyltenstam 2009, Hyltenstam 2014). Ultimate attainment refers to the final stage of second language (L2) learning. In exceptional cases it can result in nativelikeness, namely a unique ability to speak the L2 in the way native speakers do (Birdsong 2006). Some researchers have claimed that absolute

---


* Corresponding author. Email: k.hammer@mail.bbk.ac.uk

** 12 out of the 149 participants were residing outside the UK (Ireland, USA, Canada, Australia).
nativelikeness is impossible and cases thereof are to be perceived as pathology no less than cases of L1 acquisition failure (Bley-Vroman 1989). Bylund, Abrahamsson, & Hyltenstam (2012) addressed the question of a potential negative influence of L1 maintenance on L2 ultimate attainment. The authors investigated whether L1 use hampers L2 development and ultimately blocks the achievement of high proficiency levels in the L2. They found no link between L1 maintenance and ultimate attainment but stressed the importance of language aptitude in SLA research. Schumann’s Acculturation Model for SLA highlighted the importance of socio-cultural and psychological aspects of ultimate attainment and recognised acculturation (ACC) as the main causal variable in SLA (Schumann 1986). Debaene and Harris (2013), who studied Polish-English bilinguals in Ireland, pointed out that passing for a native speaker and speech accommodation in the context of migration are to be analysed in the light of social identity theory, migration theory, group identity and individualism. Investigations into proficiency in L2 and ultimate attainment, as presented in the following sections of this chapter, are typically undertaken in relation to age of acquisition, as well as linguistic accuracy, language use, immersion and acculturation.

The aim of the present chapter is to develop the line of research on the relationship between migration, acculturation and L2 attainment (Graham & Brown 1996; Jiang et al. 2009; Maple 1982; Schrauf 2009; Schumann 1986, 1978; Singleton et al. 2013) combining both quantitative and qualitative approaches. L2 attainment in this sense is understood as the highest level of proficiency achieved, and not as nativelikeness. Potential links between variables traditionally linked to acculturation and SLA are investigated in this chapter in relation to L2 attainment. The following sections present an overview of the literature as well as the research questions, methods, results, discussion and some concluding remarks.

Literature review

Age of onset

Age of onset (AoA) and the context of learning the L2 are two of the most investigated independent variables in SLA research (Cook & Singleton 2014; Dewaele 2013). Age of onset is of particular interest when studying and comparing early and late bilinguals (cf. Paradis 2007, Pavlenko 2014). Age of onset has been linked to the critical period hypothesis (CPH) which rests on the assumption that there is an ultimate point in the lifespan after which the initiation of L2
acquisition is unlikely to result in reaching high levels of L2 attainment (cf. Lennenberg 1967; Birdsong 2005; Singleton 2003). SLA initiated at the age of 17 or more is said to fail to result in instances of nativelikeness in the L2 (Abrahamsson & Hyltenstam 2009). The age of 9 years old, on the other hand, is associated with cognitive restructuring in monolinguals (Pavlenko 2011). Previous studies on self-reported proficiency in multilinguals concluded that age of onset of the L2 has a significant effect on self-perceived competence in the L2 (Dewaele 2009a, b, 2010; Munro & Mann 2005). L2 users who start learning their L2 earlier in life have been shown to reach higher level of self-perceived proficiency in the L2 and they tend to rate their communicative competence higher. Age of onset is understood in some areas of literature as age at migration, however Pavlenko (2011, 2014) recommends that future studies continue to distinguish between these two variables. Age at migration is said to be linked with either L1- or L2- oriented naming patterns. Bilinguals with higher age on arrival are said to be under a greater influence of L1 in ways they name and classify objects (Pavlenko 2011).

Abrahamsson and Hyltenstam (2009) conducted a study on 195 Spanish-Swedish bilinguals in order to find out if most early and some late learners of the L2 can be perceived as native speakers, and whether those who do pass for native speakers maintain that status when tested over a wide range of variables. They wanted to find out what age relations, if any, exist and what patterns, if any, emerge for the groups. They found that nativelike attainment in the L2 is linked with age of onset and that passing for a native speaker does not occur for those learners whose onset would equal or exceed the end of puberty set as 17 years of age. Their conclusions were congruent with previous findings by Flege et al. (1995).

Similarly, Kopeckova (2013) found that 20 younger Polish L1 learners were able to distinguish and imitate English vowels more successfully than 20 older learners. She attributed this aptitude to increased perceptual abilities in cross-language phonetic similarity in young learners. The latter resulted in more accurate acquisition of L2 segments which ultimately translated into better pronunciation. Her findings matched those of Abrahamsson (2012) who studied 200 Spanish-Swedish bilinguals and found that lower AoA raises the likelihood of achieving nativelike phonetic and morphosyntactic intuition in the L2. Participants in his study had spent on average 15 years in Sweden and were compared against a control group of 20 native speakers of Swedish. Abrahamsson found that nativelike morphosyntactic and phonetic intuition ceased to occur after the age of 13. Pronunciation is a necessary element in achieving
nativelikeness, however, it is not sufficient in its own right to pass for a native speaker; in the same way that age of acquisition is seen to be a necessary yet not sufficient requirement for nativelike attainment in the L2 (Hyltenstam & Abrahamsson 2003).

