

The Relationship between Knowledge of Formulaic Sequences  
and Willingness to Communicate in Finnish EFL Speakers:  
A Correlational Study

Master's Thesis  
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<b>Tiivistelmä – Abstract</b> <p>Kielen vakiintuneet ilmaisut ja vieraan kielen oppijan halukkuus kommunikoida kohdekielellä ovat molemmat erittäin ajankohtaisia tutkimuskohteita. Näiden ilmiöiden välistä suhdetta ei ole kuitenkaan tähän asti tutkittu lainkaan ja suomalaisten englannin oppijoiden osa kyseisten ilmiöiden tutkimuksessa on häviävän pieni. Tämän maisterintutkielman tavoitteena on täydentää alan kirjallisuutta selvittämällä, miten englannin kielen vakiintuneiden ilmaisujen hallinta vaikuttaa suomalaisten englannin kielen käyttäjien halukkuuteen kommunikoida kohdekielellä. Lisäksi tutkimuskohteena ovat iän ja sukupuolen mahdolliset vaikutukset näiden kahden tekijän väliseen suhteeseen.</p> <p>Tutkimuksen aineisto kerättiin joulukuussa vuonna 2019 jaetulla nettikyselyllä, johon osallistui yhteensä 474 13-60+-vuotiasta suomalaista englannin kielen käyttäjää. Aineisto analysoitiin määrällisesti käyttämällä tilastomenetelmiä. Pearsonin korrelaatiokertoimet laskettiin muuttujien kesken ja niitä vertailtiin keskenään eri ikäryhmissä ja sukupuolen mukaan käyttämällä Fisherin z-muunnosta ja z-testausta.</p> <p>Korrelaatiotutkimuksen päätuloksena oli vahva positiivinen korrelaatio (<math>r = .54, p &gt; .001</math>) tutkittavien muuttujien välillä. Tämä tarkoittaa, että mikäli osallistuja hallitsi vakiintuneet ilmaisut hyvin, hän osoitti myös vahvaa halukkuutta kommunikoida englanniksi. Sukupuolella ei ollut merkittävää vaikutusta tekijöiden väliseen suhteeseen, mutta ikä vaikutti merkittävästi 20-39- ja 40-59-vuotiaiden välisessä vertailussa. Tulokset antavat lisää painoarvoa vakiintuneiden ilmaisujen tietoiseen huomioimiseen englannin kielen opetuksessa, sillä se voi konkreettisesti auttaa oppijoita olemaan aloitteellisia englannin kielen käyttäjiä niin luokkahuoneessa kuin sen ulkopuolellakin.</p>	
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EFL = English as a foreign language

FSK = formulaic sequence knowledge

WTC = willingness to communicate

SLA = second language acquisition

## 1. INTRODUCTION

In recent years, formulaic language has become the subject of a large and growing body of research. Although there is a long-standing tradition of regarding words as the main building blocks of language and language learning (Pinker 1991), the emphasis in modern research is no longer on individual orthographic words but on prefabricated multiword sequences (Schmitt 2010, Arnon and Christiansen 2017). This phenomenon of formulaic language and its instances in language use have been given an abundance of names in the literature, such as prefabricated patterns (Granger 1998), multiword building blocks (Arnon and Christiansen 2017), phrasal chunks (De Cock 2000) and conventional sequences (Forsberg 2010). For the purposes of the present thesis, I will adapt the term *formulaic sequence* to refer to the conventionalized unanalysed units of language that seem to be retrieved from the memory as wholes and fulfil similar functions to content words (Wray 2002). Formulaic language has been found to be pervasive in communication, and in fact, some researchers estimate that up to half of native speaker language use is formulaic (Conklin and Schmitt 2012). Seeing that formulaicity seems to permeate language, it is no wonder that it has been found to play a crucial role in how language is stored, processed, produced and learned. For native speakers, formulaic sequences offer a significant processing advantage, which contributes greatly to their fluency (Pawley and Syder 1983). For non-native speakers, however, formulaic language has been proven to be a true stumbling block (e.g. Wray 2002, Erman 2009, De Cock 2009, Siyanova-Chanturia et al. 2011). This is why there is now an emerging consensus among second language acquisition (SLA) researchers and educators alike that it is imperative to incorporate formulaic language into L2 pedagogy (Nattinger and DeCarrico 1992, Lewis 1993, Ellis 2001, Nizonkiza and Van de Poel 2019).

Another topic of increasing interest is the construct of willingness to communicate (WTC), which is defined as a person's likelihood to initiate communication when they are free to do so (McCroskey 1992: 20). Its roots can be traced back to the mid-20<sup>th</sup> century, when the main objective of L2 instruction was achieving *linguistic competence* (Chomsky 1965). This concept refers to the ability to produce utterances that are consistent with the principles and rules of the language, and the standard for these norms was the idealised native speaker. However, this view brought about growing concern among researchers that such a formalistic view of language cannot be adequate to explain native speakers' ability to communicate. Out of this concern, a new approach to L2 instruction emerged, *communicative competence* (Hymes 1972), which is

concerned with language learners' ability to use language for successful communication. Today, despite the increased emphasis on communication, anecdotal evidence among L2 educators abounds that many L2 learners never go from a *learner* to a *user* of the language. The study of *willingness to communicate* (henceforth also referred to as WTC), a term first introduced by McCroskey and Baer (1985), provides a way of shedding light on this issue of why one individual will communicate, while another will not under identical or virtually identical situational constraints. With its beginnings in the context of L1, the study of WTC has later been extended to second language learners, and current research strongly suggests that WTC plays an integral role in L2 use. According to the model by MacIntyre et al. (1998), WTC is the factor that most directly influences L2 communication behaviour, which is why they propose that WTC should, in fact, be the main objective of all formal L2 education.

Although both formulaic sequences and willingness to communicate have received and continue to receive much attention in recent literature (e.g. Wray 2002, 2008, 2012, Wood 2002, 2010, 2012, Öz et al. 2015, Başöz and Erten 2018), no studies to date have been specifically devoted to investigating the relationship between the two phenomena. Furthermore, willingness to communicate is a phenomenon well-researched in North America and in Asia (MacIntyre et al. 2001, Peng 2007, Yashima 2002, Aliakbari et al. 2016, Öz et al. 2015), but minimally studied in the Finnish context. The purpose of the present study is to fill this gap in the literature by investigating whether there is a significant correlation between the two variables specifically in the English as a foreign language (henceforth referred to as EFL) context in Finland. The main research question is, therefore, *Is there any significant correlation between knowledge of formulaic sequences and Finnish EFL speakers' willingness to communicate?* A secondary interest of the present study is to investigate whether age or gender has a meaningful influence on the relationship between the two variables. In pursuing these research questions, I took on a quantitative approach by administering a 35-item online questionnaire to a large sample of Finnish EFL speakers (N=474). The acquired data were statistically analysed by calculating Pearson's correlation coefficients ( $r$ ) and comparing the significance of the differences between the groups by utilizing Fisher's  $z$  transformation and  $z$ -testing. Overall, the findings of the study provide new interesting insights into what it is that makes EFL learners willing to communicate.

The present paper is structured in the following manner: chapter two will provide the theoretical underpinnings that will serve as the starting point for the present study; relevant previous research will be overviewed and definitions for the central concepts will be provided. Chapter

three introduces the quantitative methodology utilized in the present study and analysis. The acquired results of statistical data analysis will be presented in chapter four. In chapter five, the findings will be critically analysed, discussed and related back to previous research and the limitations of the study will be addressed. The final chapter will summarize the key findings of the present research, evaluate the significance of the study to the field and conclude with a discussion on pedagogical implications and suggestions for future research.

## **2. THEORETICAL FRAMEWORK**

The aim of the present chapter is to provide a theoretical framework for the key issues dealt with in the present study. The focus will be laid upon two central concepts: (1) *formulaic language* and (2) *willingness to communicate*. Working definitions will be provided and discussed for both phenomena as well as an overview of the most relevant research previously conducted on the topics. This chapter will conclude with a brief summary of the key issues raised in the theoretical framework.

### **2.1 Key concept of formulaic language**

In this first section, I will firstly discuss the plurality of names addressed to the phenomenon. Secondly, I will present and discuss different definitions for the multifaceted term *formulaic sequence*. Thirdly, I will explore the various ways in which formulaicity has been identified and classified in the literature. To conclude this chapter, I will review and summarize some relevant research findings already made about the phenomenon, focusing specifically on the context of the second language learner.

#### **2.1.1 Defining and identifying formulaic language**

Chunks, lexical bundles, multiword units, ready-made utterances, prefabs, and the list goes on – formulaic sequences have been given a plethora of names in the literature. In fact, Wray (2008: 9) was able to list over fifty terms used in the literature, which seem to describe the phenomenon of formulaicity in language. However, she points out that some doubt should be exercised about the likelihood that all the terms do indeed refer to the *same exact* phenomenon, because the terms are used interdisciplinarily, for example, in the fields of anthropology, philosophy, neurology and learning psychology (Pawley 2007). There are, therefore, innumerable ways the different types of the phenomenon have been studied and categorized.



With this caution in mind, Wray concludes that although all the different terms surely have something useful to say, none of them seem to “fully capture the essence of the wider whole” (2008: 8). The plurality of names also reflects the difficulty of providing a practical, and all-encompassing definition for the complex phenomenon. The category is indeed far from clear-cut, largely because of the sheer variety in formulaic language. Furthermore, as previously stated, the phenomenon has been studied in multiple fields of enquiry and various interrelated traditions, such as psycholinguistics, historical linguistics, second language acquisition (SLA), grammar, discourse analysis and computational linguistics (Wray 2012: 232). As a good starting point, the present thesis will use an oft-quoted working definition provided by Wray (2002: 9), which characterizes a formulaic sequence as

“... a sequence, continuous or discontinuous, of words or other elements, which is, or appears to be, prefabricated: that is, stored and retrieved whole from memory at the time of use, rather than being subject to generation or analysis by the language grammar.”

At the core of Wray’s definition is the notion that formulaic sequences are or appear to be generated and processed *holistically*, i.e. without recourse to the individual words or morphemes that make up the phrase. They seem to be processed as “single choices, even though they might appear to be analysable into segments” (Sinclair 1991: 110). However, the evidence for the notion that formulaic sequences are retrieved from the memory as wholes is inconclusive, since it is very difficult to verify empirically whether a sequence is stored holistically or generated via syntactic rules<sup>1</sup> (Schmitt et al. 2004). This is why some scholars (e.g. Forsberg 2010, Edmonds 2008) have chosen to refer to the instances that clearly have processing benefits (usually idioms) as *formulaic sequences*, but they choose to label the rest as *conventionalized sequences*, which does not imply any holistic storage. Wray is keen to point out, however, that her definition aims to be as inclusive as possible so that it can be applied in any field of research. This is why she later characterized it more as a stipulative definition, the purpose of which was to form the basis for analysis (Wray 2008: 29). The definition is thus not an end-product of empirical research and analysis, but for the purposes of the present research, Wray’s (2002) definition is deemed satisfactory. As the focus of the present study is not on the psycholinguistic aspects of the phenomenon, this study will henceforth adapt Schmitt’s (2004)

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<sup>1</sup> To shed more light on this issue, eye movement tracking methods have been utilized in research to investigate this issue, see for example McDonald and Shillcock 2004, Underwood et al. 2004 and Siyanova-Chanturia et al. 2011

convention of using the term *formulaic language* to refer to the overall phenomenon in question and *formulaic sequence* for the individual instances of it.

Boers and Lindstromberg (2012: 84) concur that in many ways, the functions that formulaic sequences fulfil are the same as the functions of single words. They can, for instance, carry out referential or ideational functions like content words (e.g. collocations: *running water*, *blow your nose*); convey an evaluative stance (e.g. exclamations: *What the heck*); organizing discourse (e.g. *on the other hand*) or fulfil pragmatic purposes (e.g. *thank you so much*, *my condolences*) (ibid.). Contrary to many definitions in the field, some researchers propose that formulaicity is not only present in multiword sequences, but it can also be displayed within single unit words, especially in the case of agglutinating languages, such as Finnish or Turkish (e.g. Lehtonen et al. 2007, Durrant 2013). For instance, in his analysis of formulaicity beyond the word-level, Durrant (2013) found that most high-frequency morphemes build strong collocational relations with their syntagmatic neighbours. Even in the English language “the division between multiword and single-word items is blurred, to say the least” (Moon 1998: 81), which can be detected when one comes across words such as *albeit*, *anyway* and *somebody*. Illustrating this vein of thought, Wray (2012: 245) reformulates the well-known expression *It is turtles all the way down*<sup>2</sup> to, *It is formulaicity all the way down*, with which she intends to propose that perhaps everything we say – from the smallest morpheme to even the completely novel utterances that are still governed by the abstract frames of semantic associations – is formulaic at one level or another. As attractive as this idea seems, it is not, however, without its issues. Wray (2012: 245) herself acknowledges the main problem that comes with this suggestion: a loss of perspective. The way I see it, if everything in language can be characterized as formulaic, then nothing makes formulaic sequences exceptional. This takes away from the perceived uniqueness of formulaic language, in which certain word strings stand out as more formulaic than others.

A very recent definition by Buerki (2020: 103) emphasises the shared, communal aspect of formulaic language by characterising it as “habitual turns of phrase in a speech community.” This definition is linked to Wray’s (2002, 2012) suggestion that the underlying principle of formulaic language is the fact that it is a linguistic way of promoting our own survival interests. By this she means that by incorporating word strings that are often used in the surrounding

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<sup>2</sup> This saying originates from a mythological idea of the world which is supported by a chain of increasingly large turtles, which continues indefinitely, and hence “It is turtles all the way down.”

community, one can draw others into behaviours beneficial to him/herself; “I am like you because I talk like you, so you will want to help me” (Wray 2012: 232). In this way, therefore, formulaic language is “a linguistic solution to a non-linguistic problem” (Wray 2002: 100). In a similar vein, Erman and Warren’s (2000: 31) definition emphasises the role of the native speakers’ speech community by regarding formulaic sequences as: “combinations of at least two words *avored by native speakers* in preference to an alternative combination which could have been equivalent had there been no conventionalization” (italics added). Pawley and Syder (1983: 208) give an enlightening example: the terms *headache* and *backache* are culturally recognized descriptions of a specific ailment in the body, whereas *footache* or *kneeache* do not have a similar role. Although one could theoretically say *I have an ache in the head*, it is not the culturally standardized way of expressing it. In this way, formulaic sequences are an intrinsically social and cultural institution.

Another approach to defining formulaic sequences is to emphasize the *frequency* in which the phenomenon occurs in language:

“... lexical phrases are chunks of language of varying length, conventionalized structures *that occur more frequently* and have more idiomatically determined meaning than language that is put together each time.” (Nattinger and DeCarrico 1992: 558-567, italics added)

Although Nattinger and DeCarrico’s definition remains quite vague in stating that conventionalized structures occur *more frequently* than expressions that are pieced together word-by-word, it is widely agreed that formulaic sequences are pervasive in language. A calculation carried out by Erman and Warren (2000) showed that formulaic sequences constituted as much as 58.6% of the analysed spoken classroom talk and 52.3% of the written discourse. However, other measurements have arrived at strikingly different results. Moon (1998) found only 4-5% of the words in the *Oxford Hector Pilot Corpus* (consisting of over 18 million words) to be part of fixed expressions. By contrast, in another study, Altenberg (1990) estimates that as much as 70% of the words in the *London-Lund Corpus* form part of frequent formulaic sequences. The significant divergence in these estimations can most likely be traced back to the researchers’ differing views on as to what exactly constitutes a fixed expression. Despite the divergence in estimations, it is now believed that formulaic sequences are ubiquitous in language, and it is also likely that items of formulaic language are featured universally in languages (Buerki 2020: 104).

When encountering statistics such as the ones presented above, one may raise the crucial question of how exactly formulaic sequences can be identified and counted in a pool of data. Due to the absence of a single, all-encompassing definition, the identification of formulaicity is an extremely difficult task. To answer the question in a nutshell, there are two basic ways in which formulaicity is conventionally identified: using native speaker intuition or conducting corpus research (Wray 2002: 20). Intuition is based on the speech community members' perception of what *feels* idiomatic: an expression counts as idiomatic if it "just sounds right" to the native speaker (*ibid.*). In academia, this approach often puts the researcher in the place of the self-appointed judge of what is formulaic and what is not (a method used by e.g. Erman and Warren 2000) or a panel of native speaker judges are used (e.g. Wood 2012). Although commonly used, intuition as a reliable research method has been treated with suspicion, because it goes against the scientific principle of systematicity<sup>3</sup>; it is independent of other kinds of observation (Wray 2002: 21). Most importantly, however, the emergence of large corpora and the research thereof have revealed that "human intuition about language is highly specific, and not at all a good guide to what actually happens when the same people actually use the language" (Sinclair 1991: 4). This is why the usefulness of intuition is limited only to providing information about the nature of the intuitions themselves, not about the nature of language (*ibid.*).

### 2.1.2 Formulaic language in corpus linguistics

As a result of the advances of modern computerized technology, corpus research has provided access to vast pools of empirical data, which is regarded as essential for the linguistic description of language (Casas-Pedrosa et al. 2013: 2). Corpus research is an excellent resource for investigating formulaic language, because unlike intuition methods, it is systematic and is able to better reflect the reality of language use, as "[w]hat we think we would say in a given situation is not necessarily the same as what we would actually say" (Gass and Selinker 2008: 68). Much of the research of formulaic sequences in corpus linguistics is based on frequency counts to detect patterns of distribution, and due to the modern computer software (e.g. WordSmith Tools, COBUILD, BNCweb), there is an impressive number of corpus-based descriptive and explanatory studies into formulaic language. For example, the study by Francis

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<sup>3</sup> Kothari (1990: 20) defines good research as "systematic: It means that research is structured with specified steps to be taken in a specified sequence in accordance with the well-defined set of rules. Systematic characteristic of the research does not rule out creative thinking, but it certainly *does reject the use of guessing and intuition in arriving at conclusions.*" (italics added)

(1993) shows that the verbs and adjectives occurring frequently in the structure **v it adj** (e.g. *render it useless*) are limited, which implies that the meanings this structure can convey are also limited.

