

UNIwersytet PEDAGOGICZNY  
im. Komisji Edukacji Narodowej w Krakowie  
WYDZIAŁ NAUK HUMANISTYCZNYCH

Anna Borkowska

**Gotowość osób starszych do komunikowania się w języku  
angielskim podczas grupowych zajęć językowych**

Praca doktorska  
napisana pod kierunkiem  
dr. hab. Joanny Rokity-Jaśkow, prof. uczelni

Kraków 2021

PEDAGOGICAL UNIVERSITY OF CRACOW

FACULTY OF HUMANITIES

Anna Borkowska

**Senior learners' in-class willingness to communicate  
in English**

The doctoral dissertation written under the supervision

of Prof. Joanna Rokita-Jaśkow

Cracow 2021

## ACKNOWLEDGEMENTS

This dissertation could not have been completed without the direction of professor Joanna Rokita-Jaśkow. I cannot express my gratitude for her constructive feedback, all the suggestions, and faith in me and my project. There are no words that express how much her knowledge, careful reviews, and professionalism have meant to me.

I must also recognise the help and support of colleagues, Magdalena Noworolnik and Krzysztof Waśkowski, who were always eager to provide valuable feedback.

I would like to thank Eric for proofreading my thesis and giving me timely responses to all my questions and doubts.

Also, my research project could not have been done without my senior learners who willingly participated in my studies. Their motivation and determination to learn English could set a role model for many younger students who take their language education for granted. My students are a constant source of inspiration for me as a teacher and as a novice researcher.

Last but not least, I wish to express my appreciation to my husband, Piotr Borkowski, for his love, encouragement, and unconditional support throughout all the process. Whenever I doubt in myself, Piotrek knows what to say or do to make me see the light at the end of the tunnel. My husband believed in me before I even thought of believing in myself!

## TABLE OF CONTENTS

<b>Glossary of abbreviations .....</b>	<b>8</b>
<b>Introduction .....</b>	<b>11</b>
<b>Chapter One. The characteristics of third-age learners .....</b>	<b>13</b>
1. The psychosocial distinction between old age and the third age .....	13
1.1. The terminology of older adults and the third age in foreign language learning research .....	14
1.2. The characteristic features of the third age .....	15
2. Ageing: Definition and types.....	17
3. Biological changes in the ageing body .....	18
3.1. Age-related changes at the cellular level .....	18
3.2. Age-related changes in the sensory organs .....	19
3.2.1. Vision impairments.....	19
3.2.2. Hearing deficiencies .....	20
4. The neuropsychological aspects of ageing .....	21
4.1. The adaptive functions of the ageing brain.....	22
4.1.1. The HERA model.....	22
4.1.2. The HAROLD model .....	23
4.1.3. The CRUNCH model.....	23
4.1.4. The STAC model .....	24
4.1.5. Cognitive reserve .....	26
4.2. Cognitive functions in late adulthood .....	28
4.2.1. Attention and reaction time in senior years .....	28
4.2.2. Memory capacity in later life.....	31
4.3. Intellectual changes in old age .....	37
5. The impact of SLA on neurocognitive ageing: Literature review.....	40
5.1. Bilingualism and bilingual advantage.....	40
5.1.1. The effect of bilingual experience on brain plasticity .....	41
5.1.2. Dementia prevention.....	43
5.1.3. The cognitive effects of second language acquisition in the third age .....	44
6. Age stereotypes and self-stereotyping.....	47
<i>Summary.....</i>	<i>51</i>

<b>Chapter Two. Older adults’ foreign language learning: Theoretical background .....</b>	<b>52</b>
1. The rationale for education in late adulthood.....	52
2. The concept of lifelong learning .....	53
2.1. Third Age Universities.....	55
3. The concept of andragogy .....	56
4. The concept of geragogy .....	62
4.1. The emergence of critical foreign language geragogy.....	63
5. Glottogeragotics as a subdiscipline of applied linguistics.....	65
6. Seniors as foreign language learners .....	67
6.1. Motives and motivation to learn foreign languages.....	67
6.2. Third agers’ expectations of foreign language learning and the teaching process .....	70
6.2.1. The most preferable characteristics of foreign language teachers.....	70
6.2.2. Seniors’ expectations of foreign language courses.....	71
6.2.3. Teacher recommendations on foreign language courses for senior learners.....	76
<i>Summary</i> .....	87
<b>Chapter Three. Willingness to communicate (WTC) in the second language.....</b>	<b>89</b>
1. The foundations of second language WTC .....	89
2. The heuristic model of second language WTC .....	93
2.1. WTC and its cultural perspective.....	100
3. Early research on second language WTC.....	101
3.1. Tools for measuring learners’ WTC .....	102
4. A dynamic turn in WTC research.....	105
4.1. The qualitative approach towards WTC research.....	105
4.1.1. Kang’s (2005) psychological antecedents to situational WTC .....	105
4.1.2. Cao’s (2011) three dimensions underlying learners’ WTC.....	107
4.1.3. The effect of the teacher on students’ WTC in the study by Zarrinabadi (2014)...	108
4.1.4. Eddy-U’s (2015) proposed task situated WTC model.....	110
4.2. The mixed-methods approach towards WTC research.....	112
4.2.1. Cao and Philp’s (2006) study .....	112
4.2.2. De Saint-Léger and Storch’s (2009) study .....	113
4.2.3. MacIntyre and Legatto’s (2011) study .....	114
4.2.4. Peng’s (2014) study .....	115

4.2.5. Mystkowska-Wiertelak and Pawlak’s (2014) study .....	116
4.2.6. Pawlak and Mystkowska-Wiertelak’s (2015) study .....	117
4.2.7. Mystkowska-Wiertelak and Pawlak’s (2017) macro- and micro-perspective of WTC .....	118
4.2.8. Gałajda’s (2017) study.....	121
4.3. Zhang et al.’s (2018) proposed framework of situational characteristics .....	123
5. WTC and motivation .....	125
6. WTC and foreign language enjoyment.....	129
<i>Summary</i> .....	133
<b>Chapter Four. Research project design .....</b>	<b>134</b>
1. An overview of the research project.....	134
1.1. The general aim of the research project .....	135
1.2. General data about the participants in Study 2, 3, and 4.....	135
1.3. The instrument used in Study 2, 3, and 4.....	136
1.4. General information about the procedure .....	137
2. Study 1: Questionnaire study .....	137
2.1. Research aims and questions .....	138
2.2. Participants.....	138
2.3. Research instrument and procedure .....	140
2.4. Study findings .....	140
2.4.1. Language skills .....	140
2.4.2. Communication and in-class WTC in English .....	142
2.4.3. The components of classroom instruction fostering in-class WTC in English .....	144
2.4.4. The factors hindering in-class WTC in English .....	145
2.4.5. The teacher .....	146
2.5. Discussion .....	150
3. Study 2: In-class WTC in English during the communicative class .....	153
3.1. Research aims and questions .....	153
3.2. Participants.....	154
3.3. Research instruments .....	154
3.4. Tasks .....	155
3.5. Procedure .....	157
3.6. Study findings .....	158

3.6.1. The third agers' WTC in English during the communicative class.....	158
3.6.2. The older adults' perceptions of the tasks .....	160
3.6.3. The task that fostered WTC in English most during the communicative class.....	161
3.6.4. The task that inhibited WTC in English most during the communicative class.....	162
3.7. Discussion .....	164
4. Study 3: In-class WTC during the information-gap activity .....	166
4.1 Research aims and questions .....	166
4.2. Participants.....	166
4.3. Research instruments .....	167
4.4. Task.....	168
4.5. Procedure .....	169
4.6. Study findings .....	170
4.6.1. Seniors' WTC in English during the interview .....	170
4.6.2. The older learners' self-evaluation of the task performance .....	172
4.6.3. The older adults' in-class WTC in English in pair work.....	173
4.6.4. The application of communication strategies .....	174
4.7. Discussion .....	177
5. Study 4: In-class WTC in English during the self-prepared presentation of a picture.....	179
5.1. Research aims and questions .....	179
5.2. Participants.....	179
5.3. Research instruments .....	180
5.4. Task.....	181
5.5. Procedure .....	181
5.6. Study findings .....	182
5.6.1. Seniors' WTC in English during the presentation and while answering the teacher's questions.....	182
5.6.2. The third agers' self-assessment of the task performance.....	183
5.6.3. The older learners' degree of willingness to speak .....	184
5.7. Discussion .....	185
6. Study 5: The relationships among the third-agers' WTC in English, intrinsic motivation, language enjoyment, classroom environment, as well as teacher immediacy.....	187

6.1. Research aims and questions .....	187
6.2. Participants.....	188
6.3. Research instruments .....	191
6.4. Procedure .....	193
6.5. Study findings .....	195
6.5.1. Basic descriptive statistics with test for normality of distributions.....	195
6.5.2. Correlations among five scales.....	197
6.5.3. Correlations between WTC and selected variables .....	198
6.5.4. The older adults' classroom WTC in English .....	200
6.5.5. The most prominent aspects of Intrinsic Motivation, Foreign Language Enjoyment, Classroom Environment, and Teacher Immediacy among the senior learners.....	202
6.6. Discussion.....	205
<i>Summary</i> .....	209
<b>Chapter Five. Findings and conclusions .....</b>	<b>210</b>
1. A recapitulation of the study findings .....	210
2. The limitations of the research project .....	215
3. The pedagogical implications for glottogeragotics .....	216
4. Concluding remarks and directions for future research .....	218
<i>Summary</i> .....	219
<b>References .....</b>	<b>220</b>
<b>List of Tables and Figures .....</b>	<b>241</b>
<b>Appendices .....</b>	<b>243</b>
<b>Summary in Polish .....</b>	<b>277</b>
<b>Summary in English.....</b>	<b>279</b>

## **GLOSSARY OF ABBREVIATIONS**

<b>CE</b>	classroom environment
<b>CFLG</b>	critical foreign language geragogy
<b>CG</b>	critical geragogy
<b>CR</b>	cognitive reserve
<b>CRUNCH</b>	Compensation-Related Utilisation of Neural Circuits Hypothesis
<b>EC</b>	European Commission
<b>EER</b>	education, employment, retirement
<b>EFL</b>	English as a foreign language
<b>EWM</b>	executive working memory
<b>FL</b>	foreign language
<b>FLCA</b>	foreign language classroom anxiety
<b>FLE</b>	foreign language enjoyment
<b>FLL</b>	foreign language learning
<b>fMRI</b>	functional magnetic resonance imaging
<b>FOK</b>	feeling of knowing
<b>HAROLD</b>	Hemispheric Asymmetry in Older Adults
<b>HERA</b>	Hemispheric Encoding/Retrieval Asymmetry
<b>IQ</b>	intelligence quotient
<b>IM</b>	intrinsic motivation
<b>L1</b>	the first language
<b>L2</b>	the second language

<b>LTM</b>	long-term memory
<b>MCI</b>	mild cognitive impairment
<b>PET</b>	positron emission tomography
<b>SDT</b>	self-determination theory
<b>SLA</b>	second language acquisition
<b>STAC</b>	Scaffolding Theory of Cognitive Ageing
<b>STM</b>	short-term memory
<b>TAU</b>	Third Age University
<b>TI</b>	teacher immediacy
<b>TL</b>	target language
<b>TOT</b>	tip of the tongue
<b>U3A</b>	University of the Third Age
<b>UNESCO</b>	United Nations Educational, Scientific and Cultural Organization
<b>USTM</b>	ultra-short-term memory
<b>WAIS</b>	Wechsler Adult Intelligence Scale
<b>WHO</b>	World Health Organisation
<b>WM</b>	working memory
<b>WTC</b>	willingness to communicate

*“Anyone who stops learning is old,  
whether at twenty or eighty.  
Anyone who keeps learning stays young.  
The GREATEST thing in life is to keep your mind young”*

**Henry Ford**

## INTRODUCTION

Nowadays, learning in late adulthood is becoming more and more popular (e.g., Formosa & Findsen, 2011). As contemporary societies are ageing, it seems noteworthy to provide opportunities for older adults to maintain their quality of life, and thus “social institutions are ready to initiate and support programmes promoting seniors’ well-being, thereby inhibiting the negative effects of ageing” (Piechurska-Kuciel & Szyszka, 2018, p. 108). Learning at an advanced age has the potential to eliminate social isolation and open new doors for older students to gain pragmatic and useful knowledge that may broaden their horizons (cf. Niżegorodcew, 2016). In this regard, foreign language learning may be viewed as the key to finding a new purpose in life, as well as becoming an independent member of the international world (Jaroszewska, 2013b).

For the last five years, the author of the present thesis has been teaching English to senior learners, and her most fundamental observation is by far their willingness to talk and share their experiences in the classroom. When given an opportunity, third-age learners are eager to speak English and use their (even though limited) linguistic knowledge. The enjoyment they experience while expressing themselves in English may be seen on a regular basis in the classroom context. Certainly, positive emotions contributed to the present author’s attempt to investigate their willingness to communicate (WTC) in class.

The main aim of this dissertation is to explore seniors’ WTC in the English language classroom, as well as to identify the variables that may have an impact on their readiness to speak. Additionally, the present researcher intended to examine the relationship among WTC and different factors so as to gain a comprehensive picture of the nature of readiness to communicate among third agers.

Chapter One is a description of the terminology regarding the third age, old age, and ageing. It defines ageing and its types, and discusses the biological changes affecting the ageing body. Importantly, the neuropsychological aspects of ageing are also presented, and an analysis of the latest neuroscience studies depicts different models of the adaptive functions of the human brain. This chapter also focuses on the influence of second language acquisition on neurocognitive ageing. The final part of the chapter elucidates the prominence of age stereotypes and self-stereotyping in socio-psychological life.

Chapter Two concentrates on the theoretical background of education in late adulthood. It presents the concept of lifelong learning, andragogy, and geragogy. In a similar

manner, it explains the notion of Ramírez Gómez's (2016a) critical foreign language geragogy, as well as the concept of "glottogeragotics", which was introduced to the Polish scientific discourse by Jaroszewska (2011). The second part of the second chapter thoroughly presents the most focal aspects of seniors as foreign language learners. Likewise, the results of empirical studies indicate both older adults' and the teacher's perspectives of learning in later life.

In Chapter Three, the concept of WTC in a second language (L2) is explained in detail giving much prominence to instruments and its cultural perspective. As WTC research is rather extensive, the studies discussed in the chapter have been divided on the basis of research methods, namely quantitative, qualitative, and mixed-methods. Additionally, the most crucial factors influencing in-class WTC are presented.

Chapter Four introduces the research project. The primary objectives of the project were to investigate seniors' in-class WTC in English. The mixed-methods approach was utilised, and five different studies were conducted. The combination of both qualitative and quantitative studies helped to explore the situation-specific nature of WTC in the classroom context. Each study is thoroughly described, and separate subsections present the aims and research questions, participants, instruments, procedure, findings, and discussion.

Chapter Five briefly recapitulates the results of all five studies indicating the most fundamental variables that might have the potential to impact in-class WTC among the third agers. Also, the present author discusses the limitations of the research project, and explains the pedagogical implications for glottogeragotics. The final part of the chapter includes concluding remarks and directions for future research.

## CHAPTER ONE

### THE CHARACTERISTICS OF THIRD-AGE LEARNERS

Undoubtedly, age is a prominent factor when it comes to senior learners, and the knowledge of processes that older adults undergo seems to be of unquestionable significance as nobody becomes old in a sudden moment (Stuart-Hamilton, 2012). This chapter starts with a brief discussion concerning the discrepancy between old age and the third age, as well as the terminology of older adults used in the foreign language learning (FLL) research. It also provides a comprehensive picture of ageing from the biological and neuropsychological perspective. Significantly, Chapter One focuses on studies that indicate adaptive functions of the aging brain, and neurological models that confirm its plasticity in late adulthood. Likewise, the latest study results regarding the positive impact of second language acquisition (SLA) on neurocognitive ageing are discussed. Ultimately, the last part of this chapter concentrates on the role of age stereotypes in older citizens' lives.

#### 1. The psychosocial distinction between old age and the third age

*Old age* is the final age of the human lifecycle which is basically considered to be of “an inevitable nature” (Zych, 2019, p. 23). Owing to a growing life expectancy, old age is “a commonplace experience” that is impossible to identify in one universal manner (Stuart-Hamilton, 2012, p. 19). It is widely accepted that the onset of old age is basically recognised as the age of retirement (e.g., 60 years of age for women and 65 for men in Poland) (cf. Steuden, 2011). However, old age appears to be stigmatised and stereotyped as it has connotations with a certain degree of incapacity, the decline of mental and physical abilities, and ultimately, death (cf. Laslett, 1995). It comes as no surprise that this term is frequently avoided in a social context due to the fact that it seems to be “a reminder of the existence of death” (Taranowicz, 2014, p. 21). For this reason, old age is often replaced by a more politically correct phrase, namely ‘the third age’ (cf. Pfenninger & Singleton, 2019).

The term *the third age* was proposed by Laslett (1989, as cited in Laslett, 1995) in his book “A Fresh Map of Life. The Emergence of the Third Age”. Laslett believes that an individual's life includes four ages, such as *the first age* (dependence on parents, developing social relationships, learning and immaturity), *the second age* (independence from parents, maturity, social duties and work), *the third age* (retirement and enjoyment), and *the fourth age*

(dependence, decrepitude and death). Similarly, Oxford (2018) refers to Moen's (2011) three stages which are outlined as an acronym *EER*: *education* (the first age), *employment* (the second age), and *retirement* (the third age). Stuart-Hamilton (2012) mentions the *young elderly* (young old), and the *old elderly* (old old) as synonyms of the third and the fourth age. Lawrence-Lightfoot (2009) uses the terms *the third chapter* as an equivalent of the third age (as cited in Pfenninger & Singleton, 2019). Likewise, Steuden (2011) defines the third age as *the third period* which chronologically refers to 60 – 90 years of age, and the fourth age (90 years old and older) is called *the fourth period*. As highlighted by Klimczuk (2012), World Health Organisation (WHO) distinguishes between *young-old* (60 – 74 years of age), *old-old* (75 – 89 years old) and *oldest old/longlife* (90 years old and older). It is certainly worth underlining that third age people are often referred to as 50 plus in political and media discourse (Jaroszewska, 2013a). However, the chronological age of seniors in the scientific literature is commonly recognised as being between 60 and 65 years of age which represents *post working age*. Nevertheless, when it comes to older people, the third and the fourth age are perceived as terms that lack pejorative meanings or ageist stereotypes, and they are viewed as socially acceptable (Olszewski, 2018).

### **1.1. The terminology of older adults and the third age in foreign language learning research**

Taking research on second language acquisition into account, older citizens are often referred to as *third-age learners* (e.g., Gabryś-Barker, 2018), *third agers* (Oxford, 2018), *older adults*, *older learners* (e.g., Kliesch et al., 2018; Ramírez Gómez, 2016a), *late language learners* (Singleton, 2018), *senior students/learners* (Derenowski, 2018; Niżegorodcew, 2018), *seniors* (Grotek & Ślęzak-Świat, 2018; Derenowski, 2021), and *age-advanced learners* (Pfenninger & Polz, 2018).

As regards the third age, it is viewed as an active and independent period of later life when older people are still mentally and physically healthy and may enjoy their life during retirement (cf. Pot, Keizer, & de Bot, 2018). Laslett (1995) states:

The Third Age stands for the dignity and creativity, the social importance and public significance, the self-respect and civic virtue of older people which certainly continue indefinitely into later life, unless or until a Fourth Age of decrepitude intervenes, and often even after that. (p. 10)

The third age as such is referred to as *late adulthood* (e.g., Grotek, 2018), *the later years of life* (e.g., Ardel, 2000a), *senior years* (Nizegorodcew, 2016), *autumn years* (Singleton, 2018), *late phase of life* (Pawlak, Derenowski, & Mystkowska-Wiertelak, 2018), and *later life* (e.g., Stuart-Hamilton, 2012).

## **1.2. The characteristic features of the third age**

According to Erikson's model (1982), the third age is the eighth and final stage of psychosocial development. This period of time refers to the resolution of the last crisis, and it is characterised by dichotomy of integrity versus despair. It centres on questioning whether an individual has led a meaningful and satisfying life, as well as whether desired goals have been achieved. Third agers are faced with a variety of losses (personal, existential, material and social) that may result in a crisis of identity (Studen, 2011). The upcoming perspective of one's death evokes the need for understanding, and acceptance of life which constitutes the core of the third age (Tylikowska, 2013). It is necessary for individuals to come to terms with their own life history, gains and losses, failures and successes, and ultimately, death.

Ardelt and Jacobs (2009) pay due attention to wisdom as the highest virtue of the Erikson's (1982) eighth stage. According to a well-known researcher, Judith Grück (2017, p. 1970) wisdom is a complex construct that:

- combines both "cognitive components" (broad and deep knowledge), and "noncognitive components" (emotion regulation, openness to new ideas and experiences)
- involves critical self-reflection, and unpredictability of the human existence, which basically means that, "wise people are aware of how much they do not, or cannot know";
- is gained through life experience, and it does not necessarily come when an individual ages;
- involves good intentions to others and oneself;
- is mainly viewed as "guidance provided to others" even though it may not manifest itself as "advice giving".

Ardelt and Jacobs (2009, p. 739) claim that, "wisdom is the result of the successful resolution of a long series of psychosocial crises or developmental tasks" which occurs across the lifespan. In a general sense, wisdom is defined as a combination of cognitive, reflective and affective personality features. The cognitive dimension of wisdom is related to the search for truth, and an understanding of the importance of meaning in life while the reflective factors are associated with reflective thinking, perceiving events from multiple perspectives

that requires self-examination, self-awareness and self-sight. Reflective thinking diminishes a sense of self-centredness, and enables to see the reality clearly accepting older adults' own negative aspects of life. Therefore, older adults tend to have a greater ability to adapt to painful events (cf. Steuden, 2011). Wise people do not react negatively to unpleasant events, and they develop feelings of genuine empathy, sympathy, and compassion for others which characterise the affective component of wisdom (Ardelt, 2000a).

It may be deduced that the relationship between wisdom and old age is basically mediated by openness to experience, self-reflection, self-awareness, and determination (Finsen & Formosa, 2011). Interestingly, the study conducted by Ardelt (2000a) indicated that there are early antecedents of wisdom in later life. The data revealed that the likelihood of developing wisdom is enhanced by a favourable social environment, and mature personality, such as equanimity (nervous stability, absence of irritability, and the lack of restlessness), and absence of anxiety. These variables have a substantial effect on life satisfaction in late adulthood. Notably, wisdom might grow throughout the life course, yet late adulthood provides "particular opportunities" for its emergence (Ardelt & Jabobs, 2009, p. 743).

Seniors surely have time on their hands, and they feel free to engage themselves in different forms of social organisation (e.g., charity, volunteering) that gives them a sense of being useful and needed members of society (cf. Sienkiewicz-Wilowska, 2013). Also, it offers opportunities to gain new social roles (e.g., Szarota, 2014). Some seniors find taking care of their grandchildren enjoyable while others prefer to find new challenges that are aimed at realising their dreams and ambitions (e.g., Derenowski, 2018). Healthy third-age individuals are still capable of improving their skills, and gaining new experience that may be a source of positive emotions and life satisfaction (Gabryś-Barker, 2018). Moreover, seniors tend to expect "many years of relatively good health (...), in the absence of traditional social obligations associated with full-time work and child-rearing" (Mortimer & Moen, 2016, p. 117). Thus, they often decide to take up various activities because their professional paths have come to an end, and they finally have opportunities to turn to leisure tasks that may, additionally, give them a meaningful purpose in their lives (e.g., Wiczorkowska, 2017).

In a similar manner, many older citizens place the utmost importance on third-age education, including foreign language learning, which promotes a model of successful ageing (Piechurska-Kuciel & Szyszka, 2018). As aptly stated by Ardelt (2000b, p. 772), the third age offers a chance "to explore learning goals that people at earlier stages of life course are often too busy to pursue". Importantly, there is a group of third age citizens who did not have

widespread access to foreign language pedagogy or they were even deprived of educational opportunities owing to socio-political changes or economic reasons (Gabryś-Barker, 2020). Therefore, participation in activities organised, for instance, by Third Age Universities activate older adults in various forms of third-age education (e.g., language courses) facilitating social contacts, preventing isolation, and a feeling of failure (Fabiś, 2014). They also fight against ageist stereotypes which affect seniors' self-esteem, general well-being and performance (e.g., Oxford, 2018).

## 2. Ageing: Definition and types

People in the third age face the challenges of the process of ageing which is viewed as, “an integrated individual process of biological/physical, psychological and social factors that interact and foster change over time” (Pot et al., 2018, p. 178). This dynamic and ongoing process ultimately leading to old age covers various continuous changes which are not uniform, but rather unique for individuals (cf. Treder-Rochna & Jodzio, 2018). Certainly, the universal characteristics of ageing, which are widespread and specific for old people, do exist (e.g., Steuden, 2011). Stuart-Hamilton (2012) mentions a division into *universal ageing features* which are shared by older citizens to some extent (e.g., wrinkled skin), and *probabilistic ageing features* which are likely to occur but they are not universal (e.g., Alzheimer's disease). He also pays attention to *primary ageing* (associated with age changes in the body), *secondary ageing* (more probable and frequent to happen but not definite), and *tertiary ageing* (a rapid physical decline preceding death). Much in a similar vein, Rowe and Kahn (1997) introduced a clear distinction between *usual* and *successful* ageing. Usual ageing involves non-pathologic but high risk of disease or disability primarily affected by intrinsic and genetic ageing while successful ageing refers to low probability of disease, as well as high physical and cognitive functioning. It is worthwhile mentioning health and general well-being is viewed as *normal ageing* nowadays (Crăciun, 2019).

As elucidated by Steuden (2011), the symptoms of ageing are determined by *the chronological age* (measured in years), *the social age* (refers to socially acceptable behaviours and expectations at a certain chronological age), *the biological age* (a physical capacity of organism, particularly systems and organs), and *the psychological age* (associated with mental abilities and psychosocial functioning). Another approach to classifying late adulthood is *functional age* which essentially means “the mean chronological age at which a skill” is shown at a particular level (Stuart-Hamilton, 2012, p. 17).

### **3. Biological changes in the ageing body**

One of the most fundamental types of ageing is *biological ageing* that involves the ageing of the body, namely greying hair or wrinkled skin, as well as a decline in the functioning of body organs and systems (cf. Kijak & Szarota, 2013). Regressive changes mainly related to metabolic, respiratory, digestive, nervous, cardiovascular, musculoskeletal system, and deterioration occurring in almost all organs affect the function of whole ageing organism. As a result, older people may experience motor disturbances (balance, coordination), sleep-pattern modifications (a lack of regular rest and regeneration), general weakness, and a loss of handgrip (e.g., Jaroszevska, 2013b). Finsen and Formosa (2011) refer to a distinction between *normal age changes* and *pathological or diseases processes* that are likely to occur at a later age. Nevertheless, one may notice three kinds of ageing in the literature of the subject, such as *optimal ageing* when an individual still has an active lifestyle and the loss of physical function is minimal, *usual ageing* when older citizens remain active but experience a decline of physical functions, and *pathological ageing* when seniors suffer from chronic diseases which lead to physical deterioration (e.g., Suwiński, 2018).

#### **3.1. Age-related changes at the cellular level**

Biological changes in the body are also closely linked to cells which, as pointed out by Stuart-Hamilton (2012), in most cases die after about seven years, and they are replaced by new ones or they are lost. After the age of thirty, the cells lost amounts to 0.8 – 1 per cent per annum, and this loss is more pronounced in the third age (Hayflick, 1997). According to *the somatic mutation theory of ageing*, the cell replacement process is less efficient in the third age as cells “accumulate a large burden of mutations, which could result in the production of defective progeny” (Morley, 1995, p. 20). In short, cell copies are not as strong as their original units (Kennedy, Loeb, & Herr, 2012). As a result, potentially weaker or damaged cells are produced which means that further copying is useless and even impossible. Furthermore, Hayflick (1994, as cited in Stuart-Hamilton, 2012) demonstrates that there is a limit in terms of cellular replication before each cell dies. The Hayflick phenomenon is based on the assumption that cells appear to be programmed to die (Hayflick, 1997).