Dewaele (2009b) found also that age of onset had an effect on language choice for emotional expression and mental calculation. In general, the earlier in life the L2 is acquired the higher the likelihood that the L2 user will choose the L2 to communicate emotions and the higher the age of onset, the more likely it is that L1 will remain the more emotional language (Dewaele 2009b). However, a relatively age-independent hypothesis of the emotional context of learning predicts that the language which is learnt in an emotional context is more likely to be perceived as an emotional language, regardless of the age of acquisition (Harris, Gleason & Ayçiçegi, 2006). Shared emotional contexts have the potential to alter language preferences and ways of emotional expression in people. De Leersnyder, Mesquita and Kim (2011) found that people who experience emotional situations together tend to approximate their emotional expression to match that of their companions which in case of L2 acquisition in circumstances of migration can result in the phenomenon of emotional acculturation. Studies on migrants in the USA (Korean L1) and Belgium (Turkish L1) showed correlations between patterns of emotional expression between the migrants and respective native speakers. Exposure and engagement in the L2 culture and emotional context of L2 use served as predictors of emotional acculturation (De Leersnyder et al. 2011:460). In other words, age of onset is not the only factor to consider.

**Context of acquisition**

Investigations into the effect of the context of L2 acquisition provided evidence that mixed instructed and naturalistic language learning increases the likelihood of the L2 user feeling more proficient than users who experienced solely instructed language learning (Dewaele 2010). Also prolonged contact with native speakers of the target language as well as staying abroad and language immersion were found to have a significant effect on both productive and receptive language skills in the L2 (cf. Taguchi 2008; Ożanska-Ponikwia 2013). Dewaele (2010) found also that speakers who experienced mixed or naturalistic language learning were more likely to consider the foreign language as their “language of the heart” (Dewaele 2010: 74). This in turn highlights the significance of experiencing language and accounting for the psychological and
emotional dimensions of instructed language learning in the quest of becoming a proficient user of that language (cf. Dewaele 2005, 2011).

**Frequency of use**

Frequency of L2 use is considered a crucial antecedent of L2 competence and high frequency of L2 use has a positive effect on language learning (Flege 1999, Flege, Frieda & Nozawa 1997). Moreover, languages used sporadically are said to be at a risk of attrition due to decreased levels of activation (Green 1986). Studies on the relationship between general frequency of L2 use and self-perceived proficiency show that frequency of use has a significant effect on the self-perceived level of competence (Dewaele 2010). The more the L2 is used, the more proficient the L2 user feels in that language. Studies on L2 immersion showed that frequent target language use in the native environment for that language boosts the acquisition of different skills including sociolinguistic and pragmatic competence (Mougeon et al. 2010; Regan 2005). Increased interaction rates in the L2 are moreover associated with decreased adaptation problems and more overall fluency in the L2 (Ward & Kennedy 1993). Evidence of rapid development of the L2 in immersion situations was found not only for communicative and cultural competence but also for a development of grammar (cf. Howard 2005).

Bylund, Abrahamsson and Hyltenstam (2012) studied 30 Spanish-Swedish early bilinguals who had lived in the L2 speaking country (Sweden) for an average of 23 years. The participants’ frequency of L1 use was less than 30%. The authors wanted to answer the question whether L1 hampers the ultimate attainment in the L2. The study referred to the balance theory of bilingualism and its assumption that the two languages of the bilingual make up the total language ability in the mind which in turn makes them compete for the finite memory resources. The participants were tested in each of their languages on two occasions and both their language accuracy and aptitude were measured. Results showed a positive correlation between L1 and L2 performance and no inverse relationship between the two languages was found. High proficiency in the L1 proved to be neutral, while low L1 proficiency showed to be neither beneficial nor necessary for L2 attainment. Language aptitude, however, proved to be an important factor in the ultimate attainment and reaching the ultimate proficiency in the L2.

**Gender, age and education level**
Self-perceived proficiency in the L2 has also been linked to socio-biographical variables such as gender, age and education level. Previous studies show that females typically report higher self-perceived proficiency levels in comparison to males (Dewaele 2010; Pavlenko et al. 2003). Studies by Dewaele (2010) revealed systematic age differences in self-perceived competence in the L2. A significant increase in self-perceived competence was noted after the age of thirty years old, continuing into forties and fifties. Education level had a significant and systematic effect on self-perceived competence in the L2 with more highly educated participants feeling more competent in the L2 (Dewaele 2010).

Acculturation

Schumann linked SLA with socio-cultural and psychological processes of acculturation (1978, 1986). Acculturation in this context is understood as “(...) those phenomena which result when groups of individuals having different cultures come into continuous first-hand contact with subsequent changes in the original culture patterns of either or both groups” (Redfield, Linton & Herskovits 1936: 149). A more operational definition of acculturation was provided by Brown (1994) who defined acculturation as the “process of becoming adapted to a new culture where reorientation of thinking and feeling is necessary” (p. 169). Acculturation level therefore refers to a degree to which a migrant adopts the new way of living in the host country, the extent to which s/he develops native-like habits, follows host-country customs, as well as the depth to which s/he internalises host country values. Acculturation level refers to a degree of socio-cultural and linguistic integration in the host country (Boski 2008).

Schumann’s Acculturation model for SLA is applicable in the context of migration and is based on the prediction that the L2 learner will acquire the target language to the degree to which s/he acculturates into the target language community. Acculturation is thus viewed as a link between SLA, cultural psychology and socio-cultural anthropology, and it serves as a multidisciplinary variable employed in post-structuralist approaches to L2 learning and L2 use (Pavlenko 2002). The main strength of Schumann’s model is not only the inclusion of psychosocial variables into the equation of SLA research but also its potential robustness to uncover the whys behind high levels of L2 attainment; for language is intrinsically mixed with the social context, acculturation can be viewed as a major causal variable in SLA (Pavlenko 2011). Critics of the acculturation model point to its ambivalent approach towards instructed learning and do
not see how prolonged contact with target language speakers can lead to higher proficiency levels (Kelley 1982; Stauble 1981). Dervin (2013) perceives acculturation as a notion detrimental to migration studies and an interaction between the cultural self and other which he perceives to be an unethical manifestation of pygmalionism (Dervin 2013). Other researchers view acculturation as a language related variable which should be examined in order to facilitate foreign language acquisition and as means of increasing communicative competence (Spitzberg 1988). Also the attraction of the other tends to be understood as a motivation strategy employed by foreign language learners in their quest to become multilingual subjects (Kramsch 2009).

Schumann’s (1978) theory combines both the affective (psychological) and integrative (social) aspects and recognises identification with the target language group as a prerequisite for successful SLA. Instructed context of acquisition is specifically not accounted for in the acculturation model (Ellis 1994). Identification with the target language community is said to be achieved by overcoming the perceived social and psychological distance between the two cultures. The levels of social and psychological distance are seen as crucial indicators when assessing the acculturation level, for the greater the perceived distance, the more difficult it is for the learner to acquire the target language (Schumann 1978; Ushioda 1993; Brown 2007). How distant or how close learners perceive themselves to be in relation to the target culture and how much they see themselves as part of that culture either fosters their language acquisition or hinders it (Damen 1987; Ellis 1994). Gass and Selinker (2008) stress that the level of social and psychological distance between the learner and the target language community dictates the amount of input that learners receive. As the target language input is received in the circumstances of regular contact between the learner and the target language speakers, the socio-cultural context of interaction is considered essential from the point of view of both SLA and socio-cultural adaptation (Norton Pierce 1995; Masgoret & Ward 2006). Perceived psycho-social proximity, as opposed to psycho-social distance, aids integrative processes and is likely to result in acculturation which “initiates a chain reaction including contact in the middle and acquisition as its outcome” (Gass & Selinker 2008:404).

The relationship between linguistic performance and social interaction in the migration context has been suggested to be a reciprocal one (Clément, Noels & Deneault 2001), which provides indirect support for the Schumann’s model for SLA. Lybeck (2002) notes also that shift in pronunciation patterns to resemble native speakers is viewed as a strong marker of cultural
identification with the target language group and may be a symptom of the development of a new cultural identity and thus neutralisation or eradication of the psycho-social distance. This confirms earlier studies of German-born American immigrants conducted by Hansen (1995) which showed that native-like phonation is attainable by immigrants who acculturate to a higher level. According to Ellis (1994) Schumann’s model is based on developmental understanding of SLA and aims to explain inter-individual variation in the level of L2 attainment among SLA learners. The overall social and psychological circumstances as well as the attitude towards the target language and the target group community have an impact on the ultimate success of language learning experience (Ellis 1994).

Graham and Brown (1996) conducted a study on a group of 48 native Spanish speakers in Mexico’s Colonia Juarez who attended a two-way bilingual programme with English as L2 at school. The main research question was whether social and affective variables are linked to the participant’s level of proficiency and whether they contribute to the development of L2 proficiency outside of the classroom and in a broader social context. The attainment of nativelike proficiency in the L2 was found to be linked to positive attitudes towards the English-speaking community and developing close friendships with English speaking peers. Similar conclusions were drawn by Masgoret and Gardner (1999) who found that psychological and linguistic assimilation to the host community is significantly linked to increased L2 proficiency levels.

Jiang et al. (2009) conducted an exploratory study of 49 Chinese-English late SLA learners enrolled at US universities, in order to investigate whether acculturation to the host society is associated with higher levels of L2 proficiency and pronunciation. Results showed that increased levels of acculturation were strongly linked with increased levels of L2 speaking proficiency (Jiang et al. 2009). Participants who acculturated to the host society to a higher degree were reported to achieve higher levels of L2 proficiency, when compared to participants whose acculturation levels were lower, and who displayed higher levels of psycho-social distance. These results confirmed earlier findings by Maple (1982) who studied the relationship between L2 proficiency and social distance in a group 190 adult Spanish students learning English L2 in the US. He found a significant link between the learners’ proficiency in L2 and their level of social distance. Participants with lower levels of social distance achieved increased levels of L2 proficiency (Maple 1982). Tight links found between the levels of L2 proficiency,
social distance and acculturation provide support for Schumann’s Acculturation model for SLA (Maple 1982; Jiang et al. 2009).

Schrauf (2009) measured language proficiency and language use among 60 older Puerto Ricans who migrated to the mainland and lived in ethnically concentrated neighbourhoods. Participants self-rated their English proficiency ranging from low intermediate through high intermediate to fluent and they declared their language preferences across different areas of life and in relation to different interlocutors. The study was based on the view that the level of exposure and engagement in the L2 via different sociolinguistic contexts is the main predictor of L2 proficiency level. Participants’ acculturation level was measured according to the *Puerto Rican Bicultural Scale*. Results revealed significant differences between individuals and lower levels of proficiency were strongly linked to low acculturation levels as well as lower socioeconomic status. Schrauf concluded that the “level of second language proficiency is a potent source of intracultural variation” (p. 157).

Multiple studies of Polish migrants in Ireland, Austria and France carried out in different contexts by Singleton, Regan, Debaene and colleagues (2013) showed that higher levels of integration into the host society generally correlate with higher frequency of L2 use. The authors studied different waves of migration in three different locations. Language use was said to reflect the degree of integration in the L2 culture (cf. Regan 2013).

**Motivation**

Motivation behind L2 learning is a prominent aspect of SLA research (Dörnyei & Ushioda 2009). Dörnyei and Ushioda (2011) accentuate the importance of L2 self, language identity and identification as well as integrative motivation in processes of language learning. L2 learners are surrounded by dynamic contexts which are constantly changing due to processes of globalisation and evolving visions of the ideal L2 self. Processes of migration and acculturation can be seen as such dynamic contexts in which learners’ motivations develop and processes of SLA take place. Schumann (1978) claimed that motivation, among other sociocultural factors, has a significant impact on SLA and that high levels of motivation are linked to increased success in SLA. According to Schumann motivation is an important element characterising the level of psychological distance in L2 learners. Also Giles *et al* (1979) and Gardner (2001) viewed motivation as the main determinant of L2 proficiency and concluded that L2 speakers
will try to modify their speech accordingly to their intention of reducing social distance between them and the host community (Giles et al. 1979; Gardner 2001).

**Age at migration and length of residence**

Age at migration is considered to be a powerful predictor of L2 proficiency (Jia et al. 2002). The lower the age at migration is, the higher the possibility for a complete attainment of the L2. Finally, length of residence in the host country has an influence on L2 attainment (Bialystok 1997). It is not only synonymous with receiving extended input of the L2 but it is connected with cognitive restructuring in bilinguals and effectively “re-naming the world” (Pavlenko 2011: 199).

**Method**

**Participants**

A total of 149 Polish-English bilinguals took part in the study. A majority of the participants were female (86% versus 14% male). This is a typical gender distribution in online questionnaires on language issues (Wilson & Dewaele 2010). All participants were L1-Polish/L2-English bilinguals with a university/college degree who migrated in early adulthood and were professionally or academically active in the host country. The decision to migrate to an English speaking country in early adulthood was a life-choice decision made by all participants. The average age of the participants was 31 years old and ages ranged from 23 to 45 years (Mean = 31.1, SD = 4.7). The average age at migration was 23 years old and ranged from 18 to 41 years of age (Mean = 23.6, SD = 3.8). All participants were university or college graduates of which over a half (58.4%) held MA level qualification, followed by over a quarter (26.2%) of BA holders, 10.1% of PhD holders and the remaining 5.4% were College graduates. Almost a half of the respondents (45.6%), felt proficient in their English L2, 38.3% declared to have native-like proficiency, 14.1% self-rated as advanced speakers and 2% declared to have an intermediate level of proficiency in English. Only 20% of the participants knew a third language at the level comparable to their L2 or L1. All were sequential bilinguals who learnt the L2 in the process of SLA and the earliest age of onset of L2 acquisition was the age of 3, while the average age of onset was 12 years (Mean = 12.3 years, SD = 4.6). Over a half of the participants started learning English before the age of 13.
**Instrument**

Participants filled out an online questionnaire containing close-ended Likert scale questions as well as open-ended questions (Hammer 2012). Fourteen participants were interviewed by the first author as part of the study. The closed questions in the online questionnaire measured levels of self-reported proficiency, frequency of L2 use and acculturation. Acculturation level was measured using the following close-ended question: *Acculturation is a process roughly defined as: social and psychological integration with the target language group. How integrated with your English language group do you feel?* Participants chose one out of five available answers which included the following levels: Completely / Highly / Moderately / Slightly / Not at all (Hammer 2012). Other closed questions elicited information on context of L2 acquisition, gender, education level and motivation behind migration. Open-ended questions elicited information on age of onset, age at migration, current age and length of domicile in the English-speaking country. Semi-structured interviews and other open-ended questions in the questionnaire investigated the experience of linguistic transition between L1 and L2 following migration. The questions asked included the following: 1) *Think of the time when you first moved to this country. How did you find the change from Polish to English in the majority of public situations? Has anything changed since that time?* 2) *Do you think that your journey from using Polish in your daily life - to using English - has taught you something?* 3) *Your English and Polish today - do they have different roles in your life? How do you feel about each of them?* (Hammer 2012). The questions served as a starting point and prompted respondents to share their linguistic experience following migration. Responses were later analysed qualitatively and the categories created included evidence of social and cultural integration, length of domicile, frequency of language use and emotional acculturation.

A one-sample Kolmogorov-Smirnov test revealed that the values for self-perceived proficiency level in L2 are not normally distributed (Kolmogorov-Smirnov Z value = 2.9, p < .0001); therefore Kruskal-Wallis and Mann-Whitney tests were used as non-parametric equivalents of one-way ANOVAs and independent t-tests.

**Research questions and hypotheses**
Three research questions were formulated in order to investigate possible links between L2 attainment and (1) post-migration sociolinguistic aspects; (2) temporal predictors of L2 attainment; and (3) socio-biographical variables:

(1) Is self-reported proficiency level in the L2 linked to acculturation level and frequency of L2 use?
(2) To what extent do age of onset, age at migration and length of domicile in the host country predict self-reported proficiency in the L2?
(3) Is there a link between self-reported proficiency in the L2 and socio-biographical variables such as context of L2 acquisition, education level, age, gender and motivation behind migration?

Two hypotheses were formulated to address the first research question, which investigates the sociolinguistic aspects of L2 attainment, namely:

Hypothesis 1: Participants with higher levels of acculturation will attain higher proficiency levels in L2;

Hypothesis 2: Participants who use the L2 more frequently will attain higher proficiency levels in L2;

Three hypotheses were formulated to address the second research question, which investigates the temporal aspects of L2 attainment, namely:

Hypothesis 3: Participants with lower age of onset will attain higher proficiency levels in L2 following migration;

Hypothesis 4: Participants with lower age at migration will attain higher proficiency levels in L2;

Hypothesis 5: Participants with greater length of domicile will attain higher proficiency levels in L2;

Three hypotheses were formulated to address the third research question, which investigates the socio-biographical aspects of L2 attainment, namely:
Hypothesis 6: Participants with culturally-oriented motivation behind migration will attain higher proficiency levels in L2, than participants whose motivation behind migration was socio-economic.

Hypothesis 7: Participants who started learning the L2 in a mixed context will attain higher proficiency levels in L2, than participants whose context of L2 acquisition was purely instructed or naturalistic.

Hypothesis 8: Female participants, as well as participants with higher education level and higher age will attain higher proficiency levels in L2.

The results section presents the findings under two mains strands, namely ACC and SLA. The two mains strands serve as the umbrella under which the sociocultural, temporal and socio-biographical aspects are investigated.

Results

The effect of acculturation level on self-perceived proficiency level in L2;

A Kruskal-Wallis test revealed a significant effect of acculturation level on self-perceived proficiency level in L2 ($\chi^2 = 11.1, p \leq .004$) with a mean rank of 59.6 for moderately (and less) acculturated migrants, 75.15 for highly acculturated migrants and 89.1 for completely acculturated migrants (Figure 1 presents the mean scores). Participants with higher levels of acculturation reported higher scores of self-perceived proficiency in the L2. The highest levels of L2 proficiency were noted for participants who declared to be completely acculturated. This was followed by highly acculturated participants whose self-reported proficiency was proportionally high yet lower to the completely acculturated group. The lowest levels of self-reported proficiency were noted for participants who declared to be acculturated to a moderate degree or lower. The below figure represents a monotonic increase in the level of self-reported proficiency:
The effect of age at migration on self-perceived proficiency level in L2;

A series of Kruskal-Wallis tests showed no significant effect of age at migration on self-perceived proficiency level in L2 ($\chi^2 = 2.4, p = .303$) with a mean rank of 69.4 for the group of 18-22 years old, 80.2 for the group of 23-26 years old and 73 for the group of 27 years old or more.

The effect of length of domicile on self-perceived proficiency level in L2;

A Kruskal-Wallis test revealed that there is a significant effect of length of domicile on the self-perceived proficiency level in L2 ($\chi^2 = 7.1, p \leq .029$) with a mean rank of 66.3 for up to 5 years domicile, 73.8 for between 5 and 10 years of domicile and 93.4 for over 10 years of domicile (Figure 2). Participants who have lived in the L2 speaking country for more than ten years...
declared by far the highest scores of self-rated proficiency in the L2. A significant difference was equally noted for participants with a length of domicile stretching between five and ten years, who rated their self-reported proficiency level significantly higher than participants with up to five years of domicile.

![Effect of length of domicile on L2 proficiency](image)

Figure 2. Self-perceived proficiency in L2 in relation to length of domicile (mean scores).

**The effect of motivation behind migration on self-perceived proficiency level in L2;**

A series of Kruskal-Wallis tests showed no significant effect of motivation behind migration on self-perceived proficiency level in L2 ($\chi^2 = .492, p = .782$) with a mean rank of 73.40 for socially/educationally oriented motivation, 74.6 for culturally oriented motivation and 80 for personally oriented motivation.

**The effect of age of onset of the L2 on self-perceived proficiency level in L2;**
A Kruskal-Wallis test revealed that there is a significant effect of age of onset on self-perceived proficiency level in L2 ($\chi^2 = 6.3, p \leq .042$) with a mean rank of 85.7 for ages from 0 to 9 years old, 73.1 for ages between 10 and 16 years old and 60.1 for the age of 17 years old onwards (Figure 3). Participants who started learning English as L2 before the age of nine years old reported much higher levels of L2 proficiency than the other groups. Participants whose AoA ranged from the age of ten to sixteen years old rated their proficiency as lower, on average, when compared with younger learners, but significantly higher than learners who began their SLA after the age of seventeen.

![Figure 3. Self-perceived proficiency in L2 in relation to AoA (mean scores).](image)

The effect of the context of L2 acquisition on self-perceived proficiency level in L2;

A series of Kruskal-Wallis tests showed no significant effect of context of L2 acquisition on self-perceived proficiency level in L2 ($\chi^2 = 4.3, p = .116$) with a mean rank of 72 for instructed learning, 89.65 for mixed context of acquisition and 67.5 for naturalistic context of L2 learning.
The effect of frequency of L2 use on self-perceived proficiency level in L2;

A Kruskal-Wallis test revealed that there is a significant effect of frequency of L2 use on self-perceived proficiency level in L2 ($\chi^2 = 10$, $p \leq .018$) with a mean rank of 52.1 for using L2 25% of the time, 68.9 for using L2 50% of the time, 82.7 for using L2 75% of the time and 94.2 for using L2 100% of the time (Figure 4). There was a monotonic increase in the self-reported proficiency in L2. Increased levels of frequency of L2 use are linked with increased self-reported proficiency ratings. Qualitative analysis revealed that the more English participants use in daily life, the more proficient they feel in their English.

Figure 4. Self-perceived proficiency in L2 in relation to frequency of L2 use (mean scores).

The effect of gender, age and education level on self-perceived proficiency level in L2;

a) A Mann-Whitney test showed no significant effect of gender on self-perceived proficiency level in L2 ($U = 1342$, $p = .991$).
b) A Spearman Rank analysis showed a significant link between age and self-perceived level of proficiency (Rho = .176, \( p \leq .032 \)). In other words, older migrants felt more proficient in English than their younger counterparts.

c) A Kruskal-Wallis test showed no significant effect of education level on self-perceived proficiency level in L2 (\( \chi^2 = 2.25, \ p = .324 \)) with a mean rank of 71.2 for BA/College graduates, 74.6 for MA holders and 88.9 for PhD holders.

The feedback from the open questions and from the interviews allowed us to get a better and richer understanding of the complex interaction of variables. This emic perspective offers us the opportunity to hear the voices of the participants, and understand their perspectives and interpretations of behaviour (Dewaele 2009b). We chose data extracts that were most illustrative and most interesting:

MI29 reported the importance of socio-cultural integration and cultural competence in improving her English skills and understanding full meaning of English words:

\[ \text{[When I first moved to this country]} \ I \ \text{did not feel the meaning of all English words I knew. It came with time, this social and cultural understanding. I felt sometimes stupid that I was not getting them... But going out and socialising with majority of native speakers helped a lot.} \]

MI33 reported the experience of transition in the ability to fully express herself in English attained through acquiring cultural understanding:

\[ \text{Yes, it was quite difficult at the beginning. I remember saying to myself: I cannot wait to be able to fully express myself. I can say that a lot has changed since that time. I know now that understanding of any language means to understand the culture.} \]

MI70 reported gaining full understanding of English words only after migration which increased the understanding of culture and intensified emotionality of some English words:

\[ \text{A lot has changed since I moved to England. I can relate more to words I had learnt while living in Poland. I can put them in the right context more easily; find the right collocations more quickly. I have also learnt the connections between words and cultural background. Some have become more emotionally charged.} \]
MI94 reported the importance of the cultural and societal context in acquiring communicative competence and gaining confidence when speaking English:

*At school we are taught certain words but they often lack context, we are unable to judge their level of (in)formality, and some very common words are absent altogether (...). As a result, initially, it is easier to understand the Queen than your neighbour. With time you learn the context and emotionally empty words become more and more familiar, until you are able to use them with confidence.*

MI88 reported change in perception of his language proficiency both for L1 and L2 after migration:

*When I first moved to England I felt completely lost, as back at home I was certain that my English was good. Well, it wasn’t. Funny, as I visit Poland now, I carefully listen to conversations and I feel lost!*  

MI6 reported that length of domicile had a positive effect on her confidence when using L2:

*I was more ashamed speaking in public before than nowadays. I found myself to be more confident [in my ability to speak in English] by living longer in an English speaking country.*

MI8 reported that eight years of domicile in England and education in English helped to improve her proficiency level:

*When I came to England 8 years ago I could not have a proper conversation. I understood 50% of what people were saying, but could not answer. During that period I went to a language school and did an MA which improved my English a lot. Now I can say that I speak English.*

MI10 reported how domicile in the UK had a significant effect on his English proficiency:

*When I first arrived in the UK my English was good, however since then it improved significantly. In addition, another thing which can be mentioned is that I was struggling to understand the different accents that people use. I believe that now I got used to them.*
MI41 noted how ten years domicile and acculturation affected her English proficiency:

*I have been learning English since I was 6, but learning a language and knowing a language are two different things. My high school was bilingual and I considered myself to have a good understanding of the English language, good vocabulary and grammar. When I came to England 10 years ago I was in for a shock – I could not speak the language as well as I thought and I felt incredibly self-conscious of my accent and I would often doubt if I understood everything correctly, even though I had. (...) Learning a language is not only about understanding the meaning of each separate word, it’s also about understanding humour, hidden meaning, understanding how what is being said links with events of the past, culture, TV shows or current affairs. After I came to the UK I made a conscious decision to integrate myself fully into the community and have achieved that.*

MI28 reported that length of domicile and assimilation into L2 culture had a positive effect on English language proficiency:

*At the beginning it felt completely different to what I had been taught at school and university. Pronunciation seemed different as well; even if I was very good at English I felt intimidated and was afraid to speak because I thought people would not understand me (...). Now it is completely different. It’s been 5 years since I first arrived and I think I got assimilated.*

**Discussion**

The quantitative and qualitative findings showed a systematic increase of self-reported L2 proficiency linked to acculturation level, length of domicile, age of onset, frequency of L2 use and age. Highly and completely acculturated Polish-English bilinguals rated their L2 proficiency significantly higher than moderately or less acculturated bilinguals. Level of acculturation proved therefore to be tightly linked to self-reported proficiency levels in migrants. The results also revealed that participants who use the L2 more frequently report significantly higher L2 proficiency levels than participants who report less frequent use of English. Older participants felt more proficient in their L2 than younger participants. This is congruent with the monotonic
increase in L2 proficiency ratings in participants with considerable length of domicile in the UK, particularly those who have lived there for five years and over ten years respectively. Higher age and considerable length of domicile are thus linked to increased self-reported proficiency levels in migrants. An inverse age-related connection, however, was found for age of onset. Participants who started learning English L2 earlier in life, especially up to the age of 9 and then up to the age of 16 respectively, rated their L2 proficiency levels systematically higher than participants whose AoA was situated after the age of 17. Age at migration, on the contrary, did not yield significant results, which points at AoA, rather than at age at migration, to be the most significant age-related variable in the context of L2 attainment.

These findings support previous research of age-related effects on SLA (Abrahamsson & Hyltenstam 2009; Dewaele 2009b, 2010; Hyltenstam 2014). Participants who started learning the L2 up to the age of 9, which is the age associated with cognitive restructuring in monolinguals (Pavlenko 2011), reported higher self-perceived proficiency scores than older participants. Participants who started learning the L2 between the ages of 10 and 16 scored significantly higher on self-reported proficiency than the group whose AoA was 17 years of age or older. This finding is congruent with Abrahamsson and Hyltenstam (2009) whose study revealed that no speaker of L2 with age of onset over 17 years old reached a native-like level (Abrahamsson & Hyltenstam 2009). No differences were found between participants who started learning the L2 before the age of 13 when compared to those whose onset came later than that. The findings also confirmed that older participants reported significantly higher proficiency levels than younger participants. This again reflects previous research on SLA age-related variables (Dewaele 2010).

Evidence presented in this chapter show that acculturation level is strongly and systematically linked to L2 proficiency self-ratings. The present study provides evidence that in the context of migration the L2 learner-migrant acquires the target language to the degree proportional to which they acculturate (Schumann 1978, 1986). As high acculturation levels are associated with low levels of social and psychological distance it can be inferred that higher levels of acculturation promote increased opportunities to receive L2 input via high frequency of L2 use, which results in effective L2 intake reflected in high L2 proficiency self-ratings of both highly acculturated migrants and those who use the L2 more frequently (cf. Gass & Selinker 2008). The present study supports previous findings that high frequency of L2 use and immersion in the L2 speaking culture are positively linked with higher L2 self-reported
proficiency ratings (Dewaele 2010; Ożanska-Ponikwia & Dewaele 2012; Ożanska-Ponikwia 2013; Taguchi 2008). A similar tendency with respect to L2 proficiency ratings was found in migrants who had lived in the UK for longer, which confirms previous findings on the effect of length of domicile on the L2 attainment (Bialystok 1997) and on cognitive restructuring and processes of “renaming the world” in bilinguals (Pavlenko 2011: 199).

Age at migration, motivation and education level were found to be unrelated to self-reported proficiency levels in the participants. This could be partially linked to the profile of the sample which consisted of young adults with higher level academic qualifications. Context of acquisition and gender did not have any significant effects on the self-reported proficiency in L2 either. This is in contrast with previous findings where higher education level and female gender were linked to higher self-reported proficiency scores (Dewaele 2010). It is possible that migration and acculturation neutralise the effect of education and gender.

Qualitative analyses of open questions and interviews generally confirmed the statistical results. A majority of participants declared that length of domicile had a tremendous effect on their English skills and confidence when using the L2. Many participants declared experiencing initial linguistic disorientation due to different accents and dialects of English used in the UK. Testimonies of highly acculturated participants also revealed a post-migration realisation of the importance of acquiring cultural and communicative competence. L2 attainment is therefore linked to cultural awareness and a full, confident and competent use of the L2. It could be hypothesised that L2 learning in the circumstances of migration is understood more through the prism of cultural and integrative competence, rather than merely linguistic competence. The experience and use of the L2 in different contexts potentially enables the learner/user to reach high levels of L2 attainment through minimising the distance between them and the surrounding cultural reality and bringing the L2 to life. One of the participants reported this by saying:

MI118: Living in an English speaking country without the ability to speak English [proficiently] is like window shopping: you see stuff, but you can’t touch it, get it, feel it, smell it and so on.

Feedback from open questions and interviews also revealed that participants started perceiving L2 words as more emotional which provides support for the concept of emotional acculturation as found by De Leersnyder, Mesquita and Kim (2011). One of the respondents illustrated this phenomenon by saying:
MI63: My level of understanding and ‘feeling’ of the language (English) changed dramatically over the years. I am unable to recall the feelings or emotional response now, bearing in mind the time that’s passed, but the notion of going from ‘emotional emptiness’ to the total opposite seems reasonable. My ‘feeling’ for Polish language has definitely deteriorated over the years, there are words that seem to carry more meaning in English and the Polish equivalents do not feel adequate.

This supports findings by Schrauf (2009) who concluded that not only exposure but the engagement in the L2 serves as one of the main predictors of the level of proficiency in the L2. The present study also adds to the earlier evidence provided by Maple (1982), Graham and Brown (1996), Schrauf (2009) and Jiang et al (2009) that increased levels of acculturation and cultural immersion are strongly linked to higher levels of proficiency in the L2.

**Conclusion**

The findings suggest that the high level of attainment in the L2 is tightly linked with acculturation level and age of onset (Hyltenstam 2014; Schumann 1986). It should be noted that participants who took part in this study were highly educated and were professionally or academically active following migration. It is very likely that the participants had high levels of meta-linguistic awareness and thus were able to offer relevant feedback and reflect on their L2 learning (Dewaele 2010, Wilson & Dewaele 2010).

Participants underlined the importance of cultural awareness and sociocultural understanding in the process of SLA following migration. Feedback from open questions and interviews highlighted the discrepancy between language learning in the home country and language acquisition in the country where the language is spoken on a daily basis. The findings showed that acculturation oriented variables, namely, acculturation level and length of domicile, are closely linked to self-reported proficiency level in the L2. Higher levels of acculturation and longer domicile in the L2 speaking country correspond to higher self-reported proficiency levels in migrants and an increased perception of the L2 as emotional. Also SLA-oriented variables such as frequency of L2 use, age of onset and current age, proved to be linked to self-reported proficiency scores. High frequency of L2 use, higher current age and lower age of acquisition were linked to higher self-reported proficiency scores. Acculturation turned out to have the
strongest effect on high level of attainment in English L2. What this study shows is that acculturation is a powerful variable in the processes of SLA and that it is tightly linked to the high levels of attainment in the L2.

References