It is to be noted, however, that frequency is not the only relevant factor in identifying formulaicity in language. In fact, there are multiple word strings, such as idioms, that are not all that frequent in language but are without a doubt formulaic, such as *storm in a teacup* and *Long live the King* (Moon 1998). This is why other factors need to be considered. Wray (2002: 30) explains it this way:

“To capture the extent to which a word string is the preferred way of expressing a given idea (for this is at the heart of how prefabrication is claimed to affect the selection of a message form), we need to know not only how often that form can be found in the sample, but also how often it *could* have occurred.” (italics original)

To exemplify this point, let us consider the word strings *Good night* and *Sweet dreams*. Entering them into a corpus analysis software, one may find out that *Good night* occurs **n** times and that *Sweet dreams* occurs **n - x** times. This only allows us to compare the relative frequency of the two word strings, but to truly understand the extent of their formulaicity, we need to find out how likely these expressions versus other ones (such as *Nighty night*) are used when good night wishes are conveyed (for another enlightening example, see Wray’s (2002: 30) discussion on the expression *Happy birthday*, from which I derived my example above). The issue here is, therefore, not that some formulaic sequences are more common than others, but that some *messages* are more common than others, which is naturally reflected in corpora. Furthermore, results in a corpus search do not take into account that some expressions can be both formulaic and non-formulaic at the same time. For example, the expression *kick the bucket* is not regarded as formulaic when it means striking a bucket with your foot, but it is formulaic when it means dying. By implication, frequency alone is not adequate to provide a realistic picture of formulaicity in language, but the “ratio of message to message-expression that will best help us to understand how some expressions of a given message are favoured over others.” (Wray 2002: 31). In sum, the only solution to identifying formulaicity is to employ a definition that is, to some extent, exclusive, until such a time that a definition is able to capture all the relevant features of formulaic sequences at once.

Along with striving to identify formulaic sequences in a pool of data, many scholars (e.g. Erman and Warren 2000, Nattinger and DeCarrico 1992, Moon 1998, Martinez and Schmitt 2012)

have taken on the difficult task of classifying them based on their qualities, which are generally either form, function, meaning or provenance (Wray 2002: 47), all of which are closely interrelated. There is a widespread idea in the field literature that formulaic sequences can be placed in a continuum. For instance, Pawley and Syder (1983) speak of a *novelty scale*, the two extremes of which are utterances that are completely novel creations by the speaker and utterances that are entirely familiar and memorized, and “still other clauses fall at various points along a cline between these two extremes, consisting partly of new collocations of lexical items and partly of memorized lexical and structural material” (p. 205). On the other hand, a form-based approach to the classification of formulaic sequences is to divide them in terms of fixedness. On the one side of the continuum of fixedness, there are some formulaic sequences that seem to be entirely fixed in form, i.e. they allow close to zero variation without changing the meaning (e.g. *hook, line and sinker, it’s been/it’ll be/it’s a devil of a job*). On the other side, there are formulaic sequences that permit much more variability, a good example of which being *collocates*, which Crystal (2008: 86) defines as “the habitual co-occurrence of individual lexical items”, i.e. the common, but not at all exclusive pairings of words such as *strong tea, hard work* and *clear skies*. Longer formulaic sequences that are not entirely fixed in form are sometimes termed *semi-preconstructed phrases*, which require the insertion of an additional morphological detail, such as an open-class item (e.g.  $NP_i$  *have* + *tense*  $POSS_i$  *wits about*  $NP_i$ . *Good thing Alice had her wits about her*) (Wray 2002: 7, 50). In this way, each semi-preconstructed phrase has its ‘mini-grammar’ (Pawley 2009: 20). In both cases of fixedness there are constraints, and when they are broken by using normal grammatical options, the utterances come across as unnatural to the native speaker (ibid.). As appealing as this strategy of classification may seem, it cannot be applied to all formulaic sequences, nor can any of the other available criteria. Namely, depending on the continua used, two formulaic sequences, although close to each other on one continuum, could fall far apart on another. This is why Wray (2002: 43) concludes that “identification cannot be based on a single criterion, but rather needs to draw on a suite of features.”

In this section, it has been discussed how multifaceted a phenomenon formulaic language is, and how challenging it has proven to be to satisfactorily define it and classify its varying instances. What can be concluded, however, is that “all the evidence points to an underlying rigidity of phraseology, despite a rich superficial variation” (Sinclair 1991: 121), and it is this assumption that has guided much of the research conducted on the issue.

### 2.1.3. Formulaic sequences in second language acquisition

In the field of second language acquisition, formulaicity has been a growing research interest starting from the 1970s, most notably since Wong-Fillmore (1976) presented her thorough account of children's natural L2 acquisition. Her research found evidence that the early acquisition of formulaic chunks might be the key for future nativelikeness. In the past decade, without a doubt the greatest amount of empirical research has been conducted in the domain of postchildhood second language acquisition (Wray 2012: 235), and now "a growing body of work suggests that ready-made chunks ... play a significant part in language acquisition and production" (Wood 2012: 38). Furthermore, there is now ample evidence that formulaicity is an area in which L2 speakers are very slow to catch up with native speakers (e.g. Kuiper, Columbus and Schmitt 2010). Studies have indicated that only at highly advanced levels of linguistic competence (and usually after long periods of immersion in the speech community of the target language) do non-native speakers display usages of formulaic sequences that resemble those of native speakers (e.g. Laufer and Waldman 2011, Forsberg 2010). In the following subsections, I will look at the possible underlying reasons for this by overviewing and summarizing some of the key findings made in the field of formulaic language in SLA in recent years, including L2 speakers' inventory of formulaic sequences, the patterns in the processing of formulaic sequences in non-native speakers, and the role of formulaic language in nativelike language production. This section will conclude with a discussion on the pedagogical aspects of formulaic language in SLA.

#### 2.1.3.1. L2 speakers' inventory and usage of formulaic sequences

There is now growing evidence that L2 learners have quite a limited stock of formulaic sequences which they tend to overuse (e.g. Wang 2016) or underuse (e.g. Nesselhauf 2005, Granger 1998). Furthermore, L2 learners seem to have significant difficulties in producing formulaic speech that is both accurate and appropriate, most likely because of L1-L2 transfer and the lack of sensitivity to register differences (Wray 2002, Granger 2018).

Especially collocations have been seen as *a stumbling block* (a good example of a collocate itself) for the non-native speaker (e.g. Wray 2002, Farghal and Obeidat 1995). As an example of recent research findings, Laufer and Waldman's (2011) corpus-driven study investigated the use of English verb-noun collocations (e.g. *pay money*, *throw a party*) in the writing of Hebrew native speakers at three levels of proficiency. The researchers compared the data in their learner

corpus with LOCNESS, which is a corpus of native speakers of English in the same age group as the participants. The focus of comparison was the frequency and correctness of the usage of the verb-noun collocations. The results of the study revealed, some would say rather unsurprisingly, that the Hebrew speaking learners of English produced far fewer verb-noun collocations than native speakers, although the frequency of collocation usage did increase at higher proficiency levels.

In a similar study, Forsberg (2010) investigated the use of conventional sequences in interviews at four different proficiency levels of L2 French. Using a phraseological identification method, she looked at the overall quantity, category distribution and type frequencies in the usage of conventional sequences by non-native speakers. The data revealed that the higher the level of English proficiency, the larger number of conventional sequences were used. The differences between native speakers and non-native speakers were significant up to the highest level of proficiency, where, in turn, no significant differences were displayed when compared to native speakers. Similar patterns were also detected in category distribution and type frequency, but Forsberg establishes that overall quantity remains the most predictive measure.

As illustrated in the studies above, non-native speakers seem to underuse formulaic sequences in their language production. However, evidence has also been found that the ones they do have in their stock, tend to be overused. For instance, Tsai (2015) studied Taiwanese English learners' use of verb-noun collocations in their writing, and she found out that although the density of the collocations was relatively high compared to native speakers, collocational diversity was lacking. Her explanation for this is that "it may well be that learners' poor collocational knowledge hinders them from using alternatives ... albeit the perceived needs to construct utterances with collocations. They tend to 'cling to' a limited range of low stakes collocations with which they are familiar" (Tsai 2015: 735-736). This observation echoes an earlier finding by Granger (1998) that L2 seem to rely heavily on certain 'safe' expressions<sup>4</sup> that they feel confident using to compensate for their limited repertoires of fixed sequences.

In addition to the tendencies of underusing and overusing formulaic sequences, L2 speakers also seem to struggle with accuracy. In Laufer and Waldman's (2011) study presented previously, it was found that about a third of all collocations produced by the learners were erroneous, and quite interestingly, errors in the usage seemed to persist at every level of

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<sup>4</sup> In a very recent publication, Hasselgård (2019) terms these as *phraseological teddy bears* to illustrate how these overused bundles act as something safe for the L2 learner to cling to, even in the case that they do not fit into the contexts in which native speakers would use them.



proficiency, including at the highest levels. Nesselhauf's (2005) research showed yet a higher percentage of misuse: nearly half of the collocations produced were non-standard. It is to be noted, however, that a likely explanation for the divergence in the results of the two studies may be the fact that Nesselhauf included both lexical and grammatical errors, whereas Laufer and Waldman only focused on lexical errors.

One contributing factor to the pervasiveness of errors in L2 formulaic language use is the fact that formulaic sequences vary heavily between languages. Let us take for example the case of collocation, whereby in English you would *have fun*, but in Finnish you *keep fun* (*pitää hauskaa*), and in English you *smoke a cigarette*, but in Hindi you *drink a cigarette* (*sigaret piinaa*) (Wray 2002: 73). So called 'false friends' are also a common phenomenon, which causes difficulties for the learner. They are expressions that are similar in form to ones in one's mother tongue, but carry a different meaning, as for example, *the final straw* in English refers to the final problem in a series of unpleasant events that makes one give up, whereas *viimeinen oljenkorsi* in Finnish is someone's last resort (example retrieved from Mäntylä 2004). We know, therefore, that L2 speakers already have formulaic sequences stored deep in their L1 mental lexicons that do not always conform to the patterns of the L2, and this kind of divergence between languages can be the cause of transfer from the learner's L1 to the target language (e.g. Nesselhauf 2015, Wang 2016). Nesselhauf (2005) reports as much as 48% of the collocation errors produced to result from the influence of the learners' L1. Wang (2016) also includes typological differences in the list of contributing factors; the speakers of languages that do not have articles (such as Chinese) tend to make more grammatical errors with article use, whereas native speakers of languages in the same language families (such as Swedish and English) tend to produce more lexical errors.

Appropriacy seems to be yet another weak point in L2 learners' usage of formulaic sequences. For instance, research suggests that L2 speakers are inclined to utilize spoken-like chunks in academic writing; in a corpus study by Granger (2017), a tendency of overuse of verb-based bundles (such as *I would like to*, *we can say that*, which are normally used in speech) was detected, as well as an underuse of noun-based chunks (such as *in the case of*, *on the issue of*, which are typical of academic writing). What is more, L2 learners appear to take on a high degree of involvement, which can be seen in their use of first-person pronouns (e.g. *I will discuss*), whereas more impersonal structures are more commonly favoured in native speaker academic writing (e.g. the passivized version: *will be discussed*) (Granger 2017). In addition, learner corpora also include a number of "learner idiosyncratic combinations" (De Cock 2000:

58), which are sequences that do not occur in native language speech. Some examples of this include using *according to me* instead of *in my view* and replacing *on the other hand* with *on the other side* (Granger 2018).

In the studies presented above, I have drawn from the presented empirical evidence the conclusion that L2 speakers have an impoverished inventory of formulaic sequences as well as frequent difficulties in producing accurate and register-appropriate chunks. Although evidence of L1-L2 transfer gives us some indications, it is not yet fully known why this is, and hence the scope for future research on this issue remains wide.

### **2.1.3.2. Patterns in L2 speakers' processing of formulaic sequences**

The cognitive processing of language is often divided into two different strategies: analytical processing and holistic processing<sup>5</sup> (Wray 2002, cf. Sinclair 1991). Analytical processing, taking place in the left hemisphere of the brain, refers to the “interaction of words and morphemes with grammatical rules, to create, and decode, novel, or potentially novel, linguistic material”, whereas holistic processing entails the retrieval of prefabricated word strings from memory and is associated with the right hemisphere of the brain (Wray 2002: 14,17). According to Wray (2002: 14-15), the choice of strategy depends on the demands of the language material and on the communicative context, and she therefore goes on to propose that holistic processing is not limited to those sequences that cannot be created or interpreted by rule (such as idioms), but it can also be used in cases where analytical processing would provide the same exact result. However, on their own, neither analytic nor holistic processing are enough to live up to the linguistic competence nor to the idiomaticity of the Chomskyan ideal native speaker. When combined, however, they can explain both the ability to produce language that is both novel and idiomatic (Wray 2002).

There seems to be a consensus in the field that there is an advantage in how native speakers process formulaic language compared to non-formulaic language (e.g. Pawley and Syder 1983, Bod 2001, Wray 2002, Conklin and Schmitt 2012), but is this the case in L2 speakers too? In recent research more evidence has surfaced to support the belief that there are differences in how L2 speakers process formulaic sequences compared to native speakers. Research (e.g. Pawley and Syder 1983, Altenberg 1998, Schmitt and Carter 2004, Wray 2002) indicates that formulaic sequences are processed, at least to some extent, *holistically* by native speakers (for

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<sup>5</sup> Wood (2012) calls these *controlled* and *automatic* processing.

some criticism of this assumption, see Forsberg 2010), but this does not seem to be the case with L2 speakers — especially at lower levels of language proficiency. Namely, non-native speakers appear to process formulaic language analytically, i.e. word-by-word, similarly to non-formulaic language (Conklin and Schmitt 2012).

In a corpus-based study conducted by Schmitt et al. (2004), for instance, non-native speakers were asked to complete an oral dictation task, which was designed to investigate whether corpus-derived frequent sequences (such as *I see what you* and *it's not too bad*) are stored holistically in the minds of non-native speakers. This was done by having the participants reproduce and record short passages orally, and the data was then analysed in terms of correctness and fluency. The results showed that whereas native speakers in the control group scored well in the task, the non-native speaker participants were mostly unable to dictate the formulaic sequences accurately and fluently, which may indicate that they were not retrieved and processed holistically in their minds.

Siyanova-Chanturia et al. (2011) used eye-tracking methods to investigate the processing of figurative (e.g. *at the end of the day* meaning 'eventually'), literal (e.g. *at the end of the day* meaning 'in the evening') idioms and novel phrases (*at the end of the war*) in native and non-native speakers of English. Although there were clear signs of a processing advantage for idioms in native speakers, no such evidence was found in the non-native participants, as they seemed to process idioms at a similar speed to the novel phrases. Eye-tracking methods were also used by Underwood et al. (2004) in investigating idiom processing in non-native speakers, and the results correspond to those of Schmitt et al. (2004) and Siyanova Chanturia et al. (2011): whereas native speakers display a significant processing advantage (fewer and shorter fixations made), non-native speakers' (apart from the very proficient non-natives) fixations on idioms were as frequent and as long as on novel phrases.

Based on the studies presented above it may seem that the evidence of non-native speakers' tendency to use analytical processing of formulaic sequences is conclusive. However, this is not the whole story, because there is some contrasting evidence. Conklin and Schmitt (2008) investigated the speed of formulaic language processing in native and non-native speakers by comparing reading times for formulaic sequences to matching nonformulaic phrases. Much like the other studies discussed in this section, the results support the notion of a processing advantage for native speakers, but the interesting finding is that this seemed to be the case in non-native speakers, too. The researchers draw the conclusion that it is possible for L2 speakers

to enjoy the same type of processing advantage as native speakers do. It is to be noted, however, that the proficiency levels of the participants are not explicitly stated in the research report. It is only mentioned that the participants were part of a master's level English teaching programme, which implies that they were highly proficient speakers of English. Perhaps this implies that the processing advantages of L1 speakers can occur in L2 speakers provided that their linguistic competence crosses a certain threshold. If this is the case, investigating where exactly this threshold might lie would be an interesting avenue for future research.

The findings on the issue of L2 speaker's processing of formulaic sequences are mixed, as demonstrated above. What appears to be the case, however, is that non-native speakers tend to lean more on the open choice principle than the idiom principle, but perhaps speakers at higher proficiency levels close the gap, at least to some extent.

### **2.1.3.3. Formulaic language as the key to fluency**

It was the puzzle of nativelike language use that sparked a significant resurgence of interest in formulaic language in the 1980s. As we have observed previously, for a non-native speaker to achieve nativelikeness in their language use, it is not enough to memorize the meanings of words and to have the ability to combine them according to a set of grammar rules. The missing factor seems to be *fluency*, and many L2 learners struggle greatly with the effects of their inadequate fluency — even after completing their basic L2 study (Wood 2012); as Bialystok (1990: 1) puts it, “The familiar ease and fluency with which we sail from one idea to the next in our first language is constantly shattered by some gap in our knowledge of a second language”. As a term, *fluency* generally describes oral language performance, being thus roughly synonymous with having a ‘good command of the language’, but in the field of language pedagogy a much more precise definition is needed to account for the different aspects that fluency entails. According to Wood (2012: 10), fluency includes elements beyond just accuracy of syntax, lexis and phonology, such as discourse coherence and cohesion, conversational pragmatics and sensitivity to register. Temporal variables, such as speed, pauses and hesitations, and the lengths of speech runs between pauses are generally regarded as instrumental in identifying aspects of oral fluency (ibid., Schmidt 1992). Fluency therefore differs from other aspects of oral proficiency in that it is more a question of *how* to do something (i.e. a skill) than knowledge *about* something (Schmidt 1992). Fluent speech is characterized by Schmidt (1992: 358) as “automatic, not requiring much attention or effort”, whereas nonfluent speech is “effortful and requires a great deal of attention, so that nonfluent speakers

exhibit many hesitations and other manifestations of groping for words”. Much weight is also placed on hearer-based, usually native speakers’ perceptions of fluency, which is why they are often used as judges of fluency in L2 speakers.

A notable finding made in SLA research is that attending to formulaic sequences can help L2 users to become more fluent speakers of their target language, which causes them to be perceived as ‘nativelike’ (e.g. Boers et al. 2006, Wood 2010, Gardner and Davies 2007, Rott 2009, Wray 2002, to name a few), and the same applies to fluency in writing (Lewis 2008). Some scholars go as far as to state that gaining formulaic linguistic knowledge is the single most important factor in the development of fluency in L2 learners (e.g. Towell et al. 1996). At this point, however, one may wonder why it is that nativelikeness seems to only be reachable by being a proficient user of formulaic sequences. I will now move on to look at evidence from research in different fields to attempt to shed more light on this issue.

Looking back at the early days of formulaic language research, Pawley and Syder (1983) proposed that the native speaker’s speech fluency can be traced back to what they refer to as the ‘one clause at a time *facility*’ (italics original). What the authors mean by this is the native speaker’s ability to produce whole coherent clauses, in only one single encoding operation, and thus minimizing the number of mid-clause pauses and hesitations (1983: 204). As we have seen in the previous section, non-native speakers tend not to process language in larger chunks, which is why their ability to plan ahead is very limited compared to that of the native speaker. Therefore, non-native speakers are unable produce novel stretches of speech without needing to hesitate, especially considering the constraints of the normal tempo in L1 speech. Furthermore, conflicting with the ‘one clause at a time’ constraint, multi-clause units uttered fluently are also a common feature of nativelike speech. Pawley and Syder (ibid.) give the following example:

I don’t / need / anyone / to tell me / what to do!

To explain why such multi-clause units can be produced fluently by native speakers without any problems, the authors point to ‘memorized sentences’ and ‘lexicalised sentence stems’, which we now call formulaic sequences. Due to the processing advantage of these multi-word units mentioned in previous sections, the native speaker can chain many of them together to produce long stretches of fluent novel speech, and this seems to be the key skill that L2 learners need to learn in order to reach fluency.

Many researchers have taken on the task of testing Pawley and Syder's suggestion that the utilization of formulaic language causes an increase in L2 speech fluency (e.g. Nattinger and DeCarrico 1992, Towell et al. 1996, Wray 2002). As an oft-cited example, Boers et al. (2006) conducted research on the issue by administering an oral proficiency test on 32 college students majoring in English (which is a fairly limited scope) after a time period of awareness raising of formulaic sequences. The participants were split into two groups and the students in the experimental group (N=17) were exposed to large quantities of authentic listening and reading materials and were made aware of standardized word combinations. The participants in this group were found to come across as more fluent in speech than the control group (N=15) that received teaching based on the traditional grammar-lexis dichotomy. Moreover, the frequency in which formulaic sequences were used in speech correlated with the oral proficiency ratings given by the blind judges. Boers et al. (2006: 247) also suggest that the mastery of formulaic sequences improves the degree of linguistic accuracy, as they constitute 'zones of safety' for the learner.

More recently, in his longitudinal study Wood (2012) collected speech samples from a group of study abroad participants (N=11) to track the development of fluency over six months. More specifically, he focused on the temporal variables associated with fluency<sup>6</sup> and the possible role of formulaic sequences influencing the temporal variables. In contrast to the study by Boers et al. (2006), Wood chose not to include any pedagogical intervention under the assumption that the study abroad context as a whole would drive the fluency development process. Using a combination of quantitative and qualitative methods, Wood analysed the collected data and found evidence that the participants did gain fluency during the research period, and the role of formulaic sequences was found to be related and facilitating. It was found that the participants utilized formulaic sequences far more frequently at the end of the research, which also caused an increase in the length of runs in their speech. Some particularly noticeable features of their formulaic language use were the increased use of self-talk, e.g. *I think, I know* or *I guess* and the repetition of a single formulaic sequence in a run. Wood's study, although limited in scope and not intended to be an end-all answer, is an invaluable source of information about the development of fluency over time in L2 learners and a good template for methodology for future research.

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<sup>6</sup> The variables included (1) phonation/time ratio, (2) speech rate, (3) articulation rate, (4) mean length of run and (5) formula/run ratio, all of which were later analysed quantitatively.

At this point it is essential to note that the question whether reaching nativelikeness should be an emphasised objective of L2 learning is a subject of much debate in the pedagogical circles. Some educators propose that it is not crucial that L2 learners communicate in real life situations exactly like native speakers would, but it is of more importance for them to learn pragmatic strategies for getting their message across and being understood (e.g. Krashen's theory of SLA 1982, Wray 2002). Thus, the goal of L2 pedagogy shifts from *nativelikeness* to *comprehensibility* (Abrahamsson and Hyltenstam 2009). Furthermore, in the specific case of teaching English as a foreign language (i.e. teaching English outside English-speaking countries), some scholars (e.g. Kirkpatrick 2007, Mansfield and Poppi 2012) subscribe to the idea that since non-native speakers of English now outnumber native speakers, it should no longer be a standard nor an objective for L2 learners to learn to use language as those in the innermost circle of Kachru's (1992) three concentric circles<sup>7</sup> do. As Kirkpatrick (2007: 188) states: “[t]eaching a native speaker model that includes inner-circle linguistic and pragmatic norms and inner-circle cultures is thus not appropriate for non-native learners of English.” Scholars like Kirkpatrick therefore suggest that the English taught in the classroom should not be English as an inner-circle language, but rather English as an international language (EIL) (for a detailed discussion on this topic, see for example Matsuda 2003 and Sharifian 2009). As there is not enough space in the present paper to discuss the issue of nativelikeness as the learning ideal in depth, it suffices to conclude that fluency, be it nativelike or not, is still regarded as important by L2 instructors and learners alike (e.g. Tavakoli and Hunter 2018, Derwing 2003), and based on empirical evidence, formulaic sequences play an important role in its development. Unfortunately, as discussed above, L2 speakers find formulaic sequences particularly challenging to learn and produce, not least because they are unable to utilize the innate intuition native speakers possess (see for example Pawley and Syder 1983, Nesselhauf 2005, Wray 2002, De Cock 2009).

## 2.2. Key concept of willingness to communicate

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<sup>7</sup> Kachru's (1992) famous model of three circles of English consists of the (1) **Inner Circle**, where English is used as a native tongue, such as USA and UK Englishes, the (2) **Outer Circle**, which includes places where English is not learned as a first language, but used as a lingua franca like, for example, in India and Nigeria, and (3) **Expanding circle**, where English does not play a historical or governmental role, but is still used widely for international communication, like in China, Russia and Indonesia.

When an opportunity arises to use their L2, some people eagerly jump at the chance to communicate while others choose to stay silent; some students, even with high linguistic competence, are extremely unwilling to use the language, whereas other students with little linguistic knowledge seize every opportunity to speak. Interestingly, even after years of learning the language, some people never go from being a *L2 learner* to becoming a *L2 speaker* (MacIntyre 2007: 565). Determining the reasons behind this phenomenon is no simple task, because of the variety of factors that come into play: e.g. learner's individual qualities, social and situational variables, learner's linguistic history and other factors.

The study of *willingness to communicate* has been developed to investigate the issue of reluctance in communication, and although the WTC construct has its roots in the first language research (see McCroskey and Baer 1985, and Burgoon 1976), in past decades it has received increasing interest in the context of the L2. In this section, I will firstly look at some important models designed to measure and characterize WTC. Secondly, I will elaborate on the different factors that may affect one's WTC when it comes to communicating in a second language. Lastly, I will provide a brief overview on previous research on WTC in the EFL, with a special focus on the Finnish context.

### **2.2.1. Models of willingness to communicate**

The term *willingness to communicate* was first introduced by McCroskey and Baer in 1985, and they define it as the personality predisposition, "which explains why one person will communicate and another will not under identical or virtually identical situational-constraints" (p. 3). McCroskey and Baer saw WTC as essentially a personality construct, which is affected by a variety of situational factors such as how the speaker happens to feel that day, what communication the person has had recently, who the person is communicating with and what the partner looks like, and what the person can possibly gain or lose through the act of communication. The authors and other researchers also propose that WTC is connected to other personal attributes such as shyness, communication apprehension and self-esteem. Although a person's willingness to communicate is influenced by a number of factors, McCroskey and Baer suggest that individuals seem to exhibit regular willingness to communicate tendencies across situations (cf. Mortensen et al. 1977).

McCroskey and Baer (1985) developed a model to measure willingness to communicate based on the assumption that it is a personality-based and trait-like predisposition which retains its relative consistency across a variety of communication situations. Following this assumption,

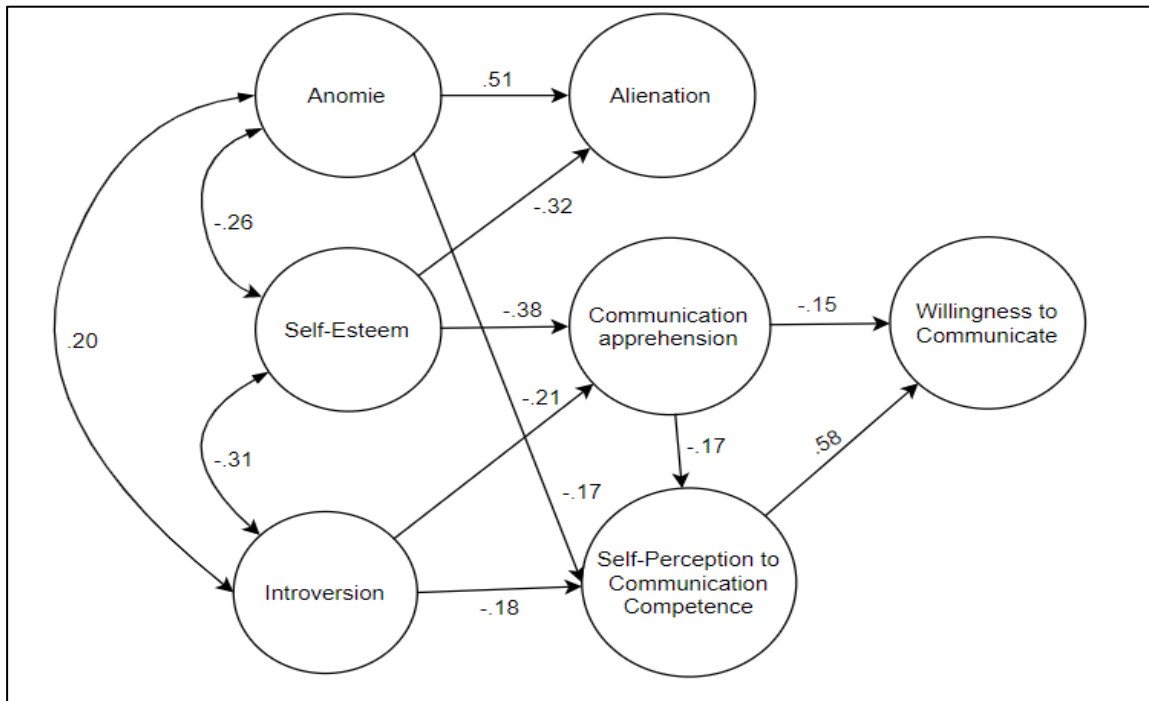


a person should then display similar patterns of WTC when communicating in different contexts (e.g. small-group discussion or public speaking) and with different types of receivers (e.g. acquaintances, friends or strangers). The authors point out, however, that this does not imply that a person is equally willing to communicate in all contexts or with all receivers, but rather that the level of WTC in various contexts and with various receivers is correlated.<sup>8</sup> The scale of WTC includes items that relate, firstly, to four contexts of communication: (1) public speaking, (2) talking in meetings, (3) talking in small groups, and (4) dialogues, and secondly, to three types of receivers: (1) strangers, (2) acquaintances, and (3) friends. In testing their measurement scale, the authors found evidence for the assumption that an individual's willingness to communicate in one context and one receiver type is highly related to their WTC in other contexts and other receiver types. The authors are also adamant about emphasizing that the scale will only provide accurate results if the individual being tested truly has free choice whether to communicate or not.

A more recent model shown in Figure 1 below, which was created by MacIntyre (1994), considers the following six personality-based variables (drawing the first five from Burgoon 1976) as predictors of WTC in the L1: (a) communication apprehension, (b) anomie, (c) alienation, (d) introversion, (e) self-esteem and (f) perceived competence. MacIntyre utilizes causal modelling to test the interrelations of these variables and their possible influence on WTC. The findings of his study indicate that WTC is most directly affected by communication apprehension and perceived communication competence. Communication apprehension is, in turn, most affected by self-esteem and introversion, and perceived communication competence is affected by introversion, communication apprehension and, to some extent, anomie (see Figure 1 for exact correlation values). The strongest variable overall affecting WTC seemed to be one's perceived communicative competence, whereas anomie and alienation appeared not to have a strong causal relationship with WTC. Therefore, the conclusion can be drawn that an individual is willing to communicate to the extent that they are not apprehensive about it and they perceive themselves to be capable of effective communication (MacIntyre 1994). MacIntyre concludes that up to 60% of variation in WTC could be accounted for by this model, and he proposes that by influencing the most affecting variables, communication apprehension and self-perceived competence, WTC can also be affected.

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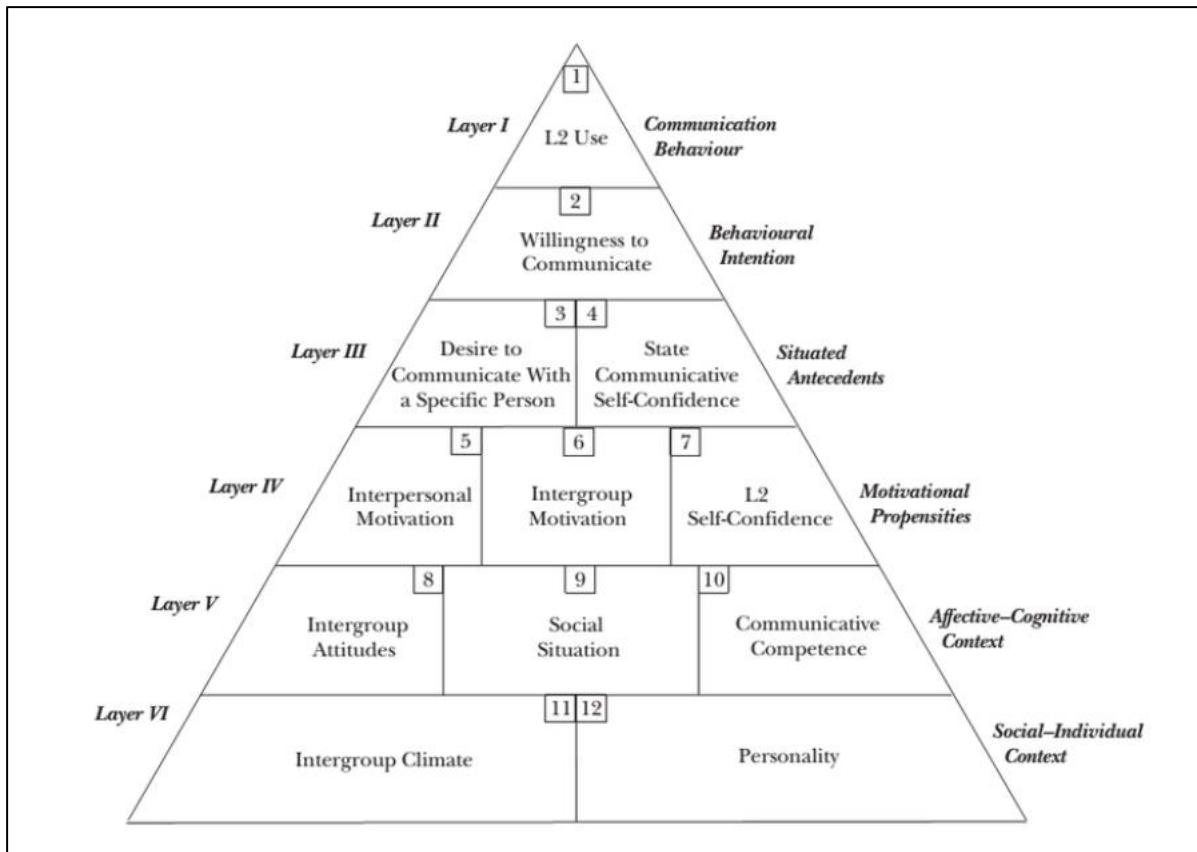
<sup>8</sup> McCroskey and Baer (1985: 7) exemplify this in the following way: "[I]f Person A is much more willing to communicate in small groups than in a public speaking context, the underlying assumption is not necessarily violated. However, if Person A is more willing to communicate than Person B in one context, it is assumed that Person A will be more willing to communicate than Person B in other contexts as well."



**Figure 1. Hypothesized causal sequence for predicting WTC using personality-based variables. (MacIntyre 1994: 137)**

Whereas McCroskey and Baer (1985) and MacIntyre (1994) conceptualize willingness to communicate as essentially a personality trait, there are models that are not limited to the phenomenon as an explicitly trait-like variable. MacIntyre et al. (1998) treat WTC as a situational variable which is influenced by both transient and enduring factors. Furthermore, while McCroskey and Baer's work is only concerned with oral production, MacIntyre et al. extend it to other modes of communication, such as written production and the comprehension of both spoken and written language. MacIntyre et al. created a heuristic<sup>9</sup> model (see Figure 2) displaying the range of different variables that might influence one's WTC specifically in the L2.

<sup>9</sup> That is, relating to a practical method, not necessarily optimal or perfect but sufficing to reach the desired goal.



**Figure 2. Heuristic Model of Variables Influencing WTC (MacIntyre et al. 1998: 547)**

The model is structured as a pyramid, which is meant to signify the moment in which one is about to communicate in the L2 (layer I, on top of the pyramid) and the different factors that come into play in the situation. The top tier is influenced by a number of situational and personal factors, and their influence is shown in their immediacy or their relative distance. The pyramid is divided into six layers, which further represent the two basic structures: (1) *situational influences* on WTC (Layers I, II and III) and (2) *stable, enduring influences* (Layers IV, V and VI). Starting from the bottom and making our way to the top, we will now briefly discuss each layer and their influences on L2 communication.

At the foundation of the pyramid lie the broadest of the variables, upon which the others operate. The bottom layer is further divided into two boxes, which are *intergroup climate* and *personality*, and they are the most basic and enduring influences on the willingness to communicate in the L2, and the individual has little control over these factors. Intergroup climate represents the influence of the society in which interlocutors evolve, which can include various communication networks. Depending on the network, it can either favour or discourage the use of the L2 based on their attitudes towards the L2 group. For example, a shared prejudiced attitude towards the L2 community in a given network can influence the individual's L2

learning and willingness to communicate in the language very negatively. However, there are obviously differences in the individuals' processes within a given group, which is where *personality* comes into play. According to MacIntyre et al. (1998: 557), certain personality patterns can predict an individual's reactions to members of other groups. For instance, an individual with an ethnocentric personality regards their own ethnic group as superior to other groups, which makes him or her unlikely to pursue interactions with members of other ethnic groups. Overall, the role of intergroup climate and personality is to set the stage for L2 communication, but they do not very directly influence an individual's WTC in a given situation.

Moving upwards, Layer V is entitled *Affective-Cognitive Context* and is concerned with the prior history, broad-based attitudes and the motives of an individual. Although a step closer to the top, these variables are still regarded as enduring rather than situation specific. Box 8 signifies *intergroup attitudes*, which include the extent to which (1) the individual wishes to integrate in the L2 community, (2) fears assimilation and the loss of L1 identity and (3) is motivated to learn the L2. *Social situation* (box 9) refers to the type of the communicative event one is in and how it can influence one's WTC. The authors give the example of a professor who is very confident when lecturing in the L2, and yet becomes shy when having to converse on the phone with a L2 speaker. According to MacIntyre et al. (1998: 553), what underlies different communicative events are variables such as the participants (e.g. native vs. non-native, age, gender, friend vs. stranger etc.), the setting (time and place, private vs. public), the purpose (e.g. persuading, exchanging information, entertaining etc.), the topic (familiar vs. unfamiliar), and the channel of communication (speaking vs. writing). The authors suggest that one's WTC in L2 varies depending on the social situation just like it tends to vary in the L1. The last factor in this layer is communicative competence, which the authors explain to be comprised of other sub-competencies. Interestingly, what seems to affect WTC is not so much the individual's objective competence but rather her own perception of it, which is why there exist many communicators with minimal competence but yet proportionately high level of WTC.

Building on the affective-cognitive context, *motivational propensities* form the fourth layer of the pyramid, and they include *interpersonal motivation*, *intergroup motivation* as well as *L2 self-confidence*. These propensities are perceived as mostly stable individual differences and they apply in several situations. *Interpersonal motivation* is concerned with the different motives interlocutors may have to communicate with each other, and it is most characterized by two purposes: (a) control and (b) affiliation. Control refers to communication situations,

which are generally initiated by the party with a higher status, and the situations are thus generally hierarchical and task-related, such as bosses mandating activities to their subordinates or teachers controlling the classroom. In situations like these, enduring social roles are involved, which influences WTC. The second purpose, affiliation, refers to the need to establish a relationship with the interlocutor, which is a tendency that tends to display variation from person to person. The traits introversion and extroversion appear to be closely linked to the extent to which an individual wishes to establish relationships with their communicative partners. Control and affiliation also seem to play a similar role in building *intergroup motivation* as in building interpersonal motivation; the basis of communication can be establishing power-relations or maintaining rapport between groups, both of which actions influence communication behaviour. Based on the cognitive and affective aspects discussed above, *L2 self-confidence* deals with the individual's relationship with the L2; it is the "overall belief in being able to communicate in the L2 in an adaptive and efficient manner" (MacIntyre et al. 1998: 551). Self-evaluation of one's L2 skills and language anxiety are the main building blocks of L2 self-confidence, which originate in the self-perception of communicative competence and feelings of apprehension which are often caused by previous negative experiences in using the L2.

Now reaching the situation-specific sector, Layer III describes the individual's *desire to enter into communication* in the L2 and their *state self-confidence*, which act as immediate precursors of willingness to communicate. The desire to communicate stems from interpersonal and intergroup motivation, which is why affiliation and control enter into play yet again. According to the authors, affiliation as the motivation to enter into communication is most likely to occur when communicating with people who are physically near and frequently encountered, physically attractive and similar to the speaker in a variety of ways (MacIntyre et al. 1998: 548-549), and when conversing with such an individual, the L2 is likely to be used. Predicting if L1 or L2 is used in the context of control-related situations is less straight-forward, but the authors assume that the L2 is used only when the interlocutors are comfortable enough to use the language efficiently to reach their goals. This is why they conclude that the language of the most powerful party is likely to be used in task-related situations. *State communicative self-confidence*, unlike trait-like self-confidence (discussed in box 7), is transient and occurs differently depending on the situation. This situation specific self-confidence is affected by state anxiety and state perceived competence, which means that anything that increases one's state anxiety or makes one feel unable to communicate effectively in a given situation reduces one's

WTC. Completely novel situations can, therefore, be particularly difficult to the L2 speaker, as there is uncertainty whether they are able to meet the communicative demands of the situation.

*Willingness to communicate* is the second highest layer of the pyramid and the final step before the communication act in the L2, making WTC “the most immediate determinant of L2 use” (Clément et al. 2003: 191). Expanding on McCroskey and Baer’s (1985) definition, MacIntyre et al. (1998: 547) define L2 WTC as “a readiness to enter into discourse at a particular time with a specific person or persons, using a L2”. This definition holds that one can also possess WTC even when the opportunity to communicate might not necessarily be present, but WTC is more concerned with the readiness to do so, and this is why Layer II is labelled as *Behavioural Intention*. The authors give the example of hand-raising in the classroom, which acts as a sign of willingness to communicate, should the opportunity be given to the student. Even if the student is not called-upon (oral communication does not occur), they have displayed a high level of WTC, since they raised their hand as a sign of readiness. What lies behind the significant influence of behavioural intention is the notion that intention strongly predicts behaviour (Ajzen 1988), also in the case of communication behaviour, which forms the very peak of the pyramid.

Building on everything discussed above, the top layer signifies authentic communication behaviour in the L2, which the authors see as the result of a complex combination of interrelated situational and enduring factors. In this model, communication behaviour is used in a broad sense, and can thus refer to all kinds of activities in the L2, such as watching L2 television, participating in classroom discussion or using the L2 on the job. Regardless of the type of communication, the main thrust of the entire article is that formal L2 instruction should always lead to the learner to actively pursuing communication situations and being willing to actually communicate in them. This is why the authors propose strongly that the main objective of L2 education should be to generate a willingness to communicate in the learner comprising of authentic situations with people of different languages and backgrounds.

### **2.2.2. Previous studies of WTC in EFL contexts**

Willingness to communicate is a phenomenon, which is becoming well researched and established in the fields of SLA and applied linguistics due to the salient role it plays in language learning and use. Since the development of MacIntyre et al.’s (1998) model, numerous studies have been conducted on investigating the role of the different variables affecting WTC. The majority of research has, however, been focused on the ESL context especially in North

America (e.g. MacIntyre et al. 2001), whereas EFL contexts have received less attention. To compensate for this gap, willingness to communicate has become a topic of increasing interest in many Asian and Middle Eastern EFL contexts, such as China (e.g. Peng 2007), Japan (e.g. Yashima 2002), Iran (e.g. Aliakbari et al. 2016, Biria and Jouybar 2016) and Turkey (e.g. Öz et al. 2015). In the present section, I will briefly overview some relevant research findings on the issue of WTC in various EFL contexts. To conclude this section, I will lay directed focus on research conducted on Finnish EFL learners, as it is the setting of the present study.

According to research findings, the factors most influencing WTC in EFL are self-perceived communication competence (SPCC) and communication apprehension (CA), which is in line with the model proposed by MacIntyre (1994). In a recent study, for example, Öz et al. (2015) investigated WTC in Turkish EFL learners through quantitative means by administering a questionnaire survey and by applying structural equation modelling. The researchers were able to find a positive direct path from SPCC and a negative direct path from CA to L2 WTC in a group of Turkish EFL learners (N=134). In a similar study, Aliakbari, Kamangar and Khany (2016) examined the impact of anxiety, self-confidence, communicative competence and international posture on a group (N=194) of Iranian EFL learners' WTC. The researchers applied structural modelling analysis to examine the model developed by the researchers, and their results indicate that there is a direct link between the participants' WTC and their perceived communication competence, self-confidence and attitudes towards the international community. Thus, the findings are in alignment with MacIntyre et al.'s (1998) heuristic model.

The levels of EFL learners' WTC have also been measured in various contexts. In the Chinese setting, for example, Wang and Liu (2017) conducted an empirical study on a large group of Chinese Senior High School students (N=304) using a slightly revised version of MacIntyre et al.'s (2001) *Willingness to Communicate inside the Classroom Scale*. The calculated mean score of the participants' overall WTC was  $M=70.74$ , which is clearly below the median value of 81. Furthermore, the researchers found that the participants experienced high levels of English classroom anxiety, which in turn influences WTC negatively. The results of the study thus indicate that Chinese senior high school students experience relatively low levels of WTC (cf. Pavičić Takač and Požega 2011).

In comparison to the Chinese EFL learners, Turkish EFL learners seem to have a moderate level of WTC. In their study, Başöz and Erten (2018) investigated Turkish tertiary level EFL learners' perceived levels of willingness to communicate in English. The study also aimed at examining

whether there is a significant statistical difference between the participants' level of WTC inside the classroom and their WTC outside the classroom. The sample group (N=701) consisted of Turkish students of tourism guidance and management, and they were selected based on geographical proximity and easy accessibility. The measurement instrument was a revised version of the L2 WTC scale devised by MacIntyre et al. (2001). The scale consisted of a total of 54 items divided into two sections: (1) WTC in English in the classroom and (2) WTC in English outside the classroom. The procedure for the participants was to rate items on a five-point Likert scale based on how willing to communicate in English they perceived themselves to be in a given situation (e.g. "Have a conversation with a stranger if he/she talks to you first", "Read an English article in a paper"). The main finding of the research was that Turkish EFL learners seem to have a moderate level of WTC, as indicated by the overall WTC score of  $M=2.86$ . Furthermore, the participants' mean value for WTC in English outside the classroom was 2.93, while the score for WTC in English inside the classroom was 2.86., which indicates that the participants have a significantly higher level of WTC outside the classroom than inside the classroom. The findings of the study align with previous studies in the Turkish EFL context (e.g. Öz et al. 2015, Bursalı and Öz 2017), but contrast with the studies discussed above in the Chinese EFL context (e.g. Pavičić Takač and Požega 2011, Wang and Liu 2017), which is why the researchers conclude that the context of L2 learning is a significant influence on the individual's WTC.

The investigation of age and gender differences has not been a major topic of interest in EFL WTC research thus far. In the early days of L2 WTC research, MacIntyre et al. (2002: 538) put forward the idea that sex and age may have an influence on second language learners' WTC. Since then, there has been a relatively small number of studies which have included gender and age variables. These studies have yielded strikingly contrasting results, as some report meaningful differences between age groups and genders (e.g Baker and MacIntyre 2003, Donovan and Macintyre 2004, Gholami 2015, Ars Chad et al. 2015), while others fail to find any statistically significant differences (e.g. Canary and Hause 1993, Afghari and Sadeghi 2012, Valadi, Rezaee and Baharvand 2015 and Motlagh and Gilakiani 2018). However, most studies have thus far focused only on the age range from adolescence to young adulthood, while few examine the variable in older age groups. Furthermore, no studies to date have acknowledged the existence of genders beyond the male/female binary, which is why accurate accounts of non-binary experiences remain underrepresented in the literature. The present study attempted to address these gaps in two ways. Firstly, the investigation of the age variable



included a wider range of age groups beyond adolescence and young adulthood. Secondly, the non-binary *other* was included as an option in addition to the traditional binary genders *male* and *female* in the background information part of the questionnaire.

Although receiving increasingly more research activity in various EFL contexts, willingness to communicate has not received widespread interest in Finland thus far. The seemingly only existent studies include a comparative study by Sallinen-Kuparinen and McCroskey (1991), a master's thesis by Kostiainen (2015) and a bachelor's thesis by Kuutila (2014). The cross-cultural study by Sallinen-Kuparinen and McCroskey (1991) investigated the differences between Finnish and other populations in communication orientations, including their overall WTC. The study found that although scoring relatively high on the SPCC scale, Finns seemed less willing to communicate than people from other cultures<sup>10</sup> except Micronesia. Strikingly, Finns were also found to be the least prone to initiating conversation with a friend out of all the cultures. However, this study was focused on the L1 context, which is why it remains inconclusive whether these results translate into the foreign language communication context.

The two theses mentioned above focus explicitly on the Finnish EFL context. Kostiainen (2015) examined the influence of the classroom context in a group of Finnish EFL learners (N=73) on their WTC utilizing both quantitative and qualitative methods. Her findings include that Finnish EFL learners seem to be generally willing to communicate both inside and outside the classroom. Furthermore, it was found that the learners were most willing to communicate when the number of interlocutors was small as opposed to larger groups. Lastly, she found evidence that the topic of the conversation, the level of acquaintance with the conversational partners and the presence of the teacher in the classroom were variables that were found to have either a positive or a negative influence on the participants' WTC. In her small-scale study, Kuutila (2014) investigated the effect of the instructor on Finnish EFL learner's WTC and found that the most influential factor is the teaching methods employed by the teacher. The most positive influence by the teacher seems to occur when his/her behaviour is encouraging, enthusiastic and their methods are versatile. Lack of diversity in methodology and the teacher's lack of interest in the subject were found to be the most negatively influential factors in the participants' WTC. Beyond the two studies presented above, there is a dearth of information about

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<sup>10</sup> The populations compared included Finland, USA, Sweden, Australia and Micronesia.

willingness to communicate in the Finnish EFL context, and it can thus be stated that the research on WTC in Finland is still lacking.

### **2.3. Summary**

The first section of the present chapter has been an attempt to illustrate that the widely researched formulaic nature of language is a pressing issue in language acquisition. Namely, evidence was discussed that formulaicity plays a crucial role in how language is processed, used, and learned both in the L1 and the L2. It was also pointed out that formulaic language seems to a stumbling block for non-native speakers, as they have quite a limited repertoire of formulaic sequences and they do not enjoy the cognitive processing advantages to the same extent as native speakers do. This is why there now exists a consensus that “instructed SLA should include the teaching of formulaic sequences as a featured component” (Dörnyei 2009: 302).

The overarching theme of the second section was that willingness to communicate is a complex phenomenon which is affected by various variables and processes. Some influential models have been developed, which aim to characterize WTC, most notable of which being MacIntyre et al.’s (1998) heuristic model (see Figure 2, p. 26). The model was developed based on the assumption that WTC is influenced by a number of both situational and trait-like variables, while WTC itself is the key influence on L2 communication behaviour. Evidence to support the validity of this model has been found in numerous studies in the EFL context. This is why the researchers (*ibid.*) assert the need for WTC to become the primary objective of formal L2 instruction. However, as pointed out previously, the scope of research conducted in the Finnish EFL context is very limited, which is why the present study will serve as an important contribution to this thus far neglected area.

## **3. METHODOLOGY**

In the previous section, the central conceptual framework for the present thesis was established. The present chapter will move on to outline the main objectives of the study as well as present and elaborate on the research questions. Finally, the methods of data collection and data analysis will be explained and justified.

### **3.1. Aims and research questions**

To my best knowledge, there has been no research on the relationship between formulaic language knowledge and willingness to communicate in L2 speakers thus far despite the obvious prevalence of the phenomena in the field. Furthermore, WTC has been a neglected area in the Finnish EFL context. To fill these obvious gaps in the literature, the aim of the present study is to investigate, whether there is correlation between an EFL speaker's knowledge of formulaic sequences in English and his/her willingness to communicate in the target language. I have formulated the following two research questions:

1. Is there a significant correlation between knowledge of formulaic sequences and Finnish EFL speakers' willingness to communicate?
2. Does age or gender affect the relationship between formulaic sequence knowledge and willingness to communicate?

The first research question is the primary interest of the present study, which is intended to fill the current gap in research by examining the possible evidence for a correlation or the lack thereof. With the second research question, I set out to investigate if any differences can be detected in the different age groups and in males and females to further test MacIntyre et al.'s (2002) claim that sex and age may have an influence on WTC. The reasoning behind this assumption is that distinct attitude and motivation differences have been reported between males and females as well as different age groups when it comes to language learning and L2 communication behaviour, which might be due to developmental psychology and maturational patterns (e.g. Gardner 1985, Clark and Trafford 1995, MacIntyre et al. 2002). The present study thus aims to investigate whether these differences emerge when it comes to the relationship between formulaic sequence knowledge and WTC in EFL.

### **3.2. Data collection methods and participants**

The data were collected in November 2019. To collect the necessary data, I took on a quantitative approach by comprising a questionnaire (see Appendix 1) and administering it online on social media platforms. The choice of using a questionnaire as my data collection method was the most natural, as my aim was to obtain generalizable results through statistical analysis, for which a large number of people is required. Questionnaires are an efficient means for gathering data from a large number of people (Dörnyei 2010: 6) as compared to interviewing participants individually. Of course, there are some limitations when it comes to using

questionnaires, which should be considered. Firstly, the questions in a questionnaire must be simple enough for it to be understood by everybody, which means that the resulting answers might be superficial (Dörnyei 2010: 7). This obviously limits the depth of the investigation to some degree, although it can be argued that what is lost in depth is gained in generalizability. Secondly, according to Hopkins, Stanley and Hopkins (1990) the quality of the results may vary significantly from one individual to another, depending heavily on the time and effort they choose to put into answering the questions. Lastly, since the researcher is not physically present when the participants fill out the questionnaire, misunderstandings cannot be addressed, and erroneous responses cannot be corrected (Dörnyei 2010: 8). The measures I have taken to avoid these pitfalls are that the questionnaire is in Finnish, which I believe makes it easier to understand. Furthermore, I verified the effectiveness of the questionnaire by using a sample test group of three people to identify any issues in understandability or readability prior to conducting the survey.

### **3.2.1. Instrument**

To measure the participants' willingness to communicate and their knowledge of formulaic sequences, an online questionnaire was developed. The questionnaire consisted of 37 items divided into three parts. The purpose of the first part was to collect some basic background information from the participants, more specifically, their gender and age group<sup>11</sup>. As the role of gender is also a research focus in this study, the participants were obligated to provide that piece of information, but should a participant not identify themselves within the binary, they could opt to choose third option 'other', in which case their data was included in all the other comparisons but the gender aspect.

The second part was concerned with the participants' willingness to communicate. To avoid any possible effects of the formulaic sequence test on this part, the questionnaire was administered first. Using Kostiainen's (2015) questionnaire as a template for structure and wording, the section was comprised of 15 statements which the participants were asked to rate on the Likert scale from 1 to 5 (1 being *completely disagree* and 5 being *completely agree*) based on their own views. The objective was to obtain information on how willing the participants perceive themselves to be to communicate in English. It is to be noted, however, that the questionnaire did not aim at covering all the possible variables that can affect WTC but

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<sup>11</sup> The age groups were based on Erikson's (1968) classic division between the eight stages of human psychosocial development.

focused rather on the most directly influencing factors according to MacIntyre (1994) and MacIntyre and associates' heuristic model (1998) (see section 2.2.1 for a discussion of the model). Furthermore, inspiration was drawn from McCroskey and Baer's (1985) measurement scale insofar as it relates to the different contexts and receivers (i.e. the degree of acquaintance between communicators and the number of people present), with whom EFL communication might take place. The themes of the formulated statements and their respective questions are presented in Table 1.

**Table 1. WTC questionnaire structure**

Themes of questionnaire items	Questions
1. Self-perceived communicative competence	1 to 3
2.1. Motivation to use the L2 with different receivers	4 to 7
2.2. Motivation to use the L2 in different settings	8 to 10
3. Communication apprehension	11 to 15

As we can see in Table 1, the themes were the following: (1) self-perceived communicative competence, (2) motivation to use the L2 with different receivers and in different settings, and (3) communication apprehension. Questions 1-3 were thus concerned with (1), the participants' self-perceived communicative competence, questions 4-7 addressed the different types of receivers: friends, strangers, large audiences and native speakers and questions 8-10 dealt with the participant's motivation to use the language in different contexts: in the home country, in formal educational settings and while travelling abroad. The final five questions specifically addressed the communication apprehension aspect of WTC.

The final part of the questionnaire was a measurement battery, the structure of which was inspired by Schmitt et al. (2004) in that it also consisted of a gap filling procedure based productive and receptive parts. The productive part was a 10-item-long sentence completion task, the purpose of which was to provide an understanding of the participants' productive knowledge of some common formulaic sequences in English. I made the choice of which target formulaic sequences to use in the two tasks by picking out high-frequency formulaic sequences

from two corpus-derived lists (1) the PHRASE list <sup>12</sup>(Martinez and Schmitt 2012, Appendix) and (2) the PHaVe list<sup>13</sup> (Garnier and Schmitt 2015). The reasoning behind drawing my target formulaic sequences from these two lists is the fact that they are both L2 pedagogy oriented, which means that they are specifically designed to include formulaic sequences that are necessary to be known by the L2 learner. This is why I deem them also appropriate to be included in my measurement battery. However, this is where the issue of bias must be addressed to uphold the principle of transparency. Namely, my choice of which target sequences were selected was influenced by my personal views on which ones are the most necessary for the Finnish EFL speaker. My views are those of a 24-year-old female Finn with a bachelor's degree in the study of the English language and who has lived in an English-speaking country for an extended period of time. Therefore, my assessment of which formulaic sequences are the most important may not be in concordance with the views of all Finnish EFL speakers.

After selecting the target formulaic sequences from the two lists, I then formulated the questionnaire items by combining elements of the gap-filling procedure and general translation tasks. Each item was a sentence, in which a part had been omitted, and the participant's task was to fill in the blank with the help of the Finnish translation, as for example in question five:

5. I'm really \_\_\_\_\_ (*odotan innolla*) the birthday party next week.

Instead of merely asking for the translations for the sequences, I decided to place them in sentences to provide more context. The receptive part of the test had ten questions, and the participants were asked to choose between four options in a multiple-choice test format. The three distractors were formulated to look lexically quite similar to the correct formulaic

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<sup>12</sup> The PHRASE list is the end-product of corpus analysis and extraction based on a combination of frequency and compositionality criteria, which meant in practice that the compilers chose to include only the high-frequency expressions that convey a discrete identifiable meaning or function (thus avoiding sequences such as *is the* or *is of*) (Martinez and Schmitt 2012: 303). The finished list consists of 505 of the most frequent non-transparent multiword expressions in English.

<sup>13</sup> The PHaVe List was developed in response to language instructors' need to know which of the thousands of phrasal verbs in the English language are most useful to address in tests or in instruction (Garnier and Schmitt, 2015). The compilers picked out phrasal verbs from Liu's (2011) corpus-derived list based on frequency and the finished list includes 150 of the most common phrasal verbs in the English language.

sequence so as to increase the difficulty level to what I deemed appropriate for the purposes of the present study. An example question is shown below in question two.

2. I like making my own pizza \_\_\_\_\_:

a) by the time                      b) at the time

c) from time to time              d) out of time

To collect a randomized sample, I utilized University of Jyväskylä's mailing lists, and two different social media platforms: Facebook and Instagram. It is necessary to point out, however, that since initially there was not a sufficient number of 60+ aged participants, I specifically requested people on social media to invite their relatives and friends in that age group to participate, which meant that some participants likely came from the same social circles. Moreover, that the survey is conducted online naturally excludes those members of the population who have no access to the internet. However, since the internet penetration rate in Finland is estimated to be 90.73% in 2019 (Statista Research Department 2019), the percentage naturally excluded is only 6.3%. The questionnaire was online for a total seven days, although the majority of the responses came in already within the first 48 hours.

### **3.2.2. Participants**

A total of 474 participants took part in the study. As the target population of the present study is Finnish EFL speakers, the criteria for selecting the participants were the following: (1) their native language is Finnish, (2) they are at least 13 years of age, and (3) they have access to the internet and have adequate computer literacy skills to complete the questionnaire. To administer the questionnaire, I chose to use a web-based survey due to its effectiveness and convenience for both the participants and the researcher. The platform used was the University of Jyväskylä Webropol software. It allowed me to create the questionnaire, send it directly to the participants and share the link to the questionnaire on other platforms, and it showed real-time data during the time it was online.

The gender and age distributions of the sample (presented in Table 2 and Table 3) turned out not to be equal, as can be expected when random sampling is utilized. Despite the obvious inequality, all groups still had a large enough number of participants for statistical analysis

( $N \geq 30$ , Schmuller 2013), except for the ‘others’ group ( $N=9$ ) in the gender division. For this reason, the group was excluded from the gender comparison, but the participants’ data was included in all other calculations. After a sufficient number of responses was gathered, the questionnaire was taken offline and I moved on to perform the data analysis, which is explained in the next section.

**Table 2. Gender distribution**

<b>Gender</b>	<b>N</b>	<b>%</b>
<b>Females</b>	378	80%
<b>Males</b>	87	18%
<b>Others</b>	9	2%
<b>Total</b>	474	100%

**Table 3. Age distribution**

<b>Age group</b>	<b>N</b>	<b>%</b>
<b>13-19</b>	45	9.5%
<b>20-39</b>	323	68.1%
<b>40-59</b>	76	16.0%
<b>60+</b>	30	6.3%
<b>Total</b>	474	100%

### **3.3. Data analysis**

In this present correlational study of formulaic sequences and willingness to communicate, quantitative methods were utilized in the statistical analysis of data. In the present section, I will elaborate on the coding of the collected data and the analysis processes used in this study.

#### **3.3.1. Coding the data**

After receiving a sufficient number of responses, the first step in my analysis was coding the collected data into numerical, analysable form. This was done separately for the two latter parts of the questionnaire, since they investigate different variables and thus require different approaches.



### 3.3.1.1. Calculating WTC scores

In the second part of the questionnaire, my aim was to measure the participants' willingness to communicate by asking them to rate statements on a Likert scale from 1 to 5. Based on the answers, I converted the responses into a numerical score, giving them a value between 1 and 5. For the questions 1, 2, 4, 6, 7, 8, 9, 10, 12, 13 and 14 the scoring goes as shown in Table 4. For the remaining questions, 3, 5, 11 and 15, due to the negative phrasing of the questions, the scoring pattern was reversed, as presented in Table 5. The maximum number of points was thus 75.

**Table 4. Scoring of Statements**

Number on Likert scale	Value
1	1
2	2
3	3
4	4
5	5

**Table 5. Reverse Scoring of Statements**

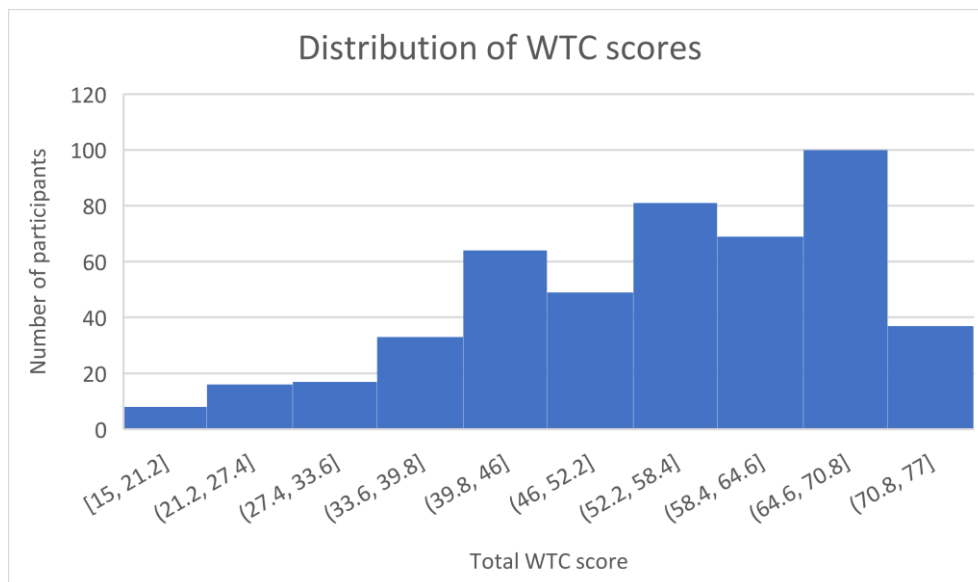
Number on Likert scale	Value
1	5
2	4
3	3
4	2
5	1

### 3.3.1.2. Calculating FSK scores

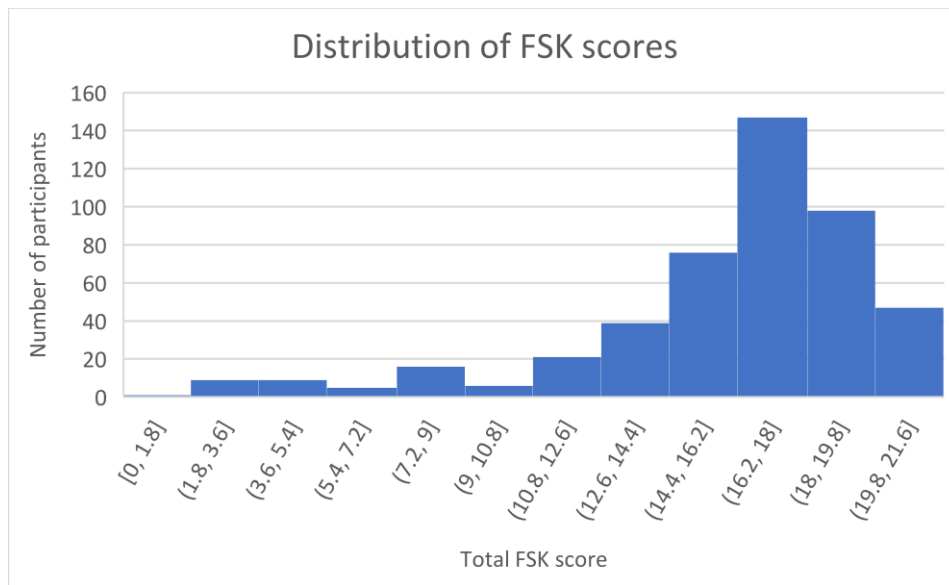
The coding of the formulaic sequence knowledge (FSK) measurement battery was straightforward: there were twenty questions in total and each correct answer was assigned one point (some have more than one correct answer, but each item could only be assigned one point), which makes 20 the highest possible score.

### 3.3.2. Statistical analyses

Methods of descriptive statistical analysis and regression analysis were used to examine my data. As the first step, in order to get a tentative idea whether the gathered data was distributed normally, I created a histogram for a visual way of examining the distribution of both the WTC scores and FSK scores (see Figure 3 and Figure 4). As we can see in Figures 3 and 4, both histograms appear to be asymmetrical with a negative (left) skew, which indicates that the data is not normally distributed. This assumption received further evidence by carrying out the Shapiro-Wilk normality test, which obtained the p-values of  $<.001$  (with significance level set at  $\alpha = 0.05$ ). Since the p-values are smaller than  $\alpha$ , this would lead us to reject the null hypothesis that the data is normally distributed. However, this is rather normal in large samples (Pallant 2010), and since the values for skewness,  $-1.7165$  (FSK) and  $-0,654$  (WTC), fell between  $-2$  and  $2$ , the assumption of normality cannot be totally rejected (Kunnan 1998). Furthermore, drawing on the Central Limit Theorem<sup>14</sup>, skewness should not “make a substantive difference in the analysis” (Tabachnick and Fidell 2001: 74) when the sample size is reasonable. As the present study has a large sample size ( $N = 474$ ), parametric tests were deemed as appropriate on the basis of the normality assumption. However, to ensure the validity of the parametric tests, a nonparametric test (Spearman’s  $\rho$ ) was also performed and compared to the obtained results.



<sup>14</sup> The central limit theorem (CLT) establishes that the sampling distribution of the mean is approximately a normal distribution if the sample size is large enough (generally  $N > 30$ ) with the indicated parameters (Schmuller 2013: 190).

**Figure 3. The Distribution of WTC Scores****Figure 4. The Distribution of FSK Scores**

To assess the relationship between Finnish EFL learners' knowledge of formulaic sequences and their willingness to communicate, I utilized both Pearson's Correlation Coefficient (also called Pearson's product-moment correlation,  $r$ ) and Spearman's rank-order correlation coefficient ( $\rho$ ). Pearson's correlation instrument is carried out by drawing a scatter plot of the two variables to see if there is linearity; the closer the scatter of points is to a straight line, the more correlation there is between the variables. Pearson's  $r$  can range from -1.00 to 1.00, in an  $r$  value of -1.00 is a perfect negative correlation, an  $r$  value of 0 indicates no linear relationship between the variables, and an  $r$  value of +1.00 means a perfect positive correlation between the variables. Unlike Pearson's  $r$ , Spearman's rank-order correlation is nonparametric, which means that it does not assume a normal distribution of data. The value of Spearman's  $\rho$  also ranges from -1.00 to +1.00 and the closer the obtained value is to either of these two extremes, the stronger the correlation.

To address the second research question, which is concerned with investigating the impact of age and gender on the possible correlation between the two variables, the chosen methods were Fisher's z transformation and z-testing, which are statistical means to compare correlations in independent samples even when the data does not follow normal distribution, as is the case in the present data. The results of all the performed calculations are presented in the following chapter.

## 4. RESULTS

The present study aimed at investigating the correlation between formulaic sequence knowledge and willingness to communicate in Finnish EFL users. In the present chapter, the findings of the statistical analysis will be presented following the logical order of the two research questions. For the analyses to follow, the significance level was set at  $p < .05$  (unless otherwise stated) so as to follow typical conventions in statistical analysis (McLeod 2019).

### 4.1. The correlation between Finnish EFL speakers' FSK and WTC

To test the hypothesis about the population  $\rho$  (i.e. the correlation coefficient for the entire population the gathered sample represents), Pearson's correlation coefficient  $r$  was calculated.

The hypotheses were the following:

$$H_0: \rho = 0$$

$$H_1: \rho \neq 0$$

I set  $\alpha = .05$

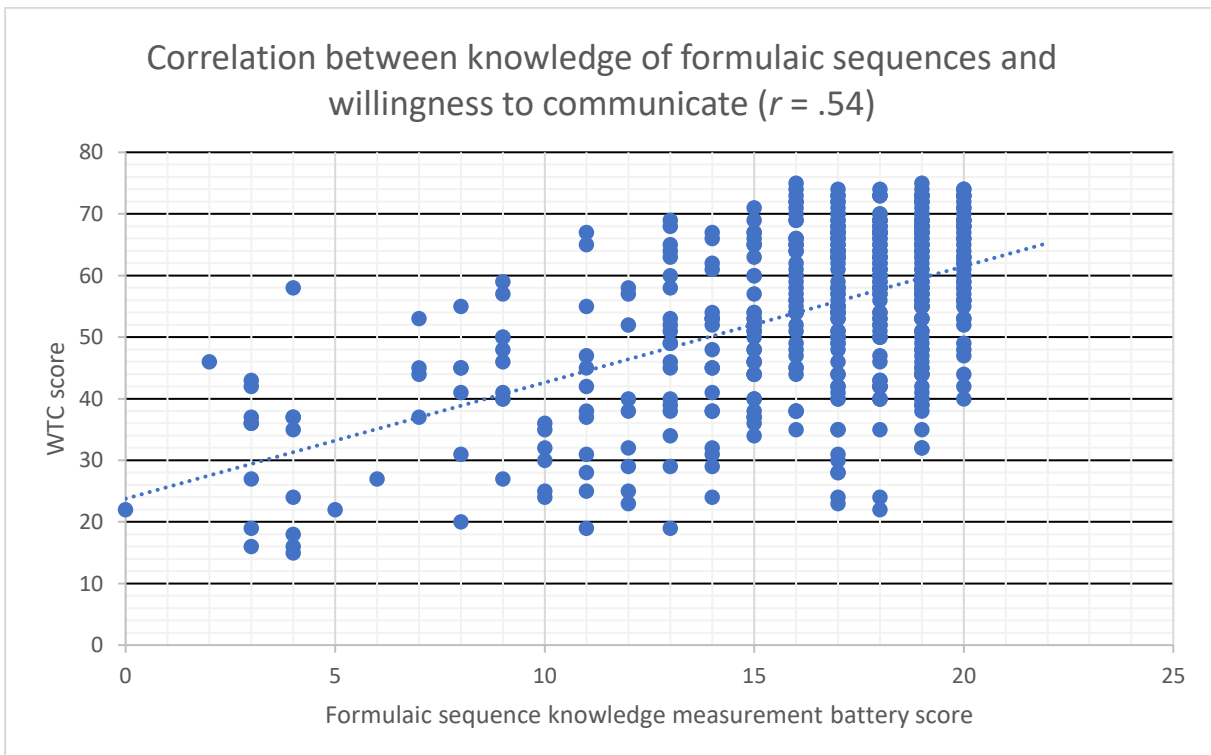
Based on the quantitative analysis of the gathered data, statistically significant ( $p < .001$ ) evidence was found for a large positive correlation between the knowledge of formulaic sequences and willingness to communicate in Finnish EFL users. The value obtained in the analysis of Pearson's correlation coefficient was  $r = .54$ ,  $p < .001$ , which is regarded as a large correlation based on Cohen's (1988) conventions for effect size (see Table 6). The distribution of the data and direction of the regression line are presented in a scatter plot form in Figure 5. As can be observed in the scatterplot, there is a small number of potential outliers included in the data. To determine whether they can be considered true outliers, I applied the following definition: "[a]n outlier is a point which falls more than 1.5 times the interquartile range above the third quartile or below the first quartile" (Renze 2020). Based on the calculations carried out using this definition, two true outliers were found in the data. The decision was made to include them in the analysis for two reasons. Firstly, there is enough reason to believe that their existence is evidence of normal variation in human behaviour rather than an error in the measurement procedures. Secondly, the deletion of the outliers does not alter the results significantly, as the calculated correlation coefficient remains  $r = .54$ ,  $p < .001$ .

**Table 6. Cohen's (1988:83) conventions for effect size**

Correlation value	Interpretation
0.10 - 0.29	Small correlation
0.30 - 0.49	Medium correlation
0.50 - 1.00	Large correlation

**Table 7. Descriptive statistics**

	WTC	FSK
<b>N</b>	474	
<b>Mean</b>	54.07	16.07
<b>Standard error</b>	0.63	0.18
<b>Median</b>	56.00	17.00
<b>Standard deviation</b>	13.73	3.94
<b>Sample variance</b>	188.85	15.48
<b>Largest</b>	75.00	20.00
<b>Smallest</b>	15.00	0.00

**Figure 5. Correlation between knowledge of formulaic sequences and willingness to communicate**

After assessing the correlation coefficient score  $r$ , I moved on to perform regression analysis, the results of which are presented in Table 9. In the analysis, I calculated the coefficient of determination ( $r^2$ ) which represents the proportion of variance that the two variables share. This can be calculated by squaring the correlation coefficient value  $r$ . The obtained coefficient of determination score was  $r^2 = 0.29$ , which is considered substantial in social sciences according to the conventions set by Cohen (1988). (see Table 8). To obtain the percentage of variance, the  $r$  squared score is multiplied by 100:  $r^2 = (0.54)^2 * 100 = 29$ . In other words, this indicates that the knowledge of the target formulaic sequences accounts for 29% of the variance in the participants' willingness to communicate.

**Table 8. Cohen's (1988:83) conventions for percentage of variance ( $r^2$ )**

Coefficient of determination value	Interpretation
0.01	Small correlation
0.09	Medium correlation
0.25	Large correlation

After performing the parametric tests, I also calculated Spearman's rank correlation score, to ensure the validity of the previous results with a nonparametric test. The obtained score was  $\rho = .45$ ,  $p < .001$ , which indicates a medium correlation between the two factors. Although a slightly weaker correlation was calculated using this test than the parametric one, it provides a further justification to reject the null hypothesis that there is no correlation between FSK and WTC.

**Table 9. Regression statistics**

Regression Statistics for FSK and WTC	
Pearson's Correlation coefficient ( $r$ )	0.54*
Coefficient of determination ( $r^2$ )	0.29
Standard Error	3.31
Spearman's Rank Correlation ( $\rho$ )	0.45*
N	474

\* $p < .001$

In sum, the results presented so far have provided a clear answer to the first research question concerned with whether there is a significant correlation between knowledge of formulaic sequences and Finnish EFL speakers' willingness to communicate. Namely, there is a large

positive correlation ( $r = .54, p < .001$ ) between the two variables, and 29% of the variance in the participants' level of willingness to communicate is predictable from their formulaic sequence knowledge.

#### **4.2. The effects of age and gender on the relationship between FSK and WTC**

In the present section, I will present the obtained results from the statistical analysis of gender and age differences between formulaic sequence knowledge and willingness to communicate. The results of the analysis on the two variables will be presented first separately and then combined at the bivariate level.

##### **4.2.1 Gender variable**

A statistically significant correlation value between FSK and WTC was calculated both in males ( $r = .60, p < .001$ ) and females ( $r = .54, p < .001$ ). Since the number of participants not identifying themselves in the binary ( $N=9$ ) was not large enough to be statistically presentive of the population, the decision was made to exclude their data from the gender comparison analysis. To answer the second research question, the correlation coefficients in males and females were compared to investigate, whether there is a statistically significant difference between the two groups. The possible hypotheses for the comparison of male and female populations were the following:

$$H_0: \rho_{\text{females}} = \rho_{\text{males}}$$

$$H_1: \rho_{\text{females}} \neq \rho_{\text{males}}$$

I set  $\alpha = .05$

In comparing the regression lines in Figures 6 and 7, it would seem upon first glance that the correlation between the two factors follows a similar direction in both groups. To confirm this hypothesis, Fisher's z transformation was used to assess, whether the correlation coefficient ( $r$ ) was significantly different in the two groups. A two tailed z-test was performed and since  $\alpha$  was set at .05, the critical values were 1.96 and -1.96. The obtained z-score,  $Z = -0.748$ , falls between the critical values, which indicates that its distance from the mean of the correlations of the two groups is not great. The decision is thus not to reject the null hypothesis. Furthermore, the probability value of  $p < .05$  would indicate that the two correlation coefficients are significantly different from each other, and since the probability value obtained in the calculation was  $p =$

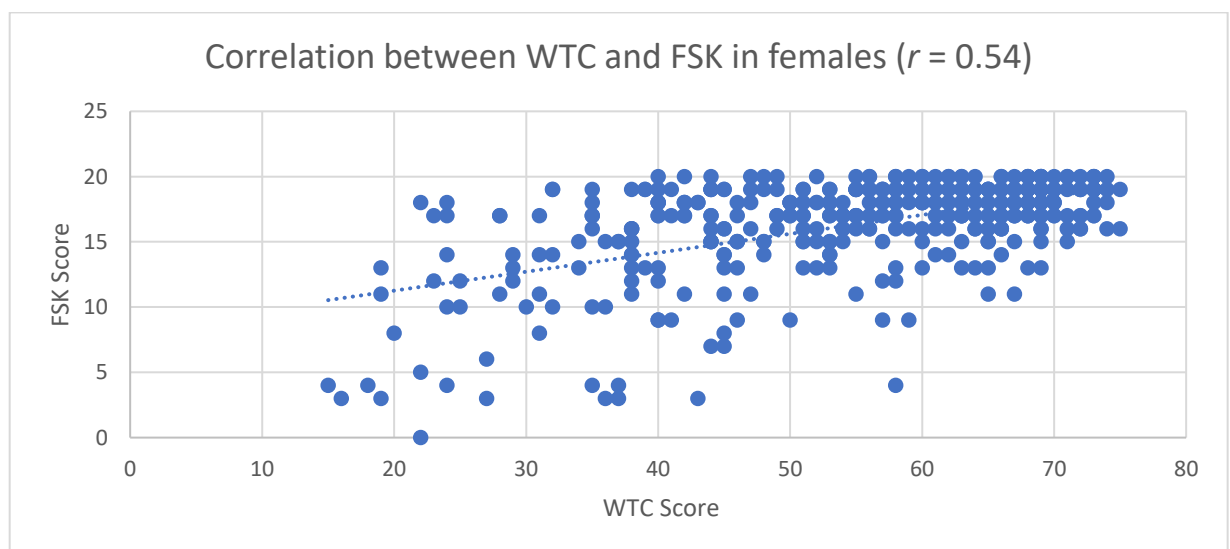
.453, which is significantly larger than .05, the null hypothesis is accepted that there is no significant difference between the two groups and reject the alternate hypothesis. Table 10 presents the mean scores, standard deviations, correlation values and significance values, which were used to calculate the z-scores and probability values of the two groups.

**Table 10. WTC and FSK means and their correlation in males and females**

		<b>FEMALES</b> N=378	<b>MALES</b> N=87
<b>WTC</b>	Mean	53.77	55.10
	S.deviation	14.13	12.44
<b>FSK</b>	Mean	16.16	15.47
	S.deviation	3.81	4.54
<b>Pearson correlation</b>		0.54*	0.60*
<b>z-Score</b>		-0.748	

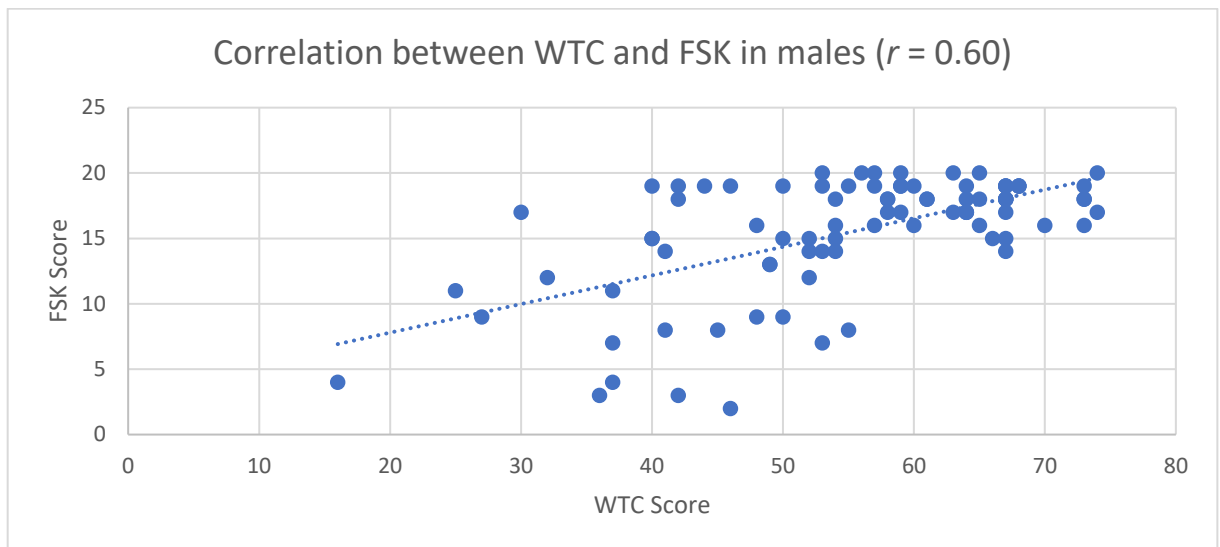
\* $p < 0.001$

Upon the analysis of gender differences in terms of the individual variables of WTC and FSK, no significant differences were calculated between the means. The obtained p-values of the comparison of WTC and FSK means were  $p = .419$  and  $p = .143$ , respectively. Both p-values are greater than the critical value of .05, which is why the decision is made to accept the null hypothesis that there are no statistically significant differences between genders within the individual variables of formulaic sequence knowledge and willingness to communicate in the Finnish EFL context.



**Figure 6. Correlation between WTC and FSK in females**





**Figure 7. Correlation between WTC and FSK in males**

#### 4.2.2 Age variable

Evidence for a statistically significant correlation was found in all age groups, except for the 60+ group (for a discussion for plausible reasons for this, see section 5.2.2). The largest correlation between the two factors was calculated in the 40-59 group with the correlation coefficient score of  $r = .70$ ,  $p < .001$  (see data distribution presented in Figure 10), which can be regarded as a very large correlation (refer to Table 6 for conventions). A large correlation was also found in the 13-19 group obtaining the score  $r = .67$ ,  $p < .001$  (Figure 8). The largest sample group between the ages 20 and 39 showed evidence for a medium (although nearly large) correlation between the two variables,  $r = .49$ ,  $p < .001$  (Figure 9). The small correlation of  $r = .25$ ,  $p = .192$  (Figure 11) in the 60+ group was proven not to be statistically significant, since the calculated p-value is greater than the maximum critical value of .05 for statistical significance (i.e.  $p = .192 > .05$ ). This leads us to accept the null hypothesis that there is no statistically significant correlation between the two variables, WTC and FSK, in the 60+ group.

**Table 11. WTC and FSK means and their correlations in different age groups**

		<b>13-19</b> <b>n=45</b>	<b>20-39</b> <b>n=323</b>	<b>40-59</b> <b>n=76</b>	<b>60+</b> <b>n=30</b>	
<b>WTC</b>	Mean	49.91	54.98	53.21	52.73	
	S.deviation	15.44	13.09	15.36	12.71	
<b>FSK</b>	Mean	14.02	17.01	14.04	14.17	
	S.deviation	5.20	3.01	4.97	4.01	
<b>Pearson correlation</b>		0.67*	0.49*	0.70*	0.25	
<b>z-Score</b>						1.66
						-2.59**
						-0.33

\* $p < .001$ ; \*\* $p < .05$

To answer the second research question, the different age groups were compared to assess whether there is a difference in the relationship between the two variables depending on the participant's age. The possible hypotheses for the comparison of the different age groups were the following:

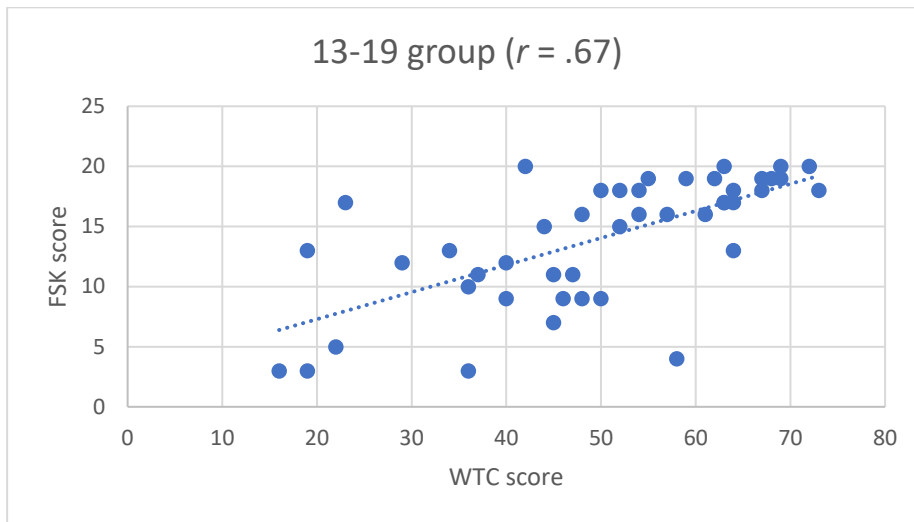
$$H_0: \rho_{13-19} = \rho_{20-39}, \rho_{13-19} = \rho_{40-59}, \rho_{20-39} = \rho_{40-59},$$

$$H_1: \rho_{13-19} \neq \rho_{20-39}, \rho_{13-19} \neq \rho_{40-59}, \rho_{20-39} \neq \rho_{40-59},$$

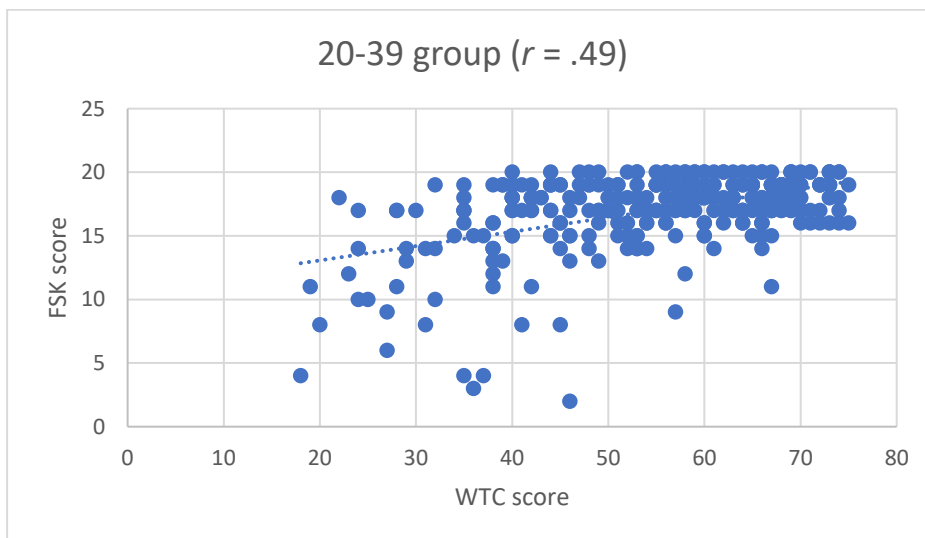
$$I \text{ set } \alpha = .05$$

As was done with the gender comparison, Fisher's z-transformation and z-testing were used to compare the age groups. As stated previously, the 60+ group was excluded from this comparison as the correlation coefficient was previously found to be statistically insignificant. All possible combinations of the three remaining age groups (13-19 and 20-39, 13-19 and 40-59, 20-39 and 40-59) were compared in terms of significance in difference in correlation. As can be seen in Table 11, the only statistically significant difference was calculated between the 20-39 and 40-59 groups, since the calculated z-score,  $Z = -2.59$ , fell outside the critical values of 1.96 and -1.96 ( $\alpha = .05$ ) and the p-value was smaller than .05. Thus, in the case of this combination the null hypothesis was rejected. The z-scores calculated for the other two combinations ( $Z = 1.66$  and  $Z = -0.33$ ) fell between the critical values, which is why the decision was made to accept the null hypothesis in their case.

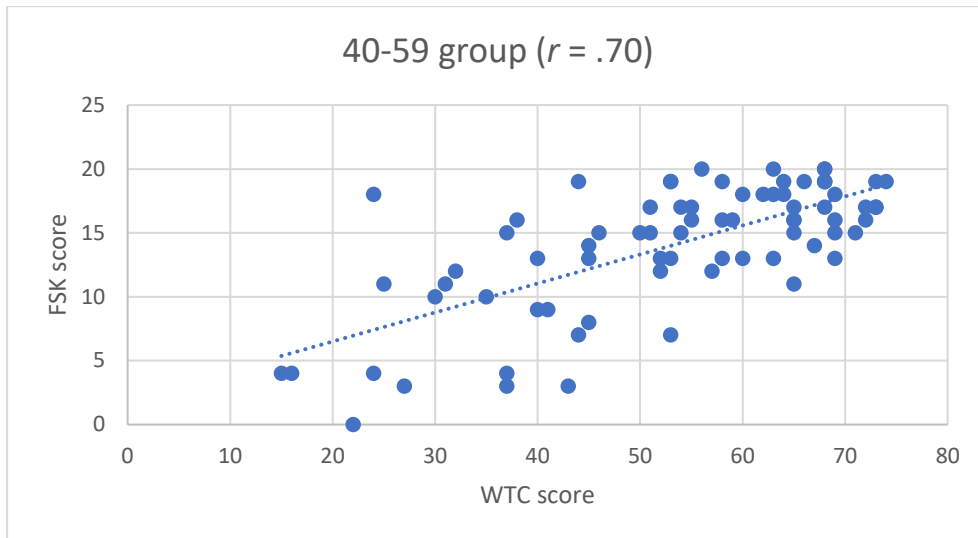
As a secondary interest, I analysed differences across age group means within the two individual variables, WTC and FSK. The only significant difference ( $p < .01$ ) in WTC means was calculated between the 13-19 and 20-39 groups. As for FSK means, statistically significant differences ( $p < .01$ ) were found between two combinations: 13-19/20-39 and 20-39/40-59.



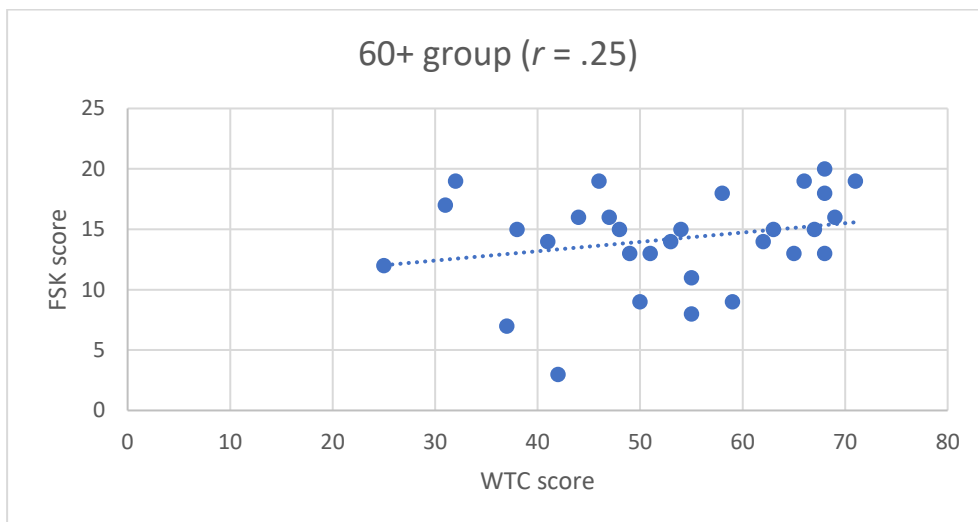
**Figure 8. Correlation between FSK and WTC in the 13-19 group**



**Figure 9. Correlation between FSK and WTC in the 20-39 group**



**Figure 10. Correlation between FSK and WTC in the 40-59 group**



**Figure 11. Correlation between FSK and WTC in the 60+ group**

#### 4.2.3 Bivariate effects of gender and age

For the final stage of statistical analysis, I moved on to investigating the joint effect of gender and age variables in order to determine, whether the correlation between formulaic sequence knowledge and willingness to communicate varies in males and females across different age groups. As is evident in Table 12, a statistically significant large correlation was calculated between the two variables both in males and in females across all age groups, excluding the oldest group. The highest significant correlation as well as coefficient of determination were calculated in males of the 13-19 group,  $r = .79$ ,  $r^2 = 0.63$  ( $p < .001$ ), which indicates that the knowledge of formulaic sequences accounts for 63% of the variance in the participants'

willingness to communicate. The lowest significant correlation was calculated in females of the 20-39 group with the model accounting for 26% of the variation. As was done previously, Z-testing was utilized to compare the correlations of males and females within each age group in search of significant differences. No Z-score exceeded the critical value of 1.96 or -1.96, which suggests that there is no significant difference in the correlation of FSK and WTC between males and females in their respective age groups. However, there is a significant difference ( $p < .01$ ) between the correlations of females in the 20-39 and 40-59 groups.

**Table 12. WTC and FSK means and their correlations in males and females within different age groups**

	<b>WTC mean</b>	<b>FSK mean</b>	<b>Correlation coefficient</b>	<b>Coefficient of determination</b>	<b>Z score</b>
<b>13-19 group</b>					
<b>Females (N=33)</b>	46.96	13.42	.63*	0.40	-0.87
S. deviation	15.96	5.54			
<b>Males (N=12)</b>	58.00	15.66	.79*	0.63	
S. deviation	10.74	3.87			
<b>20-39 group</b>					
<b>Females (N=262)</b>	54.54	17.07	.51*	0.26	-0.18
S. deviation	13.47	2.76			
<b>Males (N=53)</b>	56.89	16.55	.53*	0.28	
S. deviation	11.6	4.15			
<b>40-59 group</b>					
<b>Females (N=62)</b>	54.05	14.16	.71*	0.51	0.38
S. deviation	15.24	5.04			
<b>Males (N=13)</b>	48.85	13.07	.64**	0.42	
S. deviation	16.36	4.68			
<b>60+ group</b>					
<b>Females (N=21)</b>	54.00	14.95	.13	0.02	-0.72
S. deviation	13.89	3.15			
<b>Males (N=9)</b>	49.78	12.33	.44	0.19	
S. deviation	9.47	5.29			

\* $p < .01$ ; \*\* $p < .05$

However, the comparison of the WTC and FSK means between genders within individual age groups yielded some interesting secondary findings. Firstly, there is a significant difference ( $p < .05$ ) between males and females in the 13-19 group in their WTC means, even though their FSK score means proved not to differ significantly. Interestingly, this difference is no longer evident in the 20-39, 40-59 and 60+ groups, as the difference in means of males and females was consistently nonsignificant. Secondly, females' WTC mean differs significantly ( $p < .01$ ) between teenagers and young adults, while males' WTC mean shows significant difference ( $p < .05$ ) between the young and older adults. Lastly, females' FSK mean clearly peaks in the 20-39 group, which is why it differs significantly ( $p < .001$ ) from both the 13-19 and 40-59 groups, while males' FSK drops significantly ( $p < .05$ ) between the 20-39 and 40-59 groups.

In sum, although no significant differences were calculated in the total comparison between males and females, a closer inspection of gender differences within age groups revealed some interesting findings, which will be further examined in the following chapter.

## 5. DISCUSSION

The purpose of carrying out the present study has been to fill a gap in our current understanding of EFL usage behaviour by examining the relationship between formulaic sequence knowledge and willingness to communicate in the Finnish context. The main aim was to investigate whether there is a correlation between Finnish EFL users' knowledge of formulaic sequences and their self-perceived willingness to communicate. The research questions guiding the investigation of this problem were the following: first, *Is there a significant correlation between knowledge of formulaic sequences and Finnish EFL speakers' willingness to communicate?* and second, *Does age or gender affect the relationship between formulaic sequence knowledge and willingness to communicate?* The overarching hypothesis was that there will be a detectable correlation between the two factors and that there will be some differences across different age and gender groups. The quantitative approach of statistical analysis was used to guide me towards the inquiry of the two research questions. The data consisted of a large sample of Finnish EFL users' self-perceived willingness to communicate scores and formulaic language knowledge measurement battery scores. Statistical analyses, including Pearson's correlation coefficient, Fisher's z transformation and Spearman's rank correlation, were performed, first on the entire sample and then on the individual subgroups to

address the second research question. In the present chapter, I will discuss the results presented in the previous chapter, suggest some of the possible underlying reasons for them and point out connections and possible contradictions with previous research. This chapter will conclude with an account of the limitations of the study.

### 5.1 Interpreting the large correlation between FSK and WTC

The most important finding of the present research was that there is a large positive correlation ( $r = .54, p < .001$ ) between Finnish EFL users' willingness to communicate and their knowledge of some of the most common formulaic sequences in English. Therefore, the null hypothesis which states that there is no significant correlation between the two variables is rejected. As is evident in Figure 5 (p. 43), the participants' willingness to communicate increases with the level of formulaic sequence knowledge, which implies that those Finnish EFL speaking individuals with a high proficiency of formulaic sequences are also more likely to be willing to initiate communication in the target language than their less proficient peers. This would also seem to suggest that for a Finnish EFL speaker to achieve a high level of self-perceived willingness to communicate, the knowledge of formulaic sequences plays an important role. This finding echoes the findings of the recent study by Motlagh and Gilakjani (2018), in which a significant large correlation ( $r = .63, p < .001$ ) was calculated between use of English idioms (which are considered a subtype of formulaic sequences) and EFL willingness to communicate.

Prior to the further interpretation and discussion of this finding and all other findings of the present study, a word of caution is in order. Namely, when it comes to interpreting the results of any correlational study, one is obligated to consider the golden rule in statistics: *correlation does not imply causation* (e.g. Pearl and Mackenzie 2018). Although correlations have been found to often point to real causal relationships (Buchanan 2012), this phrase attempts to steer researchers away from committing the questionable-cause fallacy, which concludes that one phenomenon automatically causes another because they are regularly associated. For instance, consider Johnson and Blair's (2006) example: *Every time I go to sleep, the sun goes down. Therefore, my going to sleep causes the sun to set.* While it is important that there exists a strong consensus that such spurious correlations should not be regarded as scientifically valid, Pearl and Mackenzie (2018) argue that the long-standing mantra has actually created a virtual prohibition on any kind of causal talk in statistics. However, in recent decades this prohibition, if not taboo, is beginning to disappear in modern science (ibid). In accord with this shift, Buchanan (2012: 852) rewords the famous mantra to "Not only does correlation not imply

causality, but lack of correlation needn't imply a lack of causality either". In other words, interpreting the lack of correlation as a lack of cause-and-effect relationship is also fallacious, since not all causal relationships display a correlation (see Buchanan 2012, for an enlightening example of this).

In light of the discussion above, although a strong correlation was found in the present study between the two variables, it does not necessarily imply a direct cause-and-effect relationship between them, nor does it rule one out. Generally in statistics, in order to establish the existence of a cause-effect relationship there are three criteria that have to be met: (1) temporal precedence, (2) covariation of the cause and effect and (3) no other plausible alternative explanations (Trochim 2020). I will now critically evaluate how well the results of this study meet these three criteria.

According to Trochim (2020), the first criterion stipulates that the cause occurs *before* the effect. In the case of the variables in the present study, this implies that formulaic sequence knowledge must be acquired before one can become willing to communicate in the L2. Previous research has found that the learning and memorization of formulaic sequences plays an integral role in facilitating L2 communication (Bolander 1989). According to Nattinger and DeCarrico (1992), learners often achieve relative success in acquiring formulaic sequences already early on during L2 learning, which helps them reach initial communicative success. At the beginning stages of the L2 acquisition process, therefore, it seems that willingness to communicate is in fact preceded by formulaic sequence knowledge. At later stages, however, temporal precedence does not seem as evident. As discussed at length in section 2.1.3, even highly advanced non-native speakers struggle with mastering a nativelike usage of formulaic sequences (e.g. Pawley and Syder 1983, Wray 2002) even though they might be expected to be very willing to communicate due to their high L2 proficiency (MacIntyre et al. 1998). Furthermore, we cannot rule out the option that a formulaic sequence knowledge could *both* precede *and* succeed WTC. In other words, having a higher level of formulaic sequence knowledge might cause one to be more willing to communicate, and through their being highly willing to communicate in the target language, one is exposed to formulaic sequences more through communication and thus develops a better proficiency of them. It is therefore difficult to provide evidence for the existence of a straightforward temporal precedence in the case of the two variables in the current study.



The second criterion of cause-and-effect relationships is the covariation of the cause and effect, which simply entails that “if more of X then more of Y and if less of X then less of Y” (Trochim 2020). In the case of the results of the present research, this certainly seems to hold true as can be seen in the strong linear relationship of the two variables demonstrated in Figure 5 and in the calculated correlation value of  $r = .54$ ,  $p < 0.001$ . Out of the three criteria, this one is the most unarguably met in the present study and lends support to the idea of a cause-and-effect relationship.

The third criterion, i.e. the lack of other plausible alternative explanations, poses a difficulty in establishing a definite cause and effect relationship between FSK and WTC. Namely, the present study only focuses on the relationship between two variables, formulaic sequence knowledge and willingness to communicate. Obviously, these two variables do not exist in a vacuum isolated from other factors that affect each variable individually and together. The strong correlation may thus be explained through a third variable (or perhaps multiple variables) that was not considered in the current research. A number of social and cultural factors can be identified that may provide alternative explanations for the strong correlation between the variables. One such variable overlooked by the present study could be the participants’ self-perceived L2 proficiency. Research has found that formulaic sequence knowledge increases target language fluency and proficiency (e.g. Boers et al. 2006, Wood 2010, Gardner and Davies 2007, Rott 2009, Wray 2002, Rafieya 2018), which, in turn, seems to make one more willing to communicate due to a higher level of perceived competence (Rostami et al. 2016). In this way, formulaic sequence knowledge facilitates self-perceived L2 proficiency, which then facilitates L2 WTC, which may explain the strong correlation between the two variables. Another possible missing variable could be the participants’ level of language anxiety, which is closely linked with communication apprehension (CA). Language anxiety has been widely studied in SLA, and there is now compelling evidence that it impairs L2 learners’ willingness to communicate (Hashimoto 2002, MacIntyre and Charos 1996, Khajavy, MacIntyre, and Barabadi 2018). Language anxiety and formulaic language knowledge are also connected, because they have both been found to be strong (FSK positive and language anxiety negative) predictors of L2 fluency (Wood 2012). Other non-linguistic affective variables may include personality traits, social identity, cultural and educational background, socioeconomic orientation and so on. Unfortunately, the scope of the present chapter does not allow for an in-depth discussion of all possible underlying factors. However, for the purposes of the current

discussion it suffices to conclude that there are plausible alternative explanations for the correlation than a mere cause-and-effect relationship.

To summarize the discussion thus far, the strong relationship between Finnish EFL speakers' willingness to communicate and their formulaic language proficiency could be evidence of an actual cause-and-effect relationship between the two variables or, perhaps more likely, it could be explained through other underlying variables such as self-perceived L2 proficiency, language anxiety or a number of other social and cultural factors. Even though no comprehensive conclusions on causality can be drawn based on the findings of the present study, it is essential to note that there is still much value in conducting correlational studies. Namely, correlations are able to model the degree and nature of complex relationships between two factors in a very straightforward way (Norouzian and Plonsky 2018) and can thus be used as a foundation for many other modelling techniques. Therefore, the main finding of the present research is significant in that it shows us that the relationship between formulaic sequence knowledge and L2 willingness to communicate is existent, positive and, most importantly, strong and thus a worthy focus of future investigation.

## **5.2 The effect of individual differences**

Individual differences (IDs) are the “enduring personal characteristics that are assumed to apply to everybody and on which people differ by degree” (Dörnyei 2005), and they have been found to have an important influence on language learning (Dörnyei and Skehan 2003). According to Ehrman et al. (2003), the non-linguistic differences that are most often researched include age, gender, culture, aptitude, motivation, learning styles, learning strategies and personality. How and to what degree the different IDs influence specific aspects of L2 learning and communication is a topic of constant interest and debate in the field literature of SLA, because broadening our understanding of their effects on L2 behaviour is widely regarded as essential (MacIntyre et al. 2002). In the present study, the focus was laid upon the first two of the listed factors, gender and age, and I will now move on to discuss the obtained results. I will discuss the findings firstly at the univariate level and secondly at the bivariate level.

### **5.2.1 Gender differences**

No statistically significant difference was found between the correlation of knowledge of formulaic sequences and willingness to communicate between male and female Finnish EFL users. The lack of significant difference between the genders suggests that the relationship of

the two variables is not directly affected by the individual difference of gender. This is not to say that gender does not play any role, but rather that its impact does not appear to be linear in nature, as it might be modified by other variables such as interest, motivation or proficiency (cf. Amiryousefi 2018). This kind of a relationship requires further investigation, perhaps in the form of a focused longitudinal study of gender and possibly other contextual variables.

Overall, as can be seen in Table 10 (p. 46), males scored slightly higher on average in their level of WTC, while females performed slightly better in the formulaic sequence knowledge test. It is important to be pointed out that the differences were marginal, which concurs with previous research findings that suggest that gender differences in communication variables tend to be small (Canary and Hause 1993, MacIntyre et al. 2002). The results also confirm Motlagh and Gilakjani's (2018) finding that there seem to be no significant gender differences in WTC and use of idioms (which are regarded as formulaic sequences). Furthermore, the studies of Afghari and Sadeghi (2012), Baker and MacIntyre (2000), and Valadi, Rezaee and Baharvand (2015) were unable to show evidence of significant gender differences in EFL WTC, perceived competence and communication apprehension. The lack of significant gender differences also might apply to the formulaic language acquisition domain, as Schmitt et al.'s study (2004) found that individual differences such as age, gender and language aptitude seem not to have a significant influence on the acquisition of formulaic sequences. More empirical evidence is, however, required to confirm this finding.

On the other hand, there also exists a contradicting body of research that has revealed evidence for statistically significant differences between males and females in L2 WTC. For example, Gholami (2015) found significant differences in males and females in terms of their EFL WTC and its relationship with emotional intelligence in the Iranian context. The study identified females as the outperforming group in willingness to communicate, which the researcher attributes to their higher calculated level of emotional intelligence. Women were also found to be more willing to communicate in Donovan and MacIntyre's (2004) study of age and sex differences in WTC, communication apprehension and self-perceived communication proficiency. However, in a study by Arshad et al. (2015), males were found to display higher levels of WTC in the Pakistani context, which the researchers attributed to the male-dominated society.

As it has become evident in the discussion above, there are divergent findings when it comes to gender differences in L2 related issues. Based on the results of the present investigation,

however, the individual difference of gender alone appears to not significantly affect the relationship between formulaic sequence knowledge and willingness to communicate.

### **5.2.2. Age differences**

The second individual difference the present study focused on was age. The effects of age on second language learning and usage have interested researchers for decades, as it is one of the most obvious differences between L1 and L2 acquisition (Sanz 2005). The present study examined the correlations between four age groups, 13-19, 20-39, 40-59, and 60+, based on an oft-cited division between stages of human psychosocial development (Erikson 1968). The analysis of data from each group individually and their comparison to each other yielded some interesting findings, which I will now proceed to discuss.

#### **5.2.2.1 13-19 Group**

In the youngest group examined, a significant large correlation between the two variables was calculated ( $r = .67, p < .001$ ), which implies that formulaic sequence knowledge is a strong predictor of willingness to communicate in English in adolescents. As the majority of the participants in this age group receive formal EFL instruction in Finland, there are important pedagogical implications for instructors, which will be discussed further in section 5.3.

This group yielded the lowest score of formulaic sequence knowledge (14.0) as well as the lowest level of willingness to communicate (49.1). The relatively low formulaic sequence knowledge score of the group can be explained by the fact that many of the young participants have overall less language experience and would not have been exposed to as many formulae as older EFL speakers. The level of WTC in this group is significantly lower than in the 20-39 group ( $p < .01$ ), and I believe the reason behind this difference is linked to maturational life events such as puberty and identity formation which have been found to cause stress, low self-esteem, anxiety and communication apprehension (Bylund 1996).

#### **5.2.2.2 20-39 Group**

The group of young adults consisted of the largest number of participants, which makes the conclusions drawn from the results the most reliable. The correlation between the FSK and WTC ( $r = .49, p < .001$ ) was moderate, although a mere 0.01 point away from large according to Cohen's conventions (see Table 6). Like in adolescents, the implication is that a high level of FSK predicts a high level of WTC in young adults.

This group obtained by far the highest mean score in formulaic sequence knowledge (17.01), which is significantly greater than in the 13-19 and 40-59 groups ( $p < .01$ ). The group also displayed the highest mean of WTC level (54.98), which might offer a partial explanation for the high level of formulaic sequence knowledge: as young adults are highly willing to communicate in English, they are exposed to a greater amount of varied language in their daily interactions at university, work, online communities and travel. Furthermore, as most of the negative effects of puberty and identity formation are already behind the participants in this group, an increase in self-confidence and self-esteem facilitate a higher WTC (MacIntyre et al. 1998), which also seems to carry over into the older age groups.

### 5.2.2.3 40-59 Group

The 40-59 age group demonstrated the largest value of correlation ( $r = .70$ ,  $p < .001$ ) between the two variables. This implies that formulaic sequence knowledge predicts L2 willingness to communicate in Finnish EFL speakers most strongly in this age group. Their mean level of willingness to communicate score (53.21) was nearly as high as the young adults' but the formulaic sequence knowledge mean score (14.04) almost as low as the teenagers'. The strong correlation suggests, however, that individuals in this age group who are highly willing to communicate also have a high level of knowledge of formulaic sequences, whereas individuals who are unwilling to communicate are also likely to be less proficient in formulaic sequences.

The only statistically significant difference in the correlation between FSK and WTC across the different age groups was calculated between the 20-39 and 40-59 groups ( $Z = -2.59$ ,  $p < .05$ ), which implies that the relationship of the two variables differs the most when comparing young adults and older adults. Upon closer inspection of the descriptive statistics (see Table 12), one can observe that the mean level of willingness to communicate does not differ significantly between the two groups, while the score of formulaic sequence knowledge is significantly lower in the older adults ( $p < .01$ ). This suggests that the level of formulaic sequence proficiency has a more direct influence on willingness to communicate in older adults than in young adults.

### 5.2.2.4 60+ Group

The only nonsignificant correlation was calculated in the 60+ group ( $r = .25$ ,  $p = .192$ ). This group displayed similar levels of WTC (52.73) and FSK (14.17) as the 40-59 group, but unlike the other group, some participants in the 60+ seemed to be highly willing to communicate even with a low knowledge of formulaic sequences, while others were unwilling to communicate

despite an excellent command of formulae. FSK did not, therefore, act as a predictor of WTC in this group. In speculating the reason for the rather surprising lack of correlation in this age group, I have come to suspect that the process of recruiting participants may have led to biased results due to the recruiting channel. As Quinn (2010: 128) points out, “older adults sufficiently comfortable with survey administration technology may not be representative of older adults generally.” It is therefore highly likely that the individuals in this group do not portray an accurate picture of the entire population. Furthermore, the sample size of this group was the smallest of all groups and thus all conclusions should be made with some caution. The small number of participants is likely due to the fact that the data was collected online, and according to Statistics Finland (2019), internet usage is much more common among teenagers and young adults than older generations. Hence, the questionnaire simply did not reach as many participants in this group as in other groups. To get a more comprehensive picture of this group, it would most likely be effective to include additional distribution methods such as face-to-face, paper or telephone surveys to collect data from aging populations.

### **5.2.3 Bivariate differences**

Although no significant differences were found in the comparison of all males and females, a significant difference appeared when examining the effects of age and gender combined. Namely, there is a statistically significant difference between the youngest group’s males and females in their level of self-perceived willingness to communicate in English, even though their formulaic sequence knowledge showed no significant difference. Kostiainen’s study (2015) on EFL WTC in the Finnish context reports a similar finding, in which males consistently displayed higher levels of WTC than females in upper secondary school. Furthermore, Skinnari (2013) observed a noticeable difference in boys’ and girls’ communicative behaviour already in fifth and sixth grade English classes, during which the boys “play and laugh”, while girls “read and remain silent”.

There may be multiple underlying reasons for this gender difference in 13-19 participants’ WTC. One reason is suggested by Uuskoski (2011), who found a large correlation between playing videogames and English grades in Finnish high school students. Boys were found to play videogames more often, which was correlated with their higher proficiency in English. As previously discussed, language proficiency is a strong predictor of L2 WTC, which suggests that teenage males’ tendency to learn English via videogames might make them more willing to communicate in the target language than their female counterparts. However, as the measured

construct of the present study was *self-perceived* WTC, a possible explanation for the gender difference could be differences in self-esteem or cultural tendencies of self-perception between males and females. Indeed, Skinnari (2013) found males to be consistently more generous in their perception of their English skills than females. Moreover, she found that males were less likely to report language anxiety related feelings such as nervousness and fear when it comes to learning English. On a wider scale, Bleidorn et al. (2016) found in the data collected from a large, cross-cultural sample (N=985,937) that males consistently report higher self-esteem than females. It could be, therefore, that males' perception of themselves and their communicative willingness is more positive than females' despite their level of language proficiency. Lastly, the question should be raised whether the Finnish school system has begun encouraging males slightly more to communicate or rewarding males' acts displaying willingness to communicate more than those of females', since languages are traditionally regarded as a "feminine subject" (Colley and Comber 2003). The further investigation of the reasons behind the gender difference in adolescents is a necessary focus of future research.

### **5.3. Limitations of the study**

As the present study was exploratory in its nature, there are some limitations that need to be acknowledged. Firstly, the two questionnaires used were specifically developed for the purposes of the present study and had not undergone rigorous pilot testing to confirm their validity. Although the design process was strongly rooted in theory and especially in the results of corpus analyses of Martinez and Schmitt (2012) and Garnier and Schmitt (2015), further testing is needed to ensure that they accurately measure the target construct of formulaic sequence knowledge and willingness to communicate. All future endeavours should carefully address and test the characteristics of the measurement instruments to assure validity and reliability.

Secondly, the questionnaire on willingness to communicate is limited to measuring the participants' self-perceived WTC, which might not reflect the reality of the matter. As MacIntyre et al. (2001: 377) state, "thinking about communicating in the L2 is different from actually doing it". However, there is some evidence indicating that self-perceived L2 WTC predicts actual L2 use (Munezane 2016), but further research is needed to confirm this finding. Furthermore, the WTC questionnaire did not include a "Don't know/no opinion"- option, which is why the participants were forced to provide an answer to each question even if they did not have an actual opinion on the matter. This might have added noise in the results (i.e. participants

choosing an answer at random) as well as increased the cognitive workload of the participants, which might have also influenced the quality of their responses in the formulaic sequence measurement battery.

Lastly, the measurement battery on the knowledge of formulaic sequences only tests written skills, but leaves out oral and listening competence, which are a crucial part of L2 communication. Furthermore, the multiple-choice format of the battery creates its own limitations, as a ready-made set of alternatives might yield different results than an open-format test. Another limitation of the multiple-choice test is that we do not know why the participants chose the alternative they did. It is impossible to say, whether a correct answer was selected because the participant knew it, or because they guessed it or perhaps because they received help from a friend or looked it up in a dictionary. This is why the data might not reflect the whole picture of the participants' formulaic sequence knowledge, and this flaw should be remedied in future research by including various modes and formats of testing, which was not viable within the limitations of a master's thesis study.

## **6. CONCLUSION**

Despite the obvious prevalence of both formulaic language and willingness to communicate in recent research in SLA and applied linguistics, their relationship has remained an under-researched area thus far. Furthermore, the study of willingness to communicate in the Finnish EFL context is still very much in its infancy. In a pursuit of shedding light on this neglected topic, the present study has been an investigation of the relationship between Finnish EFL users' knowledge of formulaic sequences and their willingness to communicate in English. The differences between the effects of two individual differences, gender and age, were also examined. Although not without its limitations, the choice of using an online questionnaire as a data collection method proved to be effective, as it yielded a large sample of participants in a short amount of time. Utilizing statistical methods to research the relationship was a natural choice in order to break ground on this topic. Namely, the obtained quantitative results were able to provide straightforward indications about the strength and direction of the relationship between the two variables, and the two research questions were able to be answered satisfactorily based on the results of the analysis.

A statistical analysis of the collected data revealed a large positive correlation between the extent of the participants' formulaic language proficiency and their self-reported willingness to



communicate in English. Furthermore, the results showed that gender does not seem to play a significant role in the interrelationship between the two variables. Age was found to significantly influence the relationship between FSK and WTC only between the age groups 20-39 and 40-59, as formulaic sequence knowledge was a much stronger predictor of WTC in the older group. Furthermore, an unexpected finding was that there was a significant difference between males' and females' WTC in the 13-19 group (males being the outperforming group), despite the lack of difference in FSK.

Several pedagogical implications can be drawn from the findings of this study. Firstly, as discussed at length in chapter 2.2, the objective of second language instruction is generally for the learner to become willing to communicate in the target language. In the Finnish education context, for example, the National Core Curriculum for Basic Education (Perusopetuksen opetussuunnitelman perusteet 2014: 348) instructs that the teaching of English should “strengthen the learners’ confidence in their own ability to learn foreign languages” and “the learners should *be encouraged to confidently use the languages in diverse interaction situations*” (italics added). Therefore, the findings of this study give weight to the idea that increasingly more focus should be placed on formulaic sequences in the English classroom, as it can be a facilitating factor of L2 willingness to communicate. The lack of a significant difference in males and females in terms of the correlation of the two variables implies that specialized attention to the gender variable need not be paid when it comes to utilizing formulaic sequences to facilitate EFL WTC. However, the significant difference in self-reported WTC between females and males in the 13-19 age group implies that educators may need to be more concerned with facilitating females’ L2 willingness to communicate in this age group.

Secondly, an increased focus on formulaic sequences in the English classroom highlights the need to design and utilize teaching materials that take formulaic language intentionally and systematically into account. In his analysis of Finnish EFL textbooks, Ylisirniö (2012) found that there seems to be no common approach to formulaic sequences even though some material designers seem to be aware of research on formulaic sequences. Furthermore, it was found that corpora seemed not to have been consulted at all in the textbook design process and thus the scientific basis for the selection of formulae is questionable. Since Ylisirniö’s investigation, no further analyses have been conducted on English instruction textbooks in Finland, which is why it is unclear whether the textbooks currently in use take formulaic language better into

consideration. It is, in any case, the shared wish of many scholars in the field that teaching materials be systematically designed in alignment with our present understanding of the formulaic nature of language.

Lastly, the results of the current study may provide the EFL instructor with a practical way of facilitating L2 willingness to communicate in his/her classroom: an increased focus on formulaic sequences. Perhaps the EFL learner who is unwilling to communicate in the target language can be explicitly taught some high-frequency formulaic sequences, which could help him/her build a repertoire of “safe” expressions to draw upon, which could diminish the fear and anxiety of making mistakes. Although it has been found that L2 users tend to cling to certain formulaic sequences and use them in ways that native speakers would not (Granger 1998a, Tsai 2015, Hasselgård 2019), I would personally argue that all attempts of L2 communication, even grammatically erroneous or slightly context-inappropriate, should be seen as positive. This is why I maintain that an increased focus on formulaic sequences in the classroom would only be beneficial for the development of the students’ willingness to communicate in English.

The present exploratory study has only scratched the surface of what can be researched about the relationship between formulaic sequence knowledge and willingness to communicate. This is why there are multiple directions for future research that would benefit the field by broadening our understanding of the phenomenon. While the present study has established that there exists a strong positive correlation between FSK and WTC, it is essential to move on to investigate the underlying reasons for this relationship: does knowledge of formulaic sequences reduce communication apprehension and thus make one more willing to communicate or does formulaic sequence knowledge perhaps enhance one’s self-perceived competence? Furthermore, since formulaic sequence knowledge predicts L2 WTC, which formulaic sequences in particular have this effect and how can they be best taught to the Finnish EFL learner to facilitate willingness to communicate? Lastly, since English is not the only foreign language learned in Finland, it would be interesting to replicate the study to see if similar results can be obtained in Finnish learners of German or Spanish.

In conclusion, MacIntyre et al. (1998: 547) famously argue that the main objective of all L2 instruction should be to “engender in language students the willingness to seek out communication opportunities and the willingness actually to communicate in them”. The present study has been able to identify a shared characteristic of Finnish EFL users who are highly willing to communicate: a high level of formulaic sequence knowledge. Based on

this finding, practitioners should consider incorporating an intentional, consistent focus on formulaic language to help the language learner who is reluctant to communicate become a willing user of the L2 both inside the classroom and in the outside world.

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## **APPENDIX**

### **Appendix 1. Questionnaire**

Hei!

Nimeni on Anna Kuosmanen ja teen Englannin kielen maisterin tutkintooni kuuluvaa opinnäytetyötä Jyväskylän yliopiston kieli- ja viestintätieteiden laitoksessa. Tutkimukseni päätavoitteena on selvittää, miten englannin kielen vakiintuneiden ilmaisujen hallinta vaikuttaa suomalaisen englannin kielen käyttäjän halukkuuteen kommunikoida englanniksi eri tilanteissa. Lisäksi haluan selvittää, vaikuttaako ikä tai sukupuoli näiden kahden tekijän väliseen suhteeseen. Tutkimus toteutetaan tämän nettikyselyn muodossa, joka koostuu kolmesta osasta. Ensimmäisessä osassa pyydän osallistujaa kertomaan ikäryhmänsä sekä sukupuolensa. Toisessa osassa osallistuja arvioi väittämiä halukkuudestaan kommunikoida englanniksi eri tilanteissa asteikolla 1-5. Viimeinen osa on pienimuotoinen kirjallinen testi, joka mittaa osallistujan hallinnan tasoa tavallisimmista vakiintuneista ilmauksista englannin kielessä.

Kyselyn täyttämiseen kuluu n. 15 minuuttia. Tutkimus suoritetaan täysin anonymisti ja kaikki vastaukset käsitellään luottamuksellisesti sekä säilötään turvallisesti. Kerättyjä tietoja

käytetään ainoastaan tämän opinnäytetyön tutkimuskysymysten vastaamiseen. Kun tietoja ei enää tarvita opinnäytetyöhön, kaikki tiedot hävitetään. Voit halutessasi kieltäytyä osallistumasta tutkimukseen, milloin tahansa kysyä lisätietoja tutkimuksesta tai perua osallistumisesi tutkimukseen. Vastaamalla verkkokyselyyn annat suostumuksesi antamiesi tietojen käyttöön edellä kuvatulla tavalla.

Suuri kiitos osallistumisestasi!

Vastuullisen tutkijan yhteystiedot:

Anna Kuosmanen

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## 1. Taustatietoja

**Ikäryhmä:**

13-19 20-39 40-59 60+

**Sukupuoli:**

nainen mies muu

## 2. Halukkuus kommunikoida englanniksi

Lue seuraavat väittämät ja valitse kaikista osuvin vaihtoehto sen mukaan, miten koet toimivasi näissä eri tilanteissa. Tässä osiossa ei ole lainkaan oikeita tai vääriä vastauksia, joten vastaathan rehellisesti omien ajatustesi perusteella.



<i>Väittämä</i>	<i>Täysin eri mieltä</i>	<i>Jokseenkin eri mieltä</i>	<i>Jokseenkin eri mieltä, jokseenkin samaa mieltä</i>	<i>Jokseenkin samaa mieltä</i>	<i>Täysin samaa mieltä</i>
1 Olen mielestäni sujuva englannin kielen puhuja.	1	2	3	4	5
2 Osaan mielestäni kirjoittaa sujuvaa englannin kieltä.	1	2	3	4	5
3 En ymmärrä mielestäni englanninkielistä puhetta tarpeeksi hyvin.	1	2	3	4	5
4 Puhun mielelläni englantia, kun keskustelupartnerini on ystäväni.	1	2	3	4	5
5 Minua jännittää keskustella englanniksi ennestään tuntemattoman ihmisen kanssa.	1	2	3	4	5
6 Ison yleisön edessä puhuminen englanniksi ei ahdistaa minua.	1	2	3	4	5
7 Puhun mielelläni englantia, jos minulla on tilaisuus keskustella natiivipuhujan kanssa.	1	2	3	4	5
8 Tartun jokaiseen tilaisuuteen kommunikoida englanniksi Suomessa.	1	2	3	4	5

9	Puhun (puhuin) mielelläni englantia englannin kielen oppitunneilla.	1	2	3	4	5
10	Matkustaessani ulkomailla, puhun mielelläni englantia aina, kun on mahdollista.	1	2	3	4	5
11	Tunnen itseni epämukavaksi kommunikoidessani englanniksi.	1	2	3	4	5
12	Puhun mielelläni englantia, vaikka huomaisin tekeväni virheitä.	1	2	3	4	5
13	Koen itseni itsevarmaksi, kun puhun englantia.	1	2	3	4	5
14	Minusta tuntuu luontevalta aloittaa spontaanisti keskustelu englannin kielellä.	1	2	3	4	5
15	Englannin puhuminen ilman valmistautumista tuntuu minusta ahdistavalta.	1	2	3	4	5

### 3. Vakiintuneet ilmaisut englannin kielessä

#### 3.1. Ensimmäinen osa

Täydennä puuttuviin kohtiin mielestäsi sopiva ilmaisu käyttäen apunasi suomen kielen käännöksiä. Huomaathan, että useisiin lauseisiin ei ole vain yhtä oikeaa vastausta! Voit myös jättää kohdan tyhjäksi, jos et keksi yhtäkään sopivaa ilmausta.

1. I'm getting \_\_\_\_\_ (*vähän, jokseenkin*) tired. Can we finish the job tomorrow?
2. Tuesday is not good for me. \_\_\_\_\_ (*entä*) Wednesday?
3. Why didn't I get the promotion? It's just not fair, \_\_\_\_\_ ? (*tiedäthän mitä tarkoitan?*)
4. On the one hand, I would like to make more money. \_\_\_\_\_ (*toisaalta*), I really enjoy my current job.
5. I'm really \_\_\_\_\_ (*odotan innolla*) the birthday party next week!
6. What he did was wrong, \_\_\_\_\_ (*huolimatta siitä*) what he says.
7. That bag is way too expensive, I \_\_\_\_\_ (*ei ole varaa siihen*).
8. Could you \_\_\_\_\_ (*avata*) the TV, please?
9. This \_\_\_\_\_ (*sattuu olemaan*) my first time on an airplane.
10. What do you mean Australia gets more snow than Switzerland? It just doesn't \_\_\_\_\_ (*käy järkeen*).

### 3.2. Toinen osa

Täydennä lauseesta puuttuva ilmaus valitsemalla yksi vaihtoehtoista a, b, c tai d.

1. You have \_\_\_\_\_ beautiful smile.
  - a) a such
  - b) so a



8. Joan is an amazing person. I have \_\_\_\_\_ respect for her.

- a) all but
- b) nothing than
- c) anything than
- d) nothing but

9. \_\_\_\_\_ the Earth wasn't round? Would things be different then?

- a) What for
- b) How come
- c) Why doesn't
- d) What if

10. The students \_\_\_\_\_ listen to what the teacher says. Otherwise they won't know what will be on the test.

- a) would be best
- b) had the best
- c) had better
- d) would be better