This indicates that cells experience multidimensional changes with age which affects learning at an advancing age on a cognitive, physical and intellectual level (e.g., Finsen & Formosa, 2011). Certainly, cell loss has a negative effect on brain volume and function

which may be reduced in later life. The changes in the central nervous system are strongly linked to multiple organ and system failure (Parnowski, 2013).

### **3.2. Age-related changes in the sensory organs**

Also noteworthy is the fact that the process of ageing affects the functioning of the sensory systems. From a didactic perspective, the most significant are vision and hearing deficiencies as they may hamper foreign language learning (FLL) (e.g., Eloniemi-Sulkava, 2014; Kic-Drgas, 2010).

#### **3.2.1. Vision impairments**

A decline of visual capacity is mainly associated with rather typical problems, such as long or short-sightedness, and about one third of people sixty-five years of age and older suffer from eye disorders and diseases (Stuart-Hamilton, 2012). As reported by Steuden (2011), the most common are *cataracts* (a clouding or opaque area over the lens of the eye), *glaucoma* (permanent damage to the optic nerve due to excess fluid building up and the increasing pressure of it), *macular degeneration* (the macula responsible for central vision degenerates), *diabetic retinopathy* (a diabetic complication caused by damage to the blood vessels of the retina). It should also be noted that third agers commonly experience a deterioration of *accommodation* (a reflex action of the eye in response to focusing at various distances) which may result in presbyopia characterised by long-sightedness caused by the loss of elasticity of the lens of the eye (Jaroszewska, 2013b).

Undoubtedly, these deficiencies may have a negative impact on seniors' language learning (Derenowski, 2021). In order to eliminate potential visual limitations, educators should pay due attention to clear hand-writing on the board and using larger fonts when preparing materials (Ramírez Gómez, 2016b). Careful consideration also ought to be given to classroom sitting arrangements, and a well-lit class. The present author's observations of senior learners as language learners in the classroom have showed that they choose to sit as close to the teacher as possible because older learners believe that, "being nearer the teacher gives us a sense of security, and we can see and hear better". This might suggest that they feel more confident owing to undisturbed access to classroom equipment available in the classroom.

### 3.2.2. Hearing deficiencies

In terms of hearing capacity, senior citizens experience age-related hearing loss known as *presbycusis* (e.g., Steuden, 2011). This ailment is caused by disorders of the inner ear or auditory nerve that initially impairs high frequency tones (Wang & Puel, 2020). WHO (2018) has estimated that one third of people over 65 years old are affected by presbycusis. Moreover, up to 10 per cent of people in the third age suffer from *tinnitus* (typically named “ringing in the ears”), and there is a worsening of detected sound in direction and distance commonly referred to as *sound localisation* (cf. Jaroszewska, 2013b). It should also be highlighted that older adults have difficulties in hearing complicated speech signals, especially when they are disturbed by background sounds (e.g., Pichora-Fuller, Schneider, & Daneman, 1995, as cited in Stuart-Hamilton, 2012). As hearing is significant in speech perception, the failure to detect auditory signals has a detrimental effect on everyday communicative interactions resulting in a feeling of embarrassment, distrust and isolation (cf. Findsen & Formosa, 2011).

Hearing impairments have a direct impact on the foreign language learning process. It has been manifested that noise outside and inside a classroom has been identified as a factor hampering learning among seniors (Eloniemi-Sulkava, 2014). As outlined by Kic-Drgas (2010), hearing deficiencies are one of the most fundamental sources of fear in relation to second language acquisition as it is mainly based on the skills of speech perception and listening. The fact that older adults are susceptible to background sounds, and they find it hard to perceive high tones results in potential learning difficulties. In order to compensate for the hearing decline, senior students rely more on the top-down processing of information (Ramírez Gómez, 2016b). It involves using the context or general knowledge to understand some pieces of information which have not been perceived, and filling in the gaps. However, this compensation is believed to be efficient in natural communication whereas it may reduce the higher cognitive operations necessary for performing language activities in a classroom environment (Gómez, 2016b). In this respect, it is essential to remember that age-advanced learners find it difficult to listen to audio and video tracks recorded in natural settings, and containing background sounds on a regular basis. Matusz and Rakowska (2018) report that listening is one of the most problematic skills with regard to in-class discomfort experienced by older adults. This is in line with the study by Jaroszewska (2013b) in which some participants admitted that the emphasis on listening activities during language courses might affect their learning.

#### **4. The neuropsychological aspects of ageing**

Another important aspect of ageing is that a decline of bodily organs and systems exerts a negative impact on the central nervous system, and the brain itself. The less efficient bodily systems provide decreased blood flow containing smaller amounts of oxygen and nutrients (Suwiński, 2018). Kaplan et al. (2000) have manifested that glucose regulation may have a substantial effect on cognition in late adulthood. Blood sugar regulation is linked to both verbal declarative memory, and visuomotor performance in healthy older adults. The decline of neural functioning is associated with a dysfunction of the blood-brain barrier which leads to exposure to potentially damaging toxins (Bouras et al., 2005, as cited in Stuart-Hamilton, 2012). As a result, older people are more vulnerable to dementia, cognitive decline and a diminished capability to recover from strokes.

Fjell and Walvord (2010, p. 187) report that brain tissues shrink “with annual reductions of between 0.5% to 1.0% in most brain areas”. The brain volume decreases about 10 per cent in later life in comparison to early adulthood (Parnowski, 2013). This volumetric shrinkage is caused by decreased numbers of neurons and changes in its cellular structure (Kołodziejczyk, 2007). The process of ageing contributes to the age-related reduction of grey matter (the cell bodies responsible for processing information), and the number of white matter (the part of the nervous system that corresponds with transmitting information), which also decreases with age. The white matter declines are more extensive than grey matter loss, and the greatest loss is observed in the frontal lobes (Tisserand & Jolles, 2003, as cited in Kołodziejczyk, 2008).

What ought to be noted is that the neural changes are not uniform in the whole human brain but they are mostly pronounced in the temporal and frontal cortex, which are of utmost importance in the case of memory and language acquisition (cf. Jagodzińska, 2008). As reported by Dennis and Cabeza (2008), the cerebral cortex as a whole reduces at a rate 0.12 per cent per annum in younger adults but this number expands to 0.35 per cent year in older citizens over 52 years of age. The frontal lobe manifests the steepest rate of atrophy with an average decline rate of between 0.9 to 1.5 per cent per year. This volumetric shrinkage and cortical thinning may be related to an exacerbation of performance on cognitive tasks with substantial frontal components (Park & Reuter-Lorenz, 2009). Also, subregions of temporal lobes, which play an important role in memory function (the hippocampus) exhibit significant deterioration in healthy older citizens (Raz et al., 2005). The researchers demonstrated both

cross-sectional and longitudinal declines in brain volume showing the greatest reduction in the prefrontal and hippocampal regions.

#### **4.1. The adaptive functions of the ageing brain**

It seems fundamental to note that the human brain has adaptive functions in terms of cell loss. There is a rich body of research which suggests a dynamic reorganisation of the human brain, and cognitive system in later life (e.g., Dennis & Cabeza, 2008). The process of the brain restructure is referred to as *brain plasticity*, *cognitive neuroplasticity* or *neurocognitive plasticity* (Park & Reuter-Lorenz, 2009). Neurocognitive plasticity is the ability for the human brain to recover and reorganise itself allowing neurons to regenerate both anatomically, as well as functionally, and to form new synaptic connections. The brain has the capacity to expand functions with age as it responds to changes by “expanding its activity” or “recruiting additional sites of activation to process the information” in order to adapt to changing environmental circumstances (Goh & Park, 2009, pp. 391-392). Thus, cognitive functions may compensate for the reduced capacities of an organism (e.g., after a stroke) improving mental functions by means of cognitive stimulation (Zajac-Lamparska, 2018).

##### **4.1.1. The HERA model**

Neuroimaging evidence indicates that one of the most visible age-related changes is more symmetric prefrontal activity in older adults (Cabeza, 2002). In a general sense, during cognitive performance, younger adults tend to manifest lateralised prefrontal activity. This essentially means using one hemisphere more, and which hemisphere is activated hinges upon the type of task in which the brain is involved. Neuroimaging techniques such as PET (positron emission tomography) and fMRI (functional magnetic resonance imaging) enable to see both the brain structure and its changes with age (e.g., Park & Reuter-Lorenz, 2009). It has been reported that the left hemisphere is more involved in verbal processing in episodic memory encoding, whereas right prefrontal cortex tends to be more activated during a subsequent recall or recognition tests (retrieval) in early adulthood (Habib et al., 2003). This pattern is referred to as *the Hemispheric Encoding/Retrieval Asymmetry (HERA) model*.

#### **4.1.2. The HAROLD model**

Older citizens display little prefrontal activity during encoding whereas a bilateral pattern of prefrontal activity during recall is reported (Cabeza et. al., 1997). This age-related change was interpreted as compensation of neurocognitive deficits. Owing to a loss of brain cells and decreased interconnections between the surviving ones, more neurons are needed to be active to do a basic task when compared to younger adults. Cabeza (2002) stresses that performing a task, which requires only one hemisphere in younger adults, involves recruiting two hemispheres in later life. In other words, the hemispheric asymmetry diminishes or even disappears in old age, and a bilateral pattern of prefrontal cortex activity is observed. This concept, known as *the HAROLD model (Hemispheric Asymmetry in Older Adults)* was proposed by Cabeza (2002). The author states that “prefrontal activity in older adults during cognitive performance tends to be less lateralized in older adults than in younger adults” (Cabeza, 2002, p. 85). HAROLD serves a beneficial purpose compensating reduced cognitive deficits in the other hemispheric activity at an advancing age. As a consequence, older people are likely to obtain better results on cognitive tests. Kołodziejczyk (2008) notes that this also may be a result of so-called *dedifferentiation*, which is based on the assumption that intellectual sub-skills become more related to each other again as they were earlier in life. Stuart-Hamilton (2012) explains that this process is strictly associated with *the differentiation hypothesis* which argues that in childhood and early adulthood, all sub-skills are strongly linked to each other, however, when children develop, those sub-skills become less related to one another. In old age, dedifferentiation may occur and this process is reversed. This basically means that intellectual sub-skills become more related to each other once again.

#### **4.1.3. The CRUNCH model**

The literature of neuroscience also presents the *CRUNCH model (Compensation-Related Utilisation of Neural Circuits Hypothesis)* (Reuter-Lorenz & Cappell, 2008). This model argues that a decline in the efficiency of cognitive processes prompts the recruitment of more neural resources in later age than in early adulthood. The CRUNCH model proposes that the prefrontal cortex plays a key role in executive control functions (e.g., attentional selection, inhibition, rule switching, maintenance, and context processing), and it may be recruited adaptively in order to handle the changing environment. Reuter-Lorenz and Cappell (2008) write:

Executive recruitment may also be the primary means by which the brain adapts both neurally and cognitively to its own aging. Executive processes account for a wide range of individual differences and are a likely source of age-related variations as well. (p. 180)

The scholars found that senior citizens activated dorsolateral regions of prefrontal cortex using lower working memory loads while younger adults activated these sites only at higher loads (Reuter-Lorenz and Cappell, 2008). However, at the highest loads, prefrontal activation in the younger group exceeded that in the older group. Also, poorer performance was reported among the older participants (Cappell, Gmeindl, & Reuter-Lorenz, 2006). similar result was presented by Matthey et al. (2006, as cited in Reuter-Lorenz & Cappell, 2008). The researchers indicated that the lower levels of the task demand an induced overactivation of the prefrontal cortex in older adults, and “at lower loads age differences were minimal” (Reutez-Lorenz & Cabeza, 2018, p. 179). The “underactivation” of the prefrontal cortex and impaired performance in seniors was observed as the task demand increased (Reutez-Lorenz & Cabeza, 2018). Yet, the study by Jamadar (2020) did not support the CRUNCH effect, and its compensatory function. Jamadar (2020) notes that the literature review in this field lacks sufficient evidence, and the overactivation may have alternative explanations (e.g., dedifferentiation).

#### **4.1.4. The STAC model**

Another concept proposed by Park and Reuter-Lorenz (2009) is known as *the Scaffolding Theory of Cognitive Ageing (STAC)*. The gist of this theory is that declines of the neural mechanism may be offset by the increased use of the prefrontal cortex. The authors elucidate that older adults might have a relatively high level of cognitive skills owing to the continuous involvement of compensatory scaffolding defined as “the patterns of brain activation that include both declining networks and the associated compensatory circuitry recruited to meet the task demands” (Park & Reuter-Lorenz, 2009, p. 183). The STAC model has been used to explain the human brain’s response to acquire new skills in younger adults. This acquisition requires a set of neural circuits that needs to be engaged, and developed providing the structure for task performance at the initial skill-performance stages (Peterson et al., 1998, as cited in Park & Reuter-Lorenz, 2009). As learning continues, performance is less demanding, and it becomes overlearned with enough practice. Importantly, before overlearning occurs, the circuitry has changed from a broader to a specific, developed and

optimal circuit of neural regions that are functionally linked to mediate processing and storage. The areas that provided scaffolding at the beginning stages of practice are minimally active, whilst more specific regions take control. This indicates that scaffolding, referred to as secondary networks (scaffolds), might remain accessible when challenging performance occurs (Goh & Park, 2009).

As already mentioned, scaffolding is utilised by younger adults in novel situations, and in order to learn new information. As regards late adulthood, however, Park and Reuter-Lorenz (2009) presume that older citizens recruit neural scaffolds as the brain's response to structural shrinkage, decreased white integrity and cortical thinning. It has been suggested that the scaffolding process is not unique in ageing, but it may be observed across the lifespan. In later age, "new scaffolds can be established, or previously established scaffolds acquired in early development or during new learning can be recruited" as a reaction to neurobiological challenges (Park & Reuter-Lorenz, 2009, p. 185). Cognitive scaffolding is primarily claimed to be located in the frontal regions of the brain. Yet, the hippocampus is also of particular significance since this area deals with cognitive processes, such as learning, encoding and retrieving (cf. Goh & Park, 2009).

The authors of the STAC model (Park & Reuter-Lorenz, 2009, pp. 188-189) hypothesise that:

- scaffolding is a direct response to the magnitude of neural impairments that occur with age;
- scaffolding is not arbitrary, and it may occur by recruiting regions that are responsible for higher levels of challenges in early adulthood;
- younger people that use scaffolding characteristic to older adults are likely to age more rapidly and obtain poorer results;
- compensatory scaffolding may be dissipated by training which is focused on diminishing activation in secondary scaffolded areas if older adults rely on overactivation relative to young adults for task performance;
- scaffolding may also be created by training when older citizens indicate substantial underactivation or deterioration of a network, a training aim is to form new scaffolds in order to perform a task that is being conducted unsuccessfully;
- creating new scaffolds by means of training is feasible but difficult as it requires thousands of repetitions.

What seems to be clear and significant is the fact that the ageing brain is not only capable of adapting and compensating the effects of neural decline, but also neuroplasticity enables older students to gain new knowledge, and skills by means of cognitive training.

Thus, it is reasonable at this point to take a closer look at cognitive ageing as such, and its impact on mental processes at a senior age.

#### 4.1.5. Cognitive reserve

As previously elucidated, the ageing brain is able to react adaptively to environmental stimuli, and compensate for neural declines. What is of particular relevance here is that mental training may effectively improve seniors' cognitive skills. This concept is known as the *use-it-or-lose-it theory* (e.g., Salthouse, 2006). It is based on the assumption that the brain is similar to a muscle, and that a person "can undertake both physical and cognitively stimulating activity throughout life and preserve cognitive functioning or delay the onset of dementia in later life" (Almond, 2014, p. 29). Cognitively demanding tasks constitutes the core of the phenomenon referred to as *cognitive reserve (CR)* (e.g., Stuart-Hamilton, 2012). Stern et al. (2005) claim that:

The concept of CR posits that individual differences in how tasks are processed might provide differential reserve against brain pathology or age-related change. That is, brain networks that are more efficient or flexible may be less susceptible to disruption. (p. 394)

Szepietowska (2019, p. 66) notes that the notion of CR plays an essential role in the contemporary world due to the "double ageing of societies" which means a reduction in a population involving young people and increased proportion of older adults (80 years and older). CR may be distinguished from a similar concept defined as *brain reserve* (Stern, 2013). In short, brain reserve is "a neuroanatomic resource that reflects structural properties of the brain", and it is related to the resilience of already established networks (Stern et al., 2019, p. 124). As regards CR, it argues that the brain damage may be managed by either using compensatory processes to recruit new pathways that are not generally used while completing tasks or by pre-existing cognitive processes, which may facilitate the efficiency of existing networks. Thus, CR refers to the relationship between brain damage or the degree of pathology, and the intensity or the onset of its manifestations that can be delayed or reduced by certain experience-induced changes in neurocognitive networks (Stern, 2013).

Numerous studies have shown a variety of lifestyle factors that may impact CR by fostering neuroplasticity (e.g., Cox & Sanz, 2015; Lee et al., 2018). A person's level of education has been reported to mediate CR (e.g., Farfel et al., 2013). Older adults with a higher degree of education are capable of compensating neurological decline in older age

while lower educated citizens have a tendency to increased susceptibility to mental deterioration (e.g., Stern, 2005). Cognitive stimulation is also recognised as a lifestyle factor that slows age-related decline (Pinto & Tandel, 2016). Pinto and Tandel (2016) mention *cognitive remediation* referring to various strategy training whose main objective is to foster enhancement in particular brain areas, such as attention, memory or speed of information.

Also of relevance is the study conducted by Lee et al. (2018) among older adults in China. The subjects participated in memory strategy training, and it turned out that those who had received training performed much better on place learning (filling locations and street names on a map), associative tasks (studying word pairs associates), and text learning (reading a story and answering questions). The scholars concluded that mnemonics, such as visual image or sentence making may be beneficial in daily life events. In addition, a high level of CR has a positive impact on mood management reducing the severity of depression. This finding is in line with a study by Szepletowska (2019). The author stresses that a high CR is related to better results in cognitive tasks, and decreased exacerbation of depression. In addition, the data analysis revealed that a higher level of CR enhances verbal memory. Szepletowska (2019) has drawn the conclusion that the indicators of a high CR are a higher level of education, being professionally, physically and socially active, having a feeling of support, and pursuing a hobby. These variables foster the capacity of semantic memory, linguistic abilities and cognitive competence in older adults.

In a similar vein, Wang et al. (2012) found that various kinds of leisure activities decreased the risk of cognitive decline. The authors divided activities into mental activities which were linked to global cognition, language and executive functions (e.g., reading, playing musical instruments, playing chess); physical activities that were connected with memory and language (e.g., walking, gardening), and social activities that were associated with global cognition (e.g., meeting family or friends, being visited). It turned out that all sorts of leisure activities had a protective role against cognitive decline in women, but only mental and physical activities mediated lower cognitive decline in men. The findings could not be explained by age, gender, education or body mass index as participation in at least one type of tasks resulted in maintained or improved cognitive function both in women and men. Wang et al. (2012, p. 209) emphasise that free-time activities may also have a potent effect on “psychological and behavioural pathways” owing to lowering stress, having a better diet and healthier lifestyle, and promoting well-being. Consequently, the danger of developing various disorders associated with worse cognitive functions is reduced.

It is certainly worth underlining that higher levels of mentally stimulating activities are claimed to result in higher *intellectual flexibility* (Schooler & Mulatu, 2001, as cited in Salthouse, 2006). The longitudinal data showed that involvement in intellectually demanding tasks have a powerful effect on cognitive functioning. This supports *the mental-exercise hypothesis* which argues that “the amount of mental activity throughout one’s life contributes to the level of mental ability at later periods in life” (Salthouse, 2006, p. 70). What this essentially means is that an individual’s current level of mental ability is – to some extent – determined by the level of this activity at any age.

## **4.2. Cognitive functions in late adulthood**

Currently, much prominence is also given to cognitive ageing with regard to degenerative diseases such as Alzheimer’s disease, as well as certain features of age-related cognitive decline (Pot et al., 2018). The analysis of the research concerning cognitive impairments in late adulthood (e.g., Antoniou, 2019; Green, 2018; Park & Reuter-Lorenz, 2009; Pfenninger & Polz, 2018; Zając-Lamparska, 2018) focuses mainly on such aspects as:

- a decrease in attention and reaction time,
- reduced working memory capacity,
- decreased recall of new information,
- poorer encoding of new information,
- a slowing of the information processing speed,
- deficits in inhibitory control,
- a worsening in intellectual skills,
- changes in speech production and perception.

The following sections thoroughly discuss each aspect of cognitive decline in senior years.

### **4.2.1. Attention and reaction time in senior years**

Attention and reaction time are thought to be cognitive mechanisms which reduce information overload improving intellectual and learning potential (Jaroszewska, 2013b). Attention is defined as “the ability to concentrate on something despite distracting stimuli, shift that focus as demanded by the situation, and coordinate information from multiple resources” (Findsen & Formosa, 2011, p. 67). Attention plays a key role in receiving, encoding and selecting information, and it is closely associated with reaction time referred to as “the time taken to respond to a stimulus” (Stuart-Hamilton, 2012, p. 74). It has been well

- established that reaction times get higher as people age, which generally indicates that older adults' responses are slower (cf. Kołodziejczyk, 2007). This phenomenon is described as “one of the most reliable features of human life” (Birren & Fisher, 1995, p. 329, as cited in Stuart-Hamilton, 2012).

Attention manifests itself in three variants, namely: *sustained attention*, *selective attention*, and *divided attention* (Findsen & Formosa, 2011; Stuart-Hamilton, 2012). *Sustained attention* is the ability to focus on the activity at hand without being distracted. It is commonly measured by means of a test during which a participant is required to respond each time to a particular letter that appears in a continuous stream of letters shown on a computer screen. Sustained attention is quite well preserved in the third age. Despite the fact that there is some degree of decline, it has no significant impact on an older citizens' life (cf. Fortenbaugh et al., 2015).

*Selective attention*, on the other hand, is identified as the ability to concentrate on the exercise at hand with the presence of other stimuli. Findsen and Formosa (2011) compare it to “multi-tasking”, and being engaged to more than one daily activities. Selective attention is typically measured by a visual search task where participants are shown a display of, for instance, a letter, and they are asked to find a particular one. Older adults appear to manifest a degree of ageing decline in selective attention. However, the differences in the results may occur as they hinge upon the complexity of an experimental method (Kramer & Strayer, 2001).

When it comes to *divided attention*, it is defined as a higher-level ability to attend simultaneously, and process more than one source of information (Kołodziejczyk, 2007). The popular method of assessing divided attention is the dichotic listening task where a participant wears stereo headphones and he or she is presented with a different message in either ear. In a general sense, third age people are disadvantaged in this task, which suggests that there is an ageing deficit when attention is to be shared between two or more sources (Robinson, 2003). As pointed out by Anderson (2010, p. 733) and his associates, “distracting information is more likely to influence older adults' than younger adults' performance on a target task”. The scholars also found that divided attention during encoding and recalling activates the same frontal brain region in younger adults as performing an individual task without any distractions by older adults.

Anderson and Craik (2000, p. 413) claim that age-related decrements hamper the efficiency of encoding and retrieval processes as the process of ageing reduces, “the amount of attentional resources available to fuel complex cognitive tasks”. Evidence for *the reduced*

*attentional resources theory* ( Craik, 1983, as cited in Anderson & Craik, 2000) comes from a study where subjects were simultaneously asked to do a memory task, and an unrelated secondary task. The results showed that the secondary task performance was more disrupted by encoding and retrieval for older adults as opposed to younger adults as more attentional resources were consumed by the memory task (Anderson et al., 1998, as cited in Anderson & Craik, 2000). What seems substantial at this point is the fact that age-related deficits may be diminished by “retrieval cues” which facilitate encoding, and guide retrieval compensating the reduced attentional resources (Anderson & Craik, 2000, p. 414). It has been suggested that Craik’s (1983, as cited in Jagodzińska, 2008) *environmental support hypothesis* is of paramount relevance in ageing as the vast majority of age-related cognitive impairments depend on the quality of the retrieval cue provided. According to Craik (2002), older citizens have difficulties in self-initiated processing, and thus the lack of environmental support negatively impacts the performance of complex, and attention-demanding tasks.

The general loss of processing resources is also related to changes in the frontal lobes which are heavily affected in later life (Grady et al., 2006). *The frontal lobe hypothesis* argues that “declines in executive function are attributed to age-related changes in the frontal lobes which are in control of attentional functions, as well as many forms of complex thought processes (Kievit et al., 2014, p. 2). The human brain generates more than one response to a question, and the frontal lobes are supposed to suppress the answers that are less possible or accurate. In other words, a principal function of the frontal lobes is basically inhibiting irrelevant information and allowing the correct answer to be made (Findsen & Formosa, 2011). As mentioned by Stuart-Hamilton (2012), this frontal lobe activity is often described as inhibitory functioning. The failure to distinguish between necessary and irrelevant responses, plan in sequence and confuse the sequence of the set of items is known as *the inhibitory deficit hypothesis* (Hasher & Zacks, 1988, as cited in Jagodzińska, 2008). In brief, the more complex a task, the disproportionately worse people in the third age become since they get easily distracted by irrelevant information and that, in turn, leads to worse concentration.

In the case of older adults, interference is more intense as they have difficulty focusing on one thought and suppressing insignificant ones (Radvansky et al., 2005, as cited in Jagodzińska, 2008). Park and Reuter-Lorenz (2009, p. 176) stress that: “Inhibitory dysfunction with age is a source of general attentional dysregulation and accounts for age-related deficits in other cognitive domains such as task switching, response competition, and response suppression”.

As far as information processing is concerned, a slowing in the speed of neural transmission is also linked to *the general slowing hypothesis* which argues that “the increase in reaction time reflects a general decline of information processing speed within the nervous system of ageing individuals” (Findsen & Formosa, 2011, p. 68). The less efficient information transmission in later life may be associated with the diminished white matter integrity which is perceived as a potential candidate for age-related slowing of cognitive processing (Park & Reuter-Lorenz, 2009). The main problem with the general slowing hypothesis is related to the age-complexity effect, which is mostly pronounced in complex tasks. However, it also emerges that the age difference is of less importance when a certain activity is sufficiently practised and automatised (Rogers, 2000, as cited in Findsen & Formosa, 2011).

It may be concluded that older citizens experience declines in managing more than one task concurrently. The decrease in attention span hinges upon a decline in inhibitory control which may result in a slowing of the information processing speed. In this respect, a careful consideration of memory capacity – especially working memory – is required since it plays a crucial role in learning.

#### **4.2.2. Memory capacity in later life**

Memory capacity is related to the function of the ageing brain which may be impaired in later life (cf. Kilian, 2015). As aptly noted by Singleton (2018, p. 21): “The well-worn cliché of course is that as we get older it is especially our memory that gets worse”. It is partly true because different types of memory behave in various ways (Klimova, 2018). In order to gain a more comprehensive understanding of memory, it is essential to focus on the various categorisations of memory systems and changes in their functioning at a senior age.

Memory as such is claimed to be found in a bilaterally structured element of the limbic system located in the temporal lobe, classically referred to as the hippocampus (Jagodzińska, 2008). The process of ageing causes decay of this region of the human body owing to the decrease of blood flow, and diminished functioning of blood cells (Park & Reuter-Lorenz, 2009). The deterioration of hippocampal activity does not affect all kinds of memory in the same manner.

One of the most common categorisations of memory is associated with the length of time memories are retained, namely *ultra-short-term memory (USTM)*, *short-term memory (STM)*, and *long-term memory (LTM)* (cf. Jaroszewska, 2013b). USTM is responsible for an

automatic response to any stimuli, and it may be characterised as a passive store of received information. The next category, known as STM is the ability to remember what has happened in the few last minutes, and it is identified as a temporary store (Stuart-Hamilton, 2014). In contrast, LTM is basically defined as either a permanent store of received information or any memory longer than STM.

#### a) Age-related declines in short-term memory

Initially, the process of memorization starts in sensory memory (USTM), which may be referred to as a kind of buffer for information received from the five senses (Atkinson & Shiffrin, 1968, as cited in Jagodzińska, 2008). It is the shortest-term memory as stimuli are stored only for approximately a half to one second, and they are transferred to STM at once where the message is analysed and interpreted (Wen, 2012).

The role of the short-term store, known as STM was provided by Baddeley and Hitch's (1974, as cited in Chai, Hamud, & Abdullah, 2018) *model of working memory (WM)*. WM may be defined as "a pool of mental energy or cognitive resources that can be used to encode, access, store and manipulate information, as well as visuospatial storage systems" (Park et al., 2002). Much in a similar vein, Grymska (2016, p.107) highlights that it "functions as a kind of gateway to our long-term memory, because the material we store and process in WM may become a part of long-term memory". The information, which is held in WM, usually remains accessible to our immediate consciousness only a few seconds, and it gradually fades away unless it is repeated timely (Wen & Li, 2019).

The standard model of WM identifies WM as a multi-component system comprising (Wen, 2012):

- *the central executive* that dynamically controls all cognitive resources and allocates them to slave systems;
- *the phonological loop* which is deemed to receive information and hold it for a very short duration (about a few seconds);
- *the visuospatial sketchpad* is in charge of storing and processing visuo-spatial information;
- *the episodic buffer* which is responsible for integrating information from LTM to WM.

The phonological loop is located in the temporal lobes of the left hemisphere in the brain, whereas the central executive is situated on the dorsolateral prefrontal cortex (Gilabert & Muñoz, 2010). From a cognitive psychology viewpoint, it may be deduced that the central

executive as a critical element of WM is considered to be the prime cause of age-related decline in STM since it coordinates processes involved in doing a mental task, and trying to remember something else at the same time (Stuart-Hamilton, 2012). This aspect is manifested in the studies by Craik and Jennings (1992) where the subjects were asked to repeat a previously heard list of words/numbers in the correct order. The findings showed that there was no statistically significant decline in older age. However, as demonstrated by Bopp and Verhaeghen (2005), the age-related deterioration is more evident in the task rested on the idea of repeating the items back in reverse in the so-called *backward procedure*. The results clearly indicate that older citizens are questionably worse than younger adults in this activity. Jagodzińska (2008) reports that this phenomenon is linked to reduced processing resources in old age as people in the third age are markedly worse in tasks that require many cognitive resources. Cabeza and Dennis (2013, p. 628) point out that “cognitive deficits in healthy older adults are largest for tasks that are highly dependent on executive control processes because these processes are mediated by prefrontal cortex (...), which is the region most disrupted by healthy aging”.

The location of the central executive may prove its decay in function rests on the impairment of the frontal lobes as those regions of the human brain play an eminent role in manipulating, inhibiting, and monitoring information (Kievit et al., 2014). The study conducted by Schacter (1996, as cited in Jagodzińska, 2008) supports the idea that older citizens with a damaged frontal lobe in the dorsolateral region struggle to do some cognitive tests, namely tasks based on colour and shape categorization.

It is worth mentioning at this point that WM plays a pivotal role in language comprehension as it “is thought of as a mechanism responsible for the temporary manipulation and maintenance of relevant information during cognitive operations” (Singleton, 2018, p. 21). WM with its two components, namely *phonological WM (PWM)*, and *executive WM (EWM)*, is claimed to be an apt candidate for language aptitude (Wen & Li, 2019).

*PWM* is viewed as “the primary language learning device” (Baddeley, Gathercole, & Papagno, 1998, p. 168). It plays a decisive role in “some acquisitional and developmental aspects” of vocabulary learning, and grammar structures (Wen & Li, 2019, p. 380). By contrast, *EWM* is found to be associated with cognitively demanding processes, and this is referred to as a “language processing device” (Cowan, 2015). *EWM* is related to second language speech accuracy, and it is fundamental during simultaneous interpreting processing when a learner is to listen, understand input in a certain language, and retain the information

until it is produced in another one (Christoffels, Groot, & Kroll, 2006). It seems essential to note that both PWM and EWM dynamically interact with the second language level of proficiency (Wen & Li, 2019). As manifested by Juffs (2006), PWM figures more among beginner lessons, that is in novel word forms acquisition or retention of chunks, while EWM weights in more advanced stages of acquisition, namely monitoring or self-correction.

As previously discussed, WM retains information for a temporary period of time, and the vast majority of information is redundant, and thus memory traces rapidly fade away. However, there are some messages which are to be remembered and stored in LTM. This interaction between WM and LTM “serves as a gateway to the LTM knowledge”, and the flow of information is believed to be bi-directional multiple WM components and the LTM warehouse (Wen & Li, 2019, p. 370).

In this context, it is crucial to take a closer look at Squire’s (1994) taxonomy of the LTM system. According to Squire (1994), the most fundamental distinction is between *declarative* and *nondeclarative* memory.

#### b) Age-related changes in long-term memory

*Declarative* memory is identified as the conscious recollection of facts and events. It has also been known as *explicit memory* which provides “knowing what” information (Kurecz, 1995). It may be exemplified by explicit learning which occurs after one exposure to the information to be studied, the intention of learning seems beneficial here, and it appears to require attentional resources, such as WM (Knowlton, Moody, & Slegel, 2017). Explicit memory is divided into two categories, namely semantic and episodic memory (Schacter & Tulving, 1994).

Tulving (1972, p. 386) points out that semantic memory is “a mental thesaurus, organized knowledge a person possesses about words and other verbal symbols, their meaning, and referents, about relations among them, and about the rules”. McRae and Jones (2012, p. 2) remark that currently scholars “interpret semantic memory more broadly to refer to general experience, and dependent on culture”. It is believed to rest on a knowledge of objects, facts, as well as images, and it could be referred to as “academic knowledge” which remains relatively independent of both a situational context and personal experiences (Jaroszewska, 2013b, pp. 64-65). This memory type is recognised as a factual store of linguistic knowledge about words. For this reason, it is termed as a “mental lexicon” (Ullman, 2004, p. 233). In a general sense, facts held in semantic memory are comparably well recalled

by older people as they are by younger adults (Olszewski, 2018). As emphasised by Stuart-Hamilton (2014), semantic memories are stored in a large part of the brain, and thus it is less prone to age-related decline than mental skills which are controlled by a tightly specified region of the brain.

Interestingly, older adults experience *the tip of the tongue (TOT) state* which is defined as “a common type of speech error in which a person has a strong feeling of knowing the target word, but experiences retrieval failure because of inability to access phonological information” (Kim, Kim, & Yoon, 2020, p. 2). TOT is claimed to be a part of semantic memory. Burke et al. (2000) found that seniors reported more TOTs when compared to younger adults although there was no age difference in the proportion of resolved TOTs. Likewise, the TOT phenomenon was primarily more affected by subjective memory problems than by ageing (Kim et al., 2020).

As far as *episodic memory* is concerned, defined as recall of once-only facts, this detail recollection is mainly associated with the issues of source memory defined as remembering the context of acquired knowledge (Glisky, Rubin, & Davidson, 2001). Older adults tend to produce false memories since they may be unable to identify facts in a correct manner as in the case of the recollections of dreams or thought that could be perceived as true events (Shing, Werkle-Bergner, & Lindenberger, 2008). This basically means that seniors are challenged with *reality-monitoring* (the ability to discern between perceived and imagined events) or the term known as *source-monitoring* (the ability to attribute particular origins or sources of experience) (Jagodzińska, 2008). In other words, memories are likely to be erroneously interpreted owing to incorrect source attribution. The impairments seem not to be the results of age itself but – as mentioned earlier – the consequence of reduced frontal lobe functioning. Integration of an item and its sources or context declines because of the low function of this area of the brain. In the case of third agers whose lobes functioned at a high level, no significant discrepancy between younger and older adults was found (Glisky et al., 2001). Although people at an advanced age approach source memory tests in a different fashion and they appear to be less flexible than younger adults, they are still capable of achieving equivalent levels of performance. It is manifested that “the important difference may not be between young and old adults but may be between different subgroups of older adults” as each senior experiences ageing in an individual way (Glisky et al., 2001, p. 1145).

Episodic memory is also linked with autobiographical memory which involves events of personal experiences (Kurcz, 1995). Older citizens appear to be capable of retrieving significant situations from the distant past, and this recollection may be stimulated to

remembering novel information (Jaroszewska, 2013b). Nevertheless, the measurement of autobiographical memory proves difficult since it deals with the memory of a personal nature that might not be simply verified in the present time (Van Dyke, 2012).

The second category of LTM, namely *nondeclarative memory* is also known as *implicit memory* (Kurcz, 1995). This type of memory “refers to a collection of abilities that are expressed through performance without requiring conscious memory content” (Squire & Dede, 2015, p. 7). Implicit memory (*procedural memory*) has received much attention in the language domain as it is believed to “support the learning of new, and the control of established, sensorimotor and cognitive habits and skills” (Van Dyke, 2012, pp. 101-102). As reported by Morgan-Short et al. (2013, p. 2), procedural memory is considered to be an unconscious awareness of “knowing how” which “underlies both motor and cognitive skill and habit learning”. This memory type “describes any acquisition and the successful performance of a specific skill over the long term” (Zimprich & Kurtz, 2017, p. 1885). Jagodzińska (2008) summarises that it is linked to skills, habits, procedures, as well as simple and more complex actions, such as riding a bike or speaking a particular language. Unsurprisingly, this memory is of particular relevance to the implicit learning that occurs gradually with repeated exposure or experience with the activity to be learned, and it is even believed to happen without direct intention of learning as it is characterised by automatization (Jaroszewska, 2013b). It is worth noting that procedural memory is assessed by means of priming tasks based on processing previously occurred stimuli (*perceptual priming*) or associates of those stimuli (*conceptual priming*) (Lighthouse, Conner, & Giovanello, 2018). What needs to be underlined is that priming depends on the frontal lobe functioning as high-frontal older participants had better recall than low-frontal older adults (Geraci, 2006). Additionally, low-frontal older adults tended to have difficulty using source information and committed more misinformation errors than high-frontal subjects (Roediger & Geraci, 2007).

### c) The role of metamemory

The process of retrieving information is also associated with *metamemory*, which is recognised as “any judgment that is made about a memory” (Metcalfe & Dunlosky, 2008, p. 349). Castel, McGillivray, and Friedman (2012, p. 246) write: “Optimal metamemory functioning involves accurately assessing one’s own memory abilities and using memory principles to enhance memory performance”. Older people are reported to be rooted in so-called *metaknowledge* viewed as “the origin of knowledge” (Li, 2018, p.). Metaknowledge

is linked to feeling of knowing (FOK) experienced when an individual is unable to recall a piece of information, but they feel confident that it can be retrieved at a later time (Hart, 1965, as cited in MacLaverly & Herzog, 2009). A typical FOK task is to declare how confident an individual is to answer a question correctly. It has been shown that seniors are worse at judging one's accuracy which may be a result of decreased level of confidence in the subject to be memorised (Resse & Cheery, 2006).

As a concluding remark, one may note that age-related declines in memory capacity hinge upon an individual's mental abilities, frontal lobe functioning, complexity of tasks, and memory type.

### **4.3. Intellectual changes in old age**

Intelligence as such has been viewed as the most common and difficult term to define (e.g., Jaroszewska, 2013). Sternberg (1997, p. 1030) perceives intelligence as comprising "the mental abilities necessary for adaptation to, as well as shaping and selection of, any environmental context". In contrast, Gardner (1999, p. 34) who proposed *the theory of multiple intelligences* states that: "Intelligence is a biopsychological potential to process information that can be activated in a cultural setting to solve problems or create products that are of a value in a culture". Stuart-Hamilton (2012, p. 57) acknowledges that general intelligence referred to as *g* is perceived "as a sort of global measure of intellectual ability". However, a well-known American psychologist, Linda Gottredson (1998) writes:

The *g* factor is especially important in just the kind of behaviors that people usually associate with "smarts": reasoning, problem solving, abstract thinking, quick learning. And whereas *g* itself describes mental aptitude rather than accumulated knowledge, a person's store of knowledge tends to correspond with his or her *g* level, probably because that accumulation represents a previous adeptness in learning and in understanding new information. (p. 25)

Researchers have long argued that *g* is not uniform, and ought to be treated as a composite measure of interrelated skills (Nosal, 2019). As pointed out by Bee (2004, as cited in Marcinek, 2007), intellectual skills hinge upon three types of human developmental changes, namely *universal changes* (which refer to each individual, and are determined by biological processes specific for each stage of human development, as well as universal social experiences), *mutual changes* (related to a certain community or group and its similar experiences), and *individual changes* (linked to variables specific for each individual, such

as traumatic, accidental situations). Bearing all those changes in mind, human beings appear to indicate discrepancies between intellectual abilities with regard to a variety of factors, including age as people clearly undergo an intellectual change in later life (Nosal, 2019).

It is common knowledge that the greatest fears human beings have are those associated with mental declines in late adulthood (Gow, Pattie, & Deary, 2017). Owing to the growing life expectancy, much prominence has been given to measuring intelligence in the third age (Marcinek, 2007). Intellectual skills are claimed to decay across the lifespan even though the decline strictly depends on the type of intelligence. The most popular classification of intellectual skills consists of two subcategories, such as *fluid intelligence*, and *crystallised intelligence* (e.g., Kołodziejczyk, 2007).

The notion of *Fluid intelligence* “captures the general ability to reason, to flexibly engage with the world, to recognise patterns, and to solve problems in a manner that does not depend upon specific previous knowledge or experience” (Cochrane, Simmering, & Green, 2019, p. 1) In brief, it deals with resolving novel problems and adapting to new situations without any reference to pre-existing knowledge or experience. *Crystallised intelligence*, on the other hand, involves the ability to use knowledge or skills that have previously been acquired through education and experience, and it may be recognised as “thinking logically and solving problems in novel situations” (Neugnot-Cerioni, Gagner, & Beauchamp, 2017, p. 2). As aptly stated by Nosal (2019), minds are equipped with “neurobiological hardware” which is genetically determined, and functionally represented by fluid intelligence whereas crystallised intelligence serves the role of “software” that exhibits acquired mental procedures, knowledge and experiences.

Interestingly, general intelligence begins to age relatively fast between 20 – 25 years of age. Fluid abilities are claimed to decay at an earlier age than crystallised ones (e.g., Gow et al., 2017). The research shows that a gradual decline in fluid intelligence occurs in middle age, and it is more pronounced between 50 – 60 years old (Kołodziejczyk, 2007). The exacerbation of fluid intelligence decline is reported between the ages of 70 – 80 (cf. Jaroszewska, 2013). In contrast, crystallised intelligence maintains a steady level, and its peak is believed to have a wide range between 40 – 60 years of age (Nosal, 2019), and some researchers have argued that it may even increase at the age of 70 (Christensen, 2001, as cited in Kołodziejczyk, 2007).

Basically, there are two major ways of measuring adult intelligence, the aim of which is to find differences between younger and older adults, such as the cross-sectional and longitudinal studies (see review in Stuart-Hamilton, 2012). The most widely used intelligent

test is the *Wechsler Adult Intelligence Scale (WAIS)*, which comprises 11 subtests described as *Verbal Scales* (measuring crystallised intelligence), and *Performance Scales* (measuring fluid intelligence) (Kołodziejczyk, 2007). Verbal scores are obtained by measuring a person's ability to identify words, interpret proverbs, explain similarities between words and concepts whilst performance scores concentrate on an individual's ability to handle unfamiliar objects, often in an unknown way (Finsen & Formosa, 2011).

It has been demonstrated that there is no significant change with age in verbal abilities, while a substantial drop has been noted in terms of non-verbal abilities (Findsen & Formosa, 2011). The findings are associated with *classic ageing curve* which proposes that intelligence test scores rise through childhood and adolescence, reach a peak in the late teens before a steady downward decline that begins at some point in adulthood (Stuart-Hamilton, 2012).

Older adults tend to have worse results on the performance tests in later life due to neurophysiological factors (Marcinek, 2007). The decline in sensory and auditory functions, as well as reduced psychomotor skills may have a negative impact on reaction time contributing to poorer non-verbal performance. Also, the genetic potential of an individual could affect the ability to solve problems (Jaroszewska, 2013b). Verbal skills, on the other hand, remain constant throughout the lifespan (Kołodziejczyk, 2007). Thus, it may be concluded that fluid intelligence accounts for decline in the classic ageing curve.

What ought to be emphasised, however, is that most fluid tests are against the clock, and subjects have a limited time to give quick responses, as opposed to crystallised measures which are seldom against the clock leaving older participants more time to answer questions (Stuart-Hamilton, 2014). Therefore, the validity of research on intelligence is often put in doubt as senior citizens are vulnerable to various physical and mental ailments (e.g., arthritis, rheumatism, Alzheimer's) that may slow their movements and performance. Finsen and Formosa (2011) emphasise health as one of the most eminent factors which may affect IQ tests in later life.

Jaroszewska (2013b) also mentions Gardener's (1983) multiple intelligences. In essence, Gardener (1983) originally distinguished seven kinds of intelligences involving *linguistic intelligence*, *logical-mathematical intelligence*, *spatial intelligence*, *musical intelligence*, *bodily-kinaesthetic intelligence*, *interpersonal intelligence*, and *intrapersonal intelligence*. He added one more type of intelligence, namely *naturalistic intelligence* (Gardner, 1999). The idea of intelligence is pluralistic, and as stressed by Davis et al. (2011, p. 487), the eight intelligences grew out of Gardner's observation, and the theory "relied upon the domains or disciplines in which one typically finds individuals who

demonstrate high levels of each intelligence”. Each person represents a variety of individual capacities, and they utilise different types of intelligences to approach, and solve daily problems.

It is noteworthy that owing to the growing popularity of lifelong learning, the prospects of maintaining and enhancing several intelligences are of pivotal importance nowadays (Davis et al., 2011). Jaroszewska (2013b) hypothesises that when it comes to SLA, the most vital intelligence will, by all means, be linguistic intelligence, logical-mathematic intelligence that fosters grammar learning, musical intelligence which helps to improve pronunciation, interpersonal that plays a key role in establishing social relationships, and intrapersonal intelligence that facilitates self-directed process of learning. Similarly, Oxford (2018) believes that emotional intelligence defined as the ability to manage one’s and other’s emotions is an influential variable which may facilitate cognition, and transform potential negative emotions to positive state of mind while acquiring a second language.

## **5. The impact of SLA on neurocognitive ageing: Literature review**

There is a rich body of research suggesting that:

- bilingualism has a positive effect on brain plasticity (e.g., Antoniou, Gunasekera, & Wong, 2013; Gollan et al., 2011; Nickels et al., 2019),
- bilingualism may delay the onset of dementia (e.g., Bialystok, Craik, & Freedman, 2007; Cherkow et al., 2010; Schweizer et al., 2012),
- bilingual experiences greatly influence general cognitive abilities (e.g., Cox, 2017; Zen, Kalashnikova, & Antoniou, 2019),
- a FL learning may improve WM capacity and attention (e.g., Bak et al., 2014; Mackey & Sachs, 2012; Pfenninger & Polz, 2018; Wong et al., 2019).

The following sections present studies concerning bilingualism and its impact on cognitive functioning.

### **5.1. Bilingualism and bilingual advantage**

When it comes to bilingualism, this term has been defined as “no longer a binary variable” in the literature of the subject as each population represents a various “spectrum of knowledge of two (or more) languages” (Nickels et al., 2019). In a broad sense, bilingualism may be classified with regard to the age of SLA (early vs. late bilinguals), simultaneity of SLA (simultaneous vs. sequential bilinguals), L2 proficiency, and the frequency of L2 use

(active vs. latent bilinguals) (Calvo et al., 2016), as well as naturalistic vs. instructed (Stein et al., 2014).

Bilingual participants in the research literature constitute a complex and multidimensional group, and thus it seems unreasonable to make an attempt to find one homogenous generalised definition. However, it is by all means certain that “a lifetime experience that involves continuously managing and resolving competition between two languages will result in cognitive benefits” which are of unquestionable importance to the ageing brain (Antoniou, 2019). Neuroscience studies basically concentrate on the difference in mental functioning between immigrants (bilinguals) and non-immigrants (monolinguals).

It has been suggested that bilinguals have an advantage over monolinguals in SLA (e.g., Paap, Johnson, & Sawi, 2015). The bilingual advantage in adult SLA is associated with brain plasticity owing to the fact that it recruits a larger brain network than in other types of cognitive training, and boosts CR (e.g., Calvo, 2016). Also, lifelong bilingualism seems to affect cognitive functioning, that is WM capacity which involves monitoring (updating information in WM), shifting (the ability to switch between the activities), and/or inhibition (suppressing dominant answers) (e.g., Bialystok et al., 2009). Notably, bilingual learners juggle both languages, and thus it is justifiable to expect that they allegedly have an increased inhibitory control mechanism that plays a powerful role in regulating and controlling their attention during task performance (Pot, Keizer, & de Bot, 2018).

Executive functions are basically measured with the help of a wide variety of tasks (Bialystok, & DePape, 2009). One of the most commonly used activity is the Stroop task in which a colour word (e.g., GREEN) is written in either the same colour as its name or a different colour (e.g., Stuart-Hamilton, 2012). The participants are to name the colour of the printed word, and the researcher investigates whether there is a difference between how fast colour naming is when the word, and the ink colour are the same (congruent) or different (incongruent). Other tasks, in which the key element is whether congruent and incongruent stimuli vary in speed and/or accuracy, and involve, for instance, arrows distracting the subject to the correct direction of the target – Flanker task (Nickels et al., 2019) or response keys appearing on the same or different side as the target – Simon task (Antoniou, 2019).

### **5.1.1. The effect of bilingual experience on brain plasticity**

It is essential to note that bilingual experience has a positive impact on structural neuroplasticity in the human brain (e.g., Cox, 2017). Antoniou et al. (2013, p. 2690) suggest

that “foreign language learning could be an especially beneficial safeguard for ensuring healthy cognitive function in older adults”. Significantly, foreign language training, which involves cognitively challenging tasks, ought to be viewed as cognitive therapy that contributes to promoting neural plasticity (e.g., Cabeza, 2002). As previously explained, in the neurocognitive literature, there are accounts of how the human brain may preserve dendritic and synaptic plasticity even in senior years, and it is capable of compensating cognitive deficits by recruiting neural scaffolds as a response to cognitively challenging tasks, such as FL learning (the STAC model, see Park & Reuter-Lorenz, 2009).

The study conducted by Mårtensson et al. (2012) clearly indicated that SLA induces growth of the language-related areas of brain. The cortical thickness and hippocampal volume were increased after a three-month intensive foreign language course taken by older adults. It was shown that there are changes in the regions involved in vocabulary learning (e.g., hippocampus), and in the frontal regions of the cortex which manage interference and articulatory demands. The hippocampal plasticity plays a decisive role in “what makes a language learner talented” (Mårtensson et al., 2012, p. 243). Vocabulary training in younger adults increased the volume of grey matter on the right hippocampus (Bellander et al., 2016). The findings showed that performance of a non-verbal task (a delayed match measuring the ability to create and recall distinct memory representation while highly similar distractors are presented) resulted in positive changes in the grey matter structure during a few weeks of novel second language vocabulary learning. Abutalebi et al. (2015) have evidenced that older bilingual adults are reported to have grey matter volume in the parietal lobe which reflects that of young adults. Monolinguals showed decreased grey matter in the dorsolateral prefrontal cortex that plays a fundamental role in executive function processes. This suggests that “bilinguals benefit from more efficient executive function processes and this can be observed in the anatomical correlates of the processes” (Antoniou, 2019, p. 405).

According to Mechelli et al. (2004), the structure of the human brain might be altered by the experience of FL learning. The density in the parietal cortex is more pronounced in early rather than in late bilinguals, and grey matter volume increases with L2 proficiency, but it diminishes with the age of acquisition. Abutalebi (2015) and his colleagues argue that the age of acquisition is substantial to grey matter volume in young bilingual adults whereas in the case of senior bilinguals a lifetime of language use (40 – 50 years), vocabulary knowledge, and language exposure were critical variables.

Also, Luke et al. (2011) have reported that bilinguals have higher white matter integrity than monolinguals which indicates greater capacity to transmit messages. Heim et al.

(2019) found that the older a bilingual person is, the more protective effect bilingualism may have on posterior regions which take part in such non-linguistic functions as attention with brain activation during language processing whereas increased brain reserve associated with bilingualism starts to decay in actual language areas (the anterior regions) at the age of 55. Moreover, according to Bak et al. (2014), bilingualism has a beneficial impact on frontal executive functions affecting reading, verbal fluency and general intelligence.

### **5.1.2. Dementia prevention**

Furthermore, it is significant that bilingualism may delay the onset of the symptoms of dementia (e.g., Alladi et al., 2013; Chertkow et al. 2010). As reported by Bialystok (2007) and her associates, older bilingual adults exhibited a delay of over 4 years in the onset of dementia symptoms in comparison to monolingual individuals. The bilingual participants were categorised as those who had spent the majority of their lives (at least from early adulthood) using at least two languages on a regular basis. The authors have admitted that “bilingualism does not affect the accumulation of pathological factors associated with dementia, but rather enables brain to tolerate the accumulated pathologies” (Bialystok, et al., p. 463). This initial study was followed by another with bilingual and monolingual patients diagnosed with probable Alzheimer’s disease (Craik, Bialystok, & Freedman, 2010). It turned out that the bilingual group experienced symptoms of dementia more than five years later than their monolingual counterparts. According to Alladi et al. (2013), bilinguals developed dementia four and a half years later than monolinguals. This bilingual effect was shown independently of other potential factors, such as sex, education, occupation or place of residence. Furthermore, no additional benefit of speaking more than two languages was observed.

Chertkow et al. (2010) conducted a study in Canada, and they reported that the knowledge of two or more languages may delay the diagnosis of Alzheimer’s disease by almost five years. The scholars found a bilingual delay in the onset of symptoms in an immigrant group, and in a non-immigrant group whose first language was French. Interestingly, there was no delay in a non-immigrant group whose first language was English.

Schweizer et al. (2012) studied linear measurement of brain atrophy by means of computer tomography scans. The subjects were monolingual and older bilingual citizens with probable Alzheimer’s disease. The researchers demonstrated greater amounts of cerebral atrophy in bilinguals than in monolinguals. It appears that bilinguals required greater

neuropathology before the disease manifested suggesting a delay of the incidence of neurodegenerative diseases, such as dementia (e.g., Nickels et al., 2019).

It might also be worth mentioning that there are several longitudinal studies which found no evidence for increased CR in bilinguals. Zahodne et al. (2014) tested over 100 patients for 18–24-month intervals for up to 23 years. Three hundred subjects developed dementia in the course of the study. Bilingualism as such was related to better memory and executive function, but the authors found no association between rates of cognitive decline or dementia conversion. Sanders et al. (2012) compared the incidence of dementia in native and non-native older English users. There was no evidence that the latter group had greater CR, and, rather surprisingly, a small risk of dementia was exhibited.

In a similar manner, Kowoll et al. (2015) conducted a study among monolingual and bilingual patients with *mild cognitive impairment (MCI)* which is viewed as a neurological disorder which involves cognitive decline that is greater than expected in normal ageing, but the symptoms are not as severe as in dementia and Alzheimer patients. The researchers showed that the dominant language might be compromised first in bilingual MCI whereas severe impairments of the non-dominant language could appear later when Alzheimer's disease manifests.

It may be concluded at this point that as aptly stated by Antoniou (2019), the discrepancies between research findings are claimed to reflect methodological inconsistencies that might derive from the diversity of bilingual groups involving different populations, as well a variety of methods and techniques.

### **5.1.3. The cognitive effects of second language acquisition in the third age**

Age-related declines may have a detrimental effect on the SLA in the third age hindering the actual process of learning (Cox, 2017). The capacity of WM is of particular relevance for acquiring linguistic knowledge as it is linked with performing cognitively demanding tasks, and executive control (Wen, 2012).

Mackey and Sachs (2012) conducted a small-scale study whose aim was to investigate the relationship between the development of English question formation and the older students' WM capacity. The participants were Spanish older adults who interacted with native speakers of English. The seniors were to ask questions, and the English speakers provided interactional feedback to incorrect questions in the form of recasts whenever it was natural to do so. The researchers found that four out of nine subjects indicated improvement on the

immediate posttest, and two of them showed the improvement on at least one delayed posttest. Significantly, the subjects who developed the question formation represented the highest WM spans. This suggests that cognitive capacity plays a pivotal role in morphosyntactic learning at an advanced age, and the participants with the largest WM abilities showed substantial gains in SLA (Machkey & Sachs, 2012).

Likewise, the study by Kliesch et al. (2018) confirmed the findings that older students with higher capacities in verbal fluency and greater WM abilities had better results in L2 development. The participants were 10 third age monolingual German native speakers who reported no or only elementary knowledge of English. The research analysis indicated that age has a small effect on learning success, and that the process of SLA differs in terms of cognitive factors, as well as motivation. Kliesch (2018, p. 64) and her colleagues have admitted that “success in learning a new language in old adulthood is not merely modulated by age, but much more so by how well specific cognitive capacities that are tapped by language training are preserved”.

A short-term intensive L2 course may also improve older adults’ skills in sustained attention (Bak et al., 2016). Interestingly, the enhancement in attention did not hinge upon the level of previous knowledge of the target language as the very beginners also achieved an improvement in their skills. The authors highlight that the early stages of language mastery are linked to CR, and the fact that the symptoms of cognitive ageing may be compensated by stimulating mental exercises. Pfenninger and Singleton (2019) cite Zielińska’s (2015) study in which the researcher presented the case of an 85-year-old retired scientist. The participant, who spent all her professional life as a researcher in chemistry, became a remarkably successful L2 learner due to CR activation in later life.

Likewise, language training may lead to global cognitive improvement in late adulthood (Wong et al., 2019). The researchers conducted a computer-based stimulating activity among over 200 Chinese older adults. The participants, who had no previous knowledge of English, were divided into three groups: a targeted group which took part in FL training, an active group that played cognitively stimulating computer games, and a passive group which could freely watch and listen to Chinese music videos during training sessions. The results showed that FL training appears to be “a cognitively-reserve-building activity” (Wong et al., 2019, p. 2420). The authors observed the cognitive benefits in WM resulting from vocabulary learning as a matching task put higher demands on WM (temporarily retaining the novel word, and immediate identification of the word with pictures). Whereas intensive FL training indicated greater improvement in WM, games had a positive effect on

attention (measured by backward digit span) which, in principle, requires monitoring, inhibiting irrelevant information, and enhancing orientation to a correct response.

An interesting study was also conducted by Pfenninger and Polz (2018). The scholars investigated the cognitive benefits of FL learning at an advanced age. The participants, who had no previous English learning experience, took part in a 3-week-course the aim of which was to teach comprehension, and the use of everyday expressions needed for daily communication. They were divided into two groups: a monolingual group (the knowledge of German), and bilinguals (the knowledge of German and Slovenian) The data revealed that there was no significant growth in test results, but both monolinguals and bilinguals slightly improved their scores. The monolingual students learnt English faster at the beginning of the course while the bilingual group indicated a more rapid rate of progress after two weeks which enabled them to catch up with the monolingual group. Moreover, the inhibitory performance was better in the monolingual group whereas the bilinguals were able to self-correct relatively more mistakes. The seniors admitted that learning a new language enhanced their self-confidence, social ties, and life-satisfaction. It was also suggested that the language training led to improvement in executive tasks, such as inhibition and interference, but there was no effect on focusing on tasks or concentration (Pfenninger & Polz, 2018).

There are also advantages in additional instructed learning for senior bilinguals regardless of the type of instructional conditions with or without grammar explanations (Cox, 2017). Cox (2017) has indicated that bilinguals as experienced language students differ in their approach to the process of learning from novices (monolinguals). The results showed that task-essential practice appeared to be a more prominent factor than grammar. Cox (2017, p. 54) remarks that “contrary to common beliefs connecting aging and inflexibility, results indicate that older adults are able to adjust processing strategies from their known language(s) to those of a novel language”.

As pointed out by Zeng et al. (2019), bilingual experience exerts a strong influence on an individual’s linguistic processing and general cognitive abilities. The scholar evaluated the relationship between linguistic and non-linguistic domains by assessing inhibition skills, and verbal fluency in monolingual, as well as bilingual children, younger and older adults. It turned out that bilinguals outperformed monolinguals in the measure of inhibition in the case of the children and senior groups. This suggests that significant advantages were observed when cognitive skills were undergoing development changes. Thus, it is worth noting that the advantages of bilingualism occur earlier in both early life and at an advanced age (Antoniou & Wright, 2017). When it comes to verbal fluency, older participants show

a substantially poorer performance in the category of verbal fluency (where a participant is to name as many words belonging to a single semantic category as possible within a set time) than monolinguals, but no language group effects in the letter verbal fluency task (naming as many words beginning with a particular letter of the alphabet as possible) was observed. This finding is incongruent with Bialystok, Anderson, and Grundy's (2018) study where in both types of verbal fluency tasks, older monolinguals had significantly larger vocabulary sizes than bilinguals. Zeng et al. (2019) underscore that the category of the verbal fluency task requires additional language monitoring and attention demands. Consequently, this activity is subjected to greater interferences from bilingual participants' additional language. It may be deduced that "bilingualism may be more pronounced in older age and be more dependent on lexical competence" (Zeng et al., 2019, p. 673)

What should also be underscored is that memory capacity in the third age may be facilitated by memory training strategies (e.g., Singleton, 2018). Grotek (2018) conducted a study among members of a Third Age University. The data gathered by means of written narratives clearly suggested that memory strategy training might overcome perceived memory problems and facilitate FLL.

Introducing memory strategies (e.g., visualisation) is of great help to older learners as it may improve the process of vocabulary retrieval (Ivashko, 2018). Ramírez Gómez (2016 b) has examined the learning experience of Japanese seniors as Spanish learners in the use of vocabulary learning strategies. The aim of the study was to help the participants to evaluate their learning process on the basis of their actual skills, as opposed to how the process of older learners is perceived by society. The students acknowledged that their main challenges were caused by cognitive ageing, especially with regard to memorisation. Notably, learners at an advanced age are faced with societal views of ageing involving "age-related defeatism", and assumptions that third agers' language performance will be poor because of the physical and mental changes they experience (Singleton, 2018, p. 22). Ramírez Gómez (2016b) has acknowledged that learning an FL and developing learning strategies in late adulthood was of great value to seniors since they realised that age-related preconceptions did not apply to reality.

## **6. Age stereotypes and self-stereotyping**

Unfortunately, old age is one of the most stigmatised periods of human life, and, age stereotypes in contemporary cultures tend to shape social views and opinions of later life

(Kaczorowska-Bray, Milewski, & Michalik, 2020). Stereotypes as such are “unchallenged myths” or “overstated beliefs” that are widespread in various contexts within a society (Dionigi, 2015, p. 2). The preconceptions about old age lead to ageism which reflects negative and prejudiced beliefs stemming both from assumptions that all older people are all the same, and generalisations about how people at or over a certain age ought to behave without regard for the heterogeneity of the process of ageing (cf. Tomaszewska-Hołub, 2019). Stereotypes about ageing seem to develop during childhood and adolescence, and they may even be acquired as early as the age of six (Steuden, 2011). In a similar manner, Levy (2003) remarks that ageing stereotyping originates in childhood, are reinforced in adulthood, and at a later age, is transformed into self-stereotyping.

Surprisingly, age stereotypes may be both positive (e.g., older people are likely to be wise, kind, experienced and free), as well as negative (e.g., older citizens tend to be ill, useless, ugly and depressed) (cf. Kijak & Szarota, 2013). It is worth noting, however, that negative stereotypes about late adulthood outweigh positive ones in modern societies mainly due to mass media which promote “the cult of youth” (cf. Steuden, 2011).

Stereotypes may be created at the individual and institutional levels (Hebda & Biela, 2015). The individual form is *gerontophobia* defined as an irrational fear or hatred of the old age, as well as the fear of the process of ageing (Miszczak, 2008). When it comes to the institutional context, stereotypes are linked to various types of discrimination in social life, such as driving ban, obligatory retirement age or medical procedure refusal.

In a general sense, as outlined by Tomaszewska-Hołub (2019), negative stereotypes may be divided on the basis of three types of age-related changes:

- biological (physical changes, including changes in appearance),
- psychological (reduced adaptive and cognitive capacities),
- social (changes in social roles, activity and lifestyle).

Needless to say, changes in later life are associated with a feeling of ‘failure’ as seniors are believed to abandon many things (e.g., pleasure, social roles) because of physical and mental decrepitude (Hebda & Biela, 2015). According to Polish university students and senior high school students, ageing primarily involves a struggle with diseases, loneliness, death and pain, and the most common problems are those of a medical and financial nature (Świdarska & Kapszewicz, 2015).

Löckenhoff et al. (2009) conducted a cross-cultural study concerning changes in functioning in late adulthood. The participants were over 3000 college students from 26 different cultures, mostly females, who were asked to express their standpoints about old

age, and rate positively or negatively their society's views about ageing. The data analysis showed that negative societal opinions in terms of attractiveness, task performance and learning new skills. Also, the subjects admitted age-related increases in knowledge, wisdom, received respect, stability in family authority and life satisfaction. It is noteworthy that perceptions about age trajectories in new learning were more favourable in cultures that considered their typical members as being open. The respondents' ratings of societal views of ageing were more positive in cultures that perceived their members as open, agreeable and low in neuroticism. Interestingly, European cultures with high rates of population ageing (Italy, Portugal) indicated more negative perceptions, as opposed to cultures with younger populations (Malaysia, India) which expressed more favourable opinions. Asian participants declared more positive societal views of ageing, but compared to Western subjects, they showed fewer positive standpoints about changes in wisdom (Löckenhoff et al., 2009).

As far as learning in the third age is concerned, Escuder-Mollón (2014, p. 66) points out that there are five common stereotypes that might be "broken" in the classroom:

- *Seniors cannot learn new things* – crystallised intelligence does not decline, and lifelong experiences help to learn new skills;
- *Seniors do not face up to the changes of ageing* – social support and laid-off classroom environment enable third agers to focus their attention on positive feelings, and reduce the potential psychological barriers that may inhibit learning in the third age;
- *Seniors are intolerant and strict* – the instructor ought to act as a facilitator who offers opportunities to reach a common goal in a respectful and tolerant manner;
- *Seniors are lonely and isolated* – learning as such provides room for establishing new relationships, and gaining new social roles;
- *Seniors have memory problems* – memory decline is associated to brain related diseases, as well as a lack of cognitive fitness, and thus a variety of revision tasks may foster the process of learning.

What also appears to be critical is that a third-age generation tends to self-stereotype, and as outlined by Singleton (2018, p. 22), older students "often seem to believe that the changes experienced by them in the course of ageing will inevitably have a negative impact on their L2 learning capacity and progress".

According to Levy's (2009) *stereotype embodiment theory*, age-related outcomes (e.g., memory functions and health) may be predicted by the extent to which the cultural message of ageism are endorsed and absorbed. Levy (2009) states that age "stereotypes are embodied when their assimilation from the surrounding culture leads to self-definitions that, in turn,

influence functioning and health” (Levy, 2009, p. 4). This process occurs in two directions, namely top-down (from society to an individual), and over time (from childhood to old age). The theory proposes that age stereotypes are internalised throughout a lifetime after repeated exposure. It is also proposed that preconceptions can operate at an unconscious level, and this subliminal activation of negative stereotypes affects third agers’ task performance. Notably, stereotypes about ageing gain salience only among people to whom the stereotype is self-relevant (Levy, 2009).

Stereotype embodiment theory also advocates that age stereotypes utilise multiple pathways to influence health, such as psychological, behavioural, and physiological (Levy, 2009). The psychological pathways functions through expectations about the ageing process which may reduce older adults’ abilities to perform mental and physical activities. The second pathway, namely the behavioural one, is associated with poor health, and the view that decline health is inevitable. This results in older citizens’ passivity in engaging in behaviours that could contradict this belief (Crăciun, 2019). The physiological pathway is linked to the relationship between stress and various health impairments, and the assumption that “older adults primed with negative age stereotypes demonstrate larger cardiovascular responses to a stressful situation” (Chasteen, Cary, & Iankilevitch, 2017, p. 102).

Levy et al. (2009) conducted a longitudinal study among individuals aged 49 and younger. The primary objective of the study was to measure negative age stereotypes, and their consequences on health in late adulthood. The findings clearly indicated that “age stereotypes internalized earlier in life can have a far-reaching effect on health”, and young participants who held more negative stereotypes were significantly more likely to experience a cardiovascular event over the next 38 years (Levy et al., 2009, p. 2). It was suggested that the reduction of negative age stereotypes of younger adults could be beneficial for cardiovascular health when they become older citizens.

On the bright side, positive self-perceptions of ageing may mediate one’s longevity which was evidenced in another longitudinal study conducted among 660 older subjects (50 years of age and older) (Levy et al., 2002). The data analysis revealed that positive self-stereotypes of ageing measured up to 23 years earlier contributed to the increased lifespan of seven and a half years when compared to less positive self-perceptions. It turned out that positive self-stereotyping had a greater influence on survival than gender, socioeconomic status, loneliness, and functional health.

Also, as evidenced in the study by Levy and Leifheit-Limson (2009, p. 1), positive views on ageing hold the potential to become “self-fulfilling prophecies”. The scholars used an experimental task in order to investigate the stereotype matching effect. They manifested that the impact of the positive and negative stereotypes on cognitive functioning (e.g., positive-cognitive such as “wisdom” or negative-cognitive such as “dementia”), and physical functioning (e.g., positive-physical such as “fit” or negative-physical such as “shaky”) was greatest when the content of the stereotypes corresponded to the outcomes (i.e., cognitive or physical) (Levy & Leifheit-Limson, 2009). Additionally, research participants exposed to positive ageing stereotypes outperformed those who were exposed to negative stereotypes both in cognitive and physical tasks.

In this regard, educators who work with seniors on a regular basis should focus on boosting a positive societal image of late adulthood in the language classroom context (cf. Ramírez Gómez, 2014). Such an approach may direct third agers’ minds not only to new language experiences but also to positive emotions that have the potential to “trigger spirals of emotional and physical well-being” (Oxford, 2018, p. 7).

### ***Summary***

Overall, it may be concluded that the latest neuroscience studies clearly show that the human brain has adaptive functions throughout a person’s life-span, and it can compensate for possible age-related changes. As a result, learning in the third age has been gaining in popularity, as it may be treated an anti-ageing strategy that fosters mental abilities and psychological well-being in late adulthood (cf. Derenowski, 2021).

What ought to be remembered, however, is that the literature lacks studies which concentrate on the impact of FL learning among older adults who begin their educational journey with a FL at an advancing age. Pfenninger and Singleton (2019, p. 45) write: “Whilst there is research which suggest that the long-term use of two languages may be neuroprotective, we lack studies of the potential effects of the learning and use of an L2 later in life”. At present, more older citizens decide to start learning a new language in senior years as they wish to become a worthy member of society (cf. Gabryś-Barker, 2018). Hopefully, this tendency will provide opportunities to examine older adults’ language performance and its impact of cognitive skills in the instructed FLL context.

## CHAPTER TWO

### OLDER ADULTS' FOREIGN LANGUAGE LEARNING:

#### THEORETICAL BACKGROUND

Chapter Two focuses on the theoretical background for foreign language learning in the senior years. It shortly discusses the discrepancy between pedagogy and andragogy, as well as introducing the concepts referring to older adults' educational needs including FL learning, namely geragogy, critical foreign language geragogy, and glottogeragogy. Likewise, the overview of results regarding FL learning in late adulthood is also presented. In order to indicate practical guidance for teaching FLs to older adults, both FL instructors' and third agers' perspectives are analysed and discussed.

##### 1. The rationale for education in late adulthood

According to the data presented by the European Commission (EC) (2001), by 2025 more than 20% of European citizens will be 65 and older. Additionally, a rapid increase in the number of people over 80 years of age is expected (Giannakouris, 2008). For instance, the average age in Poland is projected to increase more than 15 years over the period of about 50 years' time (Giannakouris, 2008). Similarly, in the shorter perspective, the senior population in Poland amounts to 13% at present while in 2030, it will increase to 17% (Gabryś-Barker, 2020). Undoubtedly, as societies age, the integration of people in late adulthood is necessary (Fiema, 2016). Derenowski (2019, p. 17) remarks that "increasing longevity needs to be perceived as one of humanity's greatest achievements and the opportunities that a socially and economically active, secure and healthy ageing population can bring to society".

With this in mind, it is essential to engage senior citizens in such forms of activities that may sustain older individuals' quality of life and life satisfaction (cf. Kaplan, 2016). The demographic changes mentioned above have a significant impact on social needs and expectations, including educational ones (Adamczyk, 2017). Education and learning in late life seem to be of pivotal importance because, as suggested by Jaroszewska (2009), they might lead to fulfilling one's potential and achieving self-realisation.

Learning in later life is not a new concept, and it is strictly associated with the development of the third age as such (Findsen & Formosa, 2011). Formosa (2014) acknowledges:

(...) older adults learning provides the opportunity to explore learning goals that people at earlier stages of the life course are often too busy to pursue, such as [the] development [of] a reflective mode of thinking, contemplating the meaning of life, coming to terms with one's past as a preparation for death, and the quest for self-fulfilment and spiritual advancement. (pp. 11-12)

In this regard, learning also plays a key role in adapting older adults to the many dynamic global transformations as it enables them not only to gain new skills and competences, but also to become active and independent members of the contemporary world (Jaroszewska, 2011). Niżegorodcew (2016, p. 103) writes: "It is beyond doubt that senior students' education, including foreign language teaching, should be developed in Poland because demographic and civilizational changes result in a greater and greater percentage of people over 60 who are able and willing to study". Therefore, it is significant at this point to present different notions that refer to learning in later life as they constitute the core of foreign language learning at an advancing age (Ramírez Gómez, 2016a).

## **2. The concept of lifelong learning**

One of the most substantial notions associated with learning at a senior age is *lifelong learning* as this concept has been known since ancient times (Ramírez Gómez, 2016b). Derenowski (2018, p. 146) states that "Plato and Aristotle described a process of learning for philosophers that extended over a lifetime". According to the EC (2001, p. 9), it should cover "all learning activity undertaken throughout life, with the aim of improving knowledge, skills and competences with a personal, civic, social and for employment-related perspective". It appears to be a dynamic process that may be affected by individual's skills and motivation, and it provides new opportunities that have the potential to "empower a person to influence the future" (London, 2011, p. 1).

Lifelong learning is linked to *lifelong education* referred to as "further education", "continuing education", "adult education", "lifewide learning" or "recurrent education" which basically involves "educational endeavours" that are offered after the end of formal schooling (Aspin & Chapman, 2007, p. 19). Finsen et al. (2017) state:

As authors we believe in lifelong learning, not because of an objective, universal “truth” that applies in the same way in all settings and contexts, but because collectively *believing* in the power of learning through life enables us to do new things: to transform identities, to cooperate and communicate effectively regardless of age, culture, and place, and to forge better societies. (p. 511)

Findsen & Formosa (2011, p. 21) point out that lifelong learning and lifelong education has long been used as similar and interchangeable terms that “portray the change that individuals make in skills, knowledge, aspirations and attitudes throughout a person’s life course”. In contrast, Ramírez Gómez (2016b, p. 110) asserts that lifelong learning hinges on the existence of lifelong education which might be recognised as “the context that offers individuals the possibility to retell, adapt, face current problems and transform their surroundings for the better”. It provides a range of mechanisms that allow adult citizens of different ages and socio-economic backgrounds to receive education. In a general sense, however, “lifelong learning” has become a more “fashionable expression” than “lifelong education” in present times (Wain, 2009, p. 391).

Notably, there are three key goals regarding lifelong learning, namely *quality* (it should improve the quality and effectiveness of education and training systems), *inclusivity* (it ought to ensure that everyone has access to them), and *international accessibility* (it should be opened to the wider world, especially in terms of teacher training, basic skills, the integration of information technologies, language learning, lifelong guidance, etc.) (Głąbińska, 2015). As presented by UNESCO, lifelong learning is based on four pillars (Delors, 1996, p. 20):

- *learning to know* – mastering learning tools that help to understand and acquire new knowledge about an ever-changing world;
- *learning to do* – involving the acquisition of competences and skills that enable individuals to develop their abilities in the future;
- *learning to live together* – being capable of solving problems and conflicts, discovering different cultures;
- *learning to be* – referring to the fact that the main aim of education is to contribute to an individual’s entire development, for instance, body and mind, intelligence, sensitivity, and spirituality.

Additionally, lifelong learning draws attention to the full range of learning contexts, namely formal, non-formal, and informal (Tudor, 2013). Typically, *formal learning* refers to structured and intentional learning that follows a syllabus, and it is organised by educational institutions, mostly in classroom environments (cf. London, 2011). *Non-formal learning* is mainly purposive and voluntary, and it takes place in a variety of non-formal institutions and situations, and contrary to formal learning, one may not be given any formal qualifications (e.g., Szarota, 2019). *Informal learning* involves unstructured learning that takes place away from traditional educational institutions (e.g., Adamczyk, 2017). It can be viewed as self-study directed towards developing self-reflection and completing various daily tasks (e.g., Kowalska-Dubas, 2020).

## **2.1. Third Age Universities**

Lifelong learning is mainly promoted by educational institutions known as Third Age Universities (TAUs) also referred to as Universities of the Third Age (U3As). Historically, the first TAU was founded in France by Pierre Vellas in 1973 (Zych, 2018). In Poland, the first one was founded by Halina Szwarc in Warsaw (Jakubaszek, 2014).

The French model of TAU seeks to improve senior citizens' knowledge and skills, activate them intellectually, psychologically, socially, and physically, as well as it intends to establish and maintain interpersonal bonds (Adamczyk, 2017). Another model of TAU is the British one developed by Peter Laskett (Grzanka-Tykwńska et al., 2015). It embraces “a self-help philosophy and mutual-aid approach”, and it promotes autonomous and self-directed learning (Findsen & Formosa, 2011, p. 138). In the Polish context, the French model which is typically based on cooperation with regional universities has gained popularity (Gabryś-Barker, 2018). At present, there are 465 TAUs in Poland with over 100,000 students (Derenowski, 2021).

It is believed that TAUs might be viewed as external motivators that positively impact autonomous learning and active ageing (Jakubaszek, 2014). According to Gabryś-Barker (2018, p. xix), the most vital advantages of TAUs can be summarised as:

- life activation (becoming active and engaged, overcoming stagnation);
- the use of senior citizens' potential in the work market;
- historical reasons (to make up for lost opportunities and fulfil individual's needs and ambitions);
- contacts with and work for the environment;

- making contacts with other institutions through exposure to the contemporary world (e.g., participation in computer courses);
- pastime (to overcome the loss of loved ones);
- accumulating mental capital to develop a cognitive reserve (e.g., learning something new).

In order to activate people at a senior age, TAUs offer a rich range of courses and lectures including, for instance, information technology courses, artistic activities, and various types of sports (e.g., Nowicka & Kopinec, 2020). One of the most popular, however, are FL courses that are tailored to seniors' needs in terms of their potential age-related limitations (Gabryś-Barker, 2018).

The opportunity to learn a new language provided by TAUs provides room for the self-realisation of their dreams (cf. Oxford, 2018). Also, it may be of great help in overcoming the feeling of loneliness which “restricts positive emotions in social isolation and stepping back from activities, especially among seniors, who often perceive their lives through the concept of stagnation and [an] inability to change” (Derenowski, 2021, p. 118).

Jaroszewska (2013a) remarks that smaller TAUs in Poland place a great emphasis on teaching the most commonly learnt languages, namely English, German, French, Italian, Russian, and Spanish whereas bigger TAUs offer less popular languages, such as Chinese, Japanese or Esperanto<sup>1</sup>. Joining TAUs “opens new doors for seniors who either never had a chance or could not take this chance, and they are ready and motivated to have one more try” (Derenowski, 2021, p. 54). In this perspective, instructors working with seniors ought to “have the goal of teaching a new language to third agers in an entertaining, enlivening, meaningful, multisensory way, keyed to learners' interests” (Oxford, 2018, p. 12). The knowledge of andragogy, geragogy, and FL geragogy appears to be of great value to FL educators as well.

### **3. The concept of andragogy**

When it comes to *andragogy*, Knowles (1970) points out that in order to understand the concept of adult education, it is significant to compare it with pedagogy, which was the first to evolve between the seventh and twelfth centuries.

*Pedagogy*, which is principally understood as “the art and science of teaching children”, was the only existing educational model in the nineteenth century (Knowles et al.,

---

<sup>1</sup> The empirical results concerning FL courses for seniors will be presented in a later part of this chapter.

2020, p. 40). The pedagogical model is teacher-oriented in which the teacher takes full responsibility of all teaching and learning decisions whereas a learner's role is to submissively follow the educator's instructions. The primary purpose of this kind of education is the transmission of knowledge and skills that is "appropriate as long as the learner's degree of dependency is high" since it becomes inefficient when the individual matures (Ramírez Gómez, 2016b, p. 94). Hence, as adult education started to be organised during the 1920s, the pedagogical model failed to suit adult learners' needs, and teachers began to realise that adults required to be taught in a much different manner than young learners (Knowles, 1970).

Basically, there was a need to focus on adult learners exclusively, and thus a new theoretical model known as *andragogy*, which was popularised by Malcolm Knowles between the late 1960s to the early 1980s (Findsen & Formosa, 2011). Originally, Knowles (1970, p. 43) identified andragogy as "the art and science of helping adults learn". Recently, Knowles (2020, p. 79) and his colleagues have proposed "a more complete andragogical model of practice" because they believe that adult educators ought to be offered "more clear guidance".

According to the scholars, the model referred to as *andragogy in practice* is "an enhanced conceptual framework to more systematically apply andragogy across multiple domains of adult learning practice" (Knowles et al., 2020, p. 79). In order to integrate and gain a more comprehensive understanding of adult learning situations, Knowles et al. (2020) have advanced a three-dimensional process that comprises offsets of variables involving such elements as the goals and purposes for learning, individual and situational differences, and the core adult learning principles.

The *goals and purposes for learning* help to shape and coordinate the learning experience, and they may be divided into three general categories, namely individual, institutional, and societal growth. *Individual growth* (personal growth) is linked to an individual learner's development goals relevant to each stage of life (Knowles et al., 2020). Adult learning may also naturally lead to *institutional growth* that might be associated with human resource development, which is viewed as "the study and practice of increasing the learning capacity of individuals (...) and organisations through the development and application of learning-based interventions for the purpose of optimising human and organisational growth and effectiveness" (Chalofsky, 1992, p. 179). As emphasised by Knowles et al. (2020, p. 84), this concept can fit within the andragogical framework, even though "the different goals require adjustments to be made in how the andragogical assumptions are applied". *Societal growth*, on the other hand, is generally recognised as

gaining knowledge with a view of transforming and establishing a better world (Knowles et al., 2020). In short, the purposes of learning ought to be oriented towards societal development.

When it comes to the second dimension of andragogy in practice, *individual and situation differences*, it consists of three groups, such as subject matter differences, situational differences, and individual differences (Knowles et al., 2020, pp. 83-87). *Subject matter differences* refer to the different learning strategies necessary to acquire complicated subject matter in a self-directed manner. The *situational differences* group “captures any unique factors that could arise in a particular learning situation and incorporates several sets of influences”: at a micro level (the number of learners in the class, location), and at a larger level (sociocultural influences: learning experience, social context of learning, etc.) (Knowles, 2020, pp. 83-84). As far as *individual differences* are concerned, they include three broad categories: cognitive (cognitive abilities, controls, and styles), personality, and prior knowledge (Jonassen & Grabowski, 1993, as cited in Knowles, 2020, p. 86).

The last dimension of andragogy in practice involves *core adult learning principles*. Knowles et al. (2020) underscore the fact that there are six principles of the andragogical model which clearly indicate discrepancies between pedagogy and adult learning. The rules are as follows:

### *1. They need to know*

This principle of andragogy refers to self-directed learning, as well as understanding and appreciating the value of knowledge. Knowles et al. (1998, p. 64) stress that adult learners “need to know why they need to learn something before undertaking it”. Clearly, they are conscious of “the benefit from learning or the consequence of not learning” (Houde, 2006, p. 92).

### *2. The learner’s self-concept*

As individuals mature, they are capable of identifying their own readiness to learn and their “self-concept eventually becomes that of a dependent personality” (Knowles et al., 2020, p. 41). A person’s self-concept as such may be defined as perceptions one has about him or herself (Sigelman & Rider, 2015). Contrary to young learners, adults become autonomously responsible for their own learning, and ultimately, they are capable of self - directed learning. In a broad sense, self-directed learning describes a process by which individuals take the initiative, with or without the assistance of others, in diagnosing their

learning needs, formulating learning goals, identifying human and materials resources for learning, choosing and implementing appropriate learning strategies, as well as evaluating learning outcomes (Loeng, 2020, pp. 2-3).

### *3. The role of experience*

Adults have more experience than children, and it may serve as a valuable resource for learning (Knowles et al., 1998). Knowles et al. (2020) remark that children have experience as well, but adult learners' experience stems from self-identity that is integrally connected with their prior experiences. Experience identifies adults, and therefore, it is manifested that "any situation in which the participants' experiences are ignored or devalued, adults will perceive this as rejecting not only their experience, but rejecting themselves as persons" (Knowles et al., 2020, p. 45).

What is more, the diversity of adults' experience enables an instructor to use "experiential techniques" in the classroom context (Knowles et al., 2020, p. 44). They are primarily based on peer interaction (e.g., group discussion, problem-solving activities, case methods).

### *4. Readiness to learn*

Adult learners are willing to learn what is viewed to be pertinent in real-life situations (Knowles et al., 2020). This principle "is a matter of adults having more psychic energy around goals that are present-focused (...) than goals that are future-focused and based on acquiring knowledge" (Houde, 2006, p. 94). Therefore, adults prioritize learning things that enable them to cope effectively with daily activities.

### *5. Orientation to learning*

As emphasised by Knowles (2020) and his associates, adults are life-, task-, or problem-centred. As opposed to children, who tend to be subject-oriented, adult learners are determined and motivated to acquire new knowledge, skills, values, and attitudes more effectively when the pragmatic context of application of real-life situations is presented. In consequence, adults are less prone to achieve knowledge-related objectives as they are not oriented towards developing practical skills, and they may lack a direct link with the naturalistic context (cf. Houde, 2006).

## 6. Motivation

Adults are intrinsically motivated (e.g., the desire to increase job satisfaction, self-esteem), but they are also responsive to some external motivation (e.g., promotion, a better job) (Ryan & Deci, 2000).

Knowles et al. (2020) indicate that internal motivation may be blocked by such barriers as negative self-concept as a student, lack of opportunities and resources, time constraints, and programmes that may violate adult learning. Therefore, the authors pay due attention to the characteristics of motivating instructors which may be grouped into four categories: *expertise* (the power of knowledge and preparation), *empathy* (the power of understanding and consideration), *enthusiasm* (the power of commitment and animation), and *clarity* (the power of language and organisation) (Wlodowski, 1985, as cited in Knowles et al., 2020, p. 183). Likewise, Komorowska (2007, p. 16) points out that “involving learners’ in decision-making and in particular decisions related to learning goals, learning materials, learning strategies and self-assessment” may sustain students’ motivation.

It is also worth underscoring that self-directedness appears to be one of the most vital objectives of adult education (e.g., Knowles, 1970). According to Loeng (2020, p. 6), self-direction which may be natural or learnt is of unquestionable relevance to “how this learning approach should be treated in a learning situation”. Although adult learners are required to have the ability to determine their goals and select appropriate methods to achieve them, some of them need to be prepared for the autonomous process of learning (Ramírez Gómez, 2016b).

Notably, the andragogical model for learning proposed by Knowles (2020) and his colleagues is recognised as a *process model* whereas a *content model* is applied in traditional (pedagogical) education. The main difference between those two models is basically the role of the instructor. In a content model, he or she is to transmit, as well as to select teaching materials whereas a process model places much more weight on the instructor as a facilitator and consultant who involves his or her students in the teaching and learning processes. Table 1 presents eight key elements of the process model, and it includes a comparison with the content model.

**Table 1**

*The key elements of a process model based on Knowles et al. (2020)*

	<b>Elements</b>	<b>Andragogical approach (process model)</b>	<b>Pedagogical approach (content model)</b>
1.	<b>PREPARING LEARNERS</b>	<ul style="list-style-type: none"> <li>▪ provide information</li> <li>▪ prepare for participation</li> <li>▪ help develop realistic expectations</li> <li>▪ begin thinking about content</li> </ul>	<ul style="list-style-type: none"> <li>▪ minimal preparation</li> </ul>
2.	<b>CLIMATE</b>	<ul style="list-style-type: none"> <li>▪ relaxed, trusting</li> <li>▪ mutually respectful</li> <li>▪ informal, warm</li> <li>▪ collaborative, supportive</li> <li>▪ openness and authenticity</li> <li>▪ humanness</li> </ul>	<ul style="list-style-type: none"> <li>▪ authority-oriented</li> <li>▪ formal</li> <li>▪ competitive</li> </ul>
3.	<b>PLANNING</b>	<ul style="list-style-type: none"> <li>▪ participative planning</li> <li>▪ mechanism for mutual planning by learners and a teacher</li> </ul>	<ul style="list-style-type: none"> <li>▪ by instructor</li> </ul>
4.	<b>DIAGNOSIS OF NEEDS</b>	<ul style="list-style-type: none"> <li>▪ defining learning needs from the perspective of learners and an instructor</li> </ul>	<ul style="list-style-type: none"> <li>▪ by instructor</li> </ul>
5.	<b>SETTING OF OBJECTIVES</b>	<ul style="list-style-type: none"> <li>▪ selection of objectives by mutual negotiation</li> </ul>	<ul style="list-style-type: none"> <li>▪ by instructor</li> </ul>
6.	<b>DESIGNING LEARNING PLANS</b>	<ul style="list-style-type: none"> <li>▪ sequenced by readiness</li> <li>▪ problem units</li> </ul>	<ul style="list-style-type: none"> <li>▪ logic of subject matter</li> <li>▪ content units</li> </ul>
7.	<b>LEARNING ACTIVITIES</b>	<ul style="list-style-type: none"> <li>▪ experiential techniques (inquiry)</li> </ul>	<ul style="list-style-type: none"> <li>▪ transmittal techniques</li> </ul>
8.	<b>EVALUATION</b>	<ul style="list-style-type: none"> <li>▪ assessing adult learners' responses to the programme</li> <li>▪ mutual re-diagnosis of needs</li> </ul>	<ul style="list-style-type: none"> <li>▪ by instructor</li> </ul>

*Note.* This table indicates the key elements of the process model and a comparison with the content model. Adapted from *The adult learner: The definitive classic in adult education and human resource development* (9th ed.) by M. S. Knowles, E. F. Holton III, R. A. Swanson, & P. A. Robinson, 2020, p. 52. Copyright 2020 by Routledge.

It may be noticed that the differences between the process and the content model are dramatic, as pedagogy offers minimal preparation of learners before any task while andragogy focuses on providing relevant information, developing realistic expectations, as well as thinking about the content (Knowles et al., 2020). What is not to be ignored is also the fact that adults participate in planning the learning process, as well as setting the learning goals. Overall, older adults are involved in the teaching and learning process on a regular basis.

However, as suggested by Ramírez Gómez (2016b, p. 98), andragogy “should be taken more as an ideology” since the idea of the process model was developed for adult education in general, and it practically failed to include older adults’ needs and expectations. Findsen and Formosa (2011, p. 105) also point out that “it would be naive to assume that facilitators should prepare their teaching materials without taking into consideration the ages of learners”, and all age-related transformations characteristic for late adulthood. Therefore, at this juncture, it seems crucial to focus on a separate educational field known as geragogy (e.g., Formosa, 2002).

#### **4. The concept of geragogy**

When it comes to *geragogy*, it is viewed as “the need to fine-tune adult learning/teaching experiences of older adults who are generally post-work and post-family, and sometimes frail, with intellectual limitations” (Findsen & Formosa, 2011, p. 103). Briefly, it refers to “education of and by the elderly” (Lemieux & Martinez, 2000, p. 491). Similarly to educational gerontology, it is based on the concept of lifelong learning directed to a “successful adaptation to one’s own ageing” (Kilian, 2015, p. 171). In modern times, geragogy has been used interchangeably with *educational gerontology* (Maderer & Skiba, 2006). Also, Lemieux and Martinez (2000) have proposed the synonymous *gerogogy*, and *geriagogy*.

Significantly, Formosa (2002) proposed the first set of concrete principles of critical geragogy (CG). Older people are subjected to oppression and discrimination that need to be identified by educators (e.g., Sigelman & Rider, 2015). According to Formosa (2002), education for older adults ought to emphasise a strong commitment to transforming ageist social stereotypes. Likewise, it is substantial to acknowledge the heterogeneity of this age group, and geragogists are to teach older citizens from a communicative perspective in order to integrate them into a close network. CG plays a considerable role in activating and reaching out for all distinct segments of older citizens “who beforehand did not necessarily think that they desired or needed education” (Formosa, 2002, p. 81). It also rejects the traditional model of education where learners are passive recipients of the knowledge transmitted by the instructors (Formosa, 2012). Teachers should generate a liberating curriculum and include older adults in creating a programme that comprises topics and issues relevant for the older generation (Formosa, 2002). As a consequence, teaching and learning from a critical geragogy perspective comprises dialogue negotiation, reflection, as well as the promotion of the

ownership of the learning experiences among learners in later life (Velaso & Guimarães, 2014).

#### **4.1. The emergence of critical foreign language geragogy**

Following the principles of CG, Ramírez Gómez (2016a) proposed their exploratory application of FL learning. The author defined her framework as *critical foreign language geragogy (CFLG)* which postulates that “FL education should provide a context in which older learners identify [the] limitations of their learning process and develop coping mechanisms to improve their learning experience” (Ramírez Gómez, 2016a, pp. 137-138). Language instructors, who frequently “adopt a patronizing attitude towards the learner’s abilities”, set undemanding goals based on stereotypical assumptions, particularly linked to cognitive decline or to the fact that third agers are not interested in achieving high FL level of proficiency (Ramírez Gómez, 2016b, p. 107).

As suggested by Ramírez Gómez (2016a), CFLG ought to be recognised as a practical model that seeks to change seniors’ perceptions of their own learning potential. Ultimately, this framework is to empower a positive image of older learners in communities (Ramírez Gómez, 2016b, p. 108). As illustrated in Figure 1, the CFLG model is based on a few fundamental principles. It is noteworthy that CFLG should promote pragmatic skills, and discuss both general topics and issues related to the older generation. Ramírez Gómez (2016a) acknowledges that a functional and content-based approach are of great relevance in a FL classroom since language instructors are capable of empowering older learners’ self - image, as well as improving societal perceptions. Also, FL teachers are to be knowledgeable about potential seniors’ limitations and inadequacies as to adapt a flexible teaching style. FL geragogists ought to create linguistically coherent curricula and pass knowledge in both a bottom-up and top-down manner. CFLG should also lead to self-directed learning and strategy use. What is more, the development of self-recognition is of great benefit because “CFLG should assist older learners to assess their current FL abilities realistically and from an empirical perspective, and to increase their self-knowledge” (Ramírez Gómez, 2016a, p. 141).

**Figure 1**

*A summary of the main principles of CFLG (based on Ramírez Gómez, 2016a)*



*Note.* This figure presents a summary of the main principles of CFLG. Based on “Critical geragogy and foreign language learning: An exploratory application” by D. Ramírez Gómez, 2016b, *Educational Gerontology*, 42, 136–143.

It is also substantial to note that many older adults exhibit self-defeating attitudes concerning learning in late adulthood (cf. Singleton, 2018). Also, generalised ageist beliefs appear to obstruct FL, and they may negatively influence instructors’ perceptions about senior learners (Ramírez Gómez, 2014). The implementation of CFLG has the potential to “improve older learners’ general individual self-images and empower them to pursue different activities and fulfill renovated roles in the society” which may contribute to “an age-friendly community” that supports learning in later life (Ramírez Gómez, 2016a, p. 142).

Based on the principles of CFLG, Ramírez Gómez (2016b) conducted a study whose aim was to encourage older adults to develop a higher awareness concerning their vocabulary strategy use and become more focused and self-directed in the FL learning. The participants were ten Japanese third agers who were enrolled in a Spanish course for seniors. According to the researcher, as older adults have a varied learning background, they require learner re - training that “focuses on older learners’ reassessment of several elements involved in the

learning process, such as perceptions, attitudes regarding FL learning, learning strategy and needs” (Ramírez Gómez, 2016b).

When it comes to strategy use, the data showed that the participants found creating associations of ideas difficult as they require a “higher memorability rate” and connection to a memory or image already stored in LTM (Ramírez Gómez, 2016b). In this context, time constraints could also have a potentially negative impact. Some learners experienced challenges while creating flashcards of Spanish words. Overall, Ramírez Gómez (2016b) suggested that all of the older students, to a greater or lesser degree, experimented with unknown strategies, learnt from each other’s experiences, and devised their own strategy habits. They recognised the importance of constantly re-evaluating their strategic behavior, as well as the benefits of establishing goals and using strategies. The strategic development “was restricted mainly by the pre-existence of inaccurate beliefs and/or inappropriate study habits that could not be uprooted” (Ramírez Gómez, 2016b, p. 154).

Therefore, it is the teacher’s role to help third agers evaluate their learning process on the basis of their actual abilities. According to CFLG, older adults are to identify age-related prejudices and preconceptions, question, and transform them (Ramírez Gómez, 2016a). A possible view of one’s abilities and a confident attitude towards the FL learning process may eliminate a feeling of frustration and lead to self-awareness, a developed knowledge concerning FFL, as well as the strength to deal with weaknesses and self-accomplishment (Ramírez Gómez, 2016b).

## **5. Glottogeragogics as a subdiscipline of applied linguistics**

As far as learning a FL in the senior years in the Polish context is concerned, it was Jaroszewska (2011) who coined the term “glottogeragogics”<sup>2</sup> as a subdiscipline of glottodidactics. *Glottodidactics* as such may be understood in two dimensions, namely scientific (the methodology of foreign language teaching), and practical (the implementation of these findings) (Wilczyńska, & Michońska-Stadnik, 2010). This term is mainly used in the Polish and Greek educational contexts while foreign language teaching methodology is typically used in the English-speaking countries (Róg, 2014).

In Poland, glottodidactics as an academic discipline has been developing for about fifty years (Jaroszewska, 2014). It embraces teaching learners of all ages whereas geragogics

---

<sup>2</sup> The term has been translated by the present author. The term “glottogeragogika” was proposed in the Polish literature by Jaroszewska (2011).

which is identified “the pedagogy of aging and old age” focuses on older learners, and its formation “completes the educational cycle of an individual human being in the developmental scheme which is compatible with a universal opinion that education should be extended to all generations” (Zych, 1992, p. 33). According to Halicki (2013), geragogics may be perceived as a subdiscipline of andragogy, and its practical dimension is mostly associated with TAUs. The main difference between glottodidactics and geragogics is certainly the age of learners, however, there are also a lot of similarities when it comes to the goals of the teaching-learning process, motivation, as well as FL teachers (Jaroszevska, 2013b).

When it comes to *glottogeragogics*, Jaroszevska (2011, p. 97) defines it as educational activities directed towards “a student-senior and a teacher-geragogist”. It is by far certain that both activating older adults, as well as transforming negative stereotypes into a positive image of ageing and old age has been gaining more and more popularity (Jaroszevska, 2013a). Undoubtedly, this is due to the fact that contemporary neuroscience regularly proves the benefits of learning at an advanced age and its role in fostering the plasticity of the brain (e.g., Pfenninger & Singleton, 2019). Significantly, these findings question the age factor in the context of SLA, and the Critical Period Hypothesis which is based on the assumption that “the optimal period for language acquisition ends when, at the end of childhood, the brain starts to lose its plasticity” (cf. Singleton, 2018, p. 20). However, Singleton and Pfenninger (2018) aptly note:

Fortunately, research activity in regard to second language learning by older adults, which has until recently been at a very low level, is finally taking off across a diversity of areas, and illumined by a welcome absence of negative platitudes about how people cope with the challenge of learning new languages in their autumn years. (pp. 268-269)

As regards the dynamics of socio-educational changes regarding FFL late in life, as well as its advantages on cognition and general well-being at a senior age, Jaroszevska (2011) stresses the importance of empirical studies in the field of glottogeragogics which has not been widely explored yet. The scholar believes that senior learners’ active lifestyle, learning potential, and motives in learning FLs may guarantee the interest of empirical investigations whose implications will promote the development of third agers’ linguistic and communicative competencies (cf. Jaroszevska, 2013b).

## **6. Seniors as foreign language learners**

The following section presents a few empirical findings regarding older adults as FL learners, particularly their motives, as well as their expectations and needs in the FL in-class context. Additionally, it discusses teachers' and researchers' suggestions that refer to the process of FL teaching in a senior classroom environment.

### **6.1. Motives and motivation to learn foreign languages**

Third-age learners motives to study FLs have been investigated by many scholars (e.g., Derenowski, 2019; Garcia, 2017; Pawlak et al., 2018; Pfenninger & Polz, 2018). In terms of motivation, it is by all means certain that older adults constitute a unique language learning group due to the fact that, in most cases, their professional paths have come to an end (cf. Gabryś-Barker, 2018). In a general sense, older adults become retired that, on one hand, is associated with a huge lifestyle change, and on the other, it opens new educational perspectives for self-accomplishment that might not have been accessible earlier in their life (cf. Jakubaszek, 2014). Atchley (2009, as cited in Sigelman & Rider, 2015, p. 359) suggests that retirement consists of three phases: “a honeymoon phase” (older people appreciate their new-found freedom), “a disengagement phase” (the new lifestyle becomes tedious and their life appears aimless and miserable at times), and “a reorientation phase” (in which seniors begin to find ways to lead a satisfying lifestyle). Therefore, “retired individuals pick up satisfying” activities, and they often turn to learning a foreign language (Oxford, 2018).

It has been well-established that the strongest motive to learn a FL in the senior years is the fact that it is considered to be a good practice for memory and mental skills (e.g., Derenowski, 2021; Grotek & Kiliańska-Przbyło, 2012, Niżegorodcew, 2016). This view is supported by Jaroszewska (2013b) who conducted an extensive study on 2145 Polish foreign language learners whose age ranged from 48 to 95. The aim of her research project was to examine the motivations, needs, and expectations of older adults by means of a survey. It turned out that seniors learnt FLs as they wished to sustain their intellectual skills, and they would like to take advantage of travelling abroad and be able to communicate independently with foreigners. Singleton and Ryan (2004, p. 219) claim that when older adults are likely to learn a FL with a view of travelling and communicating abroad, “one can expect not a few foreign language students to become involved in face-to-face communication with native speakers of the target language, indeed to be primarily motivated by a desire to be able to engage in precisely this kind of communication.” Likewise, third agers have the need to be in

contact with their family and friends living abroad (Grotek, 2012). Importantly, Derenowski (2021) highlights the fact that seniors learn a FL because they wish to communicate with their grandchildren who are frequently unable to speak their mother tongues. The author posits that seniors sign up to a FL course as they want to “avoid being excluded from” their families (Derenowski, 2021, p. 129).

Jaroszewska (2013b) points out that there were also social motives for joining language courses. Seniors, who tend to have more time at their disposal during retirement, typically avoid feeling redundant, isolated or marginalised, and thus they appreciate socialising with people of a similar age (Nizęgorodcew, 2016). The results were mirrored in a small-scale study by Pawlak et al. (2018). The scholars also confirmed the fact that older students learnt English with a view of practising memory, developing new skills, and gaining the ability to communicate in a FL. Also, it was suggested that some participants perceived learning English as their hobby. The result is in line with Derenowski’s (2021) study in which 65% of senior participants attended language courses since learning was their hobby.

Third agers also decide to take part in language courses as they wish to realise their dreams (cf. Gabryś-Barker, 2018). For instance, in the Polish context, learning a foreign language, especially English was not an available option in formal education for the present-day senior generation since they were most commonly taught Russian principally for political reasons (e.g., Jaroszewska, 2009). Gabryś-Barker (2020, p. 158) rightly states that “seniors have been the least privileged of citizens and most affected by rapid economic change” in the ex-communist countries. This may be the reason why the most popular language courses in TAUs are English (about 73%), German (20%), French (8%), and Italian (7%) (Jaroszewska, 2013b). It seems interesting to note that learners who study English and German at an advancing age did not use to learn those languages in the past. Additionally, a small number of third agers who had to study Russian in their formal education have decided to join Russian courses at present (Jaroszewska, 2013b). In the light of Derenowski’s (2019) study, seniors are likely to choose learning English as they find it necessary to know the lingua franca of the contemporary world. From this perspective, the choice of English appears to fulfill both internal and pragmatic needs.

An analysis of motivational factors among older adults was also conducted by Garcia (2017) in the Brazilian context. The data gathered by means of a questionnaire revealed that the seniors were mainly motivated to learn English owing to the pure interest in this particular language, as well as for travelling purposes. Socialisation and their increasing mental capacity were also mentioned. Moreover, the author asserted that half of the participants were

determined to gain the knowledge of English-speaking communities which is supported by Jaroszewska (2013b) study. Third agers pay due attention to the culture of FL speakers since they are conscious of multiculturalism that may help them develop a tolerant attitude towards a variety of lifestyles (cf. Fiema, 2016).

Overall, the most crucial third agers' motives to learn a FL in their senior years are intrinsic ones. Older adult learners undertake the challenges of learning a FL in order to fulfill their personal ambitions (cf. Nizęgorodcew, 2016). *Intrinsic motivation*, which stems from self-determination theory (Ryan & Deci, 2000, see Chapter 3) “concerns behavior for its own sake in order to experience pleasure and satisfaction such as the joy of doing a particular activity or satisfying one’s curiosity” (Dörnyei, 2001, p. 11). In this regard, FL learning in late adulthood is “clearly rewarding”, and it contributes to seniors’ “sense of meaning in their life” (Matsumoto, 2019, p. 113). The internal reasons to learn a FL also have a positive impact of older learners’ autonomy, and thus they are perceived as “the most hardworking and best prepared age group to work with” (Derenowski, 2021, p. 127).

It is also noteworthy that third agers' motivation may be linked to the instrumental orientation (Gardner's (1985) socio-educational model of motivation, see Chapter 3). *Instrumental motivation* “refers to reasons for language learning that emphasize the pragmatic consequences on L2 learning, such as getting a job or becoming better educated” (Noels, 2001, p. 108). In the case of seniors, instrumental motives are related to “clear goals to study” a FL, that is communicating with foreigners or establishing interpersonal relationships (Garcia, 2017, p. 245). As older adults are determined to gain knowledge of other cultures, Jaroszewska (2013b, p. 257) remarks that their motivation can have an integrative dimension associated with being a part of “a modern, multicultural and multilingual world”.

It may be concluded at this juncture that seniors' motives are utilitarian and pragmatic. Their perceptions of education in late adulthood are shaped by their prior knowledge and experience (Rudnik, 2017). As rightly noted by Jakubaszek (2014, p. 85), a senior learner is principally “an authentic consumer” of adult education who is not satisfied with gaining superficial knowledge, but rather developing practical skills necessary to be a valuable and independent member of society. In this perspective, seniors are likely to be conscious of their needs and expectations concerning FL process of learning.

## 6.2. Third agers' expectations of foreign language learning and the teaching process

Numerous researchers have indicated that third-age learners give much prominence to the language teacher whose teaching skills and personality play a significant role in the whole FL learning process (e.g., Eguz, 2019; Kacetl & Klímová, 2021; Jaroszewska, 2013b; Matusz & Rakowska, 2019). Therefore, it is worthwhile to take a closer look at the empirical findings regarding older adults' expectations about the teacher as the key figure in the older adults' process of learning.

### 6.2.1. The most preferable characteristics of foreign language teachers

As elucidated in previous research (e.g., Derenowski, 2019; Nizegorodcew, 2016; Pawlak et al., 2018; Ramírez Gómez, 2016a), third agers pay attention to the teacher who is undoubtedly one of the most crucial motivators in the language classroom environment. The results of the study by Słowik-Krogulec (2019, p. 194) showed that older adults who learnt English perceived the teacher “as the major factor that influences the learners' language development”. In this context, teachers are expected to have supportive attitudes towards their students, and educators' personality features ought to reflect a positive approach towards learning in late adulthood (cf. Sigelman & Rider, 2015). Guz and Tetiurka (2016, p. 133) write: “Positively-oriented teachers who display positive emotions inspire a similar mindset in learners creating a positively charged learning environment”.

Previous studies have also demonstrated (e.g., Matusz & Rakowska, 2019; Pfenninger & Polz, 2018) that *patience* is considered to be the most desirable personality feature of language educators. Bearing in mind the fact that older adults require slower pace of the lesson, revision tasks, as well as a slower speech rate, it may be reasonable to note that patience is linked to a constant and flexible adaptation of the teaching approach, and the attitude towards the language progress as such (cf. Ramírez Gómez, 2016b). This is supported by Jaroszewska's (2013b) study in which senior learners attended language courses at an advancing age mainly owing to having “a good teacher” who, above all, was expected to be patient.

Likewise, Derenowski (2018) conducted a study among 15 senior learners with a view of identifying the characteristics of a good teacher. The data gathered by means of group interviews revealed that a language educator working with third agers should basically be *compassionate*, *understanding*, and *friendly*. *Empathy* and *compassion* seem to be associated with age-related impairments that may obstruct learning a FL whereas friendliness plays

a powerful role in creating a safe and comfortable classroom environment. Włosowicz (2016) believes that a good relationship with the teacher is based on empathy and patience. Derenowski (2018, p. 157) also points out that teacher *enthusiasm* is regarded to be vital as it helps to maintain “meaningful and trustworthy relationships” with older learners on a daily basis. According to Gabryś-Barker (2014, pp. 303-304), enthusiasm “influences students directly in enhancing and developing their subject interests, motivation to learn it and attention, thereby indirectly affecting their learning achievement”. An enthusiastic teacher may positively impact seniors’ learning success, which due to age-related inadequacies, is not so evident from third agers’ perspective (cf. Piechurska-Kuciel & Szyszka, 2018). Importantly, the teacher should observe his or her learners’ strengths and draw their attention to these positive aspects in order to improve their self-esteem and, consequently, reduce their self-deprecating views (cf. Niżegorodcew, 2016). This may also be achieved by humour that is said to relieve stress in the classroom context (Bonk, 2013). Oxford (2018) asserts that *a sense of humour* as a positive emotion may effectively facilitate language learning at a senior age.

Overall, it is justifiable to mention that several *positive* teacher’s personality traits are of much value because they may direct older adults’ thoughts and perceptions to a sense of success and self-realisation (cf. Kilian, 2015). Obviously, as Niżegorodcew (2016, p. 97) stresses, “the effectiveness of foreign language courses for senior students” hinges much on both instructors’ personality and his or her teaching style that ought to be adapted to the most substantial older adults’ expectations and needs concerning elements of the instruction in a foreign language classroom.

### **6.2.2. Seniors’ expectations of foreign language courses**

When it comes to third-age learners’ expectations regarding FL courses, several studies have indicated that in the eyes of seniors, the most essential aspects of classroom instruction are:

- developing communicative skills (e.g., Grotek & Kiliańska- Przybyło, 2012; Oxford, 2018; Pfenninger & Polz, 2018; Viktorowa, 2020);
- the teacher’s ability to create a non-threatening atmosphere (e.g., Derenowski, 2018; Kacelt & Klímová, 2021; Piechurska-Kuciel & Szyszka, 2018):
- teacher support and encouragement (e.g., Borkowska, 2021; Rakowska & Matusz, 2019);

- a slow tempo of delivery (e.g., Grotek, 2018; Jaroszewska, 2013b; Słowik-Krogulec, 2019);
- revision tasks (e.g., Derenowski, 2019; Ramírez Gómez, 2016b);
- professional organisation of FL courses (e.g., Derenowski, 2018; Pawlak et al., 2018).

### *Developing communicative skills*

As already discussed, senior learners are mostly interested in improving their speaking skills, and thus, rather unsurprisingly, they primarily wish to practise their communicative abilities in the classroom context (e.g., Gabryś-Barker, 2018). Grotek (2018), who conducted a study among 87 members of the TAU in Katowice, sought to elicit the seniors' personal views and experiences concerning effective foreign language teaching in this cohort group. The participants admitted that FL instructors ought to pay due attention to the development of the most essential skills and subsystems that may help to improve their FL communication abilities, such as speaking, listening, pronunciation, and vocabulary. Matusz and Rakowska (2019) indicated that even though speaking as such was the main source of in-class discomfort experienced by older adults, it was still the most vital language skill in class. In order to develop communicative skills, third agers place much weight on learning and revising vocabulary, as well as practising listening and pronunciation (e.g., Jaroszewska, 2013b).

As far as lexical resources are concerned, Ramírez Gómez (2019) conducted a study in which she implemented innovations that involved adjusting materials to address the needs of older adults (e.g., audio tracks without background noises, clear pronunciation, activities based on one action at a time). The Japanese participants were re-trained in vocabulary strategy use during Spanish courses. In short, the students had a positive opinion of their participation in the training sessions. Although some subjects were unable to develop efficient vocabulary learning strategies, they all declared feeling satisfied with regard to their engagement in the classroom activities. Ramírez Gómez (2019, p. 73) concluded that in the case of seniors “focusing the learner’s attention and effort on the memorization and practice of few but highly frequent vocabulary may lead to better consolidation and oral practice”. Likewise, Kozak and Gulanowski (2012) observed two beneficial effects of the memory training conducted among 24 older students in the Polish context. Firstly, it may lead to improving the general quality of the subjects’ memory, and secondly, the knowledge of mnemonic techniques could help them self-study outside the classroom.

What is also fundamental is that when FL instructors place much more weight on communication than accuracy, older adults are capable of overcoming speaking barriers (Grotek & Kiliańska-Przybyło, 2012). This, in turn, may lead to boosting seniors' general well-being and evoking positive emotions which, as Oxford (2018) remarks, may be of paramount importance for language learning.

In this regard, it needs to be mentioned that the selection of conversation topics is relevant (Kacelt & Klímová, 2021). Eguz (2019) acknowledges that older adults have considerable experience and an extensive knowledge of a wide range of topics. For this reason, “they can easily draw on that knowledge in learning through English about familiar topics” (Niżegorodcew, 2016, p. 97). It is noteworthy that interesting and familiar topics may impact learners' level of readiness to communicate in a positive manner (e.g., Riasati & Rahimi, 2018; Zarrinabadi, 2014). In the case of older adults, pragmatic and useful topics associated with daily activities are of great interest because they may prepare them for real-life interactions (cf. Oxford, 2018). The senior participants in Derenowski's (2021) study mentioned such topics as family life, everyday life, and practical issues. As pointed out by Grotek (2018, p. 137), it is critical to bear in mind that older adults value teachers who are interested in their lives and create bonds between groupmates “by encouraging them to cooperate and share their individual opinions, views, and life stories without excluding anyone”.

#### *The teacher's ability to create a non-threatening atmosphere*

Another vital component of classroom instruction, which also appears to promote communicative behaviours among learners in the third age, is a friendly and laid-back atmosphere (cf. Eguz, 2019). Learning a FL in a safe atmosphere helps to open senior learners to new language experiences which positively impacts their self-awareness (e.g., Pfenninger & Polz, 2018). In a general sense, learners may “be comfortable, feel valued and secure in their learning environment” when the teacher gives much prominence to their positive emotions (Gabryś-Barker, 2016, p. 170).

Derenowski (2019) argues that a relaxed and positive classroom environment plays a significant role in enhancing older learners' self-confidence, as well as facilitating their eagerness to be actively involved in the learning process. Also, a pleasant atmosphere and teacher support were reported to be the most prominent components of classroom instruction that might foster in-class willingness to communicate (WTC) among third agers (Borkowska,

2021). In a similar vein, the findings of Matusz and Rakowska's (2019) study indicated that older adults require a lot of teacher support in the classroom context due to the fact that their low self-esteem is one of the major obstacles when it comes to English learning at a senior age. This result is consistent with Derenowski's (2021) view who asserts third agers may be perceived as proficient language learners when they are supported by a friendly classroom atmosphere and positive reinforcement that can motivate them to express and share their opinions freely. Additionally, positive "teacher-student relationships are often the core of any quality learning experience" (Farrell, 2018, p. vii).

### *Teacher support and encouragement*

In a similar vein, constant support may also help older adults establish new relationships with their groupmates as they could feel safe and secure to cooperate in different forms of interactions (e.g., Grotek, 2018). Pot et al. (2018, p. 195) stress that "L2 learning needs to be regarded not as a goal itself but as a toll to promote social interaction and integration". Peer communicative interactions during FL classes may reduce a feeling of isolation and increase the quality of life (e.g., Kic-Drgas, 2010; Escuder-Mollon & Esteller-Curto, 2014). Likewise, Bardus and Raso (2014, p. 74) state: "Social connections and relationships are an important dimension of well-being, as social relationships and interpersonal trust have proved to bring happiness to people's lives". Hence, language tasks performed in small groups or dyads might evoke positive emotions and eliminate the fear of failure (Grotek, 2018). As opposed to individual work, cooperation gives multiple perspectives reducing anxiety, increasing a sense of security and comfort that may result in a higher level of in-class WTC (e.g., Cao, 2011; Riasati, 2018, see Chapter 3).

### *A slow tempo of delivery*

Older adults are aware of the fact that they need more time to process learning material, and thus they tend to pay due attention to a slower pace of lessons (Grotek, 2018). In fact, a too fast tempo of delivery was considered to be one of the most debilitating factor in seniors' language classroom (Jaroszewska, 2013b). This finding is also in line with Derenowski's (2019) study. Third agers' potential age-related cognitive decline (i.e., slower WM capacity, inhibitory control deficits), and physical impairments (i.e., vision and hearing deficiencies) may heavily influence their processing time (e.g., Ramírez Gómez, 2014; Stuart-Hamilton, 2012). Third agers require more time to perform speaking activities as their

responses are slower owing to the fact that reaction times become higher (e.g., Jaroszewska, 2010). As mental and physical declines in old age are not universal, seniors require constant adaptation of pace of learning to their individual needs (cf. Ramírez Gómez, 2016b; Steuden, 2011). Kliesch et al. (2018) underscore the significance of individualisation of the learning process that principally follows the main principles of andragogy.

### *Revision tasks*

In a similar manner, older learners appreciate regular revision sessions that help them to store learning material in LTM (cf. Pawlak et al., 2018). Matusz and Rakowska (2018) found that revision tasks were of utmost importance for the vast majority of the older participants. Seniors realise that “in order to remember the new language material, they should revise it frequently and in addition to the classroom practice they need to devote time to practicing it at home” (Grotek, 2018, p. 138).

### *Professional organisation of foreign language courses*

Senior learners appreciate the teacher who is professionally prepared for the classes (e.g., Derenowski, 2019). Professionalism is associated both with having good methodological abilities and linguistic competence (cf. Jaroszewska, 2009). Language instructors are to cater to older learners’ needs, but they also ought to be fully aware of cognitive and affective aspects of FLL in later life (Grotek, 2018). Also, a professional teacher is to respect older adults’ life and learning experiences and accept the fact that they may either facilitate or hamper their FL process of learning (cf. Bonk, 2013).

As far as the age of an instructor is concerned, Jaroszewska (2013a) indicated that a young teacher might be a factor that enhances learning a FL in later life while Derenowski (2018) found that a younger educator could be viewed as less professional and reliable. Similarly, Pawlak et al.’s (2018, p. 86) study in which seniors manifested that the teacher’s experience and skills were essential, and the older educator could be subjectively regarded as more qualified because he or she was “closer in age to the respondents”.

In the light of the above seniors’ expectations and needs, it may be stated that learners in the third age express a realistic approach to their learning abilities, and they simply wish their educators to be conscious of their possible age-related impairments that may hamper their process of FL learning. Older adults’ perceptions regarding FL courses are of great value to teachers as there is no methodology designed specifically for teaching age-advanced

students (e.g., Derenowski, 2021; Jaroszewska, 2013b). Unfortunately, as aptly stated by Andrew (2012, p. x), “second language pedagogy pays little need to the diversity existing among adults of different ages, in essence adopting a generalized young-adult focus”. Niżegorodcew (2018, p. 162) acknowledges that the lack of “an applied linguistic theory on teaching senior students and methodological guidelines stemming from such a theory, foreign language teachers must rely on their intuition on how to approach their students”.

Therefore, FL courses for seniors could be designed on the basis of numerous suggestions presented by the researchers mentioned below (e.g., Eguz, 2019; Jaroszewska, 2013b; Kacelt & Klímová, 2021; Kliesch et al., 2018).

### **6.2.3. Teacher recommendations on foreign language courses for senior learners**

As regards teacher recommendations on FL courses for seniors, which are principally based on empirical research or their own didactic practice, they may be divided into such key aspects as: adaptations to seniors’ learners physical and cognitive decline (e.g., Jaroszewska, 2010; Ramírez Gómez, 2016b), the role of the teacher (Derenowski, 2018; Bonk, 2013), teaching approach (e.g., Słowik-Krogulec, 2019; Gabryś-Barker, 2020), teaching materials (e.g., Grotek, 2018; Oxford, 2018), as well as a focus on success and positive emotions (e.g., Grotek & Kiliańska-Przybyło, 2012; Piechurska-Kuciel & Szyszka, 2018).

#### *Adaptations to seniors’ needs in terms of age-related decline*

Planning a FL course for seniors requires a comprehensive knowledge about their age-related limitations (e.g., Kic-Drgas, 2010). As many older adults experience various changes in late adulthood, the examination of senior groups’ visual and hearing characteristics is essential at the very beginning of the course (Jaroszewska, 2013b). A wide range of recommendations based on previous studies and observations, was presented by Ramírez Gómez (2016b). The author states that owing to possible loss of hearing capacity, it is suggested that teachers should lower their voice pitch and prepare listening tasks that are to be clear with no background sounds. When it comes to potential vision impairments, teaching materials ought to be prepared using a minimum font size of 14 point (cf. Jaroszewska, 2010). Careful consideration must also be given to the layout of coursebooks which should be clearly organised without “too many pictures and additional information that serves opposite purposes to the one which is usually intended”, namely stimulating students’ ideas and activating their prior knowledge (Słowik-Krogulec, 2019, p. 194).

As far as third agers' cognitive dimension is concerned, language instructors are primarily to keep to a slow pace of a lesson that is associated with a decline in the processing speed (e.g., Findsen & Formosa, 2011). As opposed to younger adults, seniors attend FL courses for intrinsic reasons, and thus achieving their goals is not time-limited. Kacelt and Klímová (2021, p. 6) assert that “there is usually much lower pressure to follow the syllabus and teachers are more free to adjust the speed of teaching, the quality of input and length of exposure”.

While people tend to speak at a rate of 120/140 words per minute on a daily basis, teachers' speech rate should be at a maximum 90 words per minute (Wingfield, as cited in Ramírez Gómez, 2016b). Also, as previously discussed, the capacity of WM may be overloaded because of deficits in inhibitory control (e.g., Singleton, 2018). For this reason, using simple structure sentences helps older adults store and process information more easily. Ramírez Gómez (2016b) writes that it is beneficial to simplify activities and avoid conducting two or more activities simultaneously. The scholar stresses that tasks which require several focuses of attention “should be simplified and involve as much scaffolding as possible in order for learners to accomplish the primary objective of the task and not to feel frustrated” (Ramírez Gómez, 2016b, p. 168). Overall, it may be noted that the teacher's main duty is to adjust his or her teaching with a view of fostering older adults' learning.

### *The role of the teacher*

The role of the teacher in a seniors' FL classroom is surely multidimensional. According to Derenowski (2021, p. 123), language instructors “need to present themselves as supportive and involved teaching who assume the roles of guides, helpers, and resources, as well as facilitators”. As facilitators, teachers need to be willing to provide their learners' with practical advice that may be of great help in overcoming potential learning challenges. Dörnyei (2001, p. 106) notes that a facilitator adopts “a non-traditional teaching style” where students are not perceived as “empty vessels that need to be filled with words of wisdom coming entirely from the teacher”. It is especially true in the case of older adults as their education focuses on self-directed learning based on life experience (e.g., Kozerska, 2016). In fact, Gabryś-Barker (2020, p. 161) acknowledges that third agers' “life and learning history experience are the richest source for future learning”. Facilitators perform different functions that require a variety of skills (Nagy, 2014). Knowles et al. (2020, p. 141) point out that, as opposed to being mainly a planner and transmitter, “facilitators perform the function of

process designer and manager which requires relationship building, needs assessment, involvement of students in planning, linking students to learning resources, and encouraging student initiative”.

Therefore, a partnership between the educator and older learners is a relevant variable that may foster the FL learning process (e.g., Sikora, 2013). A mindful teacher gives much prominence to engaging his or her students in the process of designing a syllabus that involves the content of FL classes (cf. Larotta, 2019). Teachers have a duty to establish “a new communication and interaction, and to encourage students to adopt a pro-active approach to the lessons” (Nagy, 2014, p. 202). This, however, may seem difficult owing to the fact that seniors tend to treat a teacher as an authority (Derenowski, 2018). This derives from the fact that they are used to a traditional method where students were only passive recipients of the knowledge (cf. Komorowska, 2020). Derenowski (2021) writes:

Older learners often expect teachers to assume an authoritarian role and may not feel comfortable in a classroom where there seems to be no code of conduct and the atmosphere is too affable. Therefore, it may be a challenge for some of the educators to find this precise space between friendliness and authority. (p. 124)

Consequently, instructors ought to be viewed as resources and consultants, particularly in the case of modern teaching techniques based on new technology (Eguz, 2019). As indicated in the study by Słowik-Krogulec (2019), older adults’ perceptions of modern technology in the classroom were heterogeneous: some found it enjoyable while others complained. However, it is by all means certain that using advanced technology as an educational tool is currently a prerequisite for studying a target language (Krajka, 2011). Teachers working with seniors should be aware of the fact that their students feel less comfortable with computers than other age groups (Githens, 2007). Hence, educators ought to pay due attention to eliminating potential technological barriers both by providing necessary knowledge about modern learning and teaching techniques, as well as giving guidance in a slow and patient manner. As learners become accustomed to technology, the teacher as a consultant may also show various methods that are useful for self-study outside the classroom (cf. Derenowski, 2021).

### *Teaching approach*

Teaching seniors a FL is basically related to promoting student-centredness and communicative opportunities that constitute the core of older adults’ motivation

(cf. Nagy, 2014). Schiller et al. (2020, p. 752) claim that “learner-centredness is a pedagogical principle for the advancement of seniors’ foreign language-learning skills as well as their learner autonomy”. The authors suggest that it plays a pivotal role in increasing third agers’ self-awareness and self-reflective skills about their capabilities in FLL. Posiadała (2020) believes that improving self-evaluation skills (e.g., self-study, self-awareness, and self-reflection) among senior learners may lead to autonomous language learning and self-directedness. This approach appears to bring the most effective results as students may participate in specifying learning goals and teaching methods might also be consulted with them (Werbińska, 2017)

As regards the communicative approach, it ought to be implemented with a special focus on creating social bonds by offering a great number of communicative interactions in class (cf. Grotek, 2018). It seems essential to provide room for different patterns of interactions that boost an eagerness to speak and a sharing of learners’ opinions and experience (e.g., Mystkowska-Wiertelak & Pawlak, 2017). It is also substantial to note that “when group interaction produces strong emotions” learners might become more attentive and involved in the learning process (Komorowska, 2021, p. 38). In the case of seniors, emotions may also positively influence their concentration and the level of involvement (cf. Oxford, 2018). According to Werbińska (2017), a friendly classroom atmosphere, a good rapport between the teacher and students constitutes the key element of the communicative approach. The author also points out that teaching a FL in pair and small group interactions requires the teacher to be a participant, consultant, as well as a manager who flexibly organises and reacts to potential communicative difficulties.

However, the implementation of the communicative approach may not be so evident. Jaroszewska (2013b) supplemented her large-scale survey conducted among seniors in Poland with observations of intensive German courses for international older adults in Germany (seniors from Poland did not participate in those courses). The teachers were native German speakers. The analysis of daily observations showed that the first teacher (an experienced instructor with no teaching experience with senior groups) paid little attention to practising seniors speaking abilities although she had declared to be following the communicative approach. The major focus was on grammar which led to some older students’ disappointment and frustration. The second teacher (an instructor who had previously worked with seniors) took advantage of numerous opportunities for authentic communication. Briefly, she gave high priority to promoting communication skills by means of dialogues, interviews, conversations, and presentations. Such an approach was highly appreciated by the learners

who could interact with each other and share their views. Jaroszewska (2013b) concluded that in order to optimise the FL teaching process, it seems reasonable to diagnose seniors' needs, as well as to ask students for feedback at the end of the course.

Teaching experience also plays a key role in teaching third agers. Słowik (2016) demonstrated that pre-service teachers reported the necessity of using the L1 in the seniors' FL classroom, as older adults may feel more secure when they can resort to their mother tongue. This view, however, was not supported by educators who had previously worked with seniors. The experienced teachers were stricter in terms of the seniors' own language use since it meant returning to the grammar translation method in which "the ability to translate texts into the learners' mother tongue was all that could be expected" (Komorowska, 2011, p. 13). As a result, communicative interactions were practically non-existent in the traditional method. Overall, Słowik (2016, p. 214) remarks that in the eyes of seniors, using their mother tongue during task performance was viewed as a facilitating factor, and thus "overlooking older adult students' need to resort to their L1 teachers may make their process of learning more difficult and stressful".

The present author's teaching experience also indicates that translations appear to be one of the most commonly used strategies among low proficiency senior learners. Third agers who typically represent an A1 or A2 level of proficiency when asked a question in English, they are likely to translate the question out loud before answering it in English. This may be interpreted as solving their learning problems independently and relying on their own resources (cf. Ohly, 2007).

Another interesting study was conducted by Gabryś-Barker (2020) among pre-service EFL teachers. The participants' views about teaching approaches, which were collected by means of a descriptive questionnaire, "Teaching Foreign Languages to Seniors" were rather inconsistent (Gabryś-Barker, 2020, p. 163). In short, the pre-service teachers believed that FL teaching to seniors required "some form of eclectic approach" with the main focus of communication, as well as a variety of language exercises.

### *Teaching materials*

When it comes to teaching materials, it is well-established that in order to accommodate seniors' age-related needs, teachers need to design their own activities or adapt the existing ones (cf. Grotek, 2018). In a general sense, all skills and subsystems are to be taught, however, the main focus is on speaking, vocabulary, and listening.

Basically, teaching materials are to be “life-oriented” promoting various kinds of real-life interactions based on authentic materials (Gabryś-Barker, 2020). Coursebooks are to be supplemented with extra teacher-made hand-outs specially designed for older adults and focusing on their preferences (e.g., family, everyday activities, personal life). Importantly, the teacher ought to place much weight on “relatable vocabulary” that are of utmost importance in everyday communication (Ramírez Gómez, 2016b). Owing to seniors’ possible WM overload, lexical items should be carefully chosen and revised in order to enhance the process of memorisation (e.g., Grotek, 2018).

Ramírez Gómez and Sanz (2017) analysed corpus-based textbooks to teach Spanish. The authors indicated that although they were designed to follow a functional approach, they presented grammar and vocabulary that failed to reflect actual Spanish use. Therefore, in order to adapt to seniors’ characteristics, potential modifications are required, especially in terms of an introduction of grammar and vocabulary. Ramírez Gómez and Sanz (2017, p. 47) stated that “textbooks should include vocabulary-related activities that target highly frequent vocabulary, indicate the attention that learners should pay to different words, and allow the identification of relatable vocabulary”.

As regards speaking, it is critical to offer a lot of communicative opportunities which may also help to establish a good rapport between students. As speaking may affect older adults’ self-esteem and confidence, which are already lowered because of self-stereotyping, it is advised to create and maintain a stress-free atmosphere, and provide support (e.g., Matusz-Rakowska, 2019; Oxford, 2018). Also, grouping patterns, especially dyads or small groups increase student talking time and reduce potential fear of speaking in front of the whole class (e.g., Grotek, 2018). Both group work and pair work are beneficial for older adults as they foster “the development of soft competences such as negotiation and co-operation skills” (Derenowski, 2021, p. 90). Also, making mistakes in pair or group work is less anxiety-provoking, and it may affect older adults’ self-esteem in a less negative manner than entire class activities (cf. Zarrinabadi, 2014). Seniors tend to have a preference for dialogues, conversations, and interviews as they activate their creativity and prior experiences (e.g., Jaroszewska, 2013b).

Undoubtedly, regardless of the types of teaching materials, it seems important to use “non-competitive activities” since competition may have a dramatic impact on seniors’ well-being and their perceptions of learning success (Oxford, 2018, p. 13). Preparing interesting and entertaining activities may direct third agers to a sense of achievement facilitating their motivation and readiness to learn a FL (cf. Grotek, 2018). However, Komorowska

(2007, p. 9) stresses that: “Probability of learners’ readiness to continue learning often depends not only on intrinsic or extrinsic motives, but also on the subjective feeling of success”. In this context, Niżegorodcew (2018, p. 174-175) mentions language success which is not related to “measuring progress in foreign language learning in terms of the number of acquired structures and vocabulary items”, but it ought to “focus on the senior students’ sense of developing purposeful intellectual activity and agreeable social contacts”.

### *Focus on success and positive emotions*

Many researchers underscore that the most crucial aspects of FL teaching to senior learners should be directed towards building older adults’ sense of success and evoking positive emotions (e.g., Derenowski, 2021; Kacatl & Klímová, 2021; Oxford, 2018). It is basically associated with the fact that older learners are susceptible to creating an undermining picture of themselves in terms of memory capacity, the ability to learn a language and acquire new skills which heavily influence their self-esteem and a sense of usefulness (e.g., Singleton, 2018). The study conducted by Grotek (2018) clearly indicated that seniors’ opinions about their perceived proficiency level of English was self-deprecating. This finding is in line with Derenowski’s (2018) study in which third-age participants felt insecure about their skills and knowledge despite having life experience and motivation.

Therefore, it is essential to remember that FL educators working with this cohort ought to give high priority to both negative and positive emotions because they are “an integral part of SLA” (Pawlak & Kruk, 2021, p. 9). Komorowska (2016, p.45) remarks that typically “negative affect is viewed as useless and harmful, while positive emotions tend to be seen as correlating not only with well-being, but also with success in performance”. Unfortunately, negative emotions (e.g., fear, anxiety, amotivation) may “result in lower willingness to communicate, less interpersonal contact, less intercultural competence and lower fluency levels together with a tendency to ignore one’s problems and avoid difficulty connected with direct face-to-face communication”. (Komorowska, 2016, p. 52). On the other hand, positive emotions (e.g., enjoyment, curiosity, excitement, motivation, interest) play a stronger role in shaping higher levels of learners’ WTC than negative ones (e.g., Khajavy, MacIntyre, & Barabadi, 2017, see Chapter 3). Gregersen (2016, p. 71) stresses that students “who replace negative-narrowing thoughts and experiences with positive-broadening ones, not only generate more enjoyment in the process, but also generate greater stamina for the long haul”. In the case of third agers, teachers need to be aware of the importance of the social

dimension of learning since it is clearly linked to positive emotions (cf. Pawlak et al., 2018). In this regard, positive classroom dynamics is of great value create as it enhances the process of learning and provides room for interpersonal relationships (cf. MacIntyre & Mercer, 2014)

Interestingly, Nizęgorodcew (2016) and Jaroszewska (2013b) have observed that seniors are prone to choose to learn a language group mostly for social or affective reasons rather than their current level of proficiency. This phenomenon may be related to the *socioemotional selectivity theory* (Carstensen, 1992, as cited in Sigelman & Rider, 2015) which states that older citizens put their well-being first. The theory posits that “perceived limitations on time lead to a motivational shift that direct attention to emotionally meaningful goals” (Carstensen, Fung, & Charles, 2003, p. 104). In brief, what matters the most are rewarding relationships that can fulfil seniors’ “emotional well-being” (Sigelman & Rider, 2015, p. 439).

With this in mind, building the positive image of older learners, as well as the focus on a “positive evaluation may increase the level of self-esteem and help in overcoming negative stereotyping” (Derenowski, 2021, p. 81). Such an approach to FL teaching promotes two crucial models of ageing that reflect active aspects of later life, namely successful and positive ageing.

### *Successful ageing*

The idea of *successful ageing* was developed by Rowe and Kahn (1997), and it has rapidly grown in popularity in the modern societies as it appears to reflect potential success and achievement at an advancing age (e.g., Fernández-Ballesteros, 2011). *The Successful Ageing Theory* proposes that reaching old age successfully means avoiding diseases and disability in later life, maintaining high cognitive and physical functioning, as well as keeping an active engagement in life (Rowe & Kahn, 1997). The study conducted by Bowling and Dieppe (2005) showed that, according to older adults, successful ageing is related to three conditions, such as good health, psychological health, and engagement in social activities.

Language education may be perceived to help to achieve successful ageing from a biological perspective (i.e., maintenance of cognitive functioning), a social perspective (i.e., maintenance of high levels of social activity, interaction, and participation), as well as a psychological perspective (i.e., coping with age related changes, such as perceived self-efficacy, control over life, an ability to compensate for different declines) (cf. Bowling and Iliffe, 2011). Active involvement in life may take many forms, but the most eminent,

according to Rowe and Kahn (1997), are interpersonal relationships and productive activity. The authors state: “Interpersonal relations involve contact transactions with others, exchange of information, emotional support, and direct assistance. An activity is productive if it creates societal value, whether or not it is reimbursed” (Rowe & Kahn, 1997, p. 433). Seniors are likely to engage in a variety of activities (e.g., charity organisations, volunteer work or education) that opens the door to establishing new social relations, maintains a meaningful purpose in life, and offers a sense of usefulness and satisfaction (e.g., Kaczmarczyk & Trafiałek, 2007; Paúl & Lopes, 2017).

The emergence of successful ageing has provided an opportunity to change negative stereotypes, and to raise awareness of “what a desirable old age could be like” (Crăciun, 2019, p. 20). Cheng et al. (2015) pay attention to the fact that the Rowe and Kahn’s (1997) model lacks reference to psychological well-being which has been incorporated by the WHO. The authors mention *the well-being paradox* which refers to “a term describing the remarkable phenomenon of older adults maintaining well-being despite physical declines and social losses” (Cheng et al., 2015, p. 5). Another paradox illustrated by the successful ageing model is the so-called *paradox of ageing* as it combines a typically negative concept of *ageing* with the idea of *success* which is associated with achievement and productivity (Crăciun, 2019, p. 20). In fact, as outlined by Baltes and Carstensen (1996, p. 400), successful ageing is an oxymoron as focusing on a sense of meaningfulness, and purpose in life is “not ageing at all”.

Equally significant should be the fact that the increase of positive depictions of later life, and signifying the idea of *success* underscore an individual’s ability to adapt to age-related changes (e.g., Kozerska, 2016). Therefore, what appears to be critical at this point is one of the most principal models of successful ageing, namely *selective optimisation with compensation (SOC)* (Baltes & Baltes, 1990, as cited in Baltes & Carstensen, 1996). This concept specifies three processes: selection, optimisation and compensation, as well as combining the notion of ageing and one’s personal growth (cf. Zając-Lamparska, 2011). In this context, successful ageing is recognised as the “minimisation of losses and maximisation of gains” while success is viewed as “goal attainment” (Baltes & Carstensen, 1996, p. 405).

The process of *selection* deals with the outcomes and goals which need to be chosen according to an individual’s actual preferences and abilities (Jaroszewska, 2013b). As older adults are vulnerable to physical and mental changes, aims are reduced in this phase of life, and thus, older adults consciously select more important ones that may give them a feeling of meaning and progress (Piechurska-Kuciel & Szyszka, 2018). Basically, there are two types of selection: *elective selection* (involves the self-initiated allocation of objectives matching

available or achievable resources), and *loss-based selection* (characteristic of old age, and its role is to adjust aspirations or goals to accessible resources in order to maintain a smaller number of more important goals) (Freund & Baltes, 2000).

*Optimisation* means channelling decision-making into improving or sustaining one's abilities in certain areas of life for a longer period of time (Olszewski, 2018). As pointed out by Baltes and Carstensen (1996, p. 415), this process refers to "the enhancement of functioning and adaptive fitness in selected life domains". In the case of third agers, optimisation involves acquiring new skills and experiences with a view of maintaining a similar level of functioning as in early adulthood (cf. Crăciun, 2019). The example of optimisation may be a development of interpersonal interactions, seeking community, and social support which is perceived as a key source of seniors' enjoyment and well-being (e.g., Reichstadt et al., 2010).

When it comes to *compensation*, it addresses the aspects of gains and losses (e.g., Piechurska-Kuciel & Szyszka, 2018). This process is defined as a response to loss or decline, and "it denotes the application of means in the interest of maintaining a given level of functioning when confronted with a loss of goal-relevant means" (Freund & Baltes, 2000, p. 49). It differs from selection as the goal is maintained, but substitute means are applied to compensate for potential impairments or disabilities (cf. Grotek & Ślęzak-Świat, 2018). In brief, the most crucial function of compensation is to protect against a decay of skills by means of compensatory strategies (e.g., Stuart-Hamilton, 2012).

Noteworthy is also the fact that the SOC framework plays a relevant role in FFL in later life (Oxford, 2018). Older adults have clearly specified goals, and they may benefit from already acquired strategies while learning a foreign language (e.g., Jaroszevska, 2009). An interesting small-scale study was conducted by Piechurska-Kuciel and Szyszka (2018). The scholars searched for data supporting the processes of selection and optimisation, as well as they investigated compensatory strategies that seniors declared to rely on during an English course. The participants (four seniors) admitted that the most important reason for learning English at an advanced age was the fact that it helped to outweigh age-related losses (selection). The linguistic goal was optimised by investing their time and effort into learning English regularly. As regards compensatory strategies, one participant reported that intelligent guesses were of great use, but the researchers underscored that this learner was experienced in other foreign language learning. In order to overcome linguistic limitations, the subjects deployed four compensatory strategies: getting help (the help of interlocutors, and assistive devices: notes, dictionaries, and the internet), avoiding or abandoning communication

(e.g., in the context of memory problems), approximation (used by a participant with prior knowledge of other foreign languages), and circumlocution or synonym (while explaining a meaning of words). Piechurska-Kuciel and Szyszka (2018, p. 120) stressed that the study findings confirmed the role of compensatory strategies “in all walks of life of the elderly, language learning among others”. Similar to compensatory strategies, positive emotions may lead to more beneficial FL learning in late adulthood which is directly linked to the concept of positive ageing (cf. Grotek & Kiliańska-Przybyło, 2012).

### *Positive ageing*

Positive emotions in late adulthood are directly associated with *positive ageing* (e.g., Hill & Smith, 2015). Importantly, this concept stems from *positive psychology* whose aim, as acknowledged by Seligman and Csikszentmihalyi (2000, p. 5), is “to begin to catalyze a change in the focus of psychology from preoccupation only with repairing the worst things in life to also building positive qualities”. Thus, the distinctive characteristic of this type of psychology is to concentrate on positive features of human functioning (Piasecka, 2016).

*Positive psychology* was founded on three pillars, such as positive experiences including positive emotions, positive character traits and positive institutions (Seligman and Csikszentmihalyi, 2000). The authors believe that an individual ought to value subjective experiences, such as well-being, contentment and satisfaction (in the past), hope and optimism (for the future), as well as flow and happiness (in the present). Positive personality traits are especially strengths and virtues, such as flexibility, self-control, interpersonal skills and wisdom whereas school, family or community may serve as supportive and positive institutions (Peterson & Seligman, 2004).

*Positive ageing* as such is based on the assumption that older adults are capable of experiencing positive emotions and experiences even though they are faced with age-related declines (Crăciun, 2019). Gergen and Gergen (2001) have proposed that positive ageing involves:

1. *relational resources* – supportive family and friends, conversation partners and mediated resources;
2. *physical well-being* – optimal brain and body functioning;
3. *positive mental states* – the sense of well-being, happiness, and optimism;
4. *engaging activity* – active participation in mental, as well as physical tasks.

In principle, older adults age positively when they are able to be psychologically flexible, and they are likely to react to physical and mental changes in an adaptive manner generating optimistic responses to age-related deteriorations (Hill, 2011). Likewise, they attempt to make relevant lifestyle decisions which direct their thoughts and views on the bright side of life rather than potential difficulties characteristic to later life (Zadworna & Finogenow, 2012). Hill and Smith (2015, p. 18) note that people at an advanced age should preserve well-being and happiness in the presence of reduced function which basically “means not only dealing with issues as they arise but also accepting unavoidable loss”.

Another key thing to remember is the fact that learning as such is recognised as a positive ageing strategy as it may both bring valuable benefits at the individual level, and boost the older generation’s productivity at the social level (cf. Konieczna-Woźniak, 2013; Szarota, 2019). This is especially true in the case of FLL in late adulthood because, as previously discussed, it provides space for fighting against cognitive deterioration, sustaining general well-being, and achieving a successful quality of life (e.g., Pfenninger & Singleton, 2019). It may be assumed that positive ageing as a direct extension of the positive psychology movement might be a far rewarding experience when the focus of FL study is targeted towards seniors’ linguistic accomplishments and positive emotions (cf. MacIntyre, 2016).

Learning a FL as a social and positively demanding activity promotes interaction and integration that, in turn, lead to enhancing overall well-being and self-esteem (e.g., Pfenninger & Polz, 2018). Creating a supportive classroom environment is of relevance since it serves a motivational purpose encouraging not only regular attendance, but also facilitating seniors’ readiness to active participation (e.g., Ramírez Gómez, 2019).

In essence, giving a high priority to success and positivity in the case of older adults might exert a great influence on FLL in senior years. Learning a foreign language as a strategy of successful and positive ageing may generate interest in self-realisation, build self-esteem, and promote a more optimistic image of the process of ageing. Also, Niżegorodcew (2018, p. 174) underscores that “the reformulation of the concept of success” in FLL is needed, and small linguistic successes should be viewed as the driving factors that have the potential to broaden and enhance active involvement in language classes.

### ***Summary***

It may be concluded at this point that learning a FL in late adulthood is significant as it might boost older adults’ self-confidence, self-satisfaction, and self-achievement. In order to

enhance seniors' well-being and self-perceptions, both a positive and safe classroom environment, as well as a professional and knowledgeable teacher appear to be of unquestionable relevance. Instructors' awareness of their senior learners' needs and potential age-related limitations are also of great value when designing language courses tailored for this cohort. Importantly, educators should pay due attention to promoting third agers' autonomy by including them in planning a syllabus.

What should not be neglected is older students' intrinsic motivation which is primarily related to developing communicative skills in class. In this regard, a mindful teacher should provide learners with communicative opportunities which enable them to speak a FL in various types of interaction during classes. This approach might be of a beneficial impact to seniors' in-class WTC as speaking in the classroom context is a prerequisite for authentic communication in natural settings (McIntyre et al., 1998).

## CHAPTER THREE

### WILLINGNESS TO COMMUNICATE (WTC) IN THE SECOND LANGUAGE

As discussed in Chapter 2, senior learners give high priority to developing their speaking skills in the classroom context as they wish to be prepared to participate in authentic communication with foreigners in real-life interactions (cf. Derenowski, 2021). Therefore, the purpose of this chapter is to introduce the concept of willingness to communicate (WTC) which seems to be the very first step before actual communication in an L2<sup>3</sup> (MacIntyre et al., 1998). Chapter Three presents the original heuristic model of L2 WTC, and it indicates the importance of its cultural perspective. Also, Chapter Three overviews the results of early studies of L2 WTC. Importantly, a shift from the quantitative approach to a dynamic qualitative turn in WTC is elucidated. Results of numerous studies also shows the fundamental situational variables that affect L2 WTC during FL classes. Finally, the empirical investigations of WTC with reference to motivation and foreign language enjoyment present the role of WTC in fostering positive emotions in the classroom context.

#### 1. The foundations of second language WTC

The notion of WTC originated with reference to the first language communication (McCrockey & Richmond, 1987). Its precursors were the studies by Burgoon (1976, p. 60) who presented the concept of an unwillingness to communicate, which is recognised as “a chronic tendency to avoid and/or devalue oral communication and to view the communication situation as relatively unrewarding”. Also, Mortensen, Arntson, and Lustig (1977, p. 146) investigated the “predisposition toward verbal behaviour” suggesting that various communicative circumstances offer an individual a fairly stable amount of communication. The third concept indirectly related to the L2 WTC was shyness as explored by McCroskey and Richmond (1982, p. 460) and understood as “the tendency to be timid, reserved, and most specifically, talk less”. Leary (1983) acknowledged that shyness known as “social anxiety” hinges heavily upon internally experience discomfort and externally observable experience.

---

<sup>3</sup> L2 WTC regards willingness to communicate in immersion contexts where L2 was subconsciously acquired (cf. Krashen, 1981). In the studies of WTC discussed in this chapter, an L2 is used interchangeably with a FL by various scholars (e.g., Eddy-U, 2015; Hashimoto, 2002; Yashima, 2002; Zarrinabadi, 2014) to both instructed foreign language learning and second language acquisition. The present author refers to WTC studies using the same pattern.

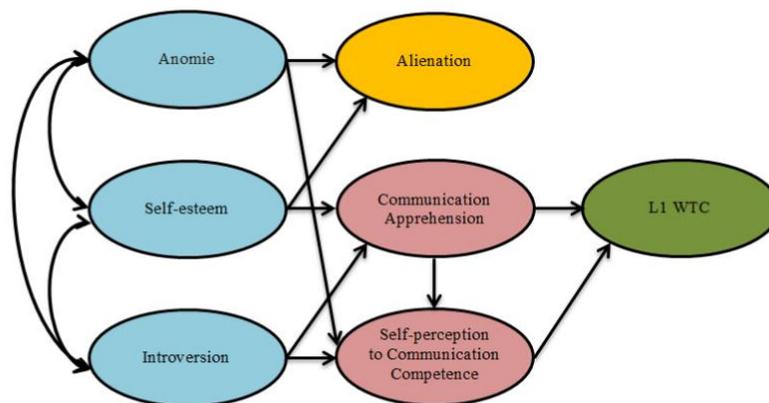
Much in a similar vein, McCroskey and Baer (1985, p. 4) developed WTC as a somewhat novel construct, and it was based on the assumption that “this is a personality-based, trait-like predisposition which is relatively consistent across a variety of communication contexts and types of receivers”. Following this perspective, WTC was considered to be the proclivity of an individual to initiate and involve in communication when given a free choice (McCroskey and Richmond, 1987). It was argued that WTC stemmed from two factors, namely lack of anxiety and perceived competence. The scholars posited that people are eager to communicate when they are not apprehensive and they perceive themselves to be competent speakers. McCroskey and Richmond (1991) further proposed that verbal communication is a volitional choice which is cognitively processed and an individual’s personality determines such cognition to a large degree. The researchers examined several antecedents of L1 WTC that influenced one’s level of engagement in communication, such as introversion/extraversion, communication apprehension, communication competence, self-esteem, and cultural divergence. They postulated that higher levels of WTC were correlated with extraversion, whereas introverts tended to manifest a lower degree of WTC. More importantly, self-perceived communicative competence had a great impact on WTC (McCroskey and Richmond, 1992). The authors acknowledged that an individual’s perceptions of communication skills played a more vital role in shaping WTC than actual competence. It also turned out that individuals who possessed low self-esteem were less likely to participate actively in communication, and they avoided situations that might threaten their self-concept. It may be assumed that self-esteem has a great influence on other communication variables like communication apprehension and perceived competence which shape an individual’s eagerness to communicate (Gałajda, 2017). McCroskey and Richmond (1991) also highlighted the interdependence between WTC and communication apprehension demonstrating a predictable result which indicated that when the level of apprehension was higher, one’s WTC was reduced. As regards cultural diversity, communication norms were found to be culture-bound, and thus various communication patterns were adapted into different cultural settings (McCroskey & Richmond, 1987). When the culture of the native language and the target language are divergent, an adaptation of communication patterns seemed to be complex and difficult (McCroskey & Richmond, 1990). It was surmised that for most of the countries (the USA, Sweden, Austrian, Micronesia), public speaking drew the least WTC whereas talking in a dyad drew the most. Micronesians demonstrated the highest communication apprehension and Puerto Ricans the lowest. Also, participants from the USA reported the highest levels of WTC, while the Micronesians’ WTC

was the lowest. Overall, the findings confirmed that different countries and cultures varied considerably in communication orientations (McCroskey & Richmond, 1990).

At this point, the breakthrough research conducted by MacIntyre (1994) needs to be mentioned. This study, mainly aimed to scrutinise the effects of the antecedents identified by Burgoon (1976), such as anomie, alienation, self-esteem and communication anxiety. Also, one additional variable, namely perceived competence, as proposed by McCroskey (1992) was added. Using path analysis, MacIntyre’s (1994) model indicated that self-perceived competence and communication apprehension had a direct influence on the L1 WTC while anomie, self-esteem and introversion only indirectly affected the L1 WTC through the first two factors, and no link between alienation and the L1 WTC was reported.

## Figure 2

*MacIntyre’s (1994) model of the L1 WTC using personality-based variables*



*Note.* This figure depicts MacIntyre’s (1994) model of the L1 WTC using personality-based variables. Adapted from, “Variables underlying willingness to communicate: A casual analysis, Communication” by P. D. MacIntyre, 1994, *Communication Research Reports* 11(2), 135–142.

MacIntyre (1994) remarked that perceived competence is a combination of communication apprehension and introversion. Introverts are prone to avoid social interactions and opportunities to develop their oral skills (MacIntyre, 1994). Apprehensive individuals may consider themselves to be less competent due to difficulties in past communicative experiences which results in the feeling of incompetence and fear of active engagement (McCroskey & McCroskey, 1988). Communication apprehension, on the other hand, is a combination of introversion and low self-esteem (MacIntyre, 1994). Therefore, a person with the lowest levels of communication apprehension would be the extravert who

feels high self-regard, while an introvert with low self-esteem would show the highest levels of communication apprehension. Also, when an individual becomes anxious about communicating or he or she feels less competent, WTC is hampered. By contrast, WTC is facilitated when an increase of perceived competence and a reduction in apprehension occurs.

MacIntyre's (1994) study was crucial in two aspects, namely it both determined the relationship between communication apprehension and perceived communication competence, and it also initiated empirical investigations exploring directional and casual relationships among factors using a path analysis which had a strong effect on shaping subsequent empirical L2 WTC research.

MacIntyre and Charos (1996) further applied the concept of WTC in the L2 context, and by means of path analysis they conducted a pioneering study using MacIntyre's (1994) model and Gardner's (1985) socio-educational model of language learning. The authors examined the influence Goldberg's (1992) taxonomy of global personality traits (i.e., extraversion, agreeableness, conscientiousness, emotional stability, and intellect) on the frequency of using the L2 in daily interactions, and they determined relationships between perceived competence, L2 anxiety and the opportunity to contact with target language speakers and the L2 WTC. It turned out that the WTC was directly affected by the agreeableness trait and indirect paths from extroversion and intellect were indicated. MacIntyre and Charos (1996) confirmed their hypothesis that the L2 readiness to communicate and the L2 motivation had a strong effect on students' active involvement in L2 communication. Likewise, the learners who manifested a greater motivation for language learning use the target language more frequently. Perceived competence directly impacted the L2 WTC, and individuals who considered to have the ability to interact at an oral level – regardless of one's actual proficiency – were more eager to participate in L2 conversations (MacIntyre & Charos, 1996). Also, language anxiety exerted a direct influence on the L2 WTC, and thus the researchers posited that the intention to communicate or the L2 WTC is shaped “by a combination of the student's perception of his or her second language proficiency, the opportunity to use the language, and a lack of apprehension about speaking” (MacIntyre & Charos, 1996, p. 17). Overall, the scholars' hybrid model of the L2 WTC plays an essential role in expanding the WTC notion from L1 communication to L2 learning.

## 2. The heuristic model of second language WTC

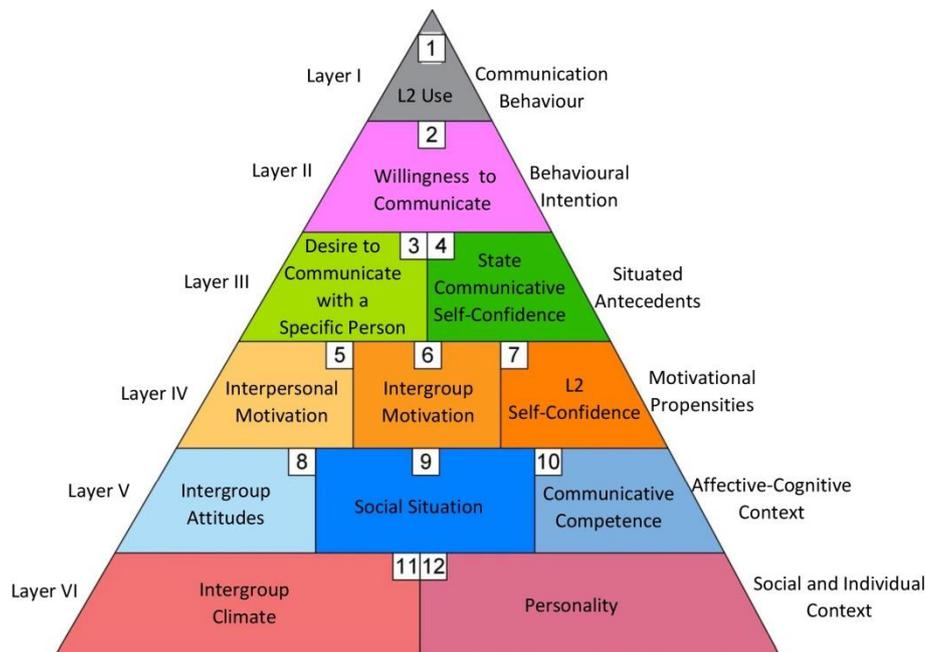
The theory of the L2 WTC was proposed by MacIntyre, et al. (1998). The authors formulated a pyramid-shaped model that illustrates the variables affecting the eagerness to communicate in the L2. This heuristic model was conceptualised at dual levels, namely as personality and situation-based factors. Much prominence was given to a state of “readiness” rather than an innate “tendency” to engage in L2 communication (MacIntyre et al., 1998, p. 547). MacIntyre et al. (1998) made a distinction between transient and enduring influences, and they posit that:

The enduring influences (e.g., intergroup relations, learner personality, etc.) represent stable, long-term properties of the environment or person that would apply to almost any situation. The situational influences (e.g., desire to speak to a specific person, knowledge of the topic, etc.) are seen as more transient and dependent on the specific context in which a person functions at a given time. (p. 546)

The heuristic model of the L2 WTC (Figure 3) comprises of six categories of variables that are referred to as “layers of the model” (MacIntyre et al., 1998, p. 547). The multi-layered pyramid involves “constructs commonly employed in the L2 literature according to a proximal-distal continuum that captures the dimensions of time with a distinct intergroup flavour” (MacIntyre, 2007, p. 567). As pointed out by MacIntyre et al. (1998), the first three layers (I, II, III) depict situation-specific influences on the L2 WTC at a given moment in time, whereas the latter three layers (IV, V, VI) portray enduring influences on the L2 communication process. The structure of the model (moving from top to the bottom) indicates more adjacent, situational factors exerting a potential impact on engaging in L2 communicative interactions to more distal, stable influences on L2 communication situations. As aptly stated by MacIntyre (2012, p. 16), the top of the pyramid is “a decision point” which shapes the student’s behaviour, and where the learner “must decide either to act, or not to speak up at all”.

**Figure 3**

*MacIntyre et al.'s (1998) heuristic model of variables influencing WTC*



*Note.* This figure illustrates MacIntyre et al.'s (1998) heuristic model of variables influencing the L2 WTC. Adapted from “Conceptualizing willingness to communicate in a L2: A situational model of L2 confidence and affiliation” by P. D. MacIntyre, R. Clément, Z. Dörnyei, & K. A. Noels, 1998, *The Modern Language Journal*, 82, 545–562.

Layer I (Communication Behaviour) is actual language use, which as outlined by MacIntyre et al. (1998), involves a variety of communication behaviours and activities, such as speaking up in class, watching L2 TV or communicating at work. The scholars acknowledge that the ultimate objective of the process of L2 learning ought to “engender in language students the willingness to seek out communication opportunities and the willingness actually to communicate in them” (MacIntyre et al., 1998, p. 547). The eagerness to communicate seems to be of unquestionable relevance for L2 education, and MacIntyre (2020) stresses that a choice whether to enter into communication or not may be one of the most crucial decisions an individual can make in the context of second language acquisition.

Layer II (Behaviour Intention) is viewed as the final step before actual L2 communicative interaction (MacIntyre, et. al, 2001). This layer includes only one component, namely L2 WTC which is defined as “a readiness to enter into discourse at a particular time with a specific person or persons, using a L2” (MacIntyre et al., 1998, p. 547). When a learner has a strong desire to communicate in a FL, he or she is likely to seek communicative opportunities. This willingness to become actively involved in L2 communication may be

expressed, for instance, by raising the student's hand in order to indicate his or her readiness to answer the teacher's question. In practice, the authors of the heuristic model underscore that the L2 WTC is the ultimate step which aims at preparing the language students for communicative interactions as "it represents the probability that a learner will use the language in authentic interaction with another individual, given the opportunity" (MacIntyre et al., 1998, p. 558).

The most proximal determinants of the L2 WTC located in Layer III (Situated Antecedents) include two components: desire to communicate with a specific person and state communicative self-confidence (MacIntyre et al., 1998). The former immediate precursor of WTC is associated with affiliation and control motives. *Affiliation* is deemed to be the intention to interact and socialise with people who an individual finds similar, familiar, or attractive while *the control motive* refers to a task-related situation where one seems to influence others' behaviour (Peng, 2014). Affiliation as such is conditioned by L2 self-confidence of interlocutors as the individual who feels more secure when speaking an L2 will be more actively engaged in a communication situation (Gałajda, 2017).

When it comes to the second component of Layer III, state communicative self-confidence, it was identified on the basis of general self-confidence which involves two prominent constructs: perceived competence and a lack of anxiety (Clément, 1986). The pyramid model was created at the time when these two notions constituted relatively stable characteristics. McIntyre and his associates (1998, p. 549) made a distinction between the trait-like self-confidence and state self-confidence defined as "a momentary feeling of confidence which may be transient within a given situation". Similarly, *state communicative self-confidence* was reported to have two subcomponents, such as state anxiety and state perceived competence. *State anxiety* is related to emotional reaction, a feeling of tension and apprehension which fluctuates owing to different variables, and its level may be increased by previous unpleasant experiences, intergroup tension, fear of assimilation, and so forth (MacIntyre et al., 1998). The other components, *state perceived competence* signifies the feeling that an individual is capable of communicating effectively at a particular moment (MacIntyre et al., 1998). It may be increased in a situation that a person has encountered previously provided that he or she has gained experience and adequate linguistic knowledge. By contrast, state competence is reduced when one represents a low level of language skills, and he or she is not able to compensate for them in other ways. It may be concluded that Layer III conveys the hypothesis that an eagerness to communicate and state confidence experienced at a certain moment directly impacts the L2 WTC at a specific time (Peng, 2014).

As far as Layer IV (Motivational Propensities) is concerned, it denotes the enduring influences on L2 communication situations. This layer also refers to motivation and it is comprised of three factors: interpersonal motivation, intergroup motivation and self-confidence (MacIntyre et al., 1998). *Interpersonal motivation* is related to “social roles a speaker plays within a group”, and this type of motivation concerns both affiliation and control (Mystkowska-Wiertelak & Pawlak, 2017). The authors of the original model suggest that “control instigates communication behaviour that aims at limiting the cognitive, affective and behavioural freedom of the communicators”, and it is mostly initiated by the more powerful party (e.g., when a teacher controls his or her students’ behaviour while doing an exercise or providing corrective feedback) (MacIntyre et al., 1998, p. 550). Societal roles that an individual plays are of utmost importance as they shape communication patterns, and it ought to be viewed as a personal, stable characteristic of each interlocutor. In the context of interpersonal motivation, affiliation stems from an individual’s desire to establish a relationship with the interlocutor. It may hinge upon one’s personal profile, but it might also happen in task-oriented situations when, for instance, students’ friendships are created because they are given opportunities to discuss personal topics during language classes (cf. Eddy-U, 2015; Riasati & Rahimi, 2018).

*Intergroup motivation*, on the other hand, is strictly related to belonging to a certain ethnic community within a multi-ethnic society. MacIntyre et al. (1998) also mention control and affiliation as its basic components. Control is yet again associated with power relationships between the groups, and it occurs when an interlocutor wishes to maintain or reinforce social positions. Affiliation is prompted by “the desire to establish or maintain a rapport with a member of another group precisely because of different group memberships” (1998, p. 551). This motive is linked to Gardner’s (1985) notion of “integrativeness” which is an element of his socio-educational model of motivation. This model is based on the assumption that a willingness to affiliate with target language speakers plays a powerful role in language learning and communication behaviours.

As regards the third component of Layer IV, *self-confidence*, it captures the relative stable trait confidence which contacts with the situation-specific confidence illustrated in Layer III. *L2 self-confidence* as such is identified as “the overall belief in being able to communicate in the L2 in an adaptive and efficient manner” (MacIntyre et al., 1998, p. 551). It includes self-perceived competence and a lack of anxiety. The authors conclude that L2 self-confidence is primarily determined by communicative competence, communication and the interlocutor’s pattern of personality of variable, and control and

affiliation motives are of great help in choosing the specific people with whom an individual wished to speak.

Layer V (Affective-Cognitive Context) addresses factors that are less situation dependent and more individually based, and it comprises intergroup attitudes, social situation and communicative competence. As regards *intergroup attitudes*, they cover such constructs as intergrativeness (Gardner, 1985; Gardner & Lambert, 1972), fear of assimilation (Clément, 1986), and motivation to learn the L2. MacIntyre et al. (1998) underscore that *integrativeness* has a positive effect on the engagement, identification and affiliation with members of the L2 community whereas *fear of assimilation*, which is understood as one's fear of losing identification and involvement with the L1 community, may pose a threat and hinder communication in the second language. The scholars claim that intergrativeness and fear of assimilation are "opposing forces" that might have either a beneficial or detrimental impact on L2 communicative interactions (MacIntyre et al., 1998, p. 552). The third factor, *motivation to learn the L2*, may be affected by attitudes towards the L2. It has been argued that a positive attitude towards the L2 itself might encourage language learning and the fact that a student finds learning enjoyable and satisfying may stimulate intensive attempts to accept the process of learning which, in turn, improves communicative competence.

The next component of Layer V, Social Situation, is believed to be a composite category describing a social encounter in a particular setting, such as the participants, the setting, the purpose, the topic and the channel of communication (Brown & Fraser, 1979, as cited in MacIntyre et al., 1998). The most crucial factors concerning *the participants* are age, gender, social class and the relationships between the interlocutors. For L2 communication, however, one of the most significant aspects is certainly the L2 proficiency level of the speaker, and whether the interlocutor is a native speaker of the L2 or not (MacIntyre et al., 1998). It is claimed that a speaker with superior L2 proficiency takes into account his or her partner's limited proficiency and while negotiating meaning, he or she will simplify utterances in order to adapt to the interlocutor's competence. The setting, on the other hand, refers to the place and time of communication, and Biber (1994, as cited in MacIntyre et al., 1998) distinguishes six categories, such as business, workplace, education/academic, government/legal, religious, art/entertainment, and domestic/personal. The authors of the pyramid model also pay attention to a different division in terms of interpersonal communication which is said to happen generally within *three environments*, namely school, organisational and social environments (McCrockey & Richmond, 1991). The third variable, *the purpose*, is recognised as the aims or intentions of discourse which govern

participants' communication tasks. Likewise, there are four major categories: persuade (or sell), transfer information, entertain (or edify), and reveal self (Bober, 1994, as cited in MacIntyre et al., 1998). As far as *topic* is concerned, topical knowledge and the familiarity with a particular register may foster an individual's linguistic self-confidence (cf. Cao and Philp, 2006). When a speaker possesses content knowledge, he or she may manage to overcome linguistic limitations and become more open to speaking. The last factor, *the channel of communication*, can be divided into two broad categories: speaking and writing, and each of them have subcategories (e.g., oral or aural) which may boost or hamper a student's eagerness to use the L2.

The last component included in Layer V, Communicative Competence, is viewed as the knowledge of how to use a linguistic system in certain pragmatic situations. MacIntyre and his colleagues (1998) adapted Celce, Dörnyei, and Thurrell's (1995) model in which communicative competence has five constituent competencies: linguistic, discourse, actional, sociocultural, and strategic. As elucidated by MacIntyre et al. (1998, p. 554), *linguistic competence* is understood as the knowledge of basic elements of communication (e.g., lexical resources, the phonological and orthographic systems) and is necessary to communicate on an oral or written level, and thus the improvement of this competence is claimed to be "a precondition of WTC". *Discourse competence* which is the ability to select, sequence, and arrange words, structures and sentences appears to be indispensable as the familiar of the discourse plays a pivotal role in the actual act of communication. *Actional competence* is related to key units known as "speech acts" which are utterances that a speaker uses to carry out actions (e.g., making a request). This competence is also identified as "pragmalinguistic competence" as it is necessary to accomplish a communicative goal (Thomas, 1983, as cited in MacIntyre et al., 1998). *Sociocultural competence* also known as "sociopragmatic competence" means the knowledge of how to express oneself in an appropriate way within a social and culture context taking into account various factors (e.g., cultural factors or nonverbal communicative factors). The last competence, *strategic competence*, is the knowledge of communication strategies which, as noted by MacIntyre et al. (1998, p. 554) are perceived to be "verbal and nonverbal devices that allow a speaker to compensate for deficiencies in any of other underlying competencies". Even a primary level of strategic competence may be of great help in L2 communication, and it is assumed that it might contribute to shaping one's linguistic self-confidence. What seems critical at this point is that communicative competence and its objective development is not as vital as a learner's

perception of it since its subjective evaluation may facilitate or hamper a readiness to communicate in the L2 (MacIntyre et al., 1998).

The last bottom layer of the pyramid involving Layer VI (Social and Individual Context) consists of two antecedents: intergroup climate and personality. *Intergroup climate* is identified by the structural characteristics and their perceptual and affective correlates (MacIntyre et al., 1998). *Structural characteristics* concern “the vitality relationships between L1 and L2 communities as well as the values and attitudes that these groups represent and adhere to” (Mystkowska-Wiertelak & Pawlak, 2017, p. 8). The language of a group which represents high ethnolinguistic vitality will attract more speakers owing to its greater prestige (MacIntyre et al., 1998). When it comes to perceptual and affective correlates, MacIntyre et al. (1998) concentrate on the role of attitudes and values in the context of the L2 community, and motives to adapt and reduce social distance between ethnic groups. In a general sense, a positive attitude toward a certain ethnic group will result in positive communicative interactions with that group while a negative attitude will lead to a fewer number of potential interactions. Negative attitudes may derive from illogical and unjustifiable information about members of a particular group (prejudice) or overall actions towards a person that are determined and based on the target’s group membership (discrimination) (MacIntyre et al., 1998). It comes as no surprise that those negative opinions about the L2 community have a detrimental effect on the L2 WTC.

The last factor located in Layer IV, Personality, is presented in terms of authoritarianism and ethnocentrism. The former refers to an individual who is submissive to authority and aggressive towards those who one thinks are inferior or different whereas the latter is based on the assumption that one’s own ethnic group is superior to others. MacIntyre and his associates (1998) also include Goldberg’s (1993) the Big Five (extraversion, agreeableness, conscientiousness, emotional stability and openness to new experiences). As previously elucidated, these five basic personality traits are likely to shape L2 motivation and the WTC (MacIntyre & Charos, 1996). What should be noted at this point is that both intergroup climate and personality set the stage for communication in the second language, and they are engaged in determining a student’s L2 WTC at a given moment.

## **2.1. WTC and its cultural perspective**

Peng (2014) remarks that MacIntyre et al.'s (1998) model highlights the significance of inter-ethnic relationships in shaping attitudes and motivation (i.e., intergroup motivation, attitudes, and climate). However, there are societies where multi-ethnic groups do not exist, and English is basically learnt as a mandatory school subject (Wen & Clément, 2003). This may be exemplified by Chinese students who are exam-oriented, and they “may not readily develop the attitudes of integrativeness or fear of assimilation toward the English-speaking community” (Peng, 2014, p. 16). Therefore, cultural discrepancies appear to play a profound role in social interaction, and intergroup differences have a strong influence when members of various cultures wish to communicate with each other (MacIntyre, 2007). McCroskey and Richmond (1987, p. 74) admit that culturally divergent people may be compared to “people with deficient communication skills” as they have excellent communication skills for one culture but not for another. They are believed to be incapable to communicate effectively in a different culture, and thus they tend to be much less active during L2 communication which, in turn, has a negative impact on their WTC.

Wen and Clément (2003) argue that MacIntyre et al.'s (1998) model was based on Western countries. As opposed to Western students, learners in China tend to focus on the pragmatic need to pass examinations, and much prominence is given to memorisation, repetition, and imitation (Simpson, 2008). Students are to be attentive and disciplined, and their main objective in class is to master the knowledge transmitted by the language instructor as “learning is a serious enterprise involving effort but not entertainment” (Peng, 2014, p. 30). Wen and Clément (2003) stress that the Chinese culture is principally built on Confucianism. This philosophical concept is based on the assumption that “cultural values are the dominant force shaping the individual's perceptions and ways of learning, which are likewise manifested in L2 communication” (Wen & Clément, 2003, p.18). The authors claim that Chinese learners' unwillingness to communicate in public is not so associated with language-dependent factors specific to learning English as to the Chinese culture, which rests on other-directed self and submissive ways of learning. What this essentially means is that Chinese society respects collectivism that contributes to creating “the Chinese self and to one's perception of the relationships between self and others or the outside world” (Wen & Clément, 2003, pp. 19-20). Chinese people are sensitive to what others think of them, and they avoid situations which might lead to losing face in public as this could bring disgrace and humiliation. Speaking up in class may pose a threat of being ridiculed or criticised as

a “show-off” (Peng & Woodrow, 2010). Therefore, Chinese learners will be eager to become involved in L2 communication when they feel comfortable, and “they will not run the risk of losing face in the presence of significant others” (Wen & Clément, 2003, p. 25). Also, the other-directedness is characterised by a sense of belonging to a group. In the traditional Chinese culture, individuals are very cautious in their contacts with strangers, and they tend to establish personal relationships with ingroup members. This approach may surely affect Chinese students’ L2 WTC as they seem to feel insecure to interact with the outgroup culture, and a lack of social interaction negatively impacts the L2 learning process (Wen & Clément, 2003). Additionally, Chinese students are submissive to authority, and silence is an indicator of respect for the teacher who plays an authoritative role in educational settings (Liu, 2002). The language teacher is viewed as an expert and a model of the target language, as well as the source of knowledge (Wen & Clément, 2003).

Wen and Clément (2003) made a distinction between desire and willingness to communicate in their conceptualisation of the L2 WTC. The scholars posit that desire is related to “a deliberate choice or preference,” whereas willingness underscores “the readiness to act”, and they believe that the desire to speak does not necessarily lead to a readiness to speak (Wen & Clément 2003, p. 25). A language learner may feel motivated to speak, but he or she may still stay quiet or reticent (cf. Wood, 2012). MacIntyre et al.’s (1998) model was also supplemented with variables moderating the relationship between the desire to communicate and Chinese learners’ of English WTC in classroom settings. Wen and Clément’s (2003) conceptualisation include *societal context* consisting of group cohesiveness and teacher support, *personality factors*, such as risk-taking and tolerance of ambiguity, *motivational orientations* including affiliation and task orientation, as well as *affective perceptions* comprising inhibited monitoring and a positive expectation of evaluations. These factors are discussed in a later part of this chapter.

### **3. Early research on second language WTC**

The L2 WTC may be mainly observed in two settings, that is in an educational context in class, and in real-life interactions outside the classroom environment. It is worthwhile to note, however, that the early research into the L2 WTC made no distinction between in-class and out-of-class WTC (Baran-Łucarz, 2015). Also, the researchers devised data collection instruments that “portrayed WTC as a trait feature or a relatively stable context-related variable” (Mystkowska-Wiertelak & Pawlak, 2017, p. 21).

### **3.1. Tools for measuring learners' WTC**

McCroskey (1992) designed a scale which was originally developed by McCroskey and Baer (1985) with reference to the first language. The scholars adapted this instrument to L2 communication, and it aimed to measure an individual's predisposition toward approaching or avoiding the initiation of communication when completely free to do so. Subjects were asked to rate the extent to which they are willing to communicate with particular interlocutors in certain contexts (from 0% – never to 100% – always). This probability-estimate scale in a self-report format, except for a total score, provides subscores based on the types of receivers: strangers, acquaintances, friends, and four other subscores depending on types of communication contexts, namely public, meeting, group, and dyad. The tool comprising such items as “Talk with a police officer” or “Talk with a friend while standing in line” which indicated the context that is grounded in everyday communication outside the classroom. Also, McCroskey and Richmond (1987) conceptualised a probability-estimate scale which was adapted by Asker (1998). This instrument sought Hong Kong learners' predisposition to approach or avoid L2 communication. Asker's (1998) tool, however, produced a lot of confusion as the students were to “imagine” their communicative behaviours in situations they did not typically encounter (e.g., talking with a garbage collector). The usefulness of this instrument was questioned by Cao and Philp (2006) who admitted that it was generic, and it was not specifically designed for instructional settings.

As previously stated, one of the most influential studies was the research conducted by MacIntyre and Charos (1996). The authors scrutinised the relationships within and between MacIntyre's (1994) L1 WTC and Gardner's (1985) socio-educational model in the Canadian context. The data collected by means of self-reports measured the Big-Five personality traits, the frequency of communication, WTC, perceived competence, attitudes, motivation, and the amount of French used in professional and domestic settings. The indirect role of global personality traits in L2 communication was found, and L2 communication frequency seemed to be associated with a readiness to engage in L2 communication, motivation for language learning, the perception of competence, as well as the opportunity for contact with L2 users (MacIntyre & Charos, 1996).

The instrument used by MacIntyre and Charos (1996) was adapted by Hashimoto (2002) who wished to investigate the relationships among L2 learning and L2 communication variables using the socio-educational model in the Japanese ESL classroom context. The objective of the study was also to explore the link between the learners' frequency of in-class

communication and motivation, perceived competence, as well as communication apprehension. The author used 10 items from MacIntyre and Charos' (1996) research. In order to measure the effect of language learning, a short version of the Attitude/Motivation Test Battery (Gardner & MacIntyre, 1993, as cited in Hashimoto, 2002, p. 14) was employed and modified to refer to attitudes toward learning English and English speakers. Also, communication-related variables were adapted, and they included the WTC in English, perceived competence, frequency of communication, and communication anxiety. Hashimoto (2002) found a significant path leading from perceived competence toward motivation. It was also emphasised that MacIntyre and Charos (1996) indicated a path from perceived competence to L2 communication frequency which turned out to be insignificant with the Japanese students even though it had been hypothesised that higher perceived competence would lead to more frequent L2 use in the classroom environment.

In a similar vein, Yashima (2002) employed the tool used by MacIntyre and Charos (1996), and the WTC scale devised by McCroskey (1992). The author examined the relationship between FL learning and communication variables using MacIntyre's (1994) model and Gardner's (1985) socio-educational model as a framework. Owing to the scarcity of the contact with native speakers in the Japanese instruction setting, Yashima (2002) excluded the frequency of communication from her research. Structural equation modelling was used to test the hypothesised model, and the results showed that a learner's motivation affected communicative self-confidence that led to an eagerness to communicate in English. International posture which included – among others – “interest in foreign and international affairs, willingness to go overseas to stay or work, or readiness to interact with intercultural partners” influenced motivation which, in turn, predicted proficiency and L2 communication confidence (Yashima, 2002, p. 57). Yashima (2002) concluded that both international posture and confidence in L2 appeared to be pertinent for promoting L2 learning and communication in the Japanese culture. Therefore, in order to facilitate learners' WTC in a L2, EFL lessons ought to be designed to draw their attention to different cultures and international affairs as this approach may reduce anxiety and build their confidence in L2 communication.

It is vital to mention at this point MacIntyre et al.'s (2001) study in which the scholars examined the readiness to communicate in all four language skills in the immersion context. The researchers used the same scale for both WTC inside and outside the classroom, and they made no reference to interaction with people of different professions, but rather L2 communication with “strangers” (e.g., take directions from a French speaker) or “friends” (e.g., write a letter to a friend). This tool, however, consisted of items which are influenced by

the L1 WTC, and they described situations that less frequently occur in a language classroom (MacIntyre et al., 2001). As pointed out by Peng (2013), the WTC inside and outside the classroom needs to be measured in a different way. The author acknowledges that the WTC requires situation-specific items (e.g., when you have a group discussion in an English class) whereas WTC out-of-class ought to include daily situations in natural settings (e.g., when sitting next to a foreigner on a train).

A significant modification was proposed by Weaver (2005) who designed a scale that aimed at investigating Japanese learners' eagerness to speak in typical classroom situations. The scholar selected situations that both students and teachers reported to occur frequently or they had the potential to happen during language classes. Using the Rasch model, Weaver (2005) developed a scale that comprises statements related to readiness to speak and to write in a variety of activities and situations typical for the educational context, such as role plays (e.g., do a role-play in English at your desk), interviews (e.g., interview someone in English asking questions from the textbook), and writing tasks (e.g., write a self-introduction in English). Weaver's (2005) tool was criticised as some items contained the unspecified word "someone" which could be interpreted as "the teacher" or "classmates", and the lack of clear reference might have a strong impact on the measurement of the L2 WTC (cf. Cao, 2011). Noteworthy is the fact that in spite of the ambiguous wording, Weaver's (2005) instrument is considered to be "a promising tool" in the L2 classroom settings (Peng, 2014, p. 17).

Weaver's (2005) tool was adapted by Peng and Woodrow (2010) who supplemented it with McCroskey and Baer's (1985) scale with a view of creating a new instrument based on WTC in meaning-focused and form-focused tasks. This scale was intended to gauge Chinese students' readiness to communicate in a variety of exercises between three kinds of interlocutors, such as the teacher (e.g., "I am willing to ask the teacher in English to repeat what he/she just said in English because I didn't understand"), a peer (e.g., "I am willing to do a role play at my desk, with a peer"), and a group of classmates (e.g., "I am willing to ask my group mates in English the meaning of word I do not know").

What should not be ignored at this juncture is that early research on L2 WTC concentrated on a trait-like predisposition, and the scholars gave much prominence to devising scales that could measure that feature (cf. Zhang et al., 2018). However, as Mystkowska-Wiertelak and Pawlak (2017, p. 21) remark that these tools "fail to capture the more subtle influences that the interplay of antecedents exerts on building someone's willingness to interact".

#### **4. A dynamic turn in WTC research**

Therefore, as the application of quantitative methods using questionnaires was no longer effective and fruitful, the scholars have started to rely on two different methodological orientations, namely the qualitative approach and mixed methods approach which intend to address the situational and dynamic nature of WTC (e.g., Zarrinabadi & Tanbakooei, 2016).

##### **4.1. The qualitative approach towards WTC research**

Qualitative methods have gained in popularity because they were designed to explore and describe a particular context of a study, identify different forms of interactions, as well as an individual's behaviours, opinions, experiences, and so forth (e.g., MacIntyre & Legatto, 2011, Mystkowska-Wiertelak & Pawlak, 2014). This approach allowed a “detailed analysis of [an] individual's tendency to speak in a specific situation and shed more light on the distal and proximal influences on WTC” (Zarrinabadi & Tanbakooei, 2016, p. 36). Qualitative data collection instruments, among others, include interview, observations, diary, and focused essays (cf. Wilczyńska & Michońska-Stadnik, 2010).

The following subsections presents the major qualitative studies on L2 WTC.

###### **4.1.1. Kang's (2005) psychological antecedents to situational WTC**

One of the first qualitative studies was carried out by Kang (2005). The researcher utilised observation, a semi-structured interview to scrutinise WTC in English among four Korean learners taking voluntary part in a conversation programme with native speakers of English. The semi-structured interview was aimed at gathering demographic information, as well as students' experiences in learning and using English, their viewpoints regarding interaction with native and non-native speakers of English, and variables impacting their WTC. The subjects' conversations were observed and audio- and videotaped, and later, the scholar used stimulated recall to elicit the students' thoughts and reflections about factors that had affected their L2 communication.

It turned out that the participants' situational WTC in English was shaped by three psychological antecedents, namely “excitement” known as a feeling of joy about speaking English, “security” recognised as “feeling safe from the fears” that non-native speakers are likely to have while communicating in the L2, and “responsibility” referred to as a feeling of duty to pass and comprehend a message (Kang, 2005, p. 282-285). Importantly, each of three

psychological conditions was created through situational factors, such as topic, interlocutor, and conversational context (Table 2).

**Table 2**

*Kang's (2005) situational factors influencing situational WTC*

<b>Situational variables affecting situational WTC</b>		
<b>TOPIC</b>	<b>INTERLOCUTOR</b>	<b>CONVERSATIONAL CONTEXT (DURING CONVERSATION)</b>
<ul style="list-style-type: none"> <li>▪ interest</li> <li>▪ (relative) knowledge</li> <li>▪ personal experience</li> <li>▪ sensitivity pertaining to speaker's culture and country</li> <li>▪ prior experience discussing</li> </ul>	<ul style="list-style-type: none"> <li>▪ first language (native vs. non-native speakers, same as or different from speaker's)</li> <li>▪ knowledge about speaker's language proficiency</li> <li>▪ (relative) familiarity</li> <li>▪ number</li> <li>▪ interest/attitudes/responses</li> <li>▪ (relative) language proficiency between speaker and other non-native speakers</li> </ul>	<ul style="list-style-type: none"> <li>▪ stage in a conversation</li> <li>▪ when asked for additional information</li> <li>▪ when misunderstood</li> <li>▪ after making mistakes</li> </ul>

*Note.* This table indicates Kang's (2005) situational factors influencing situational WTC. Based on "Dynamic emergence of situational willingness to communicate in a second language" by S. J. Kang, 2005, *System* 33, 277–292.

As regards topic, background knowledge was found to play a key role in shaping WTC (Kang, 2005). The lack of topical knowledge resulted in insecurity and fear of comprehension problems. Interesting topics led to the learners' feeling of excitement, and they were controlled by prior experiences connected with discussing them. Similarly, when the participants were more knowledgeable about a certain topic, they seemed to be more responsive.

Kang (2005) pointed out that the security mainly appeared to rest on the interlocutors. The learners felt less secure when they had no knowledge about their partner's English proficiency as they felt fearful in terms of losing face by making mistakes. The relative familiarity among the interlocutors had a negative impact on security since a possibility of knowing each other could cause insecurity and feeling ashamed of their poor English-speaking skills. Also, the students' security tended to decrease when the number of people in a communicative task increased (Kang, 2005). However, the decrease in a number of interlocutors in a conversation enhanced a feeling of responsibility to be actively involved in

L2 communication. Likewise, the interlocutors might help to improve the students' conversation skills which resulted in a feeling of excitement. It is also substantial that the interlocutors' interest was expressed by their attention and their responses also had a positive effect on the students' excitement.

When it comes to the conversational context, the individual's sense of security hinged on the particular stage of the conversation (Kang, 2005). The students were most insecure and reluctant to speak in the beginning, and as the conversation evolved, insecurity alleviated. The sense of insecurity also occurred after experiencing difficulties in producing utterances. Excitement appeared when the learners were asked about additional information while talking as they knew they had been listened to. It is also crucial that the participants felt a responsibility to clarify misunderstandings during the conversation, and delivered a message correctly.

What is significant at this point is that Kang (2005) emphasised that the situational factors presented in Table 2 may be incomplete as the state of a student's WTC can be affected by a potential situational variable that might occur in a particular L2 communication.

#### **4.1.2. Cao's (2011) three dimensions underlying learners' WTC**

Another noteworthy study was conducted by Cao (2011). The author employed classroom observations, stimulated interview, and reflective journals to investigate six students from an advanced level EAP class, particularly pertaining to the perceptions of individual and environmental factors contributing to their WTC. The study lasted twenty weeks, and data collection involved classroom observation conducted each week. Additionally, each student was recorded during an observation session, and stimulated interviews with the participants were conducted after each observed class. The learners were also asked to keep a weekly journal of their readiness to communicate in class and outside the classroom.

The data indicated that the factors reported by the subjects might be categorised into three dimensions, such as environmental, individual, and linguistic (Cao, 2011). The environmental dimension was related to external factors that exerted an impact on the learners' WTC, and they included topic, task type, interlocutor, teacher, and class interactional pattern. The students felt reluctant to discuss the topic they were not interested in, and they admitted that background knowledge could substantially increase one's sense of security, leading to a higher level of WTC. Also, it turned out that the participants were likely

to prefer teamwork to teacher-fronted activities. They were more eager to talk with a partner who was more competent than them, and the one who could share a lot of ideas. When it comes to the teacher, he or she was viewed as a proficient interlocutor, and thus they enjoyed the teacher's involvement in group discussions (Cao, 2011). Likewise, the students were willing to ask questions and be active in class when they liked an instructor. The most anxiety-provoking tasks were those based on the whole class interaction owing to peer pressure, and a fear of giving incorrect answers. Pair work, on the other hand, was beneficial in terms of generating less competition in turn-taking.

As far as variables within the individual dimension are concerned, they are associated with one's internal psychological and affective factors, namely the perceived opportunity to communicate, self-confidence, personality, and emotion. As pointed out by Cao (2011), the students felt eager to talk when a suitable communicative opportunity arose, and they felt obliged to fill the gap when others were quiet. Personality seemed to either foster or hamper WTC as extroverted, quick-tempered, sociable, and flexible learners were more likely to be risk-takers in L2 communication. Also, the participants' readiness to speak was shaped by the state of self-confidence in a specific situation which tended to fluctuate at particular moments. For instance, it was boosted while interlocutors were becoming more familiar with each other over the course of time. Similarly, emotions played a powerful role in underpinning WTC. Cao (2011) mentioned a range of negative emotions (anxiety, boredom, frustration, embarrassment, and anger) that had a debilitating effect on WTC whereas positive ones (enjoyment and satisfaction) could significantly enhance a level of WTC.

Taking the last linguistic dimension into account, both language proficiency and reliance on the L1 were of great importance. Cao (2011) stressed that the lack of linguistic competence may impede communication in terms of comprehension and production. Speaking, based on receptive skills, tended to affect WTC and lead to boredom while a lack of lexical resources would inhibit oral L2 language production. Obviously, when the learners found it impossible to express themselves in English, they appeared to rely on the L1 to sustain communication. This reliance on the native language resulted in generating scarce target language production.

#### **4.1.3. The effect of the teacher on students' WTC in the study by Zarrinabadi (2014)**

Zarrinabadi (2014) also used a qualitative method to investigate the effect of the teacher on Iranian students' WTC. The data were collected by means of the focused essay

technique where the participants were to write about their conversation with their teacher, the place the conversation took place (classroom, university, etc.), and their feelings concerning the FFL experience.

The results indicated that more of the entries were linked to communication in classroom settings, and the most prominent factors shaping the learners' readiness to speak were the teacher's wait time, error correction, teacher support, and the teacher's decision on the topic (Zarrinabadi, 2014). The time given by an instructor for receiving the answer was an influential variable with regard to both the willingness and unwillingness to communicate in English, frequency of communication, and quality of speaking. The teacher's extended wait-time was viewed as patience while decreased time for reflection was likely to evoke embarrassment and led to a reluctance to communicate. Also, longer periods of wait-time could be recognised as an effective strategy to activate students who were prone to be hesitant about initiating an L2 oral interaction.

As regards error correction, it might reduce the individual's WTC when the teacher's feedback immediately followed the learner error. This situation generated a state of anxiety which could shy the students away from active involvement, as they may feel insecure and ashamed of making mistakes in future L2 communication. Delayed error correction, on the other hand, was reported to facilitate WTC as the individuals were allowed to keep the flow of communicative interaction and express their thoughts freely.

As pointed out by Zarrinabadi (2014), another pertinent factor affecting the WTC in English was the teacher's decision on the topic. The fact that the participants could select classroom discussion topics played a pivotal role in influencing an eagerness to speak the target language. Therefore, they chose topics with which they were familiar, knowledgeable, and interested in. As a result, they demonstrated not only higher classroom engagement, but the interesting and familiar topics had also a positive impact on WTC.

The last but not least factor identified in Zarrinabadi's (2014) research was teacher support. The respondents enjoyed short confirmatory phrases or smiling, as well as the teacher's ability to create a pleasant class that encouraged speaking English. The scholar acknowledged that teacher-related factors exert a substantial influence on readiness or the unwillingness to communicate and participate in communicative interaction in class. For this reason, due attention ought to be given to the educator's classroom management, teaching style, as well as the capability to be flexible in the language teaching and learning process (Zarrinabadi, 2014).

#### 4.1.4. Eddy-U's (2015) proposed task situated WTC model

Eddy-U (2015) scrutinised task-situated WTC in English among 25 university students in Makau (China). The author used semi-structured focus group interviews that were conducted entirely in English with the assistance of translation devices, and the participants could also help each other as needed. