



**TURUN
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**STUDIES OF MULTILINGUAL
FINNISH-NORWEGIAN
ADOLESCENTS' MASTERING
OF MULTI-WORD UNITS**

Kristiina Lieri



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ABSTRACT

The overall aim of this thesis is to examine how multilingual Finnish-Norwegian adolescents residing in the greater Oslo area master *multiword units* (MWUs) in Finnish, the *first language* (L1) they were exposed to, and in Norwegian, their *second language* (L2). MWUs consist of two or more words that commonly occur together. In this thesis, the focus is on three different MWUs, namely Finnish verbs of sufficiency (*päästä käymään* 'be able to visit'), Norwegian particle verbs (*kaste opp* 'throw up/vomit') and idioms (*ha tak over hodet* 'have a roof over one's head'). The second aim of this study is to draw attention to the bilingual situation among Finnish-Norwegian adolescents, i.e., how the amount of exposure to and the use of both languages influence the bilingual development concerning MWUs.

A total of 16 Finnish-Norwegian adolescents (ten girls and six boys) ranging in age from 12 to 23 years took part in four studies. Both parents of the participants are Finnish speakers. The mastery of MWUs is compared to that of Finnish and Norwegian L1 speakers of the same age and having a similar socioeconomic background. The present thesis is a sociolinguistic oriented research on multilingual acquisition. In order to examine the research issues, multiple data sources were collected including interviews, sociolinguistic questionnaires, email messages and idiom tests. The analysis of the data collected is mainly qualitative.

The findings of the present study revealed that the Finnish-Norwegian adolescents' mastery of MWUs had both similarities and differences compared to Finnish and Norwegian L1 speakers. There was almost no difference in the use of verbs of sufficiency and particle verbs among Finnish-Norwegian participants and Finnish and Norwegian L1 speakers. The bilingual users mastered, however, Norwegian idioms related to body parts better than native-speaking adolescents of the same age. The findings on mastery of MWUs also showed that there was a great deal of individual variation within the bilingual participants as well as Finnish and Norwegian L1 speakers.

The findings of the study do not fully support the claims from previous research findings that MWUs are challenging for language users, even at an advanced level. The reasons for the partly unexpected results may be due to the amount of exposure to and use of language, as is suggested by the theoretical framework of this study: usage-based model of language. The Finnish-Norwegian adolescents received a high variety of input in Norwegian and had frequent opportunities to use their L2 in their everyday life from an early age. On the other hand, the Finnish language played a large role in the Finnish-Norwegian adolescents' early childhood. Language use changed when children started Norwegian day care and school. Then, the use of the Finnish language decreased. The Finnish-Norwegian adolescents have, however, positive attitudes towards the Finnish language and Finland as well as concrete needs and goals to use their L1. A favorable background (parents' education level, residential area) may also contribute to the fact that the Finnish-Norwegian adolescents did not differ from Finnish and Norwegian L1 speakers of the same age regarding mastery of MWUs. One factor that most likely helped the bilingual participants was that there are similarities in Finnish and Norwegian with regard to MWUs investigated in the present study and they may have benefitted from this.

KEYWORDS: Multilingual, Finnish, Norwegian, language choice and use, multiword units, verbs of sufficiency, particle verbs and idioms

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TIIVISTELMÄ

Tämän väitöskirjatutkimuksessa tarkastellaan, miten Oslon seudulla asuvat monikieliset norjansuomalaiset nuoret (nosu-nuoret) hallitsevat kahdesta tai useammasta osasta muodostuvia merkitysyksiköitä joko ensin oppimassaan suomen kielessä (L1) tai tämän jälkeen opitussa norjan kielessä (L2). Tutkimuksen kohteena ovat suomen kielen riittävyyden verbit (*päästä käymään*), norjan kielen partikkeliverbit (*kaste opp* 'antaa ylen') ja kehon osiin liittyvät idiomit (*ha tak over hodet* 'olla katto pään päällä'). Lisäksi tavoitteena on kiinnittää huomiota nosu-nuorten kaksikieliseen tilanteeseen: miten kielille altistumisen määrä (syötös) ja molempien kielten käyttö (tuotos) vaikuttavat monisanaisten ilmausten hallintaan.

Neljään eri tutkimukseen osallistui 16 (kymmenen tyttöä ja kuusi poikaa) 12–23 vuoden iässä olevaa nosu-nuorta, joiden molemmat vanhemmat ovat suomenkielisiä. Monisanaisten ilmausten hallintaa verrataan samanikäisten ja samanlaisen sosioekonomisen taustan omaavien ensikielenään suomea ja norjaa puhuvien informanttien tuloksiin. Työ on lähtökohdiltaan sosiolingvivistisesti orientoitunutta monikielisen kielenomaksumisen tutkimusta. Tutkimusmateriaali koostuu haastatteluista, sosiolingvivististä kyselykaavakkeista, sähköpostiviesteistä ja idiomitestistä. Tulosten analysointi on pääasiallisesti laadullista.

Tutkimuksen tulokset osoittavat, että nosu-nuorten monisanaisten ilmausten hallinnassa on sekä yhtäläisyyksiä että eroja ensikielenään suomea tai norjaa puhuviin verokkien kanssa. Riittävyyden verbien ja partikkeliverbien käytön osalta ryhmien väliset erot ovat vähäisiä. Nosu-nuoret hallitsevat kuitenkin kehon osiin liittyviä idiomeja paremmin kuin ensikielenään norjaa puhuvat nuoret. Tulokset osoittavat myös, että yksilölliset erot monisanaisten ilmausten osalta ovat suuret kaikissa ryhmissä.

Tutkimuksen tulokset eivät täysin tue aiempien tutkimusten tuloksia, jotka ovat osoittaneet, että monisanaiset ilmaukset ovat haastavia jopa edistyneille kielenkäyttäjille. Osittain yllättävien tulosten syynä saattaa olla kielelle altistumisen määrä ja kielen käyttö, kuten työn teoreettisessa viitekehysessä, kielen käyttöpohjaisessa mallissa, oletetaan. Kielellinen ympäristö, jossa kielellinen syötös ja tuotos norjan kielessä on ollut monipuolista ja runsasta varhaislapsuudesta lähtien on vaikuttanut siihen, että varhaiset toisenkielenoppijat kehittyvät kielitaidossaan kuten ensikieliset. Suomen kielellä oli merkittävä rooli nosu-nuorten ensimmäisinä ikävuosina. Lasten aloitettua päiväkodissa ja koulussa kielenkäyttömalli muuttui ja suomen kielen käyttö väheni. Nuorilla on kuitenkin positiiviset asenteet suomen kieltä ja Suomea kohtaan. Heillä on myös konkreettisia tarpeita ensikielen käytölle. Suotuisilla taustatekijöillä (vanhempien koulutustaso, asuinalue) voi olla vaikutusta siihen, etteivät nosu-nuoret juurikaan eroa samanikäisistä suomea ja norjaa puhuvista verokkeista, mitä tulee monisanaisten ilmausten hallintaan. Yksi tekijä, josta nosu-informantit mahdollisesti hyötyvät on, että suomen ja norjan kielessä on samankaltaisia monisanaisia ilmauksia, joita tässä työssä tarkastellaan.

ASIASANAT: Norjansuomalaiset nuoret, kielen valinta, suomen kieli, norjan kieli, monisanaiset ilmaukset, riittävyyden verbit, partikkeliverbit, kehon osiin liittyvät idiomit

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Writing a doctoral thesis is said to be a long and lonely process. In my case, it is definitely true. I mostly worked on my thesis when living four years in New York City. I cannot, however, complain about the circumstances. I had an amazing view from our 57th Street apartment over Central Park and the Hudson River and it inspired my writing every single day. However, I missed collegial coffee breaks with other doctoral students. I mostly shared my thoughts with our two lovely cats – Kitty and Sarafina. They certainly found it hard to understand why I stayed so much at home and was a boring cat mum.

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Kristiina Lieri

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List of Original Publications

This dissertation is based on the following original publications, which are referred to in the text by their Roman numerals:

- Article I Lieri, K. (2017). Språkanvändning och språkval bland finsk-norska ungdomar i Osloområdet. *Puhe ja Kieli* 37(2), 55–76.
- Article II Lieri, K. (2019). Puheessa esiintyvistä riittävyden verbeistä norjansuomalaisilla nuorilla. *Virittäjä*, 123(1), 79–109.
- Article III Lieri, K. (2020). Stå på, ikke gi opp – the use of Norwegian particle verbs in email messages by advanced L2 users of Norwegian whose L1 is Finnish. *Apples – Journal of Applied Language Studies* 14(2), 107–127.
- Article IV Lieri, K. (2019). Hur behärskas norska idiom av informanter med finska som förstaspråk? *Nordand*, nr 2 (volume 3), 117–141.

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1 Introduction

The past few decades have seen a growing interest in *multi-word units* (MWUs) in language acquisition, including second language acquisition (SLA). These conventional word strings, or ‘chunks of language’, play a central role in learning vocabulary and grammatical structures. MWUs consist of two or more words that commonly occur together (Kecskes, 2015, p. 30), such as English particle verb combinations (PVs) *let out* and *take up* or idioms *all ears* and *over my dead body*. They are frequently used in both spoken and written language (Schmitt & Carter, 2004, p. 1–2; Hyltenstam, Bartning & Fant, 2014, p. 35).

Previous research has shown that the idiomatic use of MWUs often distinguishes second language users, even at an advanced level, from native speakers (Pawley & Syder, 1983; Sjöholm, 1995; Enström, 1996; Laufer, 1997; Ekberg, 1999; Wray, 2002; Mäntylä, 2004; Golden, 2005; Siyanova & Schmitt, 2007; Prentice, 2010; Ivaska, 2014). In the present study, a *native speaker* is defined as someone who learned language in a natural setting from early childhood as a first language and who has become proficient in several dimensions of knowledge and use of the native language through a constant interaction of competence and performance (Cook, 1991; Berman, 2004). An *advanced language user*, in turn, refers to speakers who use their L2 at the very highest levels of proficiency and resembles a native-like speaker e.g., in oral and written production (cf. Hyltenstam, Bartning & Fant, 2014).

Therefore, the overall aim of this thesis is to examine how multilingual Finnish-Norwegian adolescents¹ (see definition for multilingual in Section 3.1) residing in the greater Oslo area master MWUs in their *first language* (L1), Finnish, or in their *second language* (L2), Norwegian. Here, L1 is defined as the language that a person has been exposed to from birth by their parents and which is still spoken at home (cf. Romaine, 1995, p. 19). Immigrant children’s L1 is often a minority language in an L2 environment, as Finnish in Norway (Montrul, 2016a).

¹ The Finns living in Norway are called ‘norjansuomalaiset’ in Finnish (cf. ruotsinsuomalaiset). In this study, however, the term “Finnish-Norwegian” is used to emphasize that the L1 the adolescents learned was Finnish.

Definitions for L2 are varied and the term may refer to different situations (see e.g., Hammarberg, 2010). In this thesis, L2 refers to a situation where children acquire another language later in early childhood (early second language acquisition [ESLA]; Serratrice, 2018, p.15–16, see Table 2, Section 5.1)². They hear one language at home (L1), and meet the L2 in a group setting outside the home e.g., attending day care or preschool. As for an upper cut-off point for ESLA, that is, where SLA ceases to be early SLA, different researches have proposed different thresholds between the ages of three (Paradis, Genesee & Crago, 2011) and six (De Houwer, 1990, 2009), the latter coinciding with the age at which many children start to get formal literacy instruction. In the present study, ESLA is defined as the period between ages around three and six (Serratrice, 2018, p. 15–16).³

As mentioned earlier, MWUs often pose difficulties for L2 users. In the same way, it may be expected that the idiomatic use of MWUs in the L1 is challenging for Finnish expatriates that use their L1 in an L2 environment and have limited access to L1. Their L2 learning context may also differ from that of native Norwegian-speaking adolescents regarding the amount of input and output.⁴ This offers an interesting opportunity to look at mastery of MWUs among individuals living in different language environments. What similarities and differences do the participants and the participant groups have? How do different factors, such as language choice and use, affect mastery of MWUs?

In the field of SLA, English MWUs have been extensively studied, but there is less research on Nordic languages (e.g., Enström, 1996; Ekberg, 1999; Ylikiiskilä, 2001; Golden, 2005; Prentice, 2010). This thesis seeks to fill this knowledge gap. A unique aspect of this study is the examination of how Finnish-Norwegian adolescents master MWUs in Finnish or Norwegian – and comparing their mastery

² Bilingual first language acquisition [BFLA] refers to children who are exposed to two languages in their home environment, whether from birth, or within the first year of life. In BFLA, the general consensus is that children essentially treat their two languages as two first languages (Serratrice, 2018, p.15–16; see also Section 5.1).

³ Traditionally, simultaneous and sequential/successive childhood bilingualism is used in SLA research literature. Simultaneous bilingualism refers to children acquiring two languages at the same time, while children exposed to additional languages at age three or older are considered successive bilinguals (Baker & Wright, 2017, p. 88). In the present study, some Finnish-Norwegian adolescents can be considered as simultaneous bilinguals as they were exposed to Norwegian in their early childhood when starting day care between the age of one or two (see Table 2, section 5.1).

⁴ Input refers to language that is available to the language user through social interaction or any medium (listening, reading, watching television) and it is an essential component in the acquisition process (Gass & Mackey, 2006; Ellis, 2008; Schmitt & Redwood, 2011). Output contributes to language acquisition and pushes language users to practice the language. It helps them to automatize specific forms and expressions in the target language (Swain, 2000; Unsworth, 2016).

to that of Finnish and Norwegian L1 speakers. Hence, the first aim of this study is to deepen the knowledge of mastery of MWUs from a bilingual⁵ perspective.

The second aim of this study is to draw attention to the bilingual situation among Finnish-Norwegian adolescents living in the greater Oslo area, which, to date, has been lacking. When, with whom and for what purposes do they use Finnish and Norwegian in an L2 setting? How does the amount of input and the use of both languages influence the bilingual development concerning MWUs? Does the adolescents' proficiency in their L1 continue to develop equivalent to their proficiency in L2 in terms of MWUs when they are more exposed to L2/the majority language?⁶

There are two main issues of this thesis that address different aspects of bilingualism (see Section 3.1). Firstly, they include Finnish-Norwegian adolescents' mastery of MWUs and compare it to that of Finnish and Norwegian L1 speakers, and, secondly, they comprise the bilingual situation of these adolescents in an L2 setting. The two main issues are each further subdivided into research questions (RQs), which are thus together addressed in four sub-studies, as summarized in Table 1 (the studies will be further summarized and described in Chapter 6).

Table 1. Aims and research questions of the dissertation.

Aim 1	Research questions	Paper /Study
How do Finnish-Norwegian adolescents master MWUs in Finnish or Norwegian?	RQ 1a. What are the similarities and differences in mastery of MWUs between Finnish-Norwegian adolescents and Finnish and Norwegian L1 speakers of the same age?	Paper II, III & IV
	RQ 1b. What factors affect comprehension and production of MWUs?	Paper I, II, III & IV
Aim 2	Research question	
What does the bilingual situation look like in an L2 setting? ⁷	RQ 2. What does knowledge of MWUs reveal about the Finnish-Norwegian adolescents' bilingualism?	Paper I, II, III & IV

⁵ Finnish-Norwegian adolescents are multilingual by definition (see Section 3.1 and 5.1) but bilingual is used as a general term when referred to mastery of MWUs in Finnish or Norwegian.

⁶ In the present study, a majority language is used synonymously with an L2/Norwegian.

⁷ The term 'setting' refers to the milieu in which language acquisition and use takes place (Ellis, 2008, p. 286).

The present thesis is a sociolinguistic oriented research on bilingual acquisition⁸. In order to examine the research questions, multiple data sources have been collected including interviews, sociolinguistic questionnaires, email messages and idiom tests (see Chapter 5). Also the researcher's own observations are included.

Four individual studies related to this dissertation have been published as articles (Lieri, 2017, 2019a, 2019b, 2020, see Chapter 6). *Study I* is a longitudinal study focusing on language choice and use among Finnish-Norwegian adolescents, while the other three sub-studies deal with the participants' mastery of MWUs (participants, see Section 5.1). *Study II* explores the use of verbs of possibility and sufficiency⁹ (e.g., *jaksaa opiskella* 'have mental energy to study') in spontaneous speech in Finnish; *Study III* deals with Norwegian PVs (e.g., *slå på* 'turn on') in email messages, and *Study IV* examines understanding and producing Norwegian idioms related to body parts (e.g., *ha hjerte i halsen* 'have one's heart in one's throat').

Language minority bilingualism is an important linguistic and social component of the lives of a large number of children and adolescents in Norway.¹⁰ By addressing these topics as the factors that are central to bilingual development and mastery of MWUs, the present study contributes to a deeper understanding of bilingual development in a situation where input and output vary from one language user to another. The research carried out is linked with various traditions of examining bilingualism, including the fields of SLA research, L1 maintenance research, as well as sociolinguistic and phraseological research. The aim of this summary is to present the theoretical grounding of the thesis and to discuss the empirical results in a wider context.

The structure of the thesis may be summarized as follows: In the introductory chapter, the overall purposes and research questions for the dissertation have been presented. In Chapter 2, the theoretical framework of the thesis, the usage-based model of language, is presented. In Chapter 3, the factors affecting bilingual development are discussed. Chapter 4 deals with MWUs, their idiomatic use, cross-linguistic influence and the way they are stored and processed in the mental lexicon. The data and the method of the empirical studies are introduced in Chapter

⁸ Learning is sometimes used to refer to formal and conscious learning especially taking place in classrooms as opposed to informal and often more subconscious acquisition (Ellis, 2008, p.7, 288). In this study, learning and acquisition are not differentiated.

⁹ In this thesis, the verbs of possibility and sufficiency refer to Flint's (1980) term *verbs of sufficiency* (in Finnish 'riittävyden verbit'; see Section 6.2.1).

¹⁰ As of 9 March 2020, there were 980 000 immigrants in Norway (18.2 % of the population). Children born in Norway to two immigrant parents (180 000) constitute 3.4 % of the Norwegian population today (Statistics Norway, SSB, 2020).

5. A summary of individual studies is provided in Chapter 6. Finally, Chapter 7 comprises the discussion of results and evaluation of the study, as well as suggestions for possible further research topics.

2 Usage-Based Model of Language

This chapter presents some basic starting points of the usage-based model of language (UBL), which forms the theoretical framework of the present study. The usage-based approach has been applied to the four sub-studies both in collecting and analyzing the data. In this context, the approach is discussed in connection with cognitive grammar and construction grammar.

Usage-based approaches to language acquisition do not form any coherent theory but emphasize that language users' knowledge of language emerges from meaningful experiences with language (input) as a result of numerous usage events, i.e., actual language use (output) (see e.g., Langacker, 1987, 2000; Tomasello, 2003; Goldberg, 2006; Bybee, 2006). Thus, the use of language not only describes an abstract language system, but the language used forms the system itself (see Kemmer & Barlow, 2000, p. ix).

According to UBL, language develops by using it in an interactive and diverse way in different linguistic situations (see e.g., Tomasello, 2003). Usage-based research has, however, been criticized for not taking into account the linguistic environment, situation, speaker or speech community (see Eskildsen, 2009). This shortcoming has been highlighted in the present study. Language experiences of multilingual adolescents living in an L2 setting are likely to be different from those of L1 speakers in an L1 and L2 environment, but language experiences may also be different regarding native speakers (Dąbrowska, 2012). The linguistic input multilingual users (both L1 and L2 speakers) receive in their languages, as well as their own output influences comprehension and production of conventional sequences such as idioms (Wulff, 2019). Thus, the usage-based approach is well suited to studying similarities and differences in language users' knowledge of language, such as MWUs in this thesis.

UBL shares features with cognitive approaches to language learning (Taylor, 2002, p. 27–28). The cognitive processes that learners make use of when learning a language are not only limited to language acquisition, but are general cognitive mechanisms associated with learning of any kind (Bybee, 2003, p. 17; Croft & Cruse, 2004, p. 1–4). UBL assumes that language emerges from the interaction of cognition and use (Ibbotson, 2013). As Bybee (2003, p. 5) points out, the way

language is used affects the way it is represented cognitively and, thus, the way it is structured. Conventionalized expressions in a linguistic context are understood in relation to a conceptual structure, which is based on culture-based and conventionalized knowledge of language (Taylor, 2002, p. 116).

A basic principle of UBL, as well as cognitive linguistic and construction grammar, is that knowledge of a language is knowledge of its *constructions*, which vary in abstractness and complexity, depending on the number of elements involved in their interrelations (Tomasello, 2003, p.100–101; Croft & Cruse, 2004, chapter 9). Constructions are conventionalized form-meaning pairs entrenched in the speaker's mind through repeated use (Langacker, 2000, p. 3; Taylor, 2002, p. 541; Goldberg, 2006, p. 5; Ellis & Cadierno, 2009, p. 117–118). Linguistic constructions are seen as compositions of grammatical, semantic and pragmatic patterns, in which lexicon and grammar¹¹ are considered to form a continuum from simple to complex, and from lexically specified to lexically open (Langacker, 1987, p. 25–27; Croft & Cruse, 2004, p. 240, 255; Bybee, 2006, p. 715). In the present study, the concept of construction is used for complex constructions, i.e., conventionalized form-meaning pairs larger than one word.

In UBL, linguistic knowledge is shaped by general cognitive processes, such as analogy, generalizations, and automatization, which are influenced by frequency of occurrence (Tomasello, 2003). Analogy accounts for mapping an existing structural pattern onto a novel utterance (Tomasello, 2003, p. 3–4, 298; Schmitt & Carter, 2004, p.13; see also Ibbotson, 2013). Generalizations that language users make about form and meaning (categorization) create schemas which are connected to the lexicon, i.e., a word in a network is linked to other words through meaning and structural similarity (Langacker, 1987, p. 63–76; Croft & Cruse, 2004, p. 303; Bybee, 2006, p. 713). Schemas are learned as a result of frequent and meaningful exposure to language in everyday social interactions and some schemas being more general than others (Bybee, 2003, p. 26–28). Lexical and grammatical development is highly intercorrelated; when language users' vocabulary increases, constructions also become more complex (Tomasello, 2003, p. 92; see also Schmitt, 2010, p. 247).

In UBL, frequency plays a central role when learning both L1 and L2 and can be divided into input and output frequency. Input frequency refers to how often a linguistic item occurs in a language, and output frequency to how often a particular expression occurs in the language produced by the language user (Bybee, 2003, p.

¹¹ According to UBL, there is no sharp distinction between vocabulary and grammar. Initially the network is a relatively simple one but it gradually becomes more complex as the learner acquires new forms, matches to existing functions and uses them to realize new functions (Ortega, 2009).

5–6; Ellis, 2008, p. 204; Tyler, 2010, p. 275–277; Siyanova-Chanturia & Pellicer-Sánchez, 2019, p. 4). The latter is central to the present thesis. The frequency of occurrence determines what language users notice and learn (Bybee, 2003, p. 13–14; Tomasello, 2003, p. 15; Wulff, 2019, p. 20). The higher the frequency of occurrence of a conventionalized expression, the better it is stored in memory¹² (*frequency effect*; see Langacker, 1987, p. 59; Bybee, 2003, p. 5, 2006, p. 716; Cieślicka, 2015, p. 220; see also Ellis, 2002). Compared to infrequent expressions, language users tend to produce frequent ones more accurately (Schmitt, 2010; Vetchinnikova, 2014).

UBL posits that language learning is input-driven (Ortega, 2009). Repeated exposure to language (through listening, reading, or both) reinforces cognitive representations of language (Bybee, 2006; Ellis, 2008; Wulff, 2019).¹³ In interactive situations, a language user's own activity, however, plays a major role in language development, such as the acquisition of structures and lexical knowledge, like MWUs in this study (Swain, 2000; Tomasello, 2003; Croft & Cruse, 2004). Specially, Vygotsky's (1978) sociocultural view of learning is based on an assumption that learning takes place through the use of language and participation in social interaction.¹⁴ Output frequency, i.e., having consistent opportunities to produce language is crucial to learning (Swain, 2000; Montrul, 2016a; Ortega, 2018). A repeated use of specific MWUs, e.g., idioms or PVs, results in these word strings being successively established as cognitive routines in language users' mental lexicon and, thus, accessible for further use with new items (Langacker, 1987, p. 59; Tomasello, 2003; Bybee, 2006; see also Siyanova-Chanturia & van Lancker Sidtis, 2019).

Knowledge of language is dynamic and evolves in accordance with a language user's linguistic experiences. New expressions are encountered, and others, if not kept activated through regular and variable use, may drop out of a person's language (Taylor, 2002, p. 28; Schmitt, 2010, p. 256–258; see also Montrul, 2016a). Thus, knowledge of language must be seen as a process of constant change (Eskildsen, 2009, p. 335–336; see also Mustonen, 2015; Ortega, 2018).

¹² Usage-based theories of language hold that language learning is exemplar-based (see e.g., Goldberg, 2006).

¹³ Limited input can prevent learning of a particular construction, e.g., verbs of sufficiency in Finnish.

¹⁴ Vygotsky (1978) stressed the fundamental role of social interaction in the development of cognition. He claimed that a community plays a central role in the process of "making meaning." He also pointed the knowledge and application of the scaffolding within the Zone of Proximal Development helps accelerate the cognitive development of the child, making the learning process more dynamic and the child more active.

3 Language Acquisition in Bilingual Environments

Section 3.1 deals with bilingualism in the context of this study. Different micro and macro-level factors affecting bilingual development in an L2 environment are presented in Section 3.2.

3.1 Bilingualism

According to current research (see e.g., Jessner, 2006; De Houwer & Ortega, 2018) everyone may be considered multilingual, because we inevitably come across many different languages, language variants and dialects in different daily contexts (television, internet, advertisements, jobs, shops). Even young children use multilingual resources when socializing with their friends from diverse backgrounds (Piippo & Vaattovaara, 2016, p. 237; see also Dufva & Pietikäinen, 2009; Mård-Miettinen & Vaarala, 2016). There are also different kinds of multilingualism, e.g., receptive multilingualism (understand several languages receptively) and multilingualism on the Internet and media (multilingual webpages, see e.g., Muhonen, 2013).

Bi- and multilingualism¹⁵ are complex phenomenon and can refer to individuals or an entire society (societal bi- and multilingualism, see e.g., Baetens Beardsmore, 1986; Jessner, 2006; Ellis, 2008; Aronin & Singleton, 2012; Baker & Wright, 2017) but in this dissertation, the focus is on individual bilingualism. Defining the terms *bilingualism* and *multilingualism* is an issue in research literature as researchers see the interrelation between bilingualism and multilingualism in a variety of ways (see e.g., Baetens Beardsmore, 1986; Romaine, 1995; Li Wei, 2000; Jessner, 2006; Franceschini, 2011; Aronin &

¹⁵ The term *multilinguality* is also used in the research literature. In multilinguality the identity of a multilingual person is seen as a whole, integrating sub-identities such as national/cultural identity as well as linguistic abilities. Multilinguality does not exist on its own but is shaped by the sociolinguistic settings in which a multilingual lives (Aronin & Singleton, 2012, p. 80–81; see also Jessner, 2006).

Singleton, 2012; De Houwer & Ortega, 2018). Bilingualism and multilingualism share many similarities at both the psycholinguistic and sociolinguistic level. However, current research emphasizes the greater complexity and diversity of the factors involved in acquisition and use where more than two languages are involved (Aronin & Singleton, 2012, p. 5; see also Hammarberg, 2010). A vast majority of the previous studies use the terms bilingual and bilingualism when referring to multilingual and multilingualism (Romaine, 1995; Grosjean, 2008; see also Juvonen, 2000; Kolu, 2017).

The Finnish-Norwegian adolescents residing in the greater Oslo area are multilingual (see Section 5.1). In this thesis, the focus is, however, on their use of Finnish and Norwegian as well as their mastery of MWUs in Finnish or Norwegian. In the present study, the term bilingual refers to a person using two or more languages in dynamic ways flexibly according to current needs (cf. De Houwer & Ortega, 2018, p. 3–5; see also Dufva & Pietikäinen, 2009). The definition of bilingual is based on the understanding of bilingualism and bilinguals from Grosjean (2008, p. 10): “Bilingualism is the regular use of two or more languages [...], and bilinguals are those people who use two or more languages [...] in their everyday life.

The definition of individual bilingualism is a subject of debate and there are various definitions that are of an arbitrary nature (Jessner, 2006). Individual bilingualism is a dynamic and multidimensional phenomenon, and it appears in different ways in different individuals (Ortega, 2018, p. 408; Impola, 2020, p. 55–59; see also Otterup, 2005; Caldas, 2006; Jessner, 2006; García, 2009; Grosjean, 2015; Rydenvald, 2017). Many researchers adhere to Skutnabb-Kangas’ (1981) definition of bilingualism that covers four aspects: origin, function, identification and competence. Bilingual individuals may have learned their languages under different circumstances and may differ widely from each other as to the needs and opportunities to use their languages in everyday life (Armon-Lotem & Meir, 2018; Serratrice, 2018; see also Huss, 1991). They also have different attitudes to these and master them at different levels (Lindberg, 2008, p. 51; Montrul, 2016b, p. 15). Their proficiency in each of their languages may also shift over time (Jessner, 2006, p. 17; Montrul, 2016a, p. 99). The user of more than two languages is not the sum of multiple monolinguals but rather someone who possesses special characteristics not found in monolinguals or in bilinguals (Grosjean, 1982, 2015; Ringbom, 1987).

The languages have different roles and functions. They may be used separately in social interaction, but in multilingual communities, *translanguaging*, i.e., the use of different languages as an integrated communication system is frequent in order to maximize communicative potential (García, 2009; García & Li Wei, 2014, Chapter 2). It is a question about a process of making meaning, shaping

experiences, understandings and knowledge through the use of two or more languages (Baker & Wright, 2017, p. 99). When bilingual individuals communicate with each other with the same language resources, they may use their full linguistic capacity (García & Li Wei, 2014; see also Kolu, 2017). This does not work in situations when bilingual persons speak to monolinguals (Grosjean, 2015, p. 57).

The degree of proficiency of bilingual persons, i.e., the ability to speak their languages proficiently, though not necessarily perfectly or at native speaker level is also a subject of debate. The definitions of the terms *balanced* and *nativelike proficiency* are defined in different ways by different researchers and there is no complete consensus on the issue. Skutnabb-Kangas (1981, p. 43–44) pointed out that it is difficult to verify balanced bilingualism because it is not possible to describe exactly what native language competence is (see 3.2.2). Balanced bilinguals, i.e., persons who have the kind of proficiency in two or more languages so that their skills in each language match those of a native speaker of the same age, are rare (Grosjean, 2015, p. 150; see also Baetens Beardmore, 1986, p. 9; Aronin & Singleton, 2012, p. 105).

Different competences in each of the language user's languages are an obvious result of the fact that bilingual persons acquire and use their languages for different purposes in everyday life, for example, one language at home and another at school (Lindberg, 2008, p. 50; Grosjean, 2015, p. 151; Treffers-Daller, 2018, p. 294). In addition, other languages are potentially used for traditional media, social media websites and games (Mård-Miettinen & Björklund, 2019). As a result, a bilingual person is often relatively less exposed to each language than a monolingual individual to their only language (Gathercole & Thomas, 2009; Serratrice, 2018).¹⁶ Skills and knowledge tend to be domain-specific (Treffers-Daller, 2018, p. 295). It is common to have a better lexical knowledge of certain topics in one language than another; for example, school-related vocabulary is usually better mastered in one's L2/majority language than in L1/ minority language (Grosjean, 1982, p. 140; Romaine, 1995, p. 238; Sundman, 1999, p. 49; Montrul, 2016a, p. 48).

There may also be vast differences in a bilingual person's receptive and productive abilities¹⁷ (Romaine, 1995, p. 12–14). Bilingual speakers in an L2 setting can develop good skills in languages they are exposed to. However, whether or not they actually do so depends to a large extent on different factors in the social

¹⁶ Monolingual people are the exception rather than the rule in most parts of the world (Auer & Li Wei, 2007; Grosjean, 2015).

¹⁷ Receptive competence includes forms and meanings that are recognized and understood within or without their contexts while productive competence comprises the language users can actually produce and use spontaneously. Receptive competence is normally higher than productive one (see e.g., Baetens Beardmore, 1986; Nation, 2001; Schmitt, 2010).

setting in which they grow up (Ellis, 2008, p. 286; see also Aronin & Singleton, 2012; Treffers-Daller, 2018). For children and adolescents living in an L2 setting, it is necessary to acquire cognitive academic language proficiency (CALP) in their L2, language of schooling (Cummins, 1991). Regarding L1 proficiency in an L2 setting, it does not usually develop in the same way as the proficiency of L1 speakers in an L1 environment (Tuomela, 2001, p. 85–86). Many expat Finnish children and adolescents, like the Finnish-Norwegian adolescents in the present study, have conversational language skills (BICS) in their L1, but experience difficulties when the language is used in educational contexts (Karhunen, 2004; Tigert, 2017).

In the next sections, diverse factors affecting bilingual development are discussed.

3.2 Bilingual development in an L2 setting

The linguistic development of a bilingual person in an L2 environment is affected by different factors (see e.g., Grosjean, 1982, 2015; Spolsky, 1989, 2009; Viberg, 1992; Romaine, 1995; Ellis, 2008; Abrahamsson, 2009; Athanasopoulos, 2011; Montrul, 2016a). On the macro-level, the social context of acquisition, different kinds of institutions and the support in minorities' own language (church, clubs, organized free time activities, instruction in L1, language schools and mass media), as well as demographic factors and geographical concentration have an effect on the degree an individual is able to interact in their L1. The status of a person's L1 in the society in which bilingual individuals live are also of prime importance (Romaine, 1995; Fredriksen, 1997; Kovács, 2004; Namei, 2012). On the micro-level, age of onset to L2 acquisition and the age at which there is a reduction in contact with one's L1 have an impact on one's bilingual development (see e.g., Baier, 2007; Bylund, 2008; Schmid, 2011). Other individual factors, e.g., motivation, attitudes, language aptitude (Dörnyei, 2005; Ellis, 2008), as well as one's ethnic and linguistic identity influences language acquisition and use (see e.g., Lainio, 1989; Bijvoet, 1998; Janulf, 1998). The amount of exposure to and use of both languages plays a central role, as the theoretical framework of this study, usage-based model of language, suggests (Chapter 2). Thus, the support of the child's family for the minority language can be seen as a key prerequisite for maintaining and preserving languages (Schwartz & Verschik, 2013).

3.2.1 Factors on the macro-level

The social environment contains several factors that have an influence on how often an individual is in contact with their L1 and L2, and what attitudes a person

has towards these languages. This plays a vital role in maintaining one's L1 and culture in the L2 environment (Studies I, II). On the other hand, adaptation to the majority population is central in relation to L2 acquisition and the culture of the community (Lainio, 1989; Viberg, 1992). Sociocultural adaptation is influenced by the socioeconomic status of the family (parents' educational level, occupation, income), settlement pattern, number of minority speakers, demographic concentration, intention to stay in the new country and language status (Viberg, 1992, p. 86–88; Romaine, 1995, p. 40; Abrahamsson, 2008, p. 198; Ellis, 2008, p. 316–318).

Immigrant families, in this case Finnish families in the greater Oslo area with a relatively high socioeconomic status and length of residency in Norway, often live among the majority population and have more contacts with native speakers than those living in immigrant neighborhoods (cf. Karhunen, 2004). Contrary to this, large immigrant groups concentrated in geographical areas have more contacts with minority speakers and better chances of maintaining their languages (Boyd, 1985; Wande, 1988; Huss, 1991; Viberg, 1992; Fredriksen, 1997; Janulf, 1998; Fulland, 2016; Kolu, 2017). Social networks with the majority population provide good conditions for the development of L2, while those networks are often unfavorable to L1 (Kulbrandstad, 1997; Dörnyei, Durow & Zahran, 2004; Kovács, 2004; Svendsen, 2005; Ellis, 2008; Niiranen, 2008; Györky-Ullholm, 2010; Straszer, 2011).

Language attitudes are of great importance for L2 learning and maintaining L1 (see e.g., Bijvoet, 1998; Karhunen, 2004; Ellis, 2008). If attitudes towards both cultures are positive, it strengthens the sense of belonging to both cultures and facilitates integration into the surrounding society (Engen, 1998, p. 72–76; Namei, 2012, p. 66–68; see also Saville-Troike, 2003, p. 198–200; Grosjean, 2015, p. 172–179). On the other hand, negative attitudes towards one's own culture mean that a person wants to belong to the group with a higher perceived social status (assimilation). Especially young people at a sensitive age¹⁸ are prone to orient themselves to the majority culture, which tends to increase the use of L2 (Hvenekilde, Hyltenstam & Loona, 1998, p. 46; Caldas, 2006, p. 114–115; see also Bijvoet, 1998).

The sociopolitical status¹⁹ of one's L1 in an L2 environment and its international status either hinder or facilitate bilingual development (Håkansson,

¹⁸ Here, the term sensitive period refers to a time when a child is particularly receptive to certain kinds of environmental experiences.

¹⁹ The sociopolitical status of the languages indicates a power relation. A majority language has an official status and it is used in media and in education, while a minority language is used in restricted contexts (Montrul, 2016a, p. 92).

2003, p. 38; Baier, 2007, p.145–148; see also Otterup 2005; Doyle, 2013; Montrul, 2016a). Some bilingual speakers are of the opinion that their L1 is not worth learning, because it is so small and there is no need to use it (see Imppola, 2020; cf. Janulf, 1998; Kolu, 2017). At a sensitive age, children may also refuse to speak a minority language, particularly if they have had negative experiences with the language (Lainio, 2006, p. 20; Baker, 2007, p. 73; Doyle, 2013, p. 164; Montrul, 2016a, p. 121). However, if society sees bilingualism as positive and worth maintaining, children also regard bilingualism as natural (Teiss, 2007, p. 19–21).

Language education policies play a central role in one’s bilingual development. Decision-makers do not always value minority language teaching (see e.g., Namei, 2012; Grosjean, 2015). This is, for example, the situation in Norway, where the development of domestic multilingualism is not mentioned as a learning objective in its own right in the Education Act (see *Opplæringslova* § 2–8). Students with an immigrant background are only granted mother tongue²⁰ instruction during a transitory period, i.e., until they know Norwegian well enough to follow the ‘normal’ instruction of the school (Lindberg, 2008; Øzerk, 2008a; Sickinghe, 2013; Fulland, 2016). This is also the situation for Finnish-Norwegian children in the greater Oslo area. The only place where their L1 is supported is the Finnish Language School (Suomi-koulu).²¹ The situation is different in the northern part of Norway (Troms and Finnmark county), where the Kven/Finnish students have the right to Finnish as an L2 instruction for historical reasons²² (*Opplæringslova* § 2–7; see also Niemi, 2010; Pietikäinen, Huss, Laihiala-Kankainen, Aikio-Puoskari & Lane, 2010; Niiranen, 2011; Tyldum & Friberg, 2019).

The acquisition of L2/majority language may be problematic in multilingual communities where a majority of residents are immigrants and children have few contacts with majority children of the same age at school or in free time. The situation is different for those L2 users, e.g., Finnish-Norwegian adolescents in this study, who live in residential areas inhabited mainly by majority language speakers (see e.g., Lindberg, 2008). They receive a lot of varied input in Norwegian and have frequent opportunities to use the language (schooling, media, social

²⁰ The term mother tongue (morsmål) is used in Norwegian language education documents to refer linguistic minority children’s L1 (see e.g., Sickinghe, 2013).

²¹ Municipal home language instruction was provided in the greater Oslo area until the curriculum L97 took effect in 1997. The Finnish Language School in Oslo was founded in 1999. However, not all expat Finnish children in the greater Oslo area seek to maintain and further develop their L1 by attending the school (cf. Montrul, 2016a, p. 20).

²² The Kven minority has had official status as a national minority in Norway since 1999, and the Kven language has been an official minority language since 2005 (Niiranen, 2011).

networks), while acquisition of L1 can be hampered under conditions of reduced input and output (Gathercole & Thomas, 2009; see also Unsworth, 2016).

Previous research has revealed that L1 instruction contributes to the development and maintenance of one's L1 (Fredriksen, 1997; Kulbrandstad, 1997; Janulf, 1998; Tuomela, 2001; see also Aalto, 2015; Rydenvald, 2017), whereas lack of instruction most often leads to a situation where language skills do not develop at an age-appropriate level, especially if the contact with L1 speakers is also limited (Baier, 2007; Bylund, 2008; Niiranen, 2008; Schmid, 2011; Montrul, 2016a). Previous studies on Sweden Finnish students have shown that that attendance of Finnish classes or instruction in Finnish is of great importance for the preservation of Finnish in Sweden (see e.g., Lainio, 1989; Janulf, 1998; Juvonen, 2000; Tuomela, 2001; Kangassalo, 2004; Nesser, 2007). Tuomela's study (2001) revealed that pupils in Finnish classes and bilingual classes had good opportunities to maintain and develop their L1 compared to pupils taught in Swedish classes. Both Janulf's (1998) and Tuomela's (2001) studies showed that the more children received instruction in Finnish, the better they learned the Finnish written language and the more varied their language was.

3.2.2 Factors on the micro-level

A common assumption is that most L1 speakers without later interruptions attain nativelike proficiency ("perfect L1 mastery") in the different sub-areas of that language (lexicon, phonology, grammar, pragmatics), although variation is found between these speakers as well (Lindberg, 2008, p. 50; Hyltenstam *et al.*, 2014, p. 14).²³ On the other hand, less is known about the "end-state" for L2 learners and multilingual L1 users (Ellis, 2008; Aronin & Singleton, 2012, Chapter 6; see also Montrul, 2016b).

In the present study, nativelike proficiency is defined as a high level of language proficiency comparable to that of a native speaker (cf. Birdsong, 2016; Treffers-Daller, 2018; see also Chapter 1). However, previous research has shown that most L2 users do not attain nativelike competence²⁴ in L2 (Abrahamsson & Hyltenstam, 2009, 2013), although L2 learners who have nativelike proficiency also exist (Ellis, 2008; Montrul, 2016a; Silva-Corvalán & Treffers-Daller, 2016). Nativelike proficiency is a disputed issue and definitions are ambiguous.

²³ Also for L1 children, home environments differ including how much parents talk and read to them, and the lexical richness and syntactic complexity of the language used.

²⁴ Abrahamsson & Hyltenstam (2009, 2013) use the term near-native speakers referring to those L2 users who are highly proficient speakers but distinguishable from native speakers only in small ways.

Proficiency is often referred to the native speaker's knowledge of language (Cook, 1991). This is, nevertheless, problematic because even native speakers' abilities differ widely from each other, e.g., in terms of lexicon and mastery of different oral and written styles (Schmitt, 2010; Hyltenstam *et al.*, 2014; Treffers-Daller, 2018).

A child usually has various contacts with their L1 in all linguistic areas. At the beginning of primary school (about 6–7 years of age), the language base, phonology, morphology, syntax, lexicon and pragmatics are established, although all areas except phonology will change even after this time period (Håkansson, 2003, p. 166; Enger, 2013, p. 7; Montrul, 2016a, p. 104–106; see also Clark, 2009, Chapter 16). The circumstances for L1 acquisition in an L2 setting are different, and not all children develop age-appropriate language skills in different areas of their L1 (cf. Birdsong, 2016). Older children that leave their L1 environment at around age 10–12 master their L1 so well that reduced L1 contact plays a less important role (Bylund, 2008; Montrul, 2016a). However, even for these children, favorable external factors, e.g., the quantity and the varied nature of the input, are of great importance (Halmari, 2005; Bylund, 2008; Unsworth, 2016; Armon-Lotem & Meir, 2018; Ortega, 2018). In the present study it is assumed that continuous and varied exposure to and use of one's L1 have a positive effect on L1 development, as usage-based model of language claims (Chapter 2).

3.2.2.1 Age of onset to L2 acquisition

In language development, age of onset to L2 acquisition is considered an important factor (Study IV). However, this factor has always been a controversial issue among researchers and linguists. Some researchers insist that any learner, despite the age of acquisition, can attain a nativelike level of L2 proficiency (Birdsong, 2014), whereas others claim it is generally impossible (Abrahamsson & Hyltenstam, 2009). Earlier research findings have demonstrated that the period from birth to puberty is crucial to L2 learning. According to the *critical period hypothesis*²⁵ (Lenneberg, 1967), the ability to learn an L2 through natural input steadily declines after puberty, due to biological and neurological changes. After that, learning must take place through explicit instruction and intensive practice. Current research, however, suggests that that the critical age may be even earlier, around age 4 (Johnson & Newport, 1989) and that the ability to acquire language

²⁵ Recent research favors terms sensitive/optimal periods rather than critical periods. A sensitive period refers to a period of time when learning is optimal. A child can learn a language easily, quickly, and without teaching.

declines linearly from birth (Hyltenstam & Abrahamsson, 2009, 2013).²⁶ It is also a prerequisite that an L2 learner needs some language aptitude and motivation to compensate for the negative effects of biological maturity (Birdsong, 2014; see also Dörnyei, 2005; Ellis, 2008).

Previous research supports the fact that all L2 learners do not attain nativelike language proficiency in their L2, and that there is a great deal of variation between language users (Aronin & Singleton, 2012; Birdsong, 2014). Abrahamsson and Hyltenstam (2009, 2013) argue that a nativelike level of L2 proficiency is, in principle, never attained by adult learners and, in addition, that such proficiency is much less common among child learners than has previously been assumed. They claim that linguistic sensitivity does not stop suddenly, but decreases gradually over time as maturity limits increase.

It is widespread opinion that acquiring an L2 in childhood is easier than in adulthood (Spolsky, 1989, p. 95; Baker, 2007, p. 31–32; see also Hartshorne, Tenenbaum & Pinker, 2018). This applies to children who are exposed to two languages in their home environment, whether from birth, or within the first year of life (BFLA children), and children who hear their L1 at home and are later in early childhood exposed to an L2 (ESLA children), as the Finnish-Norwegian adolescents in the present study (see Table 2, Section 5.1).

Sociopsychological factors favor children's language acquisition in many ways. Young learners receive plenty of varied input, not only natural input but also formal education (Ellis, 2008, p. 32; Ortega, 2018, p. 419–420; see also Mustonen, 2015, p. 262–263). They also have fewer psychological barriers, such as a looser relationship with their L1 and original culture (Baier, 2007, p. 32; Lindberg, 2008, p. 53–54). Studies have revealed that children at school age (between eight to eleven years) learn language faster, and, on average, perform in many tests better than children under school age, especially where knowledge of grammar is concerned (see Hvenekilde *et al.*, 1998; Kauppila, 2006; Ellis, 2008).

Older children can benefit from explicit instruction, because they are cognitively more mature and have better analytical skills and prior knowledge (Lindberg, 2008, p. 53). Further, they are motivated to learn their L2 as they need it in multiple settings. Besides, older children are more exposed to L2 during the school day and get more varied linguistic stimuli from their peers. Children under school age do not yet have the same need for communication as older children (Kauppila, 2006). On the other hand, adult learners appear to learn inflections and sentence structures better than younger learners in the early stages of their language studies (Ellis, 2008, p. 19–20; Andrew, 2012, p. 7–8). They have an extensive

²⁶ Hartshorne *et al.*, (2018) claim, however, that the age of offset for grammar-learning ability is much later than previously speculated, at around 17 years.

vocabulary in their L1 and knowledge of structures, at least in their L1 and possibly also in other languages, which facilitates language learning (see also cross-linguistic influence in Section 4.2). In spite of the many benefits of adulthood, children, in the long term, attain more nativelike proficiency than adult learners (Ellis, 2008, p. 20; Lindberg, 2008, p. 53). Study IV of this thesis looks at the age factor in L2 acquisition, particularly in mastering Norwegian idioms.

3.2.2.2 Individual factors

In addition to age, many other individual factors are bound to influence bilingual development, but only affective factors (language-related attitudes, motivation) and ethnic and linguistic identities are discussed in this thesis (Study I). People live in speech communities of different sizes that are held together by frequency of social interaction patterns (including online speech communities, see e.g., Morgan, 2014, p. 98). A group of people share not only a particular language but also a set of attitudes, values and expectations regarding the use of this language as well. Speech communities help people define themselves as individuals and community members.

Attitudes towards one's own ethnic group and the majority population, as well as one's ethnic identity, i.e., to which group a person thinks they belong to (minority vs. majority group) and how others perceive them, influence an individual's motivation to learn and use their L1 and L2 (Bijvoet, 1998; Karhunen, 2004; about acculturation, see e.g., Engen, 1998; Dörnyei *et al.*, 2004; Ellis, 2008; Grosjean, 2015).²⁷ Ethnic identity may even be internally contradictory (Norrby & Håkansson, 2007, p. 30–31) and may vary, depending on one's age and life situation (Baier, 2007, p. 27–34; Aronin & Singleton, 2012, p. 94; Aalto, 2015, p. 6; see also Ellis, 2008; Piippo & Vaattovaara, 2016; Imppola, 2020). Language users may also identify with multiple languages in various stages of life, and they can both learn and forget languages during their life (Baier, 2007; Ellis, 2008; Montrul, 2016a). In addition to attitudes towards L1 and L2, linguistic identity is closely related to language skills (Lainio, 1989; Iskanius, 2006). Linguistic and ethnic identities are addressed in Study I.

²⁷ SSB conducts an annual survey of the Norwegian population's attitudes to immigration and immigrants. The latest survey (2019) demonstrated that the population has more positive attitudes towards immigrants. The survey also showed that few Norwegians express skepticism of Sami and Kven people (Tyldum, 2019, p.36–37).

3.2.2.3 Language use and family language policy

Bilingual individuals normally use their languages for different purposes with different people in various domains of life, e.g., home, mass media, free time (cf. translanguaging Section 3.1). Language choice is context-bound, i.e., bilingual speakers change the language according to different circumstances: participants, setting and topic of discourse (Grosjean, 1982, p.128–130, 2015, p. 65; Romaine, 1995, p. 30–33; Baker & Wright, 2017, p. 4–6; see also Huss, 1991; Berglund, 2008; Kolu, 2017; Serratrice, 2018). How often bilingual persons can use each of their languages in different domains (Study I) has an impact on their language abilities (see Studies II–IV). The use of one’s L1 is often limited to few contexts in an L2 setting, especially if there are only a few people who speak the same minority language.

The motivation to maintain and use L1 is stronger if a language user has concrete goals, e.g., attending a summer course, planning to study in an L1 environment or taking a matriculation exam in an L1 (Caldas, 2006).²⁸ Grosjean (1982) suggests that using the minority language at home is the best method for helping children to become bilingual. Similarly, an L1 has a better chance of maintenance and development if both parents speak the same minority language as the situation is for the Finnish-Norwegian adolescents in the presents study, and besides, the language is actively used at home (Kovács, 2004; Straszer, 2011; Rydenvald, 2017). It is well documented that it is best for a child's linguistic development if the parents speak the language they know best, most often the parents’ L1 (Wong Fillmore, 1991, p. 343; Hvenekilde *et al.*, 1998, p. 41). In this thesis, it is assumed that knowledge of language emerges from language use. This issue is discussed in Chapter 2.

Family language policy (FLP) plays an important role in bilingual development (Huss, 1991; Cummins, 2001; Palviainen, Lehtonen & Valli, 2012; Schwartz & Verschik, 2013; see also Caldas, 2006; Lanza, 2007; Berglund, 2008; Niiranen, 2008; Namei, 2012). FLP examines language policy in relation to language use and language choice within the home among family members (King & Fogle, 2013; Palviainen, 2020). It is based on common 'rules' between parents, but children are also actively involved in designing the language policy (Fogle, 2013; Palviainen & Boyd, 2013; Tigert, 2017). At the same time, FLP is affected by the general sociocultural context and the language policy of each country. For

²⁸ Male Finnish citizens from 18–29 years living in Norway have to complete their military service in Finland.

example, Finland's positive attitude towards bilingualism²⁹ (Sundman, 1999, p. 47; Palviainen & Boyd, 2013, p. 230–231; Imppola, 2020, p. 59) promotes parents' conscious planning more than is the case in many other countries, where the appreciation of minority languages³⁰ is less positive (Spolsky, 2009; Namei, 2012). FLP is a dynamic across the life span (Palviainen *et al.*, 2012, p. 6; Schwartz & Verschik, 2013, p. 17). It may change due to different external circumstances, such as summer vacations in parents' country of origin, grandparents' visits, and starting school (Palviainen & Boyd, 2013, p. 225). These events often have an effect on children's language skills. For example, summer holidays in the parents' home country, in this study in Finland, have been found to give a significant boost to a less used language, Finnish (Caldas, 2006, p. 57–59; Niiranen, 2008, p. 332).

Language choice is person specific. In many immigrant families, as in the Finnish-Norwegian families in this study (see Table 6, Section 5.3.2), children use their L1 with their parents but speak their L2/the majority language with their siblings (Boyd, 1985; Janulf, 1998; Romaine, 1995; Tuomela, 2001; Niiranen, 2008; Namei, 2012).³¹ An older sibling has an important role in the language choice pattern, but also age, gender, family size and birth order and relationships play a part in the process (Berglund, 2008; Spolsky, 2009; Barron-Hauwaert, 2011; Unsworth, 2016; see also Györky-Ullhom, 2010). In most cases, language choice patterns change when children start day care and school.³² Contact with majority language peers increases and L2 takes over. Due to that, L2 most often becomes a stronger language³³ (Grosjean, 2015, p. 110). At the same time, the amount of linguistic exposure to L1 decreases (Spolsky, 1989; Kulbrandstad, 1997; Tuomela, 2001; Halmari, 2005; Kopeliovich, 2013; Montrul, 2016a; Tigert, 2017; Armon-Lotem & Meir, 2018). Further, homework and hobbies

²⁹ Finnish youngsters can complete their entire education in Finnish or Swedish, from day care to university. Immigrant students are given mother tongue or home language instruction at comprehensive school.

³⁰ Minority languages have different status in Norway. The status of the Finnish language is probably better compared to many other minority languages as the Kven language is an official minority language since 2005 (cf. Finnish in Sweden, see e.g., Kangassalo, 2004; Bijvoet, 2020).

³¹ Not all parents find it important that children maintain their L1 in an L2 environment. Some parents begin to use the main language with their child early in the hope that the child will learn a new language as quickly as possible (Spolsky, 2009; Straszer, 2011; Namei, 2012).

³² Previous research has demonstrated that day care in a majority language is an essential factor in the development of one's L2 (Håkansson 2003, p. 175–177; Golden, 2005, p. 158–160; Øzerk, 2008b, p. 164).

³³ A stronger language refers to the language in which a bilingual speaker is more proficient (see Kupisch & van de Weijer, 2016, p. 174).

reduce the time spent on the L1 (Grosjean, 2015; Fulland, 2016). Children may retain receptive skills in their L1, but may lose their ability to communicate in their L1 within two to three years of starting school if they are not exposed to it (Cummins, 2001). For both children and adolescents, it is important to have opportunities to speak their L1 with other persons of the same age so that they learn age-appropriate language (Barron-Hauwaert, 2011, p. 97; see also Saville-Troike, 2003, p. 234–238; Kupisch & van de Weijer, 2016, p. 179–180). In practice, it may be difficult if there are few children and adolescents in the community who speak the same minority language (Håkansson, 2003, p. 38, 58; Teiss, 2007, p. 19; see also Huss, 1991). This is the case for Finnish-Norwegian adolescents in the greater Oslo area.

It is normal to find bilinguals who can only read and write in one of their languages (Grosjean, 2015, p. 68–69). Not all immigrant parents (this also applies to some Finnish parents in the present study) consider L1 proficiency so important that they would encourage their children's writing and reading in L1 (Namei, 2012; Imppola, 2020; see also Cummins, 2001; Fulland, 2016; Baker & Wright, 2017). Nevertheless, reading and writing skills will not be developed, if they are not needed in a language (Grosjean, 2015, p. 68). Literacy facilitates a child's ability to maintain and develop their L1, compared to a child who is not able to read and write in their L1 (Tigert, 2017). Literacy opens up opportunities to read literature and magazines, take part in current events in one's L1 community and, through social media channels, maintain contacts with other children and adolescents speaking the same language around the world (Mäkelä, 2007, p. 14).

Being able to read in one's L1 is essential for language development, as it develops vocabulary and language structures (Enström, 2013, p. 180).³⁴ Watching television and YouTube videos, listening to music, and playing video games occur more often in an L2 or other languages than in L1 (Niiranen, 2008; Namei, 2012). However, the use of digital materials and video calls such as Skype and FaceTime in an L1 has a beneficial effect on the minority language (Study II), as most children are motivated to use these kinds of materials (Tigert, 2017; see also Palviainen, 2020). Today, visual and digital literacy is seen as an important new area of literacy, which also supports more traditional skills like writing and reading (Tigert, 2017; Ortega, 2018).

In this thesis, the opportunities to use one's L1 in various domains in an L2 setting are considered crucial for maintaining and developing one's L1. However,

³⁴ Early literacy activities are known to promote vocabulary growth in monolinguals (Serratrice, 2018), but is also important for L1 development in an L2 environment (Tigert, 2017).

it may not be within reach for all bilingual families despite FLP and other efforts (Serratrice, 2018). These issues are addressed in Study II.

4 Multi-Word Units (MWUs)

This chapter focuses on MWUs. The first point is to consider how MWUs are defined in the research literature, and what their place is in the field of linguistics. Secondly, the central issues to the topics of this thesis, idiomaticity and cross-linguistic influence, are presented. Finally, the ways in which MWUs are acquired, processed and represented in the brain are presented.

4.1 What are MWUs?

Knowing a language involves acquiring a high proportion of conventionalized expressions or formulaic sequences (Taylor, 2002, p. 332; Wray, 2002, p. 5; see also Ellis, 2012). A considerable amount of native speakers' language contains such established word strings, or chunks.³⁵ The terminology related to conventionalized expressions, *formulaic language*, is abundant and not well established in the research literature. Terms like *chunks*, *fixed expressions*, *formulas*, *prefabricated routines and patterns*, and *ready-made expressions* are commonly used (see e.g., Wray, 2002, p. 9). Some of these terms can be regarded as synonyms. For the most part, however, their meanings overlap only partially. In this thesis, the term *MWU* is used as a general term including word strings with different degrees of syntactic fixedness and semantic compositionality (cf. Schmitt & Carter, 2004, p.2).

Fixed semantic units (*more or less*), particle verbs (*break up*), speech formulas (*I mean*), situation-bound utterances (*Have a nice day*), collocations (*a large number*) and idioms (*all ears*) can all be considered formulaic sequences (Nattinger & DeCarrico, 1992, p. 1–2; Wray, 2002, p. 62–65; Schmitt, 2010, p. 118).³⁶ These

³⁵ Erman and Warren's (2000) corpus studies based on samples taken from spoken and written English indicated that more than half of the texts consisted of conventional elements of more than one word (see also Schmitt, 2010, p. 40).

³⁶ Vetchinnikova (2014, p. 104) notes that there does not seem to be a consensus in research on what kind of patterns constitute MWUs. Similarly, Schmitt & Carter (2004, p. 2) claim that formulaic sequences seem to exist in so many forms that it is presently difficult to develop a comprehensive definition on the phenomenon.

word strings occurring together are typically stored and retrieved as chunks from the mental lexicon (see Section 4.3). They tend to convey holistic meanings that are more than the sum of the individual parts and operate as a single unit (Kecskes, 2015, p. 30). Some MWUs are relatively general, whereas others, such as idioms or collocations, have a more restricted meaning (Hüning & Schlücker, 2015, p. 2). MWUs can be set on a continuum from completely fixed expressions (*by and large*) to ones allowing for a great deal of variation (*burn one's bridges/boats*) on the basis of their degree of semantic compositionality, syntactic fixedness or lexicalization (see e.g., Wray, 2002; Schmitt & Carter, 2004; Wulff, 2008; Ellis, 2012; Hüning & Schlücker, 2015; Kecskes, 2015; Titone, Columbus, Whitford, Mercier & Libben, 2015; Conklin & Carrol, 2019).

In this thesis, the focus is on three different formulaic sequences, namely PVs, idioms, and verbs of sufficiency. These MWUs have been chosen as the subject of the study because they occur frequently in the language of advanced language users as the participants in this study represent, whereas they occur less often or not at all at lower language proficiency levels. However, previous studies (Pawley & Syder, 1983; Sjöholm, 1995; Enström, 1996; Laufer, 1997; Ekberg, 1999; Wray, 2002; Mäntylä, 2004; Golden, 2005; Siyanova & Schmitt, 2007; Prentice, 2010; Ivaska, 2014) have shown that the idiomatic use of these kinds of MWUs is also challenging for advanced language users, for example, adopting small semantic differences of verbs of sufficiency. It can be assumed that if the Finnish-Norwegian adolescents master different types of MWUs well, it is a good measure of their language proficiency.

Traditionally, combinations of two or more words, MWUs, have been regarded as part of lexicology, despite the focus on word combinations rather than individual words. Today, the linguistic discipline that deals with MWUs is considered to belong to the field of phraseology. It is a relatively young branch of linguistics in Western Europe and the United States, albeit similar studies have long been carried out in Eastern Europe and Russia (the Soviet Union), and their number has been growing since the 1990s. An overwhelming proportion of the studies on the use of MWUs is corpus- and computer-based (Schmitt, 2010; Wulff, 2019).

MWUs are often defined and identified in relation to their features. MWUs are lexical units larger than one word. MWUs are varying form-meaning pairs or constructions (see Chapter 2), including semantic, syntactic, and pragmatic aspects. They also vary in complexity, abstractness and frequency (Langacker, 1987, p. 25–27; Wray, 2002, p. 62–65; Croft & Cruse, 2004, p. 229–237, 247; Bybee, 2006, p. 715; Wulff, 2019, p. 21).

Many MWUs show *polysemy* (Schmitt, 2010; Golden, 2014). They can bear both literal and figurative meaning (e.g., *throw in the towel* and *run into*). Especially high frequency words such as prepositions *up* and *out* or verbs *take* and

go have multiple meanings (Taylor, 2002, p. 29, 470; see also Paulmann, Ghareeb-Ali & Felser, 2015, p. 246; cf. Golden, 2005). Many MWUs are weak in their meaning and highly context dependent, e.g., *leave the bank* (Prentice & Sköldberg, 2013). MWUs differ from each other in terms of their semantic compositionality, i.e., the meaning is different from the sum of the meanings of the words it contains (Nenonen, 2002, p.17; Taylor, 2002, p. 97; Boers & Webb, 2015, p. 369). The notion of compositionality is closely related to transparency, that is, how easily figurativeness is to be detected. Generally, a distinction is made between MWUs that are transparent (*have a roof over your head*), semi-transparent (*have a sharp tongue*), or fully opaque (*kick the bucket*).

One often cited criterion is frequency of occurrence, specifically, if a MWU is frequent in a corpus, this indicates that it is conventionalized/institutionalized³⁷ by the speech community, at least to some extent (Schmitt & Carter, 2004, p. 2; Sköldberg, 2004; Cieślicka, 2015). While some MWUs are highly numerous like PVs (*put on/off*), most individual MWUs, e.g., idioms, are infrequent in actual language use (Schmitt, 2010, p. 57; Boers & Webb, 2015, p. 372, 374; Siyanova-Chanturia & Pellicer-Sánchez, 2019, p. 4).

Traditionally, MWUs have been regarded as syntactically fixed expressions. However, corpus based studies have shown that the degree of lexical and syntactic fixedness can vary (see e.g., Moon, 1998; Sköldberg, 2004; Wulff, 2008). Many MWUs tolerate variation so that it is possible to replace individual words quite freely and still maintain the same figurative interpretation (*ruoka meni väärään kurkkuun / meinasi aamukaffet hörähtää väärään kurkkuun / tässä menee turskat väärään kurkkuun*).³⁸ Yet, some MWUs are restricted regarding syntactic operations, such as anaphora, passivation, relative clause formation, topicalization and modification (Moon, 1998).

4.2 Idiomaticity and cross-linguistic influence

There is no clear definition of idiomaticity, and the term is used in several ways in the research literature (Wiktorsson, 2003, p. 1; Wulff, 2008, p. 8–10). In the current research context, *idiomaticity* refers to language use that is specific to a certain language and is considered natural by native speakers (Smiskova, Verspoor &

³⁷ By *conventionalization* is meant frequent and repeated use of certain lexical units for particular purposes in a speech community (see e.g., Smiskova, Verspoor & Lowie, 2012, p. 3; Kecskes, 2015, p. 31). These kinds of units are often also lexicalized.

³⁸ In English ‘the food went into the wrong throat’/ ‘morning coffee almost went into the wrong throat’/ ‘here goes the cod into the wrong throat’. The first expression is the most conventionalized and lexicalized; the second (Jensen, 2019) and the third (Silvennoinen, 2019) are modifications.

Lowie, 2012). Further, idiomaticity is seen as the ability of language users to interpret and use MWUs in certain situations in a manner appropriate in their target language community (Yorio, 1989, p. 62–64; Taylor, 2002, p. 549). In the present study, the focus is on similarities and differences between Finnish-Norwegian adolescents and Finnish and Norwegian L1 speakers, as far as idiomaticity and the proportion of MWUs in their language are concerned.

In order to achieve nativelike proficiency (see Section 3.2.2), language users must be able to appropriately use the many and varied MWUs that exist in language (Schmitt & Carter, 2004, p. 10; Schmitt, 2010, p. 142; Kecskes, 2015, p. 29; Siyanova-Chanturia & Pellicer-Sánchez, 2019, p. 1). Pawley and Syder (1983, p. 193) claim that only a small proportion of the possible means of expression is accepted as idiomatic by native speakers (*nativelike selection*; see also Wray, 2002, p. 72–74). L2 users have problems choosing MWUs that are the most appropriate in a given context (Pawley & Syder, 1983; Sjöholm, 1995; Wiktorsson, 2003; Abrahamsson & Hyltenstam, 2009; Prentice, 2010; Smiskova *et al.*, 2012; Ivaska, 2014; Vetchinnikova, 2014). In the same way, they produce utterances that are grammatically correct but sound unidiomatic.³⁹ This is due to the fact that L2 users have not attained nativelike competence and fluency in their L2 yet (*nativelike fluency*; see Pawley & Syder, 1983). It is often argued that idiomaticity is one of the characteristics that distinguish non-native speakers from native speakers, even at an advanced level of proficiency (Prentice & Sköldberg, 2013, s. 205; see also Ivaska, 2014).⁴⁰ It can also be assumed that L1 users living in an L2 environment and having limited access to their L1 have similar challenges in an L1 but also in an L2 depending on exposure to and use of languages.

Previous research has revealed that non-native speakers use an overall smaller number of MWUs than native speakers (Ekberg, 1996, 2013; Wray, 2002; Hyltenstam *et al.*, 2014; Kecskes, 2015; see also Conklin & Carrol, 2019; Wulff, 2019). When compared to native speakers, some MWUs are overused or underused and others simply misused by non-natives (Enström, 1996; Schmitt & Carter, 2004; Schmitt, 2010). When L2 users' proficiency improves, they also use more MWUs and their language becomes more accurate and appropriate, i.e., idiomatic in the context (Wiktorsson, 2003; Mondor, 2008; Ivaska, 2014; Vetchinnikova, 2014).

MWUs in L2 acquisition and use are of particular interest to L2 researchers, as the use of conventionalized expressions is associated with many social situations and the way one copes with them in a speech community (Wray, 2002; Schmitt &

³⁹ Idiomaticity is often seen as more important than being able to produce grammatically correct expressions (Norrby & Håkansson, 2003, p.130–131; Kecskes, 2015, p. 31).

⁴⁰ Schmitt (2010, p. 159) points out that MWUs can be a very good class of lexis to use when distinguishing between very advanced language users.

Carter, 2004; Schmitt, 2010; Conklin & Carrol, 2019). Using MWUs has practical purposes, for example mutual communication would be more successful if the speakers in a speech community used the same inventory of MWUs (Wray, 2002, p. 52–55, 94). Besides, using MWUs reduces the processing effort as retrieving formulaic sequences requires less mental effort than composing an utterance word for word (see e.g., Schmitt & Carter, 2004, p. 5; Kecskes, 2015, p. 29).⁴¹ All in all, L2 speakers would profit from using more MWUs, which contribute to greater nativelikeness and fluency (Wray, 2002; Wiktorsson, 2003; Vetchinnikova, 2014; see also Bardovi-Harlig, 2019). In order to use language idiomatically, a person must not only know the form-meaning structure of MWUs but also pragmatics (Vetchinnikova, 2014; Bardovi-Harlig, 2019).

One of the challenges that language users face, is dealing with MWUs that overlap, in one way or another, with word combinations in their L1 or another languages (Laufer & Eliasson, 1993; Mäntylä, 2004). *Cross-linguistic influence* (CLI)⁴², i.e., influence from one of a bilingual's languages on the other, is an unavoidable fact of having more than one language at one's disposal, and an essential part of being bilingual (Nicoladis, 2016, p. 220; Ortega, 2018, p. 432; see also Kolehmainen, Meriläinen & Riionheimo, 2014).

The components of one language (morphological, morphosyntactic, syntactic, and semantic) that are produced in another language may lead to odd expressions.⁴³ It is influenced by language regularities and both individual and situational factors (Alantie, Korpijaakko-Huuhka & Rantala, 2017; see also Paradis *et al.*, 2011).⁴⁴ Cross-linguistic patterns that can be predicted at the group level may hold for some individuals but not others (Juvonen, 2000).

Language users strive to make use of any similarities to prior linguistic knowledge they can perceive.⁴⁵ They tend to rely on their already-established lexical and conceptual networks in their L1 or on other familiar languages (Schmitt, 2010, p. 48–49). They do so both unknowingly and strategically (Cieślicka, 2015, p. 215; Ortega, 2018; p. 415; see Section 4.3). CLI is a two-way phenomenon that can range from an L1 to an L2 or from an L2 to an L1 (Yip &

⁴¹ Kecskes (2019) argues that L2 users want to achieve as much as possible with the least possible effort both in production and comprehension.

⁴² The term cross-linguistic influence is theory-neutral opposed to transfer (Sharwood Smith & Kellerman, 1986, p. 1).

⁴³ CLI has been observed in all linguistic subsystems, e.g., phonological, orthographical, lexical, syntactic and pragmatic etc. (Jarvis & Pavlenko, 2008).

⁴⁴ CLI is not linearly related to proficiency (Ortega, 2018, p. 417).

⁴⁵ Vetchinnikova (2014) claims that not quite nativelike phraseological units in learner production should not be explained in terms of the differences between L1 and L2 acquisition and processing but by the circumstances of L2 use, i.e., the amount of input received by the user.

Matthews, 2006; Jarvis & Pavlenko, 2008; Athanasopoulos, 2011; Ortega, 2018). The effect of the L2 on the L1 (see Study II) has been studied less than that of the L1 on the L2 (see Studies III and IV), but previous studies have shown that a language contact often leads to a change and adaptation to previous language competence (Bolonyai, 2000; Montrul, 2016a; Nicoladis, 2016).⁴⁶

The influence of the later acquired language, L2, on the L1 increases with longer residence time and schooling (Juvonen, 2000). Kangassalo (2004) found that the second and third generation Swedish Finns had more CLI from the Swedish language to Finnish than the first generation (cf. Tuomela, 2001). Likewise Halmari's (2005) longitudinal study of two American-Finnish adolescents revealed that the effect of English on their L1 Finnish was stronger on lexicon than morphosyntax. CLI, i.e., elements of one language produced in another language subsumes transfer, interference, avoidance, borrowing, overuse, facilitation and L2-related aspects of language loss (Sharwood Smith & Kellerman, 1986, p. 1; Ellis, 2008, p. 345–359; Montrul, 2016a, Chapters 3 and 4). Findings from previous research have revealed that L2 speakers overuse some elements (Enström 1996; Mondor, 2008) and they may also extend the semantics of an L2 word according to L1 semantics, e.g., *mennä Ruotsiin* 'go to Sweden', **gå til Sverige* in Norwegian (Mäntylä, 2004; Golden, 2014).⁴⁷

Usually, the closer the two languages are to each other typologically, the stronger the effect of CLI. When there is a great deal of similarity between meanings and forms between two languages, e.g., words and MWUs, language users may benefit from similarities between L1 and L2 (Ringbom & Jarvis, 2009; cf. Arabski, 2006). The L1 effects of Swedish and Finnish learners of L2 English lexis are investigated by Jarvis (2000). He found that Swedish learners of L2 English did better in vocabulary learning than Finnish learners, Swedish being closer than Finnish to English. The L1 effects could be traced back to differences in the underlying Finnish and Swedish concepts. The role of positive transfer is as important in comprehension as it is in production. Ringbom (1987) demonstrated that Finnish speakers transferred less from their L1 to English than Swedish-speaking Finns. Ringbom (1992, p. 88) also pointed out that Swedish-speaking Finns outperformed the Finnish-speaking Finns in both reading and listening comprehension in English because the closer proximity of Swedish to English was an advantage.

⁴⁶ Quite often, however, it seems difficult to prove the influence of CLI (Alantie *et al.*, 2017).

⁴⁷ The effect of CLI has not been defined unambiguously (see Sajavaara, 2006). Another debate is how to measure the effects of CLI, e.g., errors, facilitation (positive transfer), avoidance, over-use (Ellis, 2008).

Previous research has also revealed that knowledge of L2 idioms is strongly affected by the degree of their similarity to L1 translation equivalents (García, Cieślicka & Heredia, 2015, p.152; see Study IV). When idioms are the same across the languages, it may facilitate their idiomatic use (Conklin & Carrol, 2019, p. 64). Conversely, a language user of further languages can get influenced by one or more prior L2s, which creates more complex patterns of CLI (Gabryś-Barker, 2006; Hammarberg, 2010). Finnish adult learners of Norwegian (Study IV) can receive CLI from Swedish that in its structure and vocabulary is more similar to Norwegian than their L1 and this may cause negative transfer (Kaivapalu, 2005; Jessner, 2006; De Angelis, 2007; Ringbom, 2007; Ortega, 2018; see also Sjöholm, 1995). Similarly, if MWUs lack an equivalent in language users' L1, difficulties may arise. Several studies have demonstrated avoidance of PVs (*drop in, make up*) if they do not occur in one's L1 (Siyanova & Schmitt, 2007; Yildiz, 2016). Sjöholm (1995) revealed that Finnish speakers had more problems with English PVs than did Swedish-speaking Finns. This was partly explained by the fact that PVs are not as common in Finnish (Study III). Likewise, Flint (1980) found that English speakers had difficulties with verbs of sufficiency in Finnish (e.g., *kehdata* 'to be too embarrassed'), as these verbs do not typically have equivalents in English.

In the present study, it is assumed that CLI can assist in mastering verbs of sufficiency, PVs and idioms in Finnish or Norwegian. As there are similarities in meanings and forms between two languages, language users may benefit from positive transfer. On the other hand, CLI can also result in negative transfer. The semantics of a word or expression of L2 may be influenced by corresponding word or expression of L1. CLI and MWUs equivalents in Finnish and Norwegian are examined in more detail in Studies II–IV.

4.3 MWUs in L1 and L2 acquisition and processing

In recent decades, research on MWUs has become an important part of psycholinguistics, dealing with the acquisition and comprehension of MWUs in an L1 and an L2, as well as how MWUs are represented in the mind (Cacciari & Tabossi, 1988; Wray, 2002; Carrol & Conklin, 2014; Titone *et al.*, 2015). There is still relatively little research on how L2 learners deal with MWUs, and many questions remain unanswered (Heredia & Muñoz, 2015; see also Siyanova-Chanturia & Pellicer-Sánchez, 2019). As the present study is not a psycholinguistic oriented research, the subject is dealt with briefly, and neurolinguistic research is excluded.

Wray's (2002) psycholinguistic explanation is that the storage mechanisms of the mental lexicon are different for L1 and L2 acquisition processes. For L1 users, MWUs are acquired, stored and retrieved as chunks from memory at the time of use. Native speakers do not usually break them down more than necessary (*the needs-only analysis principle*, Wray, 2002, p. 130–132). If an L2 is acquired early, as the case is for the majority of the participants in the present study, the holistic-analytical processing seems not to differ from that of an L1 user (Wray, 2002, p. 150–157). However, post-childhood L2 speakers learn their L2 more analytically than young children and tend to focus on separate words rather than holistic phrases and then try to build them up (Wray, 2002, p. 206). According to Wray (2002, p. 132–135) adult learners (Study IV) appear to undergo the same development as children learning their L1. At the beginning of their language development, they rely on unanalyzed MWUs.⁴⁸ From holistic learning, they then move into a phase of analytical processing, and then again back to a more automated language use. L1 learners achieve a balance between the application of grammar rules and the use of unanalyzed MWUs in early adulthood (Levorato, 1993, p.114–119; Wray, 2002, p. 135).

Alternative explanations highlight that bilingual processing bears many similarities to monolingual processing (Nattinger & DeCarrico, 1992). Children learning their L1 use unanalyzed chunks, or holophrases (cf. Tomasello, 2003, 36–40). Most likely, the same applies to L2 learners as well (Vetchinnikova, 2014; Siyanova-Chanturia & van Lancker Sidtis, 2019). However, older L2 learners possess tools to analyze prefabricated language, whereas a child acquiring their L1 does not have that skill (Ellis & Cadierno, 2009, p 124–125).

Skehan (1998, pp. 88–89) assumes that there are two interacting systems with different roles in an individual's language development. MWUs are represented as unanalyzed units in the mental lexicon (*an example-based approach*). These memorized chunks can be produced quickly without the conscious use of grammar rules. On the other hand, the language produced by rules (*the rule-based system*) drives the learning process forward. As L2 users store smaller lexical units in memory, this creates a greater need for rule application and analysis of MWUs (see Wulff, 2019). Also Bybee (2006, 2010) supposes that MWUs are stored in memory as whole lexical units. Multiple units are linked to other lexical units that contain partially the same lexical, semantic and grammatical components and form a network. This enables a language user to access a selection of MWUs within the same system, and these can be analyzed in smaller parts if necessary.

⁴⁸ Schmitt & Carter (2004, p. 6) claims that many MWUs are partially known for a number of exposures until the point where they become mastered.

The above concepts in language processing have similarities with Sinclair's (1991, p. 109–115) *idiom* and *open-choice principles*. Language is seen as the result of a very large number of complex choices. According to Sinclair (1991), natives operate mainly on idiom principles, i.e., they have a large number of holistically learned MWUs, word strings (see also Erman & Warren, 2000; Hyltenstam *et al.*, 2014). L2 users, in turn, are more analytical and have a greater need for the open-choice principle (Titone *et al.*, 2015, p. 181). Open-choice principle means that at each point where a unit is completed (a word or a phrase or a clause), a large number of choices opens up and the only restraint is grammaticalness (Sinclair, 1991, p.109–110). The open-choice principle is invoked in L1 only when the idiom principle fails, or is blocked for some reason (Kecskes, 2019, p. 142–143).

L2 speakers use fewer MWUs than native speakers, and when using them, they tend to be even more creative than L1 speakers (Ekberg, 1999, 2013; Wray, 2002; Prentice, 2010; see also Conklin & Carrol, 2019; Wulff, 2019). Advanced non-native speakers who have access to grammatical rules prefer to create utterances of their own rather than use prefabricated chunks (Kecskes, 2015, p. 39). This creativity is one reason why advanced L2 users produce utterances that are grammatically correct but not used by native speakers (Pawley & Syder, 1983; Wray, 2002).

MWUs form a heterogeneous group with diverse characteristics including familiarity, literal plausibility⁴⁹, semantic transparency, and frequency, to name some (see Section 4.1). Psycholinguistic research has shown that these issues affect processing in L1 and L2. L1 speakers usually comprehend familiar idioms (e.g., *throw in the towel*) or PVs (e.g., *look up*) with their figurative meaning faster than literal ones (Paulmann *et al.*, 2015). A figurative expression is accessed directly (the *Direct Access Model*), without first requiring initial literal comprehension (Heredia & Muñoz, 2015, 91, 96). In contrast, L2 users with lower proficiency seem to process the literal meaning first (Cacciari & Tabossi, 1988; Cieślicka, 2015; Heredia & Muñoz, 2015; Siyanova-Chanturia & van Lancker Sidtis, 2019). This again suggests that idiomatic MWUs are perceived as wholes. Semantic transparency appears to facilitate recognition and production of MWUs so that transparent or semi-transparent MWUs pose less challenges for L2 users than opaque ones (Boers & Webb, 2015, p. 368–369; Cieślicka, 2015, p. 216–218; Siyanova-Chanturia & Pellicer-Sánchez, 2019, p. 5; see also Sjöholm, 1995, Irujo, 1986; Mäntylä, 2004; Schmitt & Carter, 2004). More frequent MWUs are also reported to take less time to comprehend than lower frequency items (Schmitt,

⁴⁹ Literal plausibility refers to an idiom's potential to have a literal interpretation (Titone *et al.*, 2015, p. 171).

2010, p. 63; Cieślicka, 2015, p. 212). This is due to the fact that the most frequent MWUs are more lexicalized and require less conceptual analyzing, as they are stored as lexical units and are not analyzed word for word (Cieślicka, 2015, p. 221–222). These issues are discussed in Studies II–IV (see Chapter 6).

In L1 as well as in L2, other strategies are also used for making sense of MWUs. The presence or the absence of the context has an influence on decoding the meaning of an unfamiliar sequence (Liontas, 2015, p. 314). However, a less advanced language user with a limited vocabulary is not able to benefit from the context as effectively as a more advanced language user with a broader vocabulary (Golden, 2005, 2009; Enström, 2013; Boers & Webb, 2015; Liontas, 2015). This is because contextual clues may contain unknown and/or low frequency words.

Previous research has shown that the individual language systems in the multilingual mind are stored and activated together, i.e., multilinguals do not use one language at the time, but monitor their linguistic systems simultaneously (Spöttl & McCarthy, 2004, p. 193; Jessner, 2006, p. 123; see also Bialystok, 2001; García & Li Wei, 2014). Thus, L2 speakers use their existing L1 knowledge or that of another known language when interpreting MWUs in L2 (Jessner, 2006; Carrol & Conklin, 2014; Cieślicka, 2015; Carrol, Conklin & Gyllstad, 2016). The consequence is that processing of the items already familiar in L1, e.g., collocations, idioms and PVs, is faster in L2 (Conklin & Carrol, 2019, p. 65, see also Schmitt, 2010 p. 187). It is an advantage for a language user if word combinations are idiomatic in both languages, and if they share form and meaning across the languages (Studies II–IV).

5 Data and method

The data and method used in this thesis are presented in sections 5.1 and 5.2. Various analytical methods, in connection with summaries of each study, are discussed in more detail in Chapter 6. In section 5.3, linguistic background and language choice and use of Finnish-Norwegian adolescents are presented. Finally, the principles of research ethics guiding this study are dealt with in section 5.4.

5.1 Participants

The four sub-studies involved a relatively large number of participants (see Table 5). Finnish-Norwegian adolescents' mastery of MWUs was compared with six Finnish L1 speakers (Study II) and 16 Norwegian L1 speakers (Studies III and IV) of the same age. In addition, 40 adult L2 speakers of Norwegian (L1 Finnish) and 20 adult L1 speakers of Norwegian participated in Study IV.

There were two criteria for choosing Finnish-Norwegian adolescents for the study. Firstly, the participants had learned Finnish as their L1 (see Chapter 1), they could speak Finnish and Norwegian and they were living in the greater Oslo area (three municipalities in the counties of Oslo and Viken after the county reform January 1st, 2020). Secondly, both the parents of the participants had to be Finnish speakers who had moved to Norway as adults.⁵⁰ Thus, the study differs, for example, from Niiranen's (2008) study carried out in northern Norway, where one of the parents was a Norwegian speaker (see also Koskinen & Norman, 1993; Hjulstad Junttila & Andersson, 1994). The group of participants consisted of ten families. The parents of three families came to the country as early as the 80s, four in the 90s, two in the 2000s and one family in the 2010s.

A total of 16 Finnish-Norwegian participants (ten girls and six boys) took part in the study. This is shown in Table 2, which presents all the Norwegian-Finnish participants with a letter-number code. For each participant, the table shows which

⁵⁰ One participant had a Finnish-Swedish father, who also spoke Finnish. All the parents also speak Norwegian, Swedish and English.

sub-study they participated in, what age they were during the study, where they were born and participation in day care, as well as their self-assessed strongest language and other languages spoken. Participants FN 3 and FN 4, FN 5 and FN 6, FN 8 and FN 9, FN 10 and 11, FN 13 and 14, and FN 15 and 16 are siblings.

Table 2. Finnish-Norwegian participants in the sub-studies.

Participants	Studies	Age during the study	Place of birth	Day care	Self-assessed strongest language ⁵¹	Other languages
FN 1 girl	I, IV	I: 14–22 years, IV: 23 years	Norway	Norwegian day care at the age of 18 months	Norwegian	English, French
FN 2 girl	I, IV	I: 13–21 years, IV: 23 years	Finland; moved to Norway at the age of seven	Finnish day care at the age of two years	Norwegian	English
FN 3 girl	I, IV	I: 10–18 years, IV: 20 years	Finland; moved to Norway at the age of four	At home until starting school at the age of six	Norwegian	English
FN 4 boy	I, II, IV	I: 11–19 years, II: 23 years; IV: 21 years	Finland; moved to Norway at the age of five	At home until starting school at the age of six	English	German, Chinese
FN 5 girl	I, IV	I: 11–19 years, IV: 21 years	Norway	Norwegian day care at the age of one year	Norwegian	English
FN 6 boy	I, IV	I: 9–17 years, IV: 19 years	Norway	Norwegian day care at the age of one year	Norwegian	English
FN 7 girl	II	II: 13 years	Finland; moved to Norway at the age of eight	Finnish day care for one year and then in Swedish pre-school education	English	Swedish
FN 8 girl	II, III, IV	II: 15, III: 16 years IV: 14 years	Finland; moved to Norway at the age of one	Norwegian day care at the age of three years	Norwegian and Finnish	English, German
FN 9 boy	II, III	II: 11 years, III: 12 years	Norway	Norwegian day care at the age of three years	Norwegian	English
FN 10 girl	II, III	II: 12 years III: 13 years	Norway	Norwegian day care at the age of two and half	Norwegian	English
FN 11 boy	II	14 år	Norway	Norwegian day care at the age of two and half	Norwegian	English
FN 12 girl	III, IV	III: 19 years, IV: 15 years	Norway	Norwegian day care at the age of 18 months	Norwegian	English, German

⁵¹ Some participants may have assessed their language skills on several occasions. Here, the information of one's strongest language is based on the most recent assessment (see 5.3.2).

Participants	Studies	Age during the study	Place of birth	Day care	Self-assessed strongest language ⁵¹	Other languages
FN 13 boy	III	15 år	Norway	Norwegian day care at the age of three years	Norwegian	English, German
FN 14 girl	III	16 år	Norway	Norwegian day care at the age of three	Norwegian	English, German
FN 15 girl	IV	23 år	Norway	Norwegian day care at the age of one year	Norwegian	English, German, French
FN 16 boy	IV	17 år	Norway	Norwegian day care at the age of one year	Norwegian	English, Spanish

FN 1 girl = Finnish-Norwegian girl, FN 4 boy = Finnish-Norwegian boy

Table 2 shows that ten out of the sixteen adolescents participated in two or more studies.⁵² Study I examined the choice and use of language of Finnish-Norwegian adolescents and was conducted twice (2004 and 2012; see Section 6.1 in more detail). All the participants who took part in Study I (FN 1, FN 2, FN 3, FN 4, FN 5 and FN 6) also completed a test on Norwegian idioms (Study IV, see Section 6.4) Participant FN 4, who was involved in the study for the longest time, i.e., 12 years, also participated in an interview where the production of verbs of sufficiency in Finnish was investigated (Study II, Section 6.2). Participant FN 8 took part in Studies II, III and IV (Study III explored Norwegian PVs, see Section 6.3). Participants FN 9 and FN 10 participated in Studies II and III and participant FN 12 in Studies III and IV. Participants FN 7 and FN 11 only took part in an interview in Finnish (Study II), participants FN 13 and FN 14 in Study III and participants FN 15 and FN 16 in Study IV. During the research period, some participants moved back to Finland, or went to study abroad. There were also some participants not willing to take part in several studies.

In optimal conditions, the participants would have been the same throughout and the studies conducted during a one- or two-year period. For practical reasons, however, this was not possible. In addition, it was difficult to find participants who met the criteria (cf. Schmitt, 2010, p. 150) and the adolescents' willingness to participate in the study was low.

As of 9 March 2020 (SSB, 2020), there were 7 373 Finnish immigrants and Norwegian-born children to Finnish immigrant parents in Norway.⁵³

⁵² Participants FN 1, FN 2, FN 3, FN 4, FN 5, FN 6, FN 8, FN 9, FN 10 and FN 12.

⁵³ The number of Finnish immigrants in Norway is low compared to many other countries with smaller populations, e.g., Iceland, Estonia and Lithuania (SSB, 2020).

Approximately 40 % of the Finns⁵⁴ are settled in the greater Oslo area (Oslo and Viken counties). As can be seen in Figure 1, the majority of the Finns living in Norway are adults and the number of children and adolescents is small.

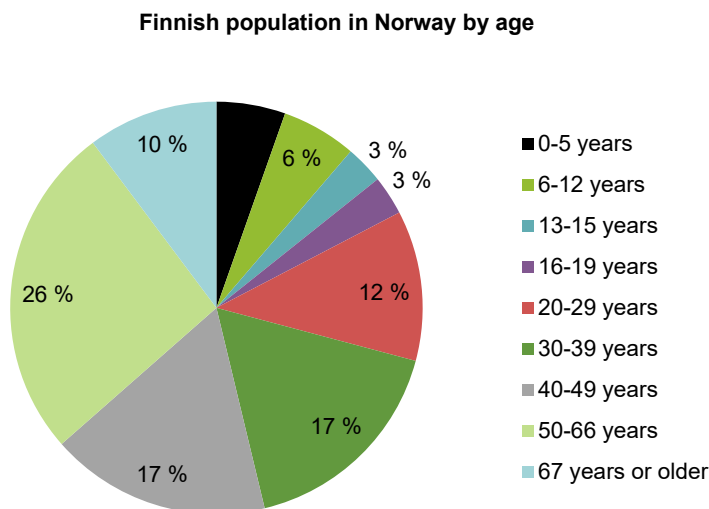


Figure 1. Finnish population in Norway by age distribution in 2020 (SSB, 2020).

The most important reasons for moving to Norway are better job opportunities and new relations. Besides, more and more Finns are also studying at Norwegian universities. Nowadays, good education is characteristic of the Finns moving to Norway (cf. Janulf, 1998). More than half (53.3 %) of 6 313 Norwegian Finns over the age of 16 have a bachelor’s or master’s degree (SSB, 2019). This is somewhat higher than, for instance, that of Norwegian Icelanders (40.5%), Danes (44.7%) and Swedes (49.0%). The Finns, as the parents of the adolescents in the present study, work as nurses, doctors, engineers, experts, and in other positions requiring special training (cf. Tjelmeland, 2003, p. 89–95; see also Koskinen & Norman, 1993). For ethical reasons, however, the family background for all the participants cannot be presented in detail, to prevent the participants being identifiable.

As the Finnish-Norwegian participants in the sub-studies were of different ages, adolescents living under similar conditions were compared to each other.

⁵⁴ In Norway, there are no statistics on citizens by mother tongue, so it is not possible to say how many Finnish citizens are Finnish or Swedish speakers (see e.g., Wilhelmsen, Holth, Kleven & Risberg, 2013).

However, the amount of input in an L1 and even in an L2 in a particular L2 environment may differ and may have an effect on language acquisition. Also contacts/interaction with Norwegian and Finnish speakers may vary and, thus, influence mastery of MWUs, as assumed in the UBL (Chapter 2). The way in which individual differences (e.g., age and language use) may appear in mastery of MWUs is examined in sub-studies II–IV in more detail (Chapter 6).

All of the Finnish-Norwegian adolescents in this study can be considered multilingual. In addition to Finnish and Norwegian, they speak English and also some other languages, such as French, German, Spanish, Swedish or Chinese (Table 2). Most Finnish-Norwegian participants (13 out of 16) reported that Norwegian was their strongest language. This is not unexpected since they had attended a Norwegian school and, thus, a higher number of participants were exposed to the Norwegian language in everyday life. Three participants differed from the rest. Participant FN 8 expressed that Finnish and Norwegian languages were equally strong languages, while participants FN 4 and FN 7, who studied in an English-language program, reported that English was their strongest language.⁵⁵

Many linguists, for example Ortega (2018), emphasize that L2 speakers should be compared with each other and not with monolingual native speakers (see also Treffers-Daller, 2018) as this often results in a negative view of the abilities of the former by comparison with the latter. As mentioned earlier, it is difficult to describe exactly what native language competence is because native speakers' abilities also differ widely from each other depending on variable exposure to different language varieties and variable levels of education different people attain (Dąbrowska, 2012; see Section 3.1). Comparisons between so-called native and non-native speakers are more valid if socioeconomic and occupational backgrounds as well as educational levels are representative and carefully controlled (Treffers-Daller, 2018; see also Romaine, 1995, p. 115–118).

In the present study, the Finnish-Norwegian adolescents' mastery of MWUs is compared with that of both Finnish L1 speakers (Study II) and Norwegian L1 speakers (Studies III and IV) to get a better understanding of what makes the bilingual situation unique.⁵⁶ The results are related to language choice and use in both languages – Finnish and Norwegian – a language pair which has not been examined extensively before. Thus, this study aims to find out what similarities and differences there are in the use of MWUs among these participants and what

⁵⁵ Participant FN 4 attended Norwegian school for 13 years before starting at university and participant FN 4 attended Norwegian school for three years.

⁵⁶ Many researchers now agree with a holistic view of bilingualism (Grosjean, 1982), according to which all the languages spoken by bilinguals need to be included in analyses and not just bilinguals' L2 or weaker language(s).

factors may lead to these. Additionally, this study compares the Finnish-Norwegian participants with each other and highlights individuals in more detail in the summarizing report.⁵⁷

Native speakers of Finnish and Norwegian in sub-studies II–IV are shown in Tables 3 and 4.⁵⁸ These participants had a similar socioeconomic background in that at least one of the parents of the participants had received higher education and also parents' occupation and income can be considered similar.⁵⁹ Table 3 shows the six Finnish L1 speakers (five girls and one boy). They ranged in age from 12 to 19 years. They only took part in an interview (Study II), in which verbs of sufficiency in the Finnish language were examined. They were born and grew up in Finland and went to a Finnish school. They were living in an area mostly inhabited by native Finns, and a majority of their schoolmates spoke Finnish.⁶⁰ Both the parents were Finnish speakers. They could be considered multilingual. They did not only speak Finnish and English, but also Swedish, French and German.

Table 3. Finnish L1 speakers in Study II.

Participant	Age	Other languages
FI 1 girl	14	English, Swedish, French
FI 2 girl	18	English, Swedish
FI 3 girl	19	English, Swedish
FI 4 girl	16	English, Swedish, German
FI 5 girl	12	English, German
FI 6 boy	14	English, Swedish

There were a total of 16 Norwegian L1 speakers included in the sub-studies (Table 4). Ten participants (five girls and five boys) between the ages of 14 and 20 participated in Study IV, which examined the understanding and production of Norwegian idioms. Six participants aged 12–19 years (four girls and two boys) took part in Study III (Norwegian PVs in emails). All of these participants were bi-

⁵⁷ Current work in sociolinguistic research focuses on individuals and provides rich descriptions of the languages users' background and the social contexts in which they participate, how they use language and how social factors shape and are shaped by the use (Ellis, 2008, p. 127, 284).

⁵⁸ Finnish and Norwegian L1 speakers consisted of children of the researcher's colleagues, friends and neighbors.

⁵⁹ There were two exceptions to this: one family among Finnish-Norwegian participants, another among Finnish L1 speakers.

⁶⁰ The Finnish L1 speakers were living in three different municipalities in southern Finland.

/multilingual. In addition to their L1 Norwegian, they spoke English, French, Spanish or German. The native Norwegian speakers were born and grew up in Norway and went to a Norwegian school. They were living in one municipality in the greater Oslo area, where the residents in the neighborhood were mainly Norwegian.⁶¹ Both the parents had Norwegian as L1. The background of the Norwegian-Finnish adolescents and the Norwegian L1 speakers were comparable in terms of residential area and parents' socioeconomic background (parents' educational level, occupation, income).

Table 4. Norwegian L1 speakers in studies III and IV.

Participant	Study	Age	Other languages
NO 1 boy	IV	14	English, French
NO 2 boy	IV	16	English, French
NO 3 boy	IV	17	English, Spanish
NO 4 boy	IV	17	English, German
NO 5 boy	IV	20	English, French
NO 6 girl	IV	15	English, French
NO 7 girl	IV	19	English, Spanish
NO 8 girl	IV	16	English, French
NO 9 girl	IV	18	English, Spanish
NO 10 girl	IV	20	English, German
NO 11 girl	III	19	English, Spanish
NO 12 girl	III	15	English, French
NO 13 boy	III	15	English, French
NO 14 boy	III	13	English
NO 15 girl	III	12	English
NO 16 girl	III	16	English, Spanish

5.2 Data

This thesis consists of four sub-studies, and relies on multiple data-collection techniques, *triangulation* (Patton, 2015). There are four types of triangulation (data, method, theory, and researcher triangulation), but in this thesis, data and method triangulation have been used. Combining several kinds of data sources and both qualitative and quantitative approaches when studying the same issue provides

⁶¹ The municipality has the highest level of education nationwide and the pupils usually achieve the highest results in national tests in reading, mathematics and English (5th and 8th grade).

more comprehensive answers to research questions and increases validity (Mackey & Gass, 2015; see also Schmitt, 2010; Larsen-Freeman & Long, 2014; Patton, 2015; Luodonpää-Manni, Hamunen & Konstenius, 2020).

In Table 5, the multiple data sources from the four studies of this thesis are presented (see Chapter 6 in more detail). Sociolinguistic as well as phraseological research has influenced the choice of the data. Language choice and exposure to L1 and L2 among Finnish-Norwegian adolescents in the greater Oslo area were investigated by using interviews, sociolinguistic questionnaires and emails. The results of the interviews, questionnaires and emails were related to the hypothesis that language choice and use would affect the bilingual participants' mastery of MWUs, as UBL suggests (Chapter 2). In order to examine mastery of MWUs, the participants completed oral and written tasks, which included both oral and written production tasks (interviews, email messages), as well as elicited tasks (idiom tests). The Finnish-Norwegian adolescents' mastery of MWUs was compared to that of the native speakers of Finnish and Norwegian.

Table 5. The material used in the four sub-studies.

Sub-study	L2 speakers of Norwegian (L1 Finnish)	L1 speakers of Finnish	L1 speakers of Norwegian	Data	Time of data collection	Extent of data from Finnish-Norwegian adolescents	Extent of L1 data
I	6			Interview Sociolinguistic questionnaire	2004 2012	1–1,5 hours per interview	-
II	6	6		Recorded interview	2016	8 262 word tokens	5 985 word tokens
III	6		6	Email messages	2017–2018	4 639 word tokens	4 604 word tokens
IV	50		30	Idiom test and questionnaire	2014–2015	-	-

This research approach may be described as selective empiricism. The aim is to describe the information that emerges from the material, and to see and interpret the connections between the items. As the interpretations are based on examples, there is no need to display all the material.

Mixed-methods triangulation often involves comparing data through qualitative methods with data collected through quantitative methods (Patton, 2015). Combining qualitative and quantitative methods does not exclude each other, and both approaches are often used in complementary ways (Hirsjärvi, Remes &

Sajavaara, 2009; Luodonpää-Manni *et al.*, 2020). In this thesis, the data was mainly analyzed qualitatively, with the exception of Study IV, where statistical tools were also used.

In Study I, the first data was collected from semi-structured interviews with children and their mothers (see Kvale & Brinkmann, 2015). Based on the interviews, a 'language profile' was written for each participant. The answers were divided into different categories including (1) language choice in the three domains, (2) ethnic and linguistic identity, (3) self-rated strongest language, and (4) social network and linguistic background information (see Section 6.1.2). The second part of the data consisted of a written questionnaire eight years later. The participants were asked to choose the best options for language choice (multiple choice task) and answer open questions and statements where four different answer alternatives were given. The information gained from the questionnaires was analyzed qualitatively and added to the previous language profile, where each participant's language choice in three different domains was described. The comparison between the two data collections of each participant was based on the language profiles that were analyzed at the individual and group level.

Study II and III were analyzed quantitatively and qualitatively. In Study II (see Section 6.2.2), the interviews were transcribed orthographically and then, all the modal verb constructions were extracted from the data. Next, the use and idiomaticity of verbs of sufficiency within their context were analyzed qualitatively. The content of the interviews as well as the four mother's responses (emails and interviews) to their children's linguistic background (language use in childhood, day care) were also analyzed. This information was related to mastery of verbs of sufficiency. In Study III (see Section 6.3.2), the data consisted of three writing tasks (email messages). First, all the occurrences of PVs in emails were excerpted, and then categorized into transparent and idiomatic PVs. After the categorization, the percentages of the above categories and PV frequency per 100 words were calculated. Qualitative approaches were used to examine the idiomatic use of PVs within their context.

In Study IV, the data was gathered through a questionnaire consisting of three different tests (see Section 6.4.2). The participants' receptive knowledge of 20 idioms related to body parts was tested by a multiple choice task, while productive knowledge of idioms was assessed by two tests, where the participants were asked to fill in the blanks with an appropriate noun (10 idioms occurred within their context and 10 without context). All the answers (in total 30) were scored as correct (1 point) or no correct answer (0 point). All participants were asked to provide information about their background (age, gender) and language use. The L2 speakers of Norwegian (L1 Finnish) were also inquired about their Norwegian

language studies, language skills in Finnish and Norwegian and length of their residence in Norway.

The test results of mastery of idioms of the four different groups were compared in terms of how they mastered individual idioms on the three different tests. Both quantitative and qualitative methods were applied in the analysis. Statistical tools were used to check whether the differences between the groups and individuals were significant. Frequency of idioms, their transparency and equivalence in Finnish were related to mastery of idioms, as well as language use. The data was also analyzed qualitatively, in order to examine which types of idioms were the easiest and the most difficult for the different groups.

As the conclusions were often based on relatively small amounts of linguistic material from the participants, the findings were compared with similar studies to evaluate the validity of the thesis. In addition, this study relies on scientific descriptions of the Finnish and Norwegian languages; in Study II, *Iso suomen kielioppi*, *VISK* [Comprehensive Grammar of Finnish] (Hakulinen, Vilkkuna, Korhonen, Koivisto, Heinonen & Alho, 2004) and in Study III, *Norsk referansegrammatikk* [Norwegian Reference Grammar] (Faarlund, Lie & Vannebo, 1997).

5.3 Linguistic background and language choice and use of Finnish-Norwegian adolescents

The aim of this thesis was to explore the bilingual situation of the Finnish-Norwegian adolescents. The attempt was to find out the extent to which the participants were exposed to Finnish and Norwegian and they could use of both languages in their daily interaction and relate language use patterns to their mastery of MWUs. Information on linguistic background was gathered because it was considered to have an effect on language development and L1 maintenance.⁶²

5.3.1 Linguistic background

The mothers of the six participants (FN 1, FN 2, FN 3, FN 4, FN 5 and FN 6) were asked about their children's linguistic background (e.g., day care, mother tongue instruction, FLP) in Study I (interview; see Section 6.1 in more detail). Similarly, the

⁶² The data on the Finnish-Norwegian participants' ethnic and linguistic identity and their attitudes towards their languages was gathered in Study I (participants FN 1, FN 2, FN 3, FN 4, FN 5 and FN 6). The same issues were also touched in the interview (Study II; participants FN 4, FN 7, FN 8, FN 9, FN 10, FN 11). In addition, participants FN 12, FN 13, FN 14, FN 15 and FN 16 were asked to reply by email to some questions related to their ethnic and linguistic identity and their attitudes.

mothers of the participants FN 8, FN 9, FN 10 and FN 11 were asked to reply by email to a few questions related to their children's linguistic background (Study II). Participants FN 12, FN 13 and FN 14 answered questions related to linguistic background by email on their own (Study III). Linguistic background of the participants FN 15 and FN 16 was based on questionnaire (Study IV) and a telephone call with their mother, while the same issues were discussed with participant FN 7 in an interview (Study II) and with her mother in a face-to-face meeting.

The Finnish-Norwegian adolescents differed by place of birth and age of onset to L2 (see Table 2, Section 5.1). Eleven participants (FN 1, FN 5, FN 6, FN 9, FN 10, FN 11, FN 12, FN 13, FN 14, FN 15 and FN 16) were born and grew up in Norway. The other five participants (FN 2, FN 3, FN 4, FN 7 and FN 8) were born in Finland. Participant FN 2 moved to Norway at the age of seven, participant FN 3 at the age of four, participant FN 4 at the age of five, participant FN 7 at the age of eight and participant 8 at the age of one.

Of these Finnish-Norwegian adolescents, participants FN 1, FN 5, FN 6, FN 12, FN 15 and FN 16 were exposed to Norwegian from an early age, as they started day care before the age of 18 months and they may be considered simultaneous bilingual (see Studies I and IV). Participants FN 8, FN 9, FN 10, FN 11, FN 13 and FN 14 are ESLA children (Chapter 1, Studies II and III). They tended to hear an L1 at home and acquired their L2 later in early childhood, when they started attending a regular form of day care in the community about at the age of three. When an upper cut-off point for ESLA is set for 6 years (De Houwer, 1990, 2009), also participants FN 3 and FN 4 are ESLA children (see Chapter 1). In the case of participants FN 2, it is no longer a question of ESLA because she was seven years old when moving to Norway. Participant FN 7 is a BFLA child (Bilingual first language acquisition), i.e., she was exposed from birth to two languages - Finnish and Swedish - in her home environment and has two first languages, Finnish and Swedish (see Chapter 1, definitions for ESLA and BFLA).

The data gathered shows that the majority of the Norwegian-Finnish ESLA children were staying at home with their mother or a Finnish-speaking caregiver for the first years (participants FN 3 and FN 4 stayed at home until starting school), and started in Norwegian day care before turning three years. At that time contacts with Norwegian-speaking children increased significantly for the participants. As both the parents spoke the same L1, ESLA children were more exposed to Finnish in the early childhood and probably more proficient in that language than in Norwegian. Participant FN 2 attended Finnish day care and completed the first school year in Finland until she moved to Norway. Participant FN 7 differed from the others. First, she was in Finnish day care for one year and then in Swedish pre-school education before going to a Swedish school for one year and finally moving to Norway.

The data shows that only a few Finnish-Norwegian adolescents were offered municipal mother tongue instruction.⁶³ Participant FN 15 received instruction in Finnish two hours per week throughout her nine years in comprehensive school and participants FN 1 and FN 5 for some years in primary school. For the other participants, the change in the curriculum L97 meant that mother tongue instruction was no longer provided on such a large scale.⁶⁴ It was only offered to those who did not know Norwegian well enough to follow the ‘normal’ instruction of the school (see Chapter 3 for more details). Participants FN 2, FN 3 and FN 4, who were born in Finland, received some supportive instruction in Finnish during two–four years, e.g., bilingual subject teaching.

5.3.2 Language choice and use

The data on language choice pattern was collected at different stages of the study. The first information on language choice and use within three domains (home, free time, mass media), as well as the contacts with Finnish and Norwegian speakers was obtained through an interview (participants FN 1, FN 2, FN 3, FN 4, FN 5 and FN 6; Study I, 2004). The same data was also gathered from the same participants in a sociolinguistic questionnaire eight years later (Study I, 2012). In addition to these six participants, participants FN 8, FN 12, FN 15 and FN 16 took an idiom test where questions about language choice and use were asked.⁶⁵ Language choice and use, as well as issues related to multilingualism, were also discussed with participants FN 4, FN 7, FN 8, FN 9, FN 10 and FN 11 in an interview (Study II). Participants FN 13 and FN 14 answered questions related to their language use by email on their own.

The Finnish-Norwegian adolescents were asked about their language choice and use. They were inquired, for example, which languages they used with different persons (family members, relatives and friends) and in mass media (watching television, reading books and newspapers, social media). The data on the language choice pattern of the Finnish-Norwegian participants is summarized in Tables 6 and 7 and is based on each participant’s final assessment of language choice and use. It is related to mastery of MWUs in Studies II–IV.

⁶³ Only participant FN 1 (Studies I, IV) attended Finnish Language school in Oslo and participants FN 13 and FN 14 in another city (Study III).

⁶⁴ Some Finnish-Norwegian adolescents took or intended to take a matriculation exam in the Finnish language at upper secondary school.

⁶⁵ Also Finnish L1 speakers (Study II, an interview) and Norwegian L1 speakers (Study IV, a questionnaire) were asked about their language use. Language use of Norwegian L1 speakers in Study III was discussed when they gave their permission to participate in the study.

Previous research has shown that children and adolescents often speak L1/minority language with their father (Svendsen, 2005; Namei, 2012), while mothers shift to using the predominant language, especially after living longer in an L2 environment. Table 6 shows that the majority of the participants mostly used Finnish with their parents (all parents spoke Finnish to each other). The siblings spoke either Finnish or Norwegian together, only participant FN 1 reported that she used both languages (participant FN 12 did not have a sibling). Based on interviews and observations, it seems that the majority of the families did not appear to have a clear FLP (see Section 3.2.2.4). Some mothers commented that as the children grew up, families started using Norwegian more.

Table 6. Finnish-Norwegian participants' reported language use with father, mother, siblings, Finnish relatives and friends.

Participants	With father	With mother	With siblings	With Finnish relatives	With Finnish friends in Norway
FN 1 girl	Finnish	Finnish, Norwegian	Norwegian, Finnish	Finnish	Norwegian
FN 2 girl	Finnish	Norwegian, Finnish	Norwegian	Finnish	Norwegian, Finnish
FN 3 girl	Finnish	Finnish	Norwegian	Finnish	Norwegian
FN 4 boy	Finnish	Finnish	Norwegian	Finnish	Norwegian
FN 5 girl	Norwegian, Finnish	Norwegian, Finnish	Norwegian	Norwegian, Finnish	Norwegian
FN 6 boy	Norwegian, Finnish	Norwegian	Norwegian	Norwegian, English	Norwegian
FN 7 girl	Swedish	Finnish	Finnish	Finnish, Swedish	Norwegian
FN 8 girl	Finnish	Finnish	Finnish	Finnish	Norwegian; Finnish
FN 9 boy	Finnish	Finnish	Finnish	Finnish	Norwegian, Finnish
FN 10 girl	Finnish	Finnish	Finnish	Finnish	Norwegian, Finnish
FN 11 boy	Finnish	Finnish	Finnish	Finnish	Norwegian, Finnish
FN 12 girl	Finnish	Finnish	-	Finnish	Norwegian
FN 13 boy	Finnish	Finnish	Finnish	Finnish	Norwegian
FN 14 girl	Finnish	Finnish	Finnish	Finnish	Norwegian
FN 15 girl	Finnish	Finnish	Norwegian	Finnish	Norwegian
FN 16 boy	Norwegian	Norwegian, Finnish	Norwegian	Finnish	Norwegian

The order of languages follows the order in which the participants named them in the questionnaire, interview and emails.

The interviews, questionnaires and emails revealed that the Finnish-Norwegian participants visited Finland every year, a few families even more than once annually. During summertime, longer periods were spent in Finland.⁶⁶ The duration of the visits ranged from a few weeks to the entire summer vacation. All the participants expressed that contact with cousins of the same age and grandparents were important. Grandparents were also contacted via telephone regularly. Language choice when communicating with Finnish relatives was quite similar in all the families. Finnish was used between the participants and their Finnish relatives, while participant FN 7 also used some Swedish. Participants FN 5 and FN 6 had few contacts with Finnish relatives after the death of their grandparents. However, they had Finnish relatives in Norway with whom they communicated in Norwegian.

As mentioned above, the number of Finnish-Norwegian adolescents in Norway is small and they are living in a large area in the greater Oslo area. Thus, they have fewer possibilities to take part in activities in Finnish compared to young Finnish L1 speakers living in Brussels⁶⁷ (Aalto, 2017) and especially in Sweden (see e.g., Janulf, 1998; Tuomela, 2001; Kangassalo, 2004; Kolu, 2017), which constitute much larger groups and are more concentrated in geographical areas. There are a couple of Finnish-Norwegian associations in Oslo, but they only organize activities for children and adolescents occasionally. The Finnish language school and music play school groups ('muskari') are the only places where Finnish-speaking children and young people can speak Finnish on a regular basis.

As a result of this, Norwegian was in more frequent use with friends than Finnish. The majority of the Finnish-Norwegian participants' friends were Norwegian speakers at school and in free time activities, and contact with other Finnish-speaking adolescents was not frequent (cf. Niiranen, 2008). The majority of the participants reported that they used mostly Norwegian in interaction with other Finnish speakers of the same age and Finnish with their parents' friends living in Norway. However, due to his poor Finnish skills, participant FN 6 used only the Norwegian language with Finnish speakers in Norway and English in Finland. A few participants reported having Finnish schoolmates at some point and that they spoke mostly Norwegian to each other. Participant FN 2 studied with another Finnish-speaking student and they spoke Finnish with each other.

The participants were asked to comment on their use of Finnish and Norwegian media. The data on the participants' language choice and use when reading books, newspapers and magazines, watching television, writing text messages and short

⁶⁶ A few participants also attended a summer confirmation school in Finland.

⁶⁷ Finnish-speaking childrens' and adolescents' language choice and use in Germany, see e.g., Karhunen, 2004; Kauppila, 2006; Impola, 2020 and in the USA, see Halmari, 2005; Tigert, 2017.

notes, as well as following social media was collected through interviews (Studies I and II), questionnaires (Studies I and IV), and emails (Study III).⁶⁸ Table 7 presents the use of Finnish and Norwegian media among the Finnish-Norwegian adolescents. The data presented in Table 7 is based on each participant's final assessment of language choice and use.

Table 7. Finnish-Norwegian participants' media use in Finnish and Norwegian.

Participants	Reading books	Reading newspapers & magazines	Television	Emails and short messages	Social media and Internet
FN 1 girl	Norwegian, English	Norwegian, Finnish	Norwegian	Norwegian, Finnish	Norwegian
FN 2 girl	Norwegian, Finnish	Norwegian, Finnish	Norwegian, Finnish	Norwegian	Norwegian, Finnish
FN 3 girl	Norwegian, English	Norwegian, Finnish	Norwegian	Norwegian, Finnish	Norwegian
FN 4 boy	English	Norwegian	Norwegian, Finnish	Norwegian, Finnish	Norwegian, Finnish
FN 5 girl	Norwegian, English	Norwegian, Finnish	Norwegian	Norwegian	Norwegian
FN 6 boy	Norwegian, English	Norwegian	Norwegian	Norwegian	Norwegian
FN 7 girl	English	Finnish	Finnish, Norwegian	Finnish, Norwegian, English	English, Norwegian, Finnish
FN 8 girl	Finnish, Norwegian	Norwegian, Finnish	Norwegian, Finnish	Finnish, Norwegian	Norwegian, Finnish
FN 9 boy	Norwegian, Finnish	Norwegian, Finnish	Norwegian, Finnish	Norwegian, Finnish	Norwegian, Finnish
FN 10 girl	Norwegian	Norwegian	Norwegian	Norwegian, Finnish	Norwegian
FN 11 boy	Norwegian	Norwegian	Norwegian, Finnish	Norwegian, Finnish	Norwegian, Finnish
FN 12 girl	Norwegian, Finnish	Norwegian, Finnish	Norwegian, Finnish	Norwegian, Finnish	Norwegian
FN 13 boy	Norwegian	Norwegian	Norwegian, Finnish	Norwegian, Finnish	Norwegian, Finnish
FN 14 girl	Norwegian	Norwegian, Finnish	Norwegian	Norwegian, Finnish	Norwegian, Finnish
FN 15 girl	Norwegian, Finnish	Norwegian, Finnish	Norwegian, Finnish	Norwegian, Finnish	Norwegian, Finnish
FN 16 boy	Norwegian	Norwegian	Norwegian	Norwegian	Norwegian

⁶⁸ The participants were asked to state the frequency with which they read books or watch television in each language, e.g., How often do you read Finnish books? They were asked to choose one of the six alternatives: never – sometimes – at least once a month – at least once a week – several times a week – daily.

Previous studies have revealed that the majority culture of a community is more dominant than any of its minority cultures (see e.g., Tuomela, 2001; Niiranen, 2008). The data of the present study also reveals that, in terms of reading and media use, the Norwegian language dominated. Almost three-fourths (11 out of 16) of the Finnish-Norwegian participants did not read in Finnish at all.⁶⁹ Participants FN 2, FN 9 and FN 12 read Finnish books occasionally and participants FN 8 and FN 15 at least once a week. Of these two participants, FN 8 reported that Finnish and Norwegian were equally strong; participant FN 15 received instruction in Finnish two hours per week throughout her nine years in comprehensive school. Participants FN 1, FN 3, FN 5 and FN 6 reported that they read books in both Norwegian and English and participants FN 4 and FN 7 in English only. Low interest in reading in Finnish may depend on the fact that it is difficult to read in a language where one has not received instruction (Karhunen, 2004; Namei, 2012; Tigert, 2017; Impola, 2020).

As Table 7 demonstrates, Norwegian newspapers were frequently followed by Finnish-Norwegian participants. Apart from participant FN 7 who reported that she only followed Finnish newspapers, all the others read Norwegian newspapers every day or almost daily, either on paper or online. Quite a few also stated that they read Finnish newspapers or magazines online at least occasionally. Participants FN 1 and FN 3 said that they read Finnish magazines in Finland on their holidays.⁷⁰

Television programs were followed more often in Norwegian than in Finnish. Participants FN 1, FN 5, FN 6 and FN 16 did not watch Finnish television at all, whereas the majority of the participants stated that they watched Finnish television occasionally.⁷¹ In addition to the Internet, many adolescents also had access to Finnish television channels at home. Participant FN 7 said that she used to watch Finnish television series with her mother. Male participants FN 4, FN 11 and FN 14 were interested in sporting events and watched, for example, Formula 1 and football on Finnish television. The interview (Study II) also revealed that the Finnish Independence Day reception was closely followed by most participants.⁷²

⁶⁹ Study I and II indicated that parents read a lot of Finnish books for children when they were young.

⁷⁰ Some Finnish-Norwegian participants reported on using linguistic varieties other than Finnish, Swedish and English for reading (cf. Muhonen, 2013; Mård-Miettinen & Björklund, 2019).

⁷¹ In the greater Oslo region, one can watch Finnish programs on Swedish television as well as Finnish news on weekdays. In addition, digital materials are accessible to all. The Finnmark Regional Library has nationwide responsibility for Finnish library services in Norway. Everyone can order books, audiobooks, films and music from the library free of charge, no matter where in Norway they live.

⁷² Listening to Finnish radio and music was only discussed in Study I. The results indicated that the Finnish-Norwegian participants only listened to these in Finland occasionally.

The participants were asked what language they used when they wrote short notes, cards and SMS. The vast majority of the participants wrote them in both languages, Finnish and Norwegian, whereas four participants, FN 2, FN 5, FN 6 and FN 16, used only Norwegian.

Regarding social media use, all participants reported being on the internet (surfing on the internet, “Facebook” and “Instagram”) during their free time. Social media plays a central role in young people’s daily life (cf. Palviainen, 2020). Multilingual adolescents can maintain contacts with other people (e.g., friends, relatives) speaking the same language around the world through social media. The data shows that slightly more than half of the participants used both languages in social media, whereas less than half used only Norwegian. In terms of media use in general, English seems to be the language that was often employed when reading books, watching television, surfing on the internet and playing computer games and listening to music (cf. Muhonen, 2013; Gynne, 2016).

On the basis of the data, it can be stated that Norwegian was the dominant language in the Finnish-Norwegian adolescents' lives. It was the language to which the participants received more exposure and the language they used more frequently in specific contexts (Silva-Corvalán & Treffers-Daller, 2016, p.7; cf. Montrul, 2016a, p. 18). They seemed to follow the pattern of language use proven in the earlier studies of Finnish-Norwegian participants. Finnish was used inside the family, either by parents, siblings and relatives (see Hjulstad Junttila & Andersson, 1994; Niiranen, 2008). Interviews, sociolinguistic questionnaires and emails indicate that the adolescents were more exposed to Norwegian than to Finnish through mass media, especially television and social media. To some extent, the majority of the participants used Finnish on a daily basis, but there were individual differences. Those who were studying or living outside their place of residence (FN 1, FN 2, FN 4, FN 5 and FN 15) were less exposed to the Finnish language than those living at home. Participants FN 4 and FN 7 were studying in an English language program, which also affected their linguistic environment.

The background information on the Finnish-Norwegian adolescents and their language choice and use in different domains is the starting point for a more detailed analysis of empirical research when considering which factors may influence mastery of MWUs and individual differences (Studies II–IV, Chapter 6).

5.4 Ethical principles

This study was carried out in accordance with the recommendations of the principles of research ethics and the instructions outlined by the Finnish National Board on Research Integrity (2012) as well as the guidelines the Norwegian

National Research Ethic committees (2016) have compiled for use within Social Sciences and the Humanities.

Prior to embarking on this research project the education department of one municipality near Oslo was contacted and the purpose of the research was explained in order to request permission to contact Finnish speaking students. Once the permission was granted, contact was made with a few schools with Finnish speaking students to receive their contact information from the school office. Parents were then contacted by telephone and informed of the study. Given the age of the students in this study 9–14 years, they are still considered legal minors and therefore parents had to give an oral consent for them to participate in the study. All the L1 minor speaker participant's parents consented to the study. The Finnish and Norwegian L1 speaker participants were pooled from children of researcher's colleagues, friends and neighbors.

Additional participants for the studies II–IV were recruited through Finnish organizations in the greater Oslo area as well as through the researcher's social network. Some of these Finnish-Norwegian participants were living in two other municipalities than the participants in Study I.

The participants were assured that they would remain anonymous and there would be no mention of their municipalities by name. Additionally, it was made clear to the participants and their parents that the research material would only be used for research purposes and only be the researcher. Participants were informed that the research material, i.e., questionnaires, recorded interviews, email messages and tests would be saved only for the period of time necessary for my research purposes. The participants were also notified that they could suspend their participation at any time.

6 Overview of the Empirical Studies

This thesis includes four sub-studies. The first study investigates language choice and use, while the three other studies focus primarily on mastery of MWUs.

6.1 Study 1: Language choice among Finnish-Norwegian youth in the greater Oslo area

6.1.1 Background

Previous studies on Finnish-speaking children and adolescents in the northern part of Norway (e.g., Hjulstad Junttila & Andersson, 1994; Niiranen, 2008) have demonstrated that Norwegian is their dominant language. i.e., the language they use significantly more in specific contexts. They also have more contacts with the Norwegian-speaking majority than, for instance, Finns in Sweden (see e.g., Janulf, 1998; Juvonen, 2000; Tuomela, 2001; Kolu, 2017). This is due to the fact that the number of Finnish people in Norway is small and they live in a large area. A bilingual person's language choice and use in an L2 environment is influenced by diverse factors (see Section 3.2). One consequence is that the L2/majority language often becomes more dominant, as there are limited opportunities to use one's L1/minority language (Grosjean, 2015). However, previous findings have shown that one's L1 has a better chance of maintenance if both parents have the same L1 (Kovács, 2004; Straszer, 2011; Rydenvald, 2017), and if a family has a clear FLP (see e.g., Huss, 1991; Palviainen & Boyd, 2013).

The aim of this study was to explore language choice and use among Finnish-Norwegian adolescents within three domains: home, free time and mass media. A further aim of this study was to find out how the situation changed during the eight years' time of observation, and what factors may have influenced the language choice pattern. In view of previous research, it was assumed that the majority language, Norwegian, would be a dominant language in adolescents' life due to sociolinguistic factors, like different language settings.

6.1.2 Data and method

The data was gathered by an interview, and a questionnaire eight years later (see Table 5, Section 5.2). The longitudinal study made it possible to look at changes in language choice in three domains over a longer time span. A total of ten children aged nine to 14 were interviewed, but the data held only six participants (FN 1, FN 2, FN 3, FN 4, FN 5 and FN 6). The sample consisted of four girls and two boys of whom FN 3 and FN 4 as well as FN 5 and FN 6 were siblings (see Table 2, Section 5.1).⁷³ Three of the research participants moved back to Finland during the study, and one did not want to complete the questionnaire at a later stage. The present study differs from previous studies on Finnish participants in Norway. Firstly, in this case the same participants' language choices were examined twice, and secondly, both the parents of the participants were Finnish speakers.

The first data was collected from semi-structured interviews (Appendix 1) with children and their mothers (see Kvale & Brinkmann, 2015). All the participants answered the same questions so that the answers were comparable (Milroy & Gordon, 2003). The participants were allowed to choose which language, Finnish or Norwegian, they wanted to use. Participants FN 1, FN 2, FN 3 and FN 4 used Finnish, while participant FN 5 used both languages and participant FN 6 only Norwegian. The interviews with the mothers were held in Finnish. The interviews were not recorded, but notes were taken simultaneously (see limitations of the study, Section 7.2). Based on the interview, a 'language profile' was written for each participant. The answers were divided into different categories: language choice in the three domains (home, free time, mass media), ethnic and linguistic identity, self-rated strongest language and social network. In addition, the mothers were asked about some background information, such as age of onset to L2, day care, length of residence and intention to stay in Norway, as well as the child's linguistic development and instruction in Finnish / Norwegian. They were also inquired about how important the maintenance of the Finnish language was to the parents.

The second part of the data consisted of a written questionnaire eight years later (Table 5, Section 5.2; see also Appendix 2). The participants were then 17–22 years old. The questionnaire was in Norwegian, as the interview revealed that some participants had difficulties in understanding Finnish. The questionnaire was sent home and returned within a month. In section one of the questionnaire, the participants were asked to choose the best options for language choice in the same

⁷³ In the published article (Lieri, 2017) the participants had different codes: participant 1 = FN 1, participant 2 = FN 2, participant 3 = FN 5, participant 4 = FN 3, participant 5 = FN 4 and participant 6 = FN 6.

three domains mentioned above (multiple choice task). Further, some new issues related to the use of social media (text messages, blogs, WhatsApp) were added. In section two, both open questions and statements with four different alternatives were given. The questions were concerned with the adolescents' strongest language, their attitudes towards the Finnish and Norwegian languages, their linguistic and ethnic identity, and a sense of belonging to Finland and Norway. The information gained from the questionnaires was analyzed qualitatively and added to the previous language profile, where each participant's language choice in three different domains was described. The comparison between the two data collections of each participant was based on the language profiles. Changes that took place over the eight-year period were analyzed at the individual and group level.

6.1.3 Main findings

Changes in language choice and use in home domain occurred at individual levels among all the participants. Concerning participant FN 1, the use of the Norwegian language increased with her mother and sister, while she continued speaking Finnish with her father. Similar changes applied to participant FN 2. She used more Norwegian with her mother and only Norwegian with her brother but the language choice did not change with her father and they spoke Finnish together. Participants FN 3 and FN 4 were siblings. They carried on speaking Finnish with their father but they shifted to using Norwegian when speaking to each other. An interesting change in language choice occurred with their mother. At the first stage (interview), they spoke both languages, at a later stage (questionnaire) only Finnish.⁷⁴ Participants FN 5 and FN 6 were also siblings. At the first stage, both the participants reported that they only spoke Finnish with their father, at a later stage they communicated in both Norwegian and Finnish. They mostly spoke Norwegian to their mother and only Norwegian to each other.

The questionnaire (2012) revealed that there were no big changes in language choice in contact with other Finnish-speaking persons outside the family. The Finnish-Norwegian adolescents mostly spoke Finnish with the older generation outside home (e.g., their parents' friends), while Norwegian was used with younger Finnish speakers (see also Table 6, Section 5.3.2). In Finland, however, the majority of the adolescents spoke only Finnish with their relatives and friends. Due to his poor Finnish skills, participant FN 6 used Norwegian with Finnish speakers

⁷⁴ At the time of the interview, the mothers of the participants FN 2, FN 3 and FN 4 reported that they also spoke Norwegian to their children so that they would learn the majority language as quickly as possible. It was not mentioned how they got this idea (ch. Spolsky, 2009; Straszer, 2011; Namei, 2012; see also De Houwer, 1999).

in Norway and English with Finnish friends in Finland. The language choice seemed to be related to one particular person; because the vast majority of the friends at school and free time were Norwegian speakers, Norwegian was the Finnish-Norwegian adolescents' dominant language in daily life.

In terms of media, the language choice changed among all the participants and Norwegian became a dominant language. In childhood the Finnish language was used when reading comics and books, watching videos, listening to music and playing computer games. FN 1 used Norwegian more than Finnish, but she read Finnish magazines occasionally and wrote SMS and short notes in Finnish. For participant FN 2, Norwegian was the dominant language when accessing the media, but she also read Finnish books and followed Finnish media to some extent (see also Table 6, Section 5.3.2). Participant FN 3 accessed forms of media mostly in Norwegian, but she read Finnish magazines and listened to the Finnish radio on holidays in Finland and wrote SMS and short notes in Finnish. In addition to the Internet, participant FN 4 watched Finnish television and wrote SMS and short notes in Finnish. He reported that he did not like to read in Finnish or Norwegian but preferred to read in English. Whereas participant FN 5 read Finnish magazines and listen to the Finnish radio occasionally, participant FN 6 only followed Norwegian media. When it comes to reading books, English took over for the majority of Finnish-Norwegian adolescents.⁷⁵

Participants FN 1, FN 2, FN 3 and FN 4 were more similar in terms of language choice and use than participants FN 5 and FN 6. Participants FN 2, FN 3 and FN 4 were born in Finland and moved to Norway at aged of seven, four and five at the end of the 90s (see Table 2, Section 5.1). They only used the Finnish language in the first years of their lives in Finland (cf. Montrul, 2016a). In addition, they received Finnish mother tongue instruction for some years when they started in a Norwegian school. Participant FN 2 attended the first school year in Finland and learned to read in Finnish.

Participants FN 5 and FN 6 differed from the other four participants in language choice and use.⁷⁶ They were born and grew up in Norway (Table 2, Section 5.1). Participant FN 5 got mother tongue instruction in primary school, while FN 6 did not get it at all. These two participants and their parents had few contacts with other Finnish-speaking persons in their speech communities. One reason may be that the family had been living in Norway for such a long time that they were 'Norwegianized' (cf. Montrul, 2016a). The limited use of the Finnish

⁷⁵ Some Finnish-Norwegian adolescents reported on using other languages than Finnish, Norwegian and English (e.g., French, German) for traditional media, social media websites and games (cf. Muhonen, 2013; Mård-Miettinen & Björklund, 2019).

⁷⁶ None of the parents had received a higher education.

language influenced language proficiency. In the interview, participant FN 5 spoke partly Finnish, FN 6 only Norwegian.

6.1.4 Discussion

The findings of the present study are in accordance with those of previous studies on the language choice and use of Finnish participants in Norway (Hjulstad Junttila & Andersson, 1994; Niiranen, 2008). The language use pattern changed after the children grew up. There was more exposure to the Norwegian language but less to the Finnish language in all three domains, as the Finnish-Norwegian adolescents' social network consisted almost exclusively of native speakers of Norwegian. Contacts with few other Finnish speakers of the same age living in a large area were rare. Nor did the Finnish-Norwegian adolescents attend the Finnish Language School (except participant FN 1 at the time of the interview) or participate in events where the Finnish language could have been used. Thus, the opportunities to use Finnish actively outside home were few (cf. Sweden Finnish adolescents, see e.g., Tuomela, 2001).

Previous research has shown that the vast majority of young people from minority backgrounds follow the media more often in the majority language than in the minority language (Namei, 2012; Imppola, 2020). In childhood, the Finnish was used when reading books and comics, watching videos, listening to music and playing games. In adolescence, the situation changed quite a bit. Then, the participants' interest in reading Finnish books and magazines or watching Finnish television channels decreased as expected (cf. Imppola, 2020). Especially reading books in Finnish was challenging for most of the adolescents, as they received Finnish mother tongue instruction for a limited time (cf. Namei, 2012).

In childhood, parents are important role models, but later many are uncertain about their identity and group affiliation. At the time of the interview, participant FN 2 found it embarrassing to speak Finnish and did not want to tell her new friends that she was a Finn. Later on, she reported in the questionnaire that she spoke Finnish with another Finnish student at university. Young people at a certain age are less positive towards a minority language and culture and tend to orient to the majority culture and its language (Bijvoet, 1998; Hvenekilde, *et al.*, 1998; Karhunen, 2004; Caldas, 2006).

Language choice is often associated with ethnic and linguistic identity (see Bijvoet, 1998; Fulland, 2016). In this respect, the young people of this study were no exception. They felt involved in both Finnish and Norwegian culture, i.e., they had positive bicultural identity towards their ethnicity and languages (cf. Lainio, 1989; Janulf, 1998; Karhunen, 2004; Grosjean, 2015). All the participants, except participant FN 6, considered themselves bilingual. FN 6 reported he was a

Norwegian speaker. Moreover, all of the participants noted that Finnish was a less important language for them than Norwegian and English. Nevertheless, they were proud of their Finnish roots and being able to speak Finnish (cf. Bijvoet, 1998; Karhunen, 2004; Imppola, 2020). Apart from FN 6, the other participants indicated they would like to speak their L1 to their future children (cf. Kolu, 2017).

The findings of the present thesis do not completely support earlier results claiming that a person's L1 has a better chance of maintenance if both parents speak the same language (Kovács, 2004; Straszer, 2011; Rydenvald, 2017). Although four out of six bilingual adolescents spoke Finnish fluently, Norwegian was clearly their dominant language. On the other hand, there was also one participant whose Finnish language skills were so poor that he could be considered monolingual in Norwegian. He did not get any mother tongue instruction at all, while the others received it some years in primary school. Thus, it seems that instruction in Finnish contributed to the development and maintenance of one's L1 (Fredriksen, 1997; Kulbrandstad, 1997; Janulf, 1998; Tuomela, 2001; see also Niiranen 2008, 2011).

The present study presents a picture of the linguistic situation among bilingual Finnish-Norwegian adolescents living in the greater Oslo area. The main conclusion to be drawn from this study is that the Finnish-Norwegian adolescents' L2/Norwegian is the dominant language but their L1/Finnish, is used, especially at home but also to some extent in media. Some adolescents use more Finnish than others depending on language proficiency and preferences. The social environment where languages are used has an effect on bilingual development and it is addressed in Studies II–IV.

6.2 Study II: Verbs of sufficiency in spontaneous speech among Finnish-Norwegian adolescents

6.2.1 Background

Verbs of possibility and sufficiency, or verbs of sufficiency⁷⁷ (term after Flint, 1980), e.g., *voida*, *ehdiä*, *jaksaa* and *viitsiä*⁷⁸, play an important role in colloquial

⁷⁷ The term 'voimisverbit' is used for verb of possibility and sufficiency in VISK § 1567.

⁷⁸ *Voida* means 'can, may, is possible', *ehdiä* 'it is possible for something to happen or someone to do something because there is a sufficient amount of time available', *jaksaa* 'it is possible for someone to do something because there is a sufficient amount of physical or mental energy', *viitsiä* 'it is possible for someone to do something because there is a sufficient amount of mental energy or motivation' (Flint, 1980).

Finnish but there are, to date, few studies on the subject. Such verbs form a rich lexical network in the semantic area and express possibility and sufficiency ('it is possible for something to happen or for someone to do something because there are sufficient reserves available'). Many of these verbs are partially overlapping, and semantic differences between verbs are small. There are differences even in native speakers' use of these verbs, regarding age, style, dialect, and frequency (Flint, 1980).

Verbs of sufficiency lack equivalents in many languages, for instance in English⁷⁹, however, there are some similar verbs in Norwegian (e.g., *viitsiä* 'å gidde') and in Swedish (e.g., *jaksaa* 'orka'/'idas'). Language users tend to have difficulties to adopt small semantic differences of these fairly common verbs. Many verbs of sufficiency also occur in complex verb constructions (*ehitiä käymään* 'to have time to visit', *pystyä tulemaan* 'to be able to come'), which makes them more demanding than the use of simple verbs (e.g., *mennä* 'to go'). In a language contact situation⁸⁰, the dominant language has an influence on the structure of the less used language, and language structures tend to be simpler (Bolonyai, 2000; Kangassalo, 2004; see also Wande, 1988). Similarly, language users tend to have fewer instances of complex utterances (Nicoladis, 2016). It can be assumed that complex constructions are not reinforced in an L2 setting, as the amount of input and output in an L1 is limited (Halmari, 2005; Bylund, 2008; Ortega, 2018).

The aim of the present study was to examine to what extent Finnish-Norwegian adolescents living in the Oslo area used verbs of sufficiency in spontaneous speech. The study particularly focused on how the participants' language use influenced the variation of such verbs and how the CLI affected verbs that did not have an equivalent in Norwegian (see Section 4.2). It was assumed that verbs of sufficiency would be challenging for Finnish-speaking adolescents living in an L2 environment, where they were less exposed to Finnish than Finnish L1 speakers of the same age.

⁷⁹ Flint (1980) demonstrated that verbs of sufficiency pose problems for English learners of Finnish, as these verbs lack equivalents in English.

⁸⁰ Language contact occurs when speakers of two or more languages or varieties interact and influence each other. In the present study, the language contact is limited to Finnish and Norwegian.

6.2.2 Data and method

Six Finnish–Norwegian adolescents (FN 4, FN 7, FN 8, FN 9, FN 10 and FN 11)⁸¹ aged 12–23, and living in the greater Oslo area participated in the study (Table 2, Section 5.1). All the parents, except one father (bilingual in Swedish and Finnish who spoke Finnish to his wife), had Finnish as their L1. All the Finnish–Norwegian adolescents had learned Finnish as their L1 and Norwegian as L2. Participants FN 8, FN 9, FN 10 and FN 11 were exposed to the Norwegian language before turning three years (ESLA children, see Chapter 1), at the time when they started in Norwegian day care (see Table 2, Section 5.1). Two participants differed from the others because of their linguistic background. Participant FN 4 moved to Norway when he was five years and stayed at home until starting school at the age of six. FN 7 moved from Finland to Norway when she was eight, and attended a Swedish school in the first school year (a BFLA child; see Chapter 1 and Section 5.3.1).

The primary data consisted of four audio-recorded interviews with six Finnish–Norwegian adolescents two of them being peer interviews (FN 8 and FN 9 as well as FN 10 and FN 11 are siblings). The participants' use of verbs of sufficiency was compared with that of Finnish L1 speakers of the same age (one group interview and three individual interviews; see Table 5, Section 5.2).⁸² The participants had a similar socioeconomic background (parents' educational level⁸³, occupation, income). The interviews lasted between 17 and 35 minutes. All the six Finnish–Norwegian adolescents spoke Finnish throughout the interview. The participants were aware of the fact that they were being tested in Finnish, so therefore they could have been nervous about speaking Finnish (cf. Sevinç & Backus, 2017). In a pair interview, it is common that one participant is dominant, especially the one with better language skills (Hirsjärvi & Hurme, 2000; see also Kurki & Mustanoja, 2020). This was also the case in the present study.

The Finnish–Norwegian participants were asked about hobbies, bilingualism/multilingualism, daily use of Finnish, holidays in Finland and future plans. All the participants were asked the same questions, but in different formats and/or different orders, depending on how the interview progressed. The native speakers of Finnish were also asked about their hobbies, holidays and future plans.

⁸¹ In the published article (Lieri, 2019a) nosu 1 = FN 7, nosu 2 = FN 8, nosu 3 = FN 9, nosu 4 = FN 10, nosu 5 = FN 11 and nosu 6 = FN 4.

⁸² The data of Study II was compared to previous research findings from L2 learners of Finnish because there are few studies related to verbs of sufficiency. This is problematic because the L1 speakers in an L2 environment ('heritage speakers') and L2 learners have different language acquisition profiles (cf. Silva-Corvalán & Treffers-Daller, 2016, p. 7). The data was also compared to material from Suomi 24 virkkeet- corpus.

⁸³ The parents of one Finnish L1 speaker did not have higher education.

In addition, they were asked what languages they used daily and how much and for what purposes. In addition, the two mothers of Finnish-Norwegian participants⁸⁴ were asked to reply by email to a few questions related to their children's linguistic development, language use in childhood and day care. This information was related to mastery of verbs of sufficiency.

The interviews were recorded on an Audacity program. Then, they were transcribed orthographically. After transcribing, all the modal verb constructions⁸⁵ were extracted from the data. Next, the use and idiomaticity of verbs of sufficiency within their context were analyzed qualitatively. The content of the interviews was also analyzed, in order to collate information on the participants' language use in different domains, as this was considered to influence mastery of verbs of sufficiency (see Luodonpää-Manni & Ojutkangas, 2020).

6.2.3 Major findings

The interview revealed that the use of verbs of sufficiency varied greatly from participant to participant. Participant FN 8 produced the most (n=15) complex constructions related to verbs of sufficiency. She used four different verbs, *voida*, *päästä*, *pystyä* and *taitaa*.⁸⁶ The verb *voida* was repeated seven times. Participant FN 4 also had four different verbs (*voida*, *päästä*, *osata* and *viitsiä*) and the verb *voida* occurred four times (ten occurrences in total). Participants FN 7 and FN 11 had as many occurrences (n=9). FN 7 had more variation as she produced four different verbs of sufficiency (*voida*, *osata*, *pystyä*, *ehittää*), while FN 11 only used verbs *voida* and *pystyä*; the later one was repeated seven times. Participant FN 9 had verbs *voida*, *pystyä*, *päästä* and *osata*, but produced slightly fewer verbs of sufficiency (n = 7) than the other four participants.

Participant FN 8 who produced the most verbs of sufficiency and participant FN 9 who produced slightly less such verbs than other participants were siblings. The mother of these two participants (a Finnish language expert) reported that the parents read a lot to their children when they were young, and reading was still a popular activity at home (cf. Tigert, 2017). Participant FN 8 used Finnish most in

⁸⁴ The same questions were discussed with one mother in Study I (2004) and the second mother was interviewed face-to-face.

⁸⁵ Verbs of sufficiency express dynamic modality (VISK § 1566–1568).

⁸⁶ The most common verbs of sufficiency among Finnish-Norwegian adolescents were *voida* (n=23), *pystyä* (n=12), *päästä* (n=8) and *osata* (n=4). *Pystyä* means 'it is possible for someone to do something because there is sufficient amount of ability for the task at hand', *päästä* 'manage to get into, can make it somewhere'. *Osata* means 'to be physically or mentally able to do something/'to know how to do something'. *Taitaa* means 'it is probable, is able to, is capable to'.

her daily life, i.e., she read books in Finnish and also used Finnish regularly on WhatsApp and Skype with relatives and friends in Finland (Tables 6 and 7, Section 5.3.2). Opposed to the other Finnish-Norwegian participants, she estimated that she was equally competent in both Norwegian and Finnish (Table 2, Section 5.1). Participant FN 9 also liked to read in Finnish. During summertime, these two participants spent longer periods in Finland, where they had lots of contact with their cousins of the same age. The verbs of sufficiency produced by FN 9 had typical features of spoken language (*ei pysty tekeen* ‘is not able to do’). This may be due to the fact that the participant was regularly in touch with spoken Finnish. FLP and holidays in Finland and especially reading probably had a positive effect on vocabulary growth and language proficiency of participants FN 8 and FN 9 (cf. Caldas, 2006; Niiranen, 2008; see also Serratrice, 2018).

Participants FN 4 and FN 7 who produced several verbs of sufficiency differed from the other four adolescents (see Table 2, Section 5.1). Firstly, they had lived in a Finnish-speaking environment for the first years of their lives and the amount of input and output was partly different from those who were living in an L2 environment. Secondly, they studied in an English program and received reduced daily input in Finnish and had fewer opportunities to use the language. At the time of the interview, participant FN 4⁸⁷ was living outside his hometown and the use of the Finnish language was limited to communication with his parents and following Finnish media coverage on the Internet and television. He only read books in English but wrote SMS and short notes in Finnish (Tables 6 and 7, Section 5.3.2). Participant FN 7 used several languages in her daily life, but mostly Finnish with her mother. Reading books in Finnish was challenging, but she read Finnish magazines and watched Finnish television.⁸⁸ As participant FN 7 spent summers in Finland, the use of the Finnish language increased considerably during the summer months.

Participant FN 10 did not produce verbs of sufficiency at all. Her expression appeared to be simpler compared to the other participants. She also needed help to find some words in Finnish. It seemed that Norwegian was her dominant language. Participants FN 10 and FN 11 were siblings. Her brother produced many complex constructions related to verbs of sufficiency but he just repeated two verbs (*voida, pystyä*). During the first years they were mostly exposed to Finnish but the

⁸⁷ Participant FN 4 moved to Norway at the age of five. He received some kind of supportive instruction in Finnish during two years. His skills in Norwegian were low when he started in a Norwegian school at the age of six. He attended Norwegian school 13 years before the university studies.

⁸⁸ Participant FN 7 reported she had never had Finnish instruction. She attended the first school year in a Swedish school before she moved to Norway and went to Norwegian school.

situation changed when they started in Norwegian day care at the age of three. They learned to read in Norwegian. They had contacts with participants FN 8 and FN 9, but otherwise they had few contacts with other Finnish speakers in their speech communities. Mostly, Finnish was used inside the family. Otherwise, they also spoke Finnish outside of their home when the family was together, e.g., when shopping (cf. Niiranen, 2008).

All in all, participants FN 10 and FN 11 seemed to get less input and fewer opportunities to use Finnish than participants FN 8 and FN 9 (Tables 6 and 7, Section 5.3.2). Participants FN 10 and FN 11 reported that they did not read in Finnish because it was challenging. Participant FN 10 used Finnish only with her parents and brother and wrote short notes in Finnish, while participant FN 11 also watched Finnish television and wrote SMS in Finnish. The use of verbs of sufficiency revealed that his communication in Finnish had been mainly oral. He also reported in the interview that he was always happy to speak Finnish when he had an opportunity for it. The findings also demonstrated that in both the cases, the older sibling (FN 8 and FN 11) had a better proficiency in the Finnish language, which previous studies have also proven (Kauppila, 2006).

The Finnish-Norwegian adolescents' use of verbs of sufficiency was compared to that of the Finnish L1 speakers. The most frequent verbs produced by Finnish L1 speakers were *voida* (n=15), *päästä* (n=7), *osata* (n=3) and *jaksaa* (n=2). There were also individual differences between the Finnish L1 speakers. Five out of six participants produced four to seven verbs of sufficiency, while one participant had just one occurrence. The results of the group interview showed that participant FI 2 produced nine complex constructions, participant FI 3 five and participant FI 4 just one. It is difficult to say why there was such variation in the result, but this may have depended on the topics. In a group interview of three persons it may be that a person or two dominated the conversation (Hirsjärvi & Hurme, 2000).

Norwegian-Finnish adolescents produced more verb tokens (verb of sufficiency) in interviews than L1 speakers of Finnish, but both groups had as many verb lexemes.⁸⁹ When the relative number (percentage of lexemes) was compared with the verb tokens, the percentage was different. The higher the percentage was, the less the participants repeated the same lexemes in the interview. In Norwegian-Finnish group, the percentage was 36 % and in L1 speakers of Finnish group 56 %. Finnish-Norwegian adolescents seemed to repeat

⁸⁹ Here, a *lexeme* is a lexical abstraction A word considered as a lexical unit, in abstraction from the specific forms it takes in specific constructions: e.g. the verb 'sing' or 'to sing', in abstraction from the varying word forms *sing*, *sings*, *sang*, *sung*, *singing* (The Concise Oxford Dictionary of Linguistics, 2014).

the same verbs of sufficiency more often than L1 speakers of Finnish in the production.

6.2.4 Discussion

Verbs of sufficiency are an integral part of the central vocabulary of the Finnish language, but the results demonstrated that neither the Finnish-Norwegian adolescents nor Finnish L1 speakers used them widely. As to the amount of input and output, the linguistic environment of the bilingual adolescents residing in Norway and native speakers of Finnish was different. Nevertheless, the frequency of verbs of sufficiency in spontaneous speech did not differ, as expected. The Finnish-Norwegian adolescents mostly used the same verbs as the Finnish L1 speakers, but they repeated the same verbs more often. It is interesting that the verb *pystyä* did not occur among the Finnish L1 speakers at all. It is a frequent verb in spoken Finnish without a subject in meaning *Ei pysty* ‘cannot do it’ (Korhonen, 2019). Topics may have had an influence on the use of the verbs of sufficiency. The Finnish-Norwegian adolescents often used the verb in meaning ‘it is possible to do something’, i.e., *pystyn puhumaan suomee niitten kanssa* (‘I can speak Finnish with them’, participant FN 7).

Even though the proportions of verbs of sufficiency did not distinguish the Finnish-Norwegian participants from the native speakers of Finnish, there were, however, individual differences among the participants in both groups (cf. Juvonen, 2000). How actively one used the Finnish language generally might explain the differences. The Finnish-Norwegian participant who produced the most complex constructions related to verbs of sufficiency used Finnish most in her daily life. On the other hand, the participant who did not produce verbs of sufficiency at all seemed to use Finnish less, and Norwegian was her dominant language. This finding was in accordance with the theoretical assumptions based on usage-based theories that both input and output matter (Chapter 2). Language use activity cannot, however, explain the use of complex constructions of the participants FN 4 and FN 7. The level of their Finnish proficiency might already have been quite advanced when the language environment changed (cf. Halmari, 2005; Teiss, 2007; Montrul, 2016a)⁹⁰ and reduced daily input and output in Finnish played a minor roll.

⁹⁰ Several studies have shown that ESLA children (participant FN 4 in the present study) who have experienced a period of monolingualism or language dominance in their L1 tend to have higher proficiency in the L1 than children who are simultaneous bilinguals because they have exposed to their L1 for a longer period of time than simultaneous bilinguals and they have received more input and output (Montrul, 2016a, p.113; 2016b, p. 16).

In view of the findings, it can be assumed that individual differences among the Finnish-Norwegian participants are particularly due to how actively one used the Finnish language, but also previous language experiences and CLI affect the proportions of verbs of sufficiency (cf. Ivaska, 2014). Adopting rather small semantic differences of fairly common verbs is difficult in a context where the language is used with only a few people. Similarly, they may have fewer holistically learned constructions and have a greater need for the open-choice principle (see Section 4.3). Many languages lack equivalents for verbs of sufficiency (Flint, 1980). In the Norwegian language there are, however, a few equivalent verbs and the Finnish-Norwegian adolescents might have benefitted from that. The Norwegian verb *å kunne* ('can'/'be able to') covers the meanings *osata*, *voida*, *päästä* as well as *pystyä*. CLI might have been one reason why the Finnish-Norwegian participants preferred to use the verb *voida*. It was appropriate in many contexts (see Section 4.2).

In language contact situations, it is common that the dominant language affects the structures of the less used language, i.e., the influence of the Norwegian language on the Finnish language in the present study (Bolonyai, 2000; Kangassalo, 2004; Ringbom, 2007; Lainio, 2013; Montrul, 2016a). The findings indicated that verbs of sufficiency were mostly used according to Finnish spoken language patterns in complex verb constructions. Some examples in the data might be influenced by the Norwegian language. In the construction *pystyä tekemään* 'to be able to do something', the short/simple infinitive *tehdä* ('to do') occurred a few times instead of mA- infinitive *tekemään* ('in order to do'). This might be due to CLI from Norwegian (see Section 4.2) where the infinitive is 'short' (*å gjøre*). Previous research findings have shown that language with a complex morphology tends to be less complex (Bolonyai, 2000; Kangassalo, 2004; Nicoladis, 2016; see also Korhonen, 2019). It is, however, difficult to prove this and more research is needed on the issue.

The general conclusion to be drawn from this study is that the majority of the Finnish-Norwegian adolescents did not differ from Finnish L1 speakers even though the amount of daily exposure to and use of Finnish was less frequent. However, the findings must be interpreted in light of the fact that there were a limited number of Finnish-Norwegian participants whose proficiency in the Finnish language was good. The results could have been different if the language users had had lower language skills. The results also revealed that there was a great deal of individual variation within the two groups.

6.3 Study III: Stå på, ikke gi opp – the use of Norwegian particle verbs in email messages by advanced L2 users of Norwegian whose L1 is Finnish

6.3.1 Background

Particle verbs (PVs) consisting of a verb and one or more verbal particles following it, e.g., *gi opp* 'to give up' and *se opp til* 'to admire' are common in Norwegian and other Germanic languages (see e.g., Sjöholm, 1995; Faarlund *et al.*, 1997; Strzelecka, 2003). Earlier research findings, however, have shown that semantically complex PVs are difficult for L2 users, even at an advanced level (Hulstijn & Marchena, 1989; Liao & Fukuya, 2004; Siyanova & Schmitt, 2007). L2 users tend to avoid PVs if these do not exist in their L1.⁹¹ Instead, they are more likely to use single verbs, e.g., *make up* vs. *invent* (Hulstijn & Marchena, 1989; Laufer, 1997; Liao & Fukuya, 2004; Siyanova & Schmitt, 2007; Blais & Gonnerman, 2013). L2 users also tend to avoid particular PVs because of their semantic transparency (compositionality). Transparent PVs, e.g., *gå ut* 'to go out' and *komme inn* 'to come in' pose less difficulty than idiomatic (figurative) PVs, e.g., *legge opp* 'retire' and *slå på* 'turn on', which are opaque (Siyanova & Schmitt, 2007, p. 120). Findings from earlier studies have also revealed that L2 users differ from native speakers in that they use fewer PVs, idiomatic ones in particular (Hulstijn & Marchena, 1989; Laufer & Eliasson, 1993; Enström, 1996; Ekberg, 1999; Yildiz, 2016).

The present study aimed at clarifying the following issues: To what extent do Finnish-Norwegian adolescents use Norwegian PVs, and does the use of PVs differ from that of Norwegian L1 speakers, while it is known that PVs are not as frequent in Finnish as in Norwegian (Kolehmainen *et al.*, 2014, p. 12)?

6.3.2 Data and method

Six Finnish-Norwegian adolescents (FN 8, FN 9, FN 10, FN 12, FN 13 and FN 14)⁹², aged 12–19, participated in the study (Table 2, Section 5.1). All the participants except participant FN 12 were ESLA children (see Table 2 Section

⁹¹ Previous results have revealed that L2 learners at the beginner level tend to avoid PVs. As their language proficiency increases, the avoidance of PVs diminishes and verbal expressions become more nativelike (Blais & Gonnerman, 2013).

⁹² In the published article (Lieri, 2020) FN 1= FN 8, FN 2= FN 12, FN 3=FN 9, FN 4= FN 10, FN 5=FN 13 and FN 6=FN 14.

5.1). The data of the Finnish-Norwegian participants was compared with a group of six Norwegian L1 speakers who were born and grew up in Norway.⁹³ They ranged in age from 12 to 19 years. All the parents of the 12 participants were either native speakers of Finnish or Norwegian. The social background (parents' educational level, place of residence, income) of the participants was comparable.

The data consisted of three writing tasks (email messages), where the participants were asked to write around 200 words on following topics: daily life, holidays and plans for the next term. First, all the occurrences of PVs in emails were excerpted manually, and then categorized into transparent and idiomatic PVs. After the categorization, the percentages of the above categories and PV frequency per 100 words were calculated. Due to the small amount of material, only qualitative approaches were used to examine the idiomatic use of PVs within their context. Furthermore, two adult native Norwegians were asked to read the emails and judge whether the verb-particle combinations were PVs or not in the context (cf. Smiskova *et al.*, 2012; see also Hamunen & Huumo, 2020).

6.3.3 Major findings

The findings of the study revealed that the proportion of PVs between Finnish-Norwegian adolescents with early age of onset to L2 and Norwegian L1 speakers did not differ. This is consistent with Ylikiiskilä's (2001) findings from Swedish-Finnish and Swedish participants' use of PVs in speech but differs partly from results from Enström (1996) and Ekberg (1999). Native speakers of Norwegian had slightly more PVs (1.14 PVs / 100 words) than the Finnish-Norwegian adolescents (0.99 PVs / 100 words). This finding agrees with previous research, confirming that L1 users have a tendency to use more PVs than L2 users (Enström, 1996; Ekberg, 1999; Liao & Fukuya, 2004; Siyanova & Schmitt, 2007; Mondor, 2008). Somewhat unexpected, the bilingual speakers used slightly more idiomatic PVs than the native speakers. This finding differs from previous results (see e.g., Sjöberg, 1995; Enström, 1996; Ekberg, 1999; Liao & Fukuya, 2004; Yildiz, 2016), which have indicated that L2 users tend to use fewer idiomatic PVs in written and spoken language than native speakers. The number of PVs that occurred just once was lower among the Finnish-Norwegian speakers, while native speakers had more variation in the use of PVs (cf. Ylikiiskilä, 2001). This finding also differs from earlier research findings which have demonstrated that the native speaker's use of PVs is more stereotyped than L2 users' (Ekberg, 1999; Ylikiiskilä, 2001). Due to the small sample, however, it is not possible to draw far-reaching conclusions from the findings.

⁹³ Participants NO 11, NO 12, NO 13, NO 14, NO 15 and NO 16 (see Table 4, Section 5.1).

The findings revealed that individual differences with regard to PVs were great within both groups. Individual variation was greater among the native speakers compared to the Finnish-Norwegian speakers (cf. Enström, 1996). The Finnish-Norwegian adolescents produced between four and eleven PVs (median 6.5) and the Norwegian L1 speakers four and thirteen PVs (median 7). The three participants that produced most PVs per 100 words belong to the native speakers' group. Participant NO 11 had the highest proportion of PVs (1.67 PVs /100 words). Also participants NO 12 and NO 15 produced slightly more PVs than the three Finnish-Norwegian adolescents that produced most PVs. Participants NO 14 and NO 15 did not differ from these three participants, while participants NO 16 produced significantly fewer PVs (0.55 PVs/100 words). When it comes to Finnish-Norwegian adolescents, participant FN 8 produced the most PVs and participant FN 9 the least. The occurrence of PVs of three participants, FN 8, FN 12 and FN 13, did not deviate greatly from each other, when compared to the total number of words in their texts. These three participants produced approximately 1.00 PVs /100 words. The other three participants – FN 9, FN 10 and FN 14 – had slightly less PVs in their emails.

Both the Finnish-Norwegian adolescents and the native speakers of Norwegian used plenty of semantically transparent PVs when telling about events in their daily life, e.g., *stå opp* 'wake up', *komme hjem* 'come home' and *gå ut* 'go out'. Whereas the native speakers as a group produced more semantically transparent PVs in emails, the Finnish-Norwegian adolescents had more idiomatic PVs. One reason may be that five out of six Finnish-Norwegian participants used the idiomatic PV *vakse opp* 'grow up' describing similarities and differences between life in Finland and Norway. This PV did not occur at all in the texts of the native speakers of Norwegian.

At the individual level, participants FN 8, FN 12, FN 13 and FN 14 produced more idiomatic PVs than transparent ones, while participant FN 9 had an equal number of both types, and FN 10 had more transparent PVs. Concerning the native speakers, participant NO 12 produced slightly more idiomatic PVs, while the other four participants had more transparent PVs. Participant NO 11, who produced the largest number of PVs (13 PVs in total), had many transparent PVs related to driving. Participant NO 14 did not have idiomatic PVs at all.

6.3.4 Discussion

As mentioned above, the proportion of PVs or their use between the L2 speakers of Norwegian and the L1 speakers did not differ, however, there was a great individual variation within the groups. The reasons for the individual differences between the participants can only be speculated upon. The topics of the emails may

have contributed to the great number of PVs expressing movement and action. In particular, these PVs were common when participants wrote about their daily activities and holiday plans. In addition, the length of the messages varied greatly and must be taken into account when interpreting the results or comparing them with previous research.

Although the Finnish and Norwegian languages differ in terms of grammar and vocabulary, there are similarities with regard to PV constructions (see CLI, Section 4.2). Transparent PVs expressing the direction of movement have equivalents in Finnish, e.g., *lyfte opp* ‘nostaa ylös/ ‘lift up’ and there are also counterparts for some idiomatic PVs in the Finnish language ‘*kaste opp*’, ‘antaa ylen, oksentaa’/‘to throw up, vomit’ even though the most idiomatic PVs are completely lacking in Finnish. Thus, the Finnish-Norwegian adolescents did not lack strategies to deal with transparent PVs because the same semantic models are established in their L1 as opposed to language users whose L1 do not have the same lexicalization pattern for motion events (e.g., French, Turkish).

All of the findings of the present study must be interpreted in light of the fact that the Finnish-Norwegian participants were advanced L2 users of Norwegian. The adolescents had been in contact with the Norwegian language from their early years onwards, e.g., day care, school, and they have received a great amount of various input and output in their L2, e.g., by reading, listening and participating in different activities (cf. Golden, 2005; see also Schmitt & Redwood, 2011). All the six Finnish-Norwegian adolescents in the present study were much less exposed to their L1 than to L2 in daily life.⁹⁴ Hence, Norwegian was their dominant language and this may contribute to the idiomatic use of MWUs.

The conclusion drawn from this study is that the great amount of input and output in the L2 setting seem to have a positive effect on mastery of Norwegian PVs, which is consistent with basic principles of cognitive linguistics and construction grammar (Chapter 2). Finnish-Norwegian adolescents may also benefit from equivalent PV constructions in Finnish and Norwegian, e.g., transparent PVs.

⁹⁴ Based on my own observations, all the six participants spoke Finnish well. FN 13 and 14 attended Finnish language school earlier, while the others did not receive any kind of instruction in Finnish. Despite this, FN 8 reported that Finnish and Norwegian were equally strong languages.

6.4 Study IV: How are Norwegian idioms mastered by participants with Finnish as their first language?

6.4.1 Background

Previous research has shown that even advanced L2 users experience considerable difficulties with idioms (e.g., Mäntylä, 2004; Abrahamsson & Hyltenstam, 2009; Prentice, 2010). L2 speakers often try to work out the meaning by comparing the idiom to a similar one in their L1 (Mäntylä, 2004). Irujo's (1986) study demonstrated that idioms with identical equivalents in one's L1 are the easiest both to understand (receptive knowledge) and to produce (productive knowledge).

According to earlier studies, there are different features that affect the interpretation of idioms. It has been shown that young children, adolescents and L2 users find transparent idioms easier to comprehend, while semi-transparent and especially opaque idioms cause more problems (Irujo, 1986; Mäntylä, 2004; Fusté-Herrmann, 2008; Prentice, 2010). Idioms whose literal meanings create a mental image close to their figurative meaning do not pose difficulties for L2 users, provided that they are familiar with the concept of idioms in their L1 (Mäntylä, 2004; Golden, 2005; see also Muikku-Werner & Penttilä, 2014; Boers & Webb, 2015).

Research on the comprehension of conventionalized expressions has revealed that the more frequent an expression is, the more familiar it is likely to be for an L2 users. Concerning idioms, though, frequency may, prove to be problematic since even the most frequent idioms are not common (Nenonen, 2002, s. 129; Sköldbberg & Prentice, 2013, s. 204; Siyanova-Chanturia & Pellicer-Sánchez, 2019, s. 4; Wulff, 2019, s. 30). Based on previous studies in SLA, the role of frequency is, however, disputed. Mäntylä's (2004) study on Finnish university students of English showed that even frequent idioms caused problems for the participants, even though they had good language skills in English (cf. Prentice, 2010).

Context may also facilitate the interpretation of idioms, especially unfamiliar and opaque ones (Levorato, 1993; Fusté-Herrmann, 2008), as well as those that do not have equivalents in L1 (Cieślicka, 2015). The lexicon of L2 users is seldom at the same level as that of native speakers and, therefore, they may have a greater need to use context when working out meaning.

Several studies have demonstrated that age of onset to L2 acquisition is a factor that affects the idiomatic use of conventionalized expressions in an L2 (e.g., Abrahamsson & Hyltenstam, 2009). Even learners with early age onset to L2 seem to differ from native speakers (Golden, 2005; Prentice, 2010). They express meanings in alternative ways, which are meaningful, but at the same time less

idiomatic (Pawley & Syder, 1983; Ekberg, 2013). This may be because native speakers have a larger set of conventionalized units stored in their mental lexicon, while L2 users store smaller lexical units (Ekberg, 1999). Therefore, they have a bigger need for analysis and application of grammatical rules (Wray, 2002; see also idiom and open-choice principles, Section 4.3).

Idiom comprehension is also influenced by the language use pattern. The results of Fusté-Herrmann's (2008) study on bilingual Spanish-English adolescents in Florida revealed that when the everyday use of Spanish decreased and the amount of English increased, scores on English idiom tests also improved (cf. Golden, 2005).

The aim of this paper was to investigate how participants with Finnish as their L1 and varied linguistic backgrounds (e.g., age of onset to L2) mastered Norwegian idioms related to body parts compared to Norwegian L1 speakers. Based on previous studies the following hypothesis was formulated: Some idioms might be easy, while others would be difficult for the L2 users of Norwegian, depending on different features of idioms (transparency, frequency), context, and equivalents in the Finnish language. It was also assumed that there would be differences in the language users' receptive and productive competence concerning idioms.

6.4.2 Data and method

A total of 80 participants took part in Study IV and they were divided into four groups (see Table 5, Section 5.2). Group 1 consisted of 10 Finnish-Norwegian adolescents aged 14–24 (their mean age at the time of investigation was 19.8 years), six of whom (FN 1, FN 5, FN 6, FN 12, FN 15 and FN 16) were exposed early to Norwegian, around at the age of one year and 18 months. Four adolescents (FN 2, FN 3, FN 4 and FN 8) had a later age of onset to L2 (with the exception of participant FN 2, the others were ESLA children; see Table 2, Section 5.1).⁹⁵ Group 2 comprised 40 adult L2 speakers of Norwegian who had moved to Norway as adults (age of onset to L2 between 19 to 40 years, mean age 41.5 years). The native speakers of Norwegian were divided into two groups: group 3 (n=10) adolescents from 14–20 years⁹⁶ (mean age 17.2 years) and group 4 (n=20) adults from 30–63 years (mean age 43.5 years). The Finnish-Norwegian adolescents had a

⁹⁵ The participants have following codes in the published article (Lieri, 2019b): participant 1 = FN 12, participant 2 = FN 3, participant 3= FN 2, participant 4= FN 1, participant 5= FN 4, participant 6 = FN 15, participant 7= FN 16, participant 8= FN 6, participant 9= FN 8 and participant 10= FN 5.

⁹⁶ The group of Norwegian adolescents consisted of participants NO 1, NO 2, NO 3, NO 4, NO 5, NO 6, NO 7, NO 8 NO 9 and NO 10.

similar socioeconomic background (parent's educational level, occupation, income) as the Norwegian L1 speakers of the same age. All of the participants in group 4, and the majority of participants in group 2 (32 out of 40) had academic degrees.⁹⁷

The data was gathered through a questionnaire consisting of three different tests (see Appendix 3). The participants' receptive knowledge of 20 idioms related to body parts was tested by a multiple choice task. Productive knowledge of idioms was assessed by two tests, where the participants were asked to fill in the blanks with an appropriate noun: 10 idioms occurred within their context and 10 without context. All the answers were scored as follows: 0 p = no answer/non-idiomatic/ungrammatical, 1 p = correct answer.

At the end of the questionnaire, the participants were asked to provide information about their background (age, gender) and language use. In addition, the L2 speakers of Norwegian (L1 Finnish) were inquired about the length of their residence in the L2 environment and their Norwegian language studies. Besides, they were asked to assess their own language skills in Finnish and Norwegian.⁹⁸ The questionnaire was delivered by hand and it was completed in the presence of the researcher. For practical reasons, the questionnaire was sent to some participants of group 4 (n=11) by email.

The test results of the four different groups were compared in terms of how they mastered individual idioms in the three different tests. Both quantitative and qualitative methods were applied in the analysis. Statistical tools were used to check whether the differences between the groups and individuals were significant considering different features that affect the interpretation of idioms, e.g., transparency, frequency and equivalence in Finnish as well language use. The data was also analyzed qualitatively, in order to examine which types of idioms were the easiest and the most difficult for the different groups.

6.4.3 Main findings

As expected, the adult Norwegian L1 speakers scored best on all the three tests in the questionnaire. The Finnish-Norwegian adolescents with early age of onset to L2 reached significantly higher results than the late L2 learners, and they also scored better in all the three tests than the Norwegian adolescents (cf. Golden, 2005; Abrahamsson & Hyltenstam, 2009; Prentice, 2010). The results

⁹⁷ The gender distribution in groups 2 and 4 was uneven because it was difficult to recruit men. Since I did not compare men and women in this study, unequal gender distribution did not matter.

⁹⁸ They were also asked what other languages they spoke.

demonstrated that the differences between the four groups occurred especially in productive knowledge of idioms, where particularly the participants with late age of onset to L2 faced problems. The proportion of correct answers in the three tests was approximately 80 percent, which meant that, in general, the participants mastered Norwegian idioms related to body parts well.⁹⁹ Expectedly, the idioms that were difficult for the native-speaking adults were also challenging for the other three groups. The results also showed that not even the adult Norwegian L1 speakers knew all the idioms.

The analysis showed statistically significant differences between the four groups, regarding semantic transparency of idioms and L1 equivalents, whereas frequency did not seem to play a significant role.¹⁰⁰ In all groups, a positive relationship was found between the amount of L1 and L2 engagement (e.g., reading books and social network) and mastery of Norwegian idioms. The statistical analysis also revealed that there were individual variations between participants in all four groups – the least among the native Norwegian-speaking adults (Group 4) and the most among the participants with the late age onset to L2 learning (Group 2) and the native Norwegian-speaking adolescents (Group 3). The greatest individual variation was to be seen in Part C, where productive knowledge of idioms was tested without a supporting context.

Regarding individual differences among the Finnish-Norwegian adolescents (Group 1) in Part A (receptive knowledge of idioms in a multiple choice task), the result showed that the majority of the Finnish-Norwegian participants received 16–18 correct (max. 20, median 17). Individual variation among the Norwegian-speaking adolescents (group 3) was greater compared to the Finnish-Norwegian adolescents.¹⁰¹ Their results varied between 14–18 (median 16). Three results deviated from the line. Participant FN 4 (moved to Norway at the age of 5) got all 20 idioms correct, while participant FN 6 received only 13 and participant FN 16 14 correct (both participants were exposed to Norwegian at the age of one). The four idioms that were difficult for these two participants were also challenging for the other participants in Group 1. The idioms *å miste ansikt* ‘to lose face’, *å være tørr bak ørene* ‘not dry behind the ears’ and *å sette seg på bakbeina* ‘to get up on one’s hind legs’ were generally difficult for younger participants, while the adult speakers in Group 3 and 4 mastered these three idioms well (80–100 % correct).

⁹⁹ Participants were scoring at least 90 % correct on 14 idioms out of 40 (‘easy idioms’) and under 70 % on ten out of 40 idioms (‘difficult idioms’).

¹⁰⁰ The number of different idioms was not equal in terms of transparency, frequency and Finnish equivalence and this may have had an influence on results (see Section 7.2).

¹⁰¹ Individual variation in Part A, Group 2 was between 13–20 (median 17) and in Group 4 between 15–20 (median 18).

The idiom *å få lang nese* meaning ‘to get tricked’ was the most challenging idiom in Part A for all the participants. It seems that the meaning of this idiom has changed from meaning ‘fool’ to ‘tell lies’.

In part B, the majority of the Finnish-Norwegian adolescents received 7–9 correct out of ten (median 8), while the variation of the results was significantly greater among the native speaking adolescents, from three to ten correct (median 7).¹⁰² Participant FN 15 completed all idioms correctly in a context, while participants FN 4 and FN 8 had seven correct. It is interesting that participant FN 4 had all correct in a multi-choice task, but he had some problems completing idioms in a context. The incorrect answers were fairly evenly distributed among the different idioms but the idiom *å ta beina på nakken* meaning ‘to run fast’ was difficult for all the participant groups (approximately 40 % correct), apart from group 4. It is an opaque idiom with low frequency and it does not have a direct equivalent in Finnish, which may explain why this idiom was challenging.

In Part C, the majority of the Finnish-Norwegian adolescents received 7–9 correct out of ten (median 8). Participant FN 8 differed from the others in both Part B and C. Her result in Part C was considerably lower, only four correct. Here again variation was significantly greater among the native Norwegian-speaking adolescents, from two to nine correct (median 6).¹⁰³ In both Part B and C, Norwegian L1 adolescents did not fill in all the blanks, and this may be one reason for their lower results. Three idioms in Part C were especially difficult. The idiom *på fastende hjerte* (no equivalent in English or in Finnish) was the most challenging in the whole test (only 20 % correct), and the two idioms *med senket hode* ‘to droop one’s head’ and *å kjempe med ryggen mot veggen* ‘to fight with your back against the wall’ were also among the ten idioms that the participants were the least familiar with. The first of these idioms is opaque with low frequency and does not have any equivalent in Finnish. The other two medium frequent and transparent idioms, however, have equivalents in Finnish. All in all, the findings of the present study demonstrated that some idioms were difficult for both groups, while some other idioms posed problems just for one group.

At the group level, the native speaking adolescents received a lower result (between 21–36 correct out of 40, median 29) on the whole test compared to the Finnish-Norwegian adolescents who achieved between 28 and 36 correct answers (median 33).¹⁰⁴ Among these participants, participants FN 4 (21 years) and FN 15

¹⁰² Individual variation in Part B, Group 2 was between 1–10 (median 7), and in Group 4 between 8–10 (median 10).

¹⁰³ Individual variation Part C, in Group 2 between 2–9 (median 6) and in Group 4 between 6–10 (median 9).

¹⁰⁴ Group 2 between 14–39 (median 30,5) and Group 4 between 29–40 (median 39) .

(23 years) scored highest (36 and 35 out of 40 correct). Both the participants can be considered to have an adult native speaker's proficiency in Norwegian. Out of these two participants, FN 4 was born in Finland and moved to Norway at the age of five, while FN 15 was born and raised in Norway and had two L1 languages (Table 2, Section 5.1). Whereas there were small differences between receptive and productive knowledge of idioms within the group of the Finnish-Norwegian adolescents, two participants, however, differed from the others. Participants FN 6 (born in Norway) and FN 8 (moved to Norway at the age of one) got the lowest results in the test. Participant FN 8 scored significantly better in part A (receptive knowledge) than in parts B and C (productive knowledge). This is in line with previous research findings proving that receptive knowledge of idioms is easier than productive skills (cf. Nation, 2001; Schmitt, 2010). On the other hand, participant FN 6 scored better in the productive parts of the test. One reason for the lower results concerning participant FN 8 may be that she was the youngest of the ten Finnish-Norwegian adolescents, and her language was in the process of evolving towards adult language skills (cf. Wray, 2002).

6.4.4 Discussion

The findings of the present study indicated that the degree of semantic transparency was a facilitating factor for all the participants except the native Norwegian-speaking adults who also mastered opaque idioms. These results confirm the findings from previous research that transparent and semi-transparent idioms are comprehended and produced more correctly than opaque ones (Irujo, 1986; Mäntylä, 2004; Fusté-Herrmann, 2008; Prentice, 2010). Frequency of idioms did not play a significant role in the present study. This is in line with previous studies (cf. Mäntylä, 2004; Prentice, 2010). Some idioms with low frequency were mastered well, while some frequent ones posed problems.

Even though the Finnish and Norwegian languages are different, many idioms related to body parts are similar, and the Finnish speakers could take advantage of this (positive transfer, Section 4.2; see also García *et al.*, 2015). As to late L2 learners who acquired Norwegian later in their life, similar idioms were comprehended almost as well as identical ones, but the CLI from Swedish, which is closer to the target language than Finnish, was visible in the production tasks (negative transfer; see Section 4.2). They used words whose form was similar to the target language but the words were basically in Swedish. A language user of more languages can get influenced by one or more prior L2s, which creates more complex patterns of CLI (Gabryś-Barker, 2006; Hammarberg, 2010). In addition, it is obvious that good knowledge of English may have influenced the results in some cases. The lower results of the group 4 (late age of onset to L2) may also be

explained by idiom principle (see Section 4.3). The participants had fewer holistically learned idioms and had a greater need for the open-choice principle, i.e., they had to choose between multiple choices (Sinclair, 1991, p.109–110; see also Kecskes, 2019, p. 142–143).

Both Finnish-Norwegian and Norwegian L1 adolescents were able to retrieve form and meaning from memory without greater difficulties when idioms were presented in a context. This is in accordance with previous research that has demonstrated that context may facilitate the interpretation of idioms, especially when facing unfamiliar and opaque ones (Fusté-Herrmann, 2008), as well as those that do not have equivalents in one's L1 (Cieślicka, 2015). However, late L2 learners with a more limited vocabulary were not able to benefit from the context as effectively as advanced language users with a broader vocabulary (Golden, 2005, 2009; Enström, 2013; Boers & Webb, 2015; Liontas, 2015). Overall, the easiest idioms for the L2 speakers of Norwegian (L1 Finnish) had an identical or similar equivalent in Finnish and were semantically transparent, but context also facilitated the comprehension of idioms to a certain extent.

The result of the present study differs from previous findings that have shown that even learners with an early age of onset to L2 distinguish from native speaking adults concerning the use of conventionalized expressions like idioms in an L2 (Golden, 2005; Abrahamsson & Hyltenstam, 2009; Prentice, 2010). The Finnish-Norwegian adolescents performed better on all three tasks than the native-speaking adolescents. This might be due to the fact that the Finnish-Norwegian speakers were a bit older than the L1 speakers of Norwegian whose language was still developing. In addition, six out of the ten Finnish-Norwegian adolescents¹⁰⁵ in Study IV were exposed to Norwegian language around at the age of one when starting day care (Table 2, section 5.1) and the other adolescents between the ages of three and six (ESLA children). This may have contributed to the good results compared to native speaking adolescents.

Another explanation might be that the bilingual participants had better linguistic awareness as they were used to managing two languages and could apply the knowledge of both languages (Bialystok, 2001; Jessner, 2006; García, 2009; García & Li Wei, 2014). All the ten Finnish-Norwegian adolescents in this study considered their skills in Norwegian as very good, while proficiency in the Finnish language was assessed lower. Only the participants FN 2, FN 4, FN 8, and FN 15 estimated that their skills in Finnish were also very good. Out of these participants FN 4 and FN 15 scored best, while participant FN 8 achieved one of the lowest results in the test compared to all the participants. However, participant FN 8 was

¹⁰⁵ Participants FN 1, FN 5, FN 6, FN 12, FN 15 and FN 16 with early age of onset to L2.

also the youngest of the ten participants, while participants FN 4 and FN 15 were among the oldest ones and had probably more linguistic experiences.

The findings revealed that there were individual differences in all four groups, also within adult native speakers (Groups 4). Some participants with late age of onset to L2 achieved better results than native speaking adults. This is consistent with previous findings that have shown that both advanced and less advanced participants may master idioms better than native speakers who score less well (Abrahamsson & Hyltenstam, 2009). This means that there is a gray area, where natives and learners present the same type of deviations from a "correct" use and language skills (see Ortega, 2018).

Previous studies have shown that idiomatic knowledge develops across one's life span (Levorato, 1993; Wray, 2002; Sprenger, la Roi & van Rij, 2019) and is acquired through varied exposure to language, as the theoretical framework of UBL, used in this study, assumes. The data from the questionnaire revealed that Norwegian was the Finnish-Norwegian adolescents' dominant language, but at home they also spoke Finnish with their parents (Tables 6 and 7, Section 5.3.2). All the participants preferred to access the media in Norwegian. Statistical analysis showed that reading books, especially in Norwegian, was a factor that affected knowledge of idioms. Only participant FN 6 seldom read in Norwegian, and this may explain the fact that idioms were not so familiar to him. On the other hand, FN 8 used to read a lot, both in Finnish and Norwegian, so this cannot explain her lower scores compared to the others. The findings of this study suggest that especially reading books in Norwegian (and Finnish) was a factor that contributed to mastery of idioms.

In conclusion, according to the results of this study, especially opaque idioms are challenging, not only for L2 users but also for younger native speakers. High exposure to the target language and early age of onset to L2 has a beneficial effect on both receptive and productive knowledge of idioms.

7 Conclusions

The aim of this thesis was to investigate how Finnish-Norwegian adolescents mastered MWUs in Finnish (the language they had learned first) or Norwegian (the language they learned after their L1). Their comprehension and production of MWUs was compared to that of Finnish and Norwegian L1 speakers of the same age. In particular, mastery of MWUs was related to language choice pattern. Furthermore, the goal was to explore the linguistic situation among 16 Finnish-Norwegian adolescents in the greater Oslo area. Thus, this thesis attempts to fill research gaps particularly with consideration to Finnish-Norwegian adolescents and the environment in which they are living, as well as the languages included in the study.

This chapter will draw conclusions from the major findings of the four sub-studies (Section 7.1). To start with, it will answer the question how Finnish-Norwegian adolescents master MWUs in Finnish or Norwegian, what are the similarities and differences between the Finnish-Norwegian adolescents and Finnish and Norwegian L1 speakers of the same age, (Section 7.1.1) and what factors affect comprehension and production of MWUs (Section 7.1.2)? Finally, to conclude this thesis will discuss what knowledge of MWUs reveals about the participants' bilingualism (Section 7.1.3). Section 7.2 includes a discussion on strengths and limitations of the study, and lastly, Section 7.3 offers some suggestions for possible future research on the topic.

7.1 Answers to the research questions

7.1.1 RQ 1a What are the similarities and differences in mastery of MWUs between Finnish-Norwegian adolescents and Finnish and Norwegian L1 speakers of the same age?

In the present study, three kinds of MWUs were examined, namely Finnish verbs of sufficiency (Study II), Norwegian PVs (Study III) and idioms (Study IV). The findings of the present study revealed that the Finnish-Norwegian adolescents'

mastery of MWUs has both similarities and differences compared to Finnish and Norwegian L1 speakers.

The proportions of the verbs of sufficiency in spontaneous speech (Study II) showed that the Finnish-Norwegian adolescents did not distinguish from Finnish L1 speakers and they even produced slightly more such verbs. However, Finnish-Norwegian adolescents seemed to repeat the same lexemes more often than L1 speakers of Finnish. The Finnish-Norwegian group mostly used the same verbs as the native speakers of Finnish (*voida, osata* and *päästä*). Neither group seemed to take advantage of the rich variety of verbs of sufficiency as they repeated the same verbs. One of the most used verbs among the Finnish-Norwegian adolescents *pystyä* did not occur at all among the native speakers of Finnish. This can be considered somewhat unexpected, as the verb is common in spoken language without a subject in meaning *Ei pysty* ‘cannot do’ (Korhonen, 2019). However, it should be kept in mind that the present study was conducted on a sample too small to allow for generalizations (cf. Schmitt, 2010, p. 152). In addition, it was difficult to compare the findings of this study with a few studies to date on the subject as the participants in the present study differed from Finnish L2 learners regarding their background and proficiency. Therefore, this study attempts to fill research gaps and provides necessary and additional information about Finnish-Norwegian adolescents’ language proficiency in their L1 and living in an L2 setting.

In Study III concerning PVs (Study III), there were both similarities and differences between participants. The proportions of these MWUs were approximately the same between the Finnish-Norwegian adolescents and Norwegian L1 speakers, even if native speakers of Norwegian produced slightly more PVs in total and had more variation, i.e., they produced more PVs that occurred just once. On the other hand, the Finnish-Norwegian adolescents used some more idiomatic PVs in the emails than the native speakers of Norwegian. The findings revealed that individual differences with regard to PVs were great within the both groups. The findings based on a small data differ from previous studies (Enström, 1996; Ekberg, 1999; Yildiz, 2016) and are only indicative and should be treated with caution. The findings show how important it is in the future studies to take into account individual differences. It is also interesting that there are individuals whose language proficiency in both languages is high and this makes a comparison with previous studies of PVs difficult.

In Study IV, the mastery of Norwegian idioms was examined. The results of the study demonstrated that the Finnish-Norwegian adolescents scored better on all three tests compared to the native Norwegian-speaking adolescents of the same age. The difference was greatest in the productive part of the test, while the participants did not differ significantly from each other in the receptive part. Some idioms were difficult for both groups, while some other idioms posed problems just

for one group. In general, idioms that were challenging for native adult speakers were also difficult for Finnish-Norwegian and Norwegian L1 adolescents. The results of the present study do not support the findings from previous studies that have demonstrated that even L2 users with early age of onset to L2 differ from native speakers with regard to mastery of idioms (Golden, 2005; Abrahamsson & Hyltenstam, 2009, 2013; Prentice, 2010). This difference may be due to the different degrees of maturity of the participants. The Finnish-Norwegian adolescents in the present study were a bit older than native speakers who had not achieved nativelike proficiency in idioms yet. In addition, Finnish-Norwegian adolescents in Study IV were exposed to Norwegian from an early age (see Table 2, Section 5.1) and this may be one reason for their good results.

The four sub-studies did not measure the same area of language proficiency and this may have influenced the results. The mastery of Finnish MWUs was examined from oral production and that of Norwegian MWUs from written production. Free oral production (Study II)¹⁰⁶ gives a good picture of a language users language skills as they must activate all the components of their language skills under time pressure (Schmid, 2011). This may have resulted in individual differences between the participants. PVs are constantly used in informal written language, e.g., email messages, by native speakers (Siyanova & Schmitt, 2007). In written production (Study III) the topics may have guided the selection of PVs. The results of the Study IV revealed that the differences among the participants were greatest in the productive part of the test, while the results did not differ significantly in the receptive part. This is in line with previous research findings proving that receptive knowledge of idioms is less demanding than productive skills (cf. Nation, 2001; Schmitt, 2010).

The findings of the three studies on mastery of MWUs showed that there was a great deal of individual variation within the Finnish-Norwegian adolescents as well as native speakers of Finnish and Norwegian. This is in accordance with the theoretical assumptions of this study that language users' knowledge of language emerges from experience with language as a result of numerous usage events (Chapter 2). Practice and repetition integrate new knowledge into existing knowledge as UBL and cognitive grammar claims, i.e., the more one uses their L1 and L2 in different domains, the more complex constructions are reinforced.

The findings of the present study do not fully support the claims from previous research findings that MWUs, such as PVs (*turn down*) and idioms (*break the ice*) are challenging for L2 users, even at an advanced level (Pawley & Syder, 1983;

¹⁰⁶ It was not relevant to examine written production in Finnish, as it was known that Finnish-Norwegian adolescents had difficulties in reading and writing Finnish because they had not received Finnish language instruction (Study I).

Sjöholm, 1995; Enström, 1996; Laufer, 1997; Ekberg, 1999; Wray, 2002; Mäntylä, 2004; Golden, 2005; Siyanova & Schmitt, 2007; Abrahamsson & Hyltenstam, 2009; Prentice, 2010). There was almost no difference in the use of verbs of sufficiency and PVs among Finnish-Norwegian participants and Finnish and Norwegian L1 speakers. In addition, the Finnish-Norwegian adolescents even mastered Norwegian idioms related to body parts better than native-speaking adolescents of the same age. The reasons for the partly unexpected results are discussed below.

7.1.2 RQ 1b What factors affect comprehension and production of MWUs?

Eight out of 16 Finnish-Norwegian adolescents who participated in the sub-studies can be considered ESLA children¹⁰⁷, i.e., they acquired another language later in early childhood (Chapter 1). They acquired Finnish at home from birth, and were exposed to Norwegian between around the age of two and half and six years (Table 2, see Section 5.1). Six Finnish-Norwegian adolescents can be considered simultaneous bilinguals¹⁰⁸ as they were exposed to Norwegian in their early childhood starting day care about at the age of one and 18 months.

The Finnish language played a large role in the adolescents' early childhood. They were more exposed to Finnish than in Norwegian, e.g., Finnish was often employed when reading, watching videos and playing computer games (Studies I–IV). Language use changed when children started Norwegian day care and school. Then, the use of the Finnish language was by and large limited to the home domain only. The amount of input and output in the L1 decreased, while the exposure to the L2 increased (social network, literacy, homework).

The Finnish-Norwegian adolescents had few opportunities to be in contact with other Finnish-speaking adolescents due to the small population dispersed over a larger area in the greater Oslo area. They were not engaged in taking part in activities in Finnish and most of the adolescents did not receive instruction in Finnish. Thus, Finnish-Norwegian adolescents living in an environment where L1 is used with only a few people (Study II) do not get as much varied input and output as language users living in an L1 environment. When opportunities for rich and meaningful interactions with peers tend to be in the majority language, activities in L1 such as reading, watching TV, surfing on the Internet, and gaming are crucial. Similarly, holidays and family visits to Finland where L1 is a dominant

¹⁰⁷ Participants FN3, FN 4, FN 8, FN 9, FN 10, FN 11, FN 13 and FN 14.

¹⁰⁸ Participants FN 1, FN 5, FN 6, FN 12, FN 15 and FN 16.

language are important. These factors may explain the positive results for the mastery of the investigated Finnish MWUs in the present study.

Maintenance and development of one's L1 in an L2 environment is highly dependent on continual exposure to L1 and various contexts where they can use their L1 (cf. Tuomela, 2001). The amount of exposure (quantity) to the minority language at home and the content of the input (quality) have an impact, particularly on the acquisition of morphosyntax and vocabulary, as the MWUs in the present study (La Morgia, 2016, p. 203). Form-meaning pairs do not get automatized as the use of L1 is limited in certain domains with few people (Chapter 2). The findings of the present study indicate that a reduced amount of both input and interaction with L1 may influence mastery of MWUs, e.g., verbs of sufficiency. Participant FN 10 did not produce such verbs at all. She mostly used Finnish with her family members and when writing short notes. On the other hand, those Finnish-Norwegian adolescents who used more Finnish in various domains and contexts, also produced more verbs of sufficiency.

The social environment where the Finnish-Norwegian adolescents were living guaranteed that they received a high amount of various input in Norwegian and had frequent opportunities to use the language in their everyday life from an early age. The amount of exposure over time and the quality of the input from a variety of different sources affect language development. Much of language acquisition in an L2 takes place through schooling, reading books and accessing media (Internet, gaming forums, chat rooms). Living in the areas where most schoolmates and friends were native speakers of Norwegian, the Finnish-Norwegian adolescents received a lot of rich native input. This may have had a positive effect on mastery of Norwegian MWUs, such as PVs and idioms in the present study. The present study differs from previous research regarding parents' socioeconomic background, i.e., residential area and educational level (at least one of the parents had received higher education). Thus, a favorable background may contribute to the fact that the Finnish-Norwegian adolescents did not differ from Norwegian L1 speakers of the same age.

Previous results have demonstrated that even advanced L2 users with the lowest age of onset to L2 experience difficulties concerning conventionalized expressions, e.g. PVs and idioms (Golden, 2005; Prentice, 2010; Abrahamsson & Hyltenstam 2009, 2013). The findings of the present study, however, do not fully support these results. The Finnish-Norwegian adolescents did not differ from native speakers of Norwegian in terms of mastery of PVs and idioms. A great amount of various input and output in Norwegian from an early age (cumulative exposure over time) resulted in achieving a high level of proficiency in terms of Norwegian MWUs investigated in the present study. Study IV demonstrated, however, that age generally seemed to affect comprehension and production of

idioms. Slightly older Finnish-Norwegian adolescents mastered idioms better than younger native speakers (this also applies to the youngest Finnish-Norwegian participant FN 8) who had not achieved nativelike proficiency in idioms yet. Previous research has namely shown that the ability to interpret idioms increases from the age of 14–17 onward (Wray, 2002; Sprenger, la Roi & van Rij, 2019).

Not only exposure to and use of languages, but also different features of MWUs such as equivalents in one's L1, degree of semantic transparency and frequency, are factors with a possible impact on the participants' results in the present study (Studies II–IV). Although Finnish and Norwegian belong to different language families and have rather different lexicons and grammars, there are similarities concerning MWUs like PVs and idioms (positive transfer; see Section 4.2). Even though PVs are not as common in Finnish as they are in Norwegian and other Germanic languages, there are still many PVs, especially transparent ones, which have equivalents semantically and structurally close to Finnish. The multilingual Finnish-Norwegian adolescents of this study did not lack strategies to deal with PVs because items are conceptualized in the same way in their L1.

The findings of the present study are in line with the results from earlier studies that have demonstrated that linguistic items with equivalents in one's L1 are the easiest both to understand and to produce, e.g., idioms (Irujo, 1986; Mäntylä, 2004). One factor that most likely helped the Finnish-Norwegian adolescents was that many idioms related to body parts are similar in Finnish and Norwegian. Finnish verbs of sufficiency are missing in many languages (Flint, 1980), but in Norwegian there are some similar verbs and the Finnish-Norwegian adolescents may have benefitted from this. Identifying similarities and differences within a language and between languages and applying this knowledge to what has been learned previously are essential to the learning process, as UBL suggests (see e.g., Tomasello, 2003).

Previous research has shown that semantic compositionality of MWUs has an effect on both comprehension and production. MWUs whose literal meaning creates a mental image close to their figurative meaning pose less difficulties for language users (Mäntylä, 2004; Golden, 2005; see also Muikku-Werner & Penttilä, 2014; Boers & Webb, 2015). The findings of the present study showed that transparent and semi-transparent idioms were less challenging for both the Finnish-Norwegian and native-speaking adolescents than opaque ones (Study IV). However, semantic complexity did not appear to affect the use of PVs as the Finnish-Norwegian adolescents produced slightly more idiomatic PVs than transparent ones (cf. Yildiz, 2016). Concerning Finnish verbs of sufficiency, the Finnish-Norwegian adolescents and Finnish L1 speakers mostly used the same verbs and seemed to avoid verbs in another semantic area.

Previous research has revealed that the more frequent an expression is, the more familiar it is likely to be. Frequency might, to some extent, explain the proportions of MWUs in the Finnish-Norwegian adolescents' production. They used high frequency verbs of sufficiency (Study II) and PVs (Study III) more often than low frequency ones. As to idiom knowledge, the study could not, however, prove the effect of frequency (cf. Mäntylä, 2004; Prentice, 2010).

7.1.3 RQ 2 What does knowledge of MWUs reveal about the Finnish-Norwegian adolescents' bilingualism?

One language of a bilingual person will often be used more frequently in specific contexts and with particular persons and will likely be processed more easily than the other (Li Wei, 2000; Montrul, 2016b). The dominant language is often the language to which the bilingual person receives more exposure. The Finnish-Norwegian adolescents in the present study had a great amount of exposure to Norwegian during childhood and especially in adolescence, while they received a lower amount of exposure to Finnish. The findings of the present study indicate that Norwegian is the Finnish-Norwegian adolescents' dominant language which they also reported themselves. Their proficiency in the majority language/L2 seems to be nativelike (cf. Montrul, 2016a, p. 20).

Exposure to and use of languages seemed to have an effect on bilingual proficiency (Studies II–IV). The amount of input the Finnish-Norwegian adolescents receive in their language environment and the opportunities to use their languages differ not only from that of Finnish L1 speakers but may also differ from that of Norwegian L1 speakers. All in all, the Finnish-Norwegian adolescents are a rather heterogeneous group. They differ with respect to their language acquisition background, exposure to Finnish and Norwegian languages, the purposes they use their languages and their ability in both languages (Treffers-Daller & Korybski, 2016, p. 106; Unsworth, 2016, p. 157). This means that even siblings who are raised with similar environments will differ from each other in different ways (Caldas, 2006; Grosjean, 2015). In Study II, the older siblings (FN 8 and FN 11) seemed to have a higher proficiency in Finnish than the younger ones (FN 9 and FN 10).

The needs and use of the languages are usually quite different and this results that bilinguals do not develop equal fluency in their languages (Grosjean, 2015, p. 84). In an L2 setting, it is not guaranteed that bilingual individuals manage to maintain their L1 even if both the parents speak the same minority language as in the present study. The observations of the longitudinal Study I demonstrated that the levels of proficiency in Finnish varied from 'fully' fluent to minimal and

receptive ability (cf. Montrul, 2016a). Parents who have been living in an L2 environment a long time (over 20 years) may also prefer to use the majority language at home and then children are less exposed to their minority language.

The extent to which the social environment supports the use of the L1 and L2 will exert a powerful influence on language development and maintenance (Ellis, 2008, p. 147–148). Living in an L2 environment often provides good conditions for the development of L2, while circumstances are more unfavorable to L1 (cf. Gathercole & Thomas, 2009). Bilingual speakers from small linguistic minorities living among the majority population may become monolingual in the majority language if they do not get enough support to maintain and develop their L1, i.e., mother tongue instruction (Cummins, 2001; cf. Janulf, 1998; Tuomela, 2001). The Finnish-speaking children in the greater Oslo area do not receive instruction in Finnish opposed to the children in the northern part of Norway (see Niiranen, 2011). Thus, the success of maintaining Finnish in the greater Oslo area depends mainly on the parents' effort to encourage their children to use Finnish in different domains and FLP.

Four Finnish-Norwegian adolescents, FN 4, FN 8, FN 9 and FN 10, participated in studies where mastery of MWUs in Finnish and Norwegian was investigated (see Table 5, Section 5.2). Of these four participants, FN 8 produced most verbs of sufficiency (n=15), while participants FN 4 produced ten and FN 9 seven verbs. How actively one used the Finnish language generally might explain the differences, as assumed in the UBL (Chapter 2). Participant FN 8 used Finnish most in her daily life, i.e., she read books in Finnish and also used Finnish regularly on social media. As opposed to the other four participants, she estimated that she was equally competent in both Norwegian and Finnish. Participants FN 8 and FN 9 are siblings. Finnish was the language used by the family members and reading was a popular activity at home. There were differences in language use between the two siblings resulting partly in different language competence in a less used language. Participant FN 10 did not produce any verbs of sufficiency. She was mostly exposed to Finnish during the first years but the situation changed when she started in Norwegian day care at the age of two and half. Finnish was used inside the family and she wrote short notes in Finnish. She did not receive any instruction in Finnish and she reported that reading in Finnish was challenging. It seems that Norwegian is her dominant language.

Table 8. Four Finnish-Norwegian participants' mastering of MWUs in Finnish and Norwegian.

	Age of onset to L2	Finnish language use	Self-assessed strongest language	Verbs of sufficiency	PVs in e-mails	Idioms, test
Language mode				Finnish, oral	Norwegian, written	Norwegian, written
FN 4	At the age of six years when starting school	Finnish when in contact with family and following media	English	10 verbs	---	Highest result (36 out of 40) among Finnish-Norwegian adolescents
FN 8	At the age of three years when starting day care	Uses Finnish regularly for reading and social media and with family	Norwegian and Finnish equally strong	15 verbs	More PVs and especially idiomatic ones	Lowest result among Finnish-Norwegian participants, Part C was considerably lower; youngest participant
FN 9	At the age of three years when starting day care	Daily Finnish in family and reading books in Finnish	Norwegian	7 verbs	More transparent PVs	---
FN 10	At the age of two and half years when starting day care	Daily Finnish in family and writing short notes	Norwegian	0 verbs	More transparent verbs	---

At the time of the interview (Study II), the use of the Finnish language of the participant FN 4 was limited to communication with his parents and following Finnish media coverage on the Internet and television. Despite this, he produced many verbs of sufficiency and he spoke Finnish fluently. This may be due to the fact that he was born in Finland and moved to Norway at aged of five. He stayed at home until starting school and Finnish was the language mostly used before school age. He also received some kind of supportive instruction in Finnish during two years. His level of his Finnish proficiency might already have been quite advanced when the language environment changed and reduced input and output in Finnish played a minor roll.

Participants FN 8, FN 9 and FN 10 participated in Study III where their use of PVs in emails was examined. Also here, participant FN 8 differed slightly from the two other participants. She produced more PVs and especially idiomatic ones, while participants FN 9 and FN 10 produced more transparent PVs. It is difficult to say why there was variation in the results, but the topics in email messages may have had an influence on the use of PVs.

Participants FN 4 and FN 8 took part in Study IV where mastery of Norwegian idioms was investigated. The results of the three tests showed that there were differences between these two adolescents. Participant FN 4 scored highest (36 out of 40 correct) among Finnish-Norwegian adolescents. He got all 20 idioms correct in Part A (receptive knowledge of idioms in a multiple choice task), while he had some incorrect answers in Part B or C (productive part). At the time of the test, participant FN 4 was 21 years and he can be considered to have an adult native speaker's proficiency in Norwegian. Participant FN 8 got the lowest results in the test among the ten Finnish-Norwegian adolescents. She scored significantly better in part A than in parts B and C and her result in Part C was considerably lower. One reason for the lower results concerning participant FN 8 may be that she was the youngest of the ten Finnish-Norwegian adolescents, and her language was in the process of evolving towards adult language skills (cf. Wray, 2002).

As there were only four Finnish-Norwegian adolescents who participated in studies where the mastery of MWUs were investigated in Finnish and Norwegian, no far-reaching conclusions can be drawn from the findings. Albeit, language acquisition in an L2 environment is the sum of many different factors and individual differences, especially in L1 acquisition, can be large.

The findings of the present study show that Finnish-Norwegian adolescents mastered complex constructions in Finnish or Norwegian well (Studies II–IV). They used MWUs in an idiomatic way and seemed not to differ from native speakers of Finnish or Norwegian. They had a high level of bilingual proficiency in terms of those MWUs that were of interest in the present study, namely Finnish verbs of sufficiency, and Norwegian PVs and idioms. Based on the three studies, the mastery of MWUs provides good information on one's language proficiency but more research in the field is needed. There was, however, individual variation and this may be due to their language use patterns and age. As the findings of the present study are based on a limited number of participants who had good skills in both languages, they cannot provide a basis for general conclusions about bilingual proficiency among all Finnish-Norwegian adolescents in the greater Oslo area. Here, one must take into account that the Finnish-Norwegian adolescents' bilingual development is strongly supported by parents who encourage their children to use the Finnish language (cf. Tuomela, 2001; Ylikiiskilä, 2001; Halmari, 2005; Tigert, 2017; Impola, 2020).

The Finnish-Norwegian adolescents are well integrated into the Norwegian society. They share a common Nordic culture and the same lifestyle and values with Norwegian adolescents (cf. Lainio, 1989; Bijvoet, 1998; Janulf, 1998). The vast majority of the participants identified themselves as bicultural (Study I). The interviews (Study II), nevertheless, indicated that Finnish identity ('Finnishness') was important for the three boys who all reported that they were completely

Finnish. The Finnish-Norwegian adolescents had positive attitudes towards the Finnish language and Finland (cf. Juvonen, 2000; Fulland, 2016) which also have a positive effect on bilingual development and language maintenance as well as. Furthermore, the Finnish-Norwegian adolescents had concrete needs and goals to use their L1, i.e., participate in confirmation school, do military service (boys) in Finland, or take a matriculation exam in Finnish. The older participants also said that they wanted to speak Finnish to their future children. The Finnish language in the greater Oslo area is not especially lowly valued so the adolescents do not need to be ashamed of speaking their L1 (cf. Bijvoet, 1998; Karhunen, 2004).

The results of this study demonstrate that it is possible to have high proficiency both in the L1 and the L2 in an L2 setting, even though the circumstances are not completely favorable (cf. Halmari, 2005). Obviously, intensive exposure to both languages and active language use are the main factors that have an effect on bilingual development, but also motivation, attitudes and (strong) ethnic identity play a role (Study I).

As Bybee (2010) points out, language is a complex adaptive system, i.e., the language that people know changes and reorganizes itself in response to multiple competing factors. Language learning is a lifelong process, whereby language becomes more complex through use (cf. Bialystok, 2001). The findings of the present study demonstrate that language dominance can change over the lifespan and that a person's L1 may not always be their dominant language (Silva-Corvalan & Treffers-Daller, 2016, p. 2).

7.2 Evaluation of the study

In this section, strengths and limitations of the present study are discussed.

The first aim of the study was to find out similarities and differences in the mastery of MWUs by Finnish-Norwegian adolescents and Finnish and Norwegian L1 speakers of the same age. While idioms have been studied to some extent in Nordic languages from the point of view of language users (Golden, 2005, Abrahamsson & Hyltenstam, 2009; Prentice, 2010), Norwegian PVs and Finnish verbs of sufficiency have not interested researchers. There are just a few studies that report language users' comprehension and production of these issues (see e.g., Hovland, 1997¹⁰⁹; Flint, 1980). The mastery of MWUs in both a participants' languages has not been studied earlier, therefore this research brings new information in the field of SLA and bilingualism: how the participants comprehended and produced different kinds of verbs of sufficiency, PVs and

¹⁰⁹ Hovland's (1997) master thesis is the only study on L2 speakers' use of PVs in Norwegian.

idioms in their L1 and L2. The findings may be beneficial in teaching Finnish and Norwegian as L2. Adopting a substantial number of MWUs in a language is a process that takes time and continues throughout life. Therefore, this thesis argues that MWUs should be addressed from the very beginning of language learning and highlighted in a variety of ways in classroom and learning material.

The second aim of the thesis was to examine how the Finnish-Norwegian adolescents live with two languages in an L2 environment. As Finnish immigrants form an invisible minority in the greater Oslo area, there was not much information to date about their language use pattern (see Heikkola, 2005).¹¹⁰ The longitudinal study provides new information on what language the Finnish-Norwegian adolescents used for what purpose, and with whom, and how the language use pattern changed during the eight years' time, as well as which factors affected language choice (Study I).

The results of the study are useful for research on bilingualism and for planning language policies. A minority language needs the majority society's support. The most important factor is that parents encourage their children to use their L1 because it will not develop in the same way as L2 that becomes most often the dominant language (Gathercole & Thomas, 2009; Birdsong, 2014). Parents should provide plenty of opportunities to expand the functions for which children may use their L1 (reading, writing, games) and the contexts in which they may use it (Tigert, 2017). Finnish language schools where children can meet other Finnish speaking peers are important and should also be supported by the majority society.

The various methods used (interviews, questionnaires, emails, tests and observations) gave a varied picture of the Finnish-Norwegian adolescents' language use and knowledge of MWUs. It will also be important in the future to look at multilingual persons' language skills and mastery of MWUs from different perspectives (receptive – productive, oral – written, qualitative – quantitative). The interviews also allowed the researcher to seek more information and clarifications from the language choice and use in various domains. In designing the questionnaires and tests, metrics from previous studies were used and the idiom test was pre-tested.

As in all studies, this study has its shortcomings which should be considered in future research. In Study I, the interviews were not recorded, only notes were taken. This can be regarded as a limitation, but the interviews focused explicitly on language choice rather than language proficiency. If something remained unclear, there were opportunities to contact the participants and/or their parents later. Language choice and use of the Finnish-Norwegian adolescents (this also applies

¹¹⁰ Heikkola's (2005) master thesis is the only study on the Finns living in the greater Oslo area and their language choice.

to Study IV) were assessed via self-report questionnaires. The reliability of self-ratings can always be questioned but in addition to tests, it is a necessary supplement and gives additional information (Ross, 2006).

Spontaneous speech (Study II) gives a good overall picture of participants' language skills, as speakers need to activate all the components of their language skills under pressure. In a peer conversation, one disadvantage is that one of the participants may be talkative and the other speaks less. Another problem is that the occurrence of constructions may be random (Kurki & Mustanoja, 2020). Some speakers may avoid certain structures, even consciously, if they are uncertain of their use (also Study III). Assumingly, this applied to those participants who may have felt they did not speak Finnish well enough. As to the writing tasks (email messages) in Study III, the topics may have guided the selection of PVs. In addition, the length of the messages varied greatly. This is important to observe when interpreting the results or comparing them with previous research.

The design of the idiom test had some limitations, which should be borne in mind in the future. In part 1 all idioms contained verb + noun, e.g., *have a roof over your head* (a multi-choice task/receptive knowledge), while in parts 2 and 3, where productive knowledge was tested, the idioms did not have the same syntactic structure. In addition to verb + noun constructions, some idioms consisted of prepositional phrases (*from hand to mouth*) or nominal phrases (*skins and bones only*). The number of different idioms was not equal in terms of transparency, frequency and Finnish equivalence. Thus, the comparison between different types of idioms was challenging. Quantitative methods were therefore used to compensate for this shortcoming.

Due to the limited number of participants in the sub-studies, the statistical significance of the results was assessed only in Study IV. The conclusions were often made on the basis of a small amount of linguistic material from the participants, but to evaluate validity, the findings of the present study were compared with other similar studies. With more participants, the results would be more generalizable (cf. Schmitt, 2010). Another limiting factor in addition to the small number of Finnish-Norwegian adolescents was that they formed a homogeneous group in terms of language skills (Studies II–IV). Most Finnish-Norwegian adolescents can be considered to have a high level of proficiency in Finnish and Norwegian but one participant had just receptive skills in Finnish (Study I). The results may have been different if language proficiency of the participants had been lower. The wide age range of the participants may also have influenced their performance due to differences in the amount of input and output they had been exposed to (cf. Swain, 2000). The empirical results reported here should be considered in the light of these limitations.

7.3 Future directions

In summary, the findings of this study contribute to the field's prior knowledge of the multiple factors influencing bilingual development in an L2 setting and mastery of MWUs. As a considerable amount of native speakers' language contains different kinds of MWUs, this issue is worth paying more attention to. To date, there are few studies on the mastery of MWUs in Finnish or Norwegian and particularly among bilingual/multilingual language users. This is the research gap that this thesis attempts to fill, in hopes that the findings presented in this thesis will inspire further research on the topic.

As the findings of this study do not fully confirm the results from earlier studies which have shown that MWUs cause problems for language users, even at advanced levels (Pawley & Syder, 1983; Sjöholm, 1995; Enström, 1996; Ekberg, 1999; Wray, 2002; Mäntylä, 2004; Golden, 2005; Siyanova & Schmitt, 2007; Prentice, 2010; Ivaska, 2014), issues requiring further investigation have been raised. Language learning is a lifelong process, and the language people know changes across one's life span, depending on multiple factors. As a result, as far as language proficiency is concerned, bilingual language users do not only differ from 'monolinguals' but also from each other. It would be important to make a longitudinal study on bilingual participants, and examine how they master different kinds of MWUs in speech and written data both in their L1 and L2. Comparing bilingual participants to each other would increase the knowledge of what kinds of MWUs occur most frequently in production, and how factors, such as age, changes in language use and CLI, might affect the use of these conventionalized expressions (cf. Ortega, 2018).

As the sample sizes of the studies were small (except Study IV), studies on a larger scale would be needed to test the generalizability of the results of this thesis. Language users with different L1 at a different level of proficiency would give useful information about how MWUs in Finnish or Norwegian languages are comprehended and produced. Thus, this knowledge could be used in the development of teaching and learning materials, e.g., what kinds of MWUs are useful and at what proficiency levels (Golden, 2005). The use of conventionalized expressions as MWUs examined in the present study is associated with many social situations and the way one copes with them in a speech community and is of particular interest to language users and teachers.

Abbreviations

BFLA	Bilingual first language acquisition
CLI	Cross-linguistic influence
ESLA	Early second language acquisition
FLP	Family language policy
L1	First language
L2	Second language
MWUs	Multi-word units
PVs	Particle verbs
SLA	Second language acquisition
SSB	Statistics Norway
UBL	Usage-based model of language

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Appendices

Appendix 1. (Study I, 2004)

Del 1.

1. Mitä kieltä puhut/lapsesi puhuu kotona
a) äidin kanssa b) isän kanssa c) sisarusten kanssa
2. Mitä kieltä puhutte, kun koko perhe on yhdessä?
3. Mitä kieltä puhut /lapsesi puhuu
a) isovanhempien kanssa b) serkkujen c) tätien ja setien kanssa
4. Kuinka usein tapaavat /lapsesi tapaa Suomessa asuvia sukulaisia?
5. Onko sinulle /teillä Norjassa asuvia suomenkielisiä sukulaisia?
a) Kuinka usein tapaatte? b) Mitä kieltä puhut / lapsesi puhuu, kun tapaatte?
6. Mitä kieltä puhut parhaan ystäväsi kanssa?
7. Onko sinulla suomalaisia ystäviä?
a) Kuinka usein tapaatte? b) Missä tapaatte? c) Mitä kieltä puhut, kun tapaatte?
8. Mitä kieltä puhut koulussa?
a) oppitunneilla b) välitunneilla
9. Onko sinulla suomea puhuvia koulukavereita? Mitä kieltä puhutte?
10. Mitä harrastat?
a) Onko sinulla suomen kieltä puhuvia ystäviä harrastusten parissa?
b) Mitä kieltä puhut ohjaajien kanssa?
11. Millä kielellä luet / lapsesi lukee sarjakuvia, lehtiä ja kirjoja? Kuinka usein?
12. Millä kielellä kirjoitat /lapsesi kirjoittaa kortteja (äitienpäivä, syntymäpäivä) ja viestilappuja? Kuinka usein?
13. Millä kielellä katsot / lapsesi katsoo videoita ja tv- ohjelmia? Kuinka usein?
14. Millä kielellä kuuntelet / lapsesi kuuntelee musiikkia? Kuinka usein?
15. Millä kielellä pelaat /lapsesi pelaa tietokonepelejä? Kuinka usein?
16. Miten arvioit omaa / lapsesi suomen kielen taitoa?
a) puheen ymmärtäminen b) puhuminen c) lukeminen d) kirjoittaminen
e) sanaston hallinta

17. Miten arvioit lapsesi norjan kielen taitoa?
a) puheen ymmärtäminen b) puhuminen c) lukeminen d) kirjoittaminen
e) sanaston hallinta
18. Sekoitatko /sekoittaako lapsesi norjaa ja suomea sekaisin?
a) Miten se ilmenee? b) Voitko antaa esimerkkejä tilanteesta?
20. Miten koet lapsesi olevan?
a) täysin suomalainen b) eniten suomalainen c) suunnilleen yhtä paljon suomalainen
kuin norjalainen d) eniten norjalainen e) täysin norjalainen

Del 2.

1. Minä vuonna lapsesi on syntynyt?
2. Minkä ikäisenä hän muutti Norjaan? Kuinka pitkään hän on asunut Norjassa?
3. Onko lapsesi ollut norjankielisessä päivähoitossa? Miten kauan?
4. Onko lapsesi saanut opetusta suomen kielessä? Miten kauan? Kuinka monta tuntia viikossa?
5. Onko lapsesi osallistunut suomenkielellä tapahtuviin kerhoihin tai Suomi-kouluun? Kuinka kauan?
6. Onko lapsesi saanut kaksikielistä opetusta tai opiskellut norjaa toisena kielenä? Kuinka kauan?
7. Millä kielellä lapsesi oppi lukemaan?
8. Mikä kieli on lapsellesi tärkein tällä hetkellä? / Mitä kieltä lapsesi tarvitsee eniten tällä hetkellä?
9. Mitä kieltä toivoisit lapsesi puhuvan kotona?
10. Mikä koet lapsesi identiteetin olevan tällä hetkellä?
11. Miten norjalaiset suhtautuvat mielestäsi suomalaisiin ja suomen kieleen?
12. Oletko kohdannut negatiivista palautetta, jos olet puhunut lapsillesi suomea jossain tilanteessa? Miten se on ilmennyt?

Del 3

1. Mikä on sinun ja puolisoasi koulutus?
2. Millä alalla työskentelette?
3. Kuinka kauan olette asuneet Norjassa?
4. Minkälaisella alueella asutte?
5. Onko teillä sekä suomalaisia että norjalaisia ystäviä? Miten usein tapaatte?
6. Kuinka usein käytte Suomessa?
7. Onko teillä aikomus jäädä Norjaan?

Appendix 2. (Study I, 2012)

Kryss rett alternative og svar på spørsmålene.

A. Språklige domener

I Familiedomen

Hvor ofte snakker du finsk med

	alltid	oftest	av og til	aldri
din mor				
din far				
dine søsken				
slektinger i Norge				
dine besteforeldre				
dine finske venner i Norge				
dine finske venner i Finland				
andre finner (venner til dine foreldre eller andre som du vet at snakker finsk)				

Hvor ofte treffer du dine besteforeldre og dine finske venner i Norge og Finland?

Hvor ofte har du kontakt med andre finner? Hvor treffer du dem?

Hvor ofte reiser du til Finland? Er det oftere eller mer sjeldent enn før? Hvorfor reiser du til Finland?

Hvilket/hvilke språk snakker du når du er i Finland på ferie?

Hvor ofte snakker du norsk med

	alltid	oftest	av og til	aldri
din mor				
din far				
dine søsken				
slektinger i Norge (hvis du har)				
dine finske venner i Norge				
andre voksne i nærmiljøet (naboer, dine foreldres venner som du vet at snakker finsk)				

Hvilket språk snakker du med din beste venn?

II Fritidsdomen

Hvilke aktiviteter driver du med?

Hvilket / hvilke språk snakker du i fritidsaktiviteter?

Deltar du i aktiviteter hvor du har muligheter å snakke finsk? Hvis ja, hvilke aktiviteter og hvor ofte?

III Massmediedomen

Hvor ofte bruker du finsk

	alltid	oftest	av og til	aldri
bøker og tegneserier				
tidskrifter og aviser				
Internet (søke informasjon)				
blogg				
dataspill				
SMS				
korte meldinger hjemme (huskelapper)				
TV og DVDer				
Radio og cder				
Skype, WhatsApp				

Hvor ofte bruker du norsk

	alltid	oftest	av og til	aldri
bøker og tegneserier				
tidskrifter og aviser				
Internet				
Internet (søke informasjon)				
dataspill				
SMS				
korte meldinger hjemme (huskelapper)				
TV og DVDer				
Radio og cder				
Skype, WhatsApp				

Hvilket /hvilke språk er de viktigste for deg nå? (Skriv det viktigste språket først, deretter nummer to etc.)

Hvilket /hvilke språk tror du att kommer til å bli de viktigste for deg i framtiden?

Tror du at du har bruk til dine kunnskaper i finsk i fremtiden? I hvilke situasjoner?

B. Holdninger og identitet

	Helt enig	Verken enig eller uenig	Helt uenig	Vet ikke
Å kunne finsk er viktig for meg.				
Jeg kan uttrykke mine følelser best på finsk.				
Jeg kan uttrykke mine følelser best på norsk.				
Jeg føler tilhørighet til Norge.				
Jeg føler tilhørighet til Finland.				
Jeg ser Norge som mitt hjemland.				
Jeg ser Finland som mitt hjemland				
I Norge føler jeg at jeg er finsk og i Finland føler jeg at jeg er norsk.				
Jeg kan tenke meg å studere i Finland.				
Som voksen kan jeg tenke meg å jobbe i Finland.				
Som voksen kan jeg tenke meg å flytte til i Finland.				
Jeg vil gjøre førstegangstjeneste i Finland.				
Jeg kan tenke meg å gifte med en finne.				
Jeg kan tenke meg å snakke finsk til mine barn.				
Tospråklighet har vært en rikdom for meg.				
Det er lett å være finsk i Norge.				
Jeg ser meg som en innvandrer.				
Finskhet for meg betyr å kunne finsk.				
Jeg holder med Finland i idrettsevenementer.				
Jeg holder med Norge i idrettsevenementer.				
Jeg føler stolthet over Finland og Finlands historie.				

Har du finsk eller norsk statsborgerskap?

Hva synes du om din identitet? Føler du at du er finsk, norsk eller noe i midten?

Har du noen gang opplevd noe negativ fordi du har finsk bakgrunn? Hvis ja, kan du motivere det.

Hvilke finske tradisjoner er viktige for deg?

Appendix 3. Norske idiom med kroppsdelar (Study IV)

TEST A. Hva tror du at følgende uttrykk betyr? Velg det alternativ som du synes passer best. Marker bare et svaralternativ.

Eksempel: å krysse fingrer for noe/noen

- å si nei til noe/noen
- å ønske at noe skal gå bra
- å ønske at noen skal mislykkes
- å ha veldig lyst til noe

1) *å få lang nese*

- å bli narret
- å lure noen
- å lyve
- å kjenne en veldig god lukt

2) *å miste ansikt*

- å besvime
- å forsove seg
- å gjøre noe dumt og deretter bli konfrontert med det foran andre
- å få panikk og miste kontrollen over seg selv

3) *å tale for døve ører*

- å diskutere noe med andre som ikke ønsker å forstå din side av saken
- å snakke med mennesker med dårlig hørsel
- å høre med liten interesse på noen
- å snakke så lavt at ingen hører

4) *å holde tunga rett i munnen*

- å angre på noe
- å konsentrere seg om å klare noe
- å være høflig mot alle
- å snakke på en direkte måte

5) *å gå med nesa i sky*

- å være interessert i været
- å føle seg bedre enn andre
- å være forkjølet
- å være veldig høy

6) *å ta seg selv i nakken*

- å slappe av
- å ikke gjøre ferdig det man har begynt med
- å bestemme seg for å bli bedre i det en ikke har fått gjort
- å være veldig lei av noe

7) *å vende noen ryggen*

- å være opptatt av vennskap
- å ikke ville ha noe med andre å gjøre lenger
- å ikke stole på noen
- å holde noe hemmelig for noen

8) *å ha hjertet i halsen*

- å være veldig redd
- å ha dårlig samvittighet
- å holde på å miste livet
- å være fryktelig sint

9) *å ha øynene på stilker*

- å være trøtt i øynene
- å sovne midt i en samtale
- å stirre intenst på noe interessant eller uvanlig
- å plutselig miste synet

10) *å ha en finger med i spillet*

- å bidra til utfallet i en sak
- å være jukse-maker i spillet
- å si ja til noe
- å blande seg opp i andres saker

11) *å stå opp med det gale beinet først*

- å stå opp for tidlig
- å være flink til å motivere de andre
- å ha en dårlig dag
- å være frekk

12) *å tråkke noen på tærne*

- å fornærme noen
- å prøve å få kontakt med noen
- å bli sint på noen
- å bli irritert på noen

13) *å ha tak over hodet*

- å være veldig intelligent
- å ha masse hår på hodet
- å ha et sted å bo
- å si noe som alle forstår

14) *å sette seg på bakbeina*

- å protestere mot noe som man ikke liker
- å ikke gi opp før man er ferdig med noe
- å nekte å gi opp sin drøm
- å ikke følge de reglene som gjelder

15) *å være tørr bak ørene*

- å ha erfaring
- å ha dårlig hørsel
- å være barnslig
- å være kjedelig

16) *å slå ut håret*

- å være opptatt av hvordan man ser ut
- å gjøre noe morsomt som man ikke gjør så ofte
- å være glad i livet
- å være i dårlig humor

17) *å sitte med skjegget i postkassen*

- å prøve å gjøre noe som er uvanlig
- å være vanskelig å like
- å være mest opptatt av seg selv
- å ikke oppnå det som en ønsker å gjøre

18) *å ta bladet fra munnen*

- å få en annen person til å fortelle noe som er hemmelig
- å snakke hele tiden uten å ha pauser
- å snakke uhøflig til andre mennesker
- å fortelle om noe som mange har ventet på å få høre

19) *å ha bein i nesen*

- å være bestemt og vite hva man vil
- å irritere seg over noe
- å være grinete
- å være en person som ingen liker

20) *å ha is i magen*

- å være rolig i en vanskelig situasjon
- å være utålmodig
- å være redd for noe som skal skje
- å ha vondt i magen

TEST B. Her er eksempler på noen vanlige idiomer. Fyll i det ord som du synes mangler.

Eksempel: Hva heter ordet på fransk igjen? Jeg har det på tunga.

- 1) Mats har aldri penger. Han lever fra hånd til _____.
- 2) Pass deg for Stine. Hun kan snakke stygt til folk. Hun har en skarp _____.
- 3) Benken er nettopp malt. Den er ikke tørr. Hold _____ fra fatet!
- 4) Barn leker ute, og de er kledd med varme klær fra topp til _____.
- 5) Ronny har alt som de fleste kan bare drømme om. Han er født med en sølvskje i _____.
- 6) Jeg kan si med hånden på _____ at jeg stoler på deg.
- 7) Det er viktig å holde _____ kaldt i en kritisk situasjon.
- 8) Ikke kjør for fort! Ellers får vi politiet på _____.
- 9) Jeg husker ingenting av samtalen. Jeg hørte visst bare etter med et halvt _____.
- 10) Klokken er allerede fem på fem. Jeg må ta _____ på nakken hvis jeg vil rekke toget.

TEST C. Fyll ut ord som mangler i uttrykken. Skriv det ordet som du først tenker på.

Eksempel. Å snakke under fire øyne

- 1) Lovens lange _____
- 2) Å ha grønne _____
- 3) Å stå på god _____ med noen
- 4) På fastende _____
- 5) Kalde hender, varmt _____
- 6) Å være bare skinn og _____
- 7) Å gjøre noe på egen _____
- 8) Å få kalde _____
- 9) Med senket _____
- 10) Å kjempe med _____ mot veggen

DEL II

Vennligst svar på noen korte spørsmål om deg og din språkbruk.

Kjønn _____

Alder _____

Hvilket/hvilke språk snakker du hjemme med dine foreldre?

Hvilket/hvilke språk snakker du hjemme med søsken?

Hvilket/hvilke språk snakker på skole?

Hvilket/hvilke språk snakker du med dine venner?

Velg det alternativ som passer best for deg.

1. Hvor ofte leser du bøker på finsk?

Aldri – iblant – minst en gang i måneden – minst en gang i uken – flere ganger i uken – hver dag

2. Hvor ofte leser du bøker på norsk?

Aldri – iblant – minst en gang i måneden – minst en gang i uken – flere ganger i uken – hver dag

3. Hvor ofte leser du aviser og blader på finsk på internett/på papir?

Aldri – iblant – minst en gang i måneden – minst en gang i uken – flere ganger i uken – hver dag

4. Hvor ofte leser du aviser og blader på norsk på internett/på papir?

Aldri – iblant – minst en gang i måneden – minst en gang i uken – flere ganger i uken – hver dag

5. Hvor ofte ser du TV-programmer på finsk?

Aldri – iblant – minst en gang i måneden – minst en gang i uken – flere ganger i uken – hver dag

6. Hvor ofte ser du TV-programmer på norsk?

Aldri – iblant – minst en gang i måneden – minst en gang i uken – flere ganger i uken – hver dag

Hvor mange år har du bodd i Norge? _____

Når begynte du å lære deg norsk? _____

Hvilke andre språk kan du? _____

Hvordan vurderer du dine kunnskaper på finsk?

Meget bra – bra – ganske bra – ganske dårlig – meget dårlig

Hvordan vurderer du dine kunnskaper på norsk?

Meget bra – bra – ganske bra – ganske dårlig – meget dårlig



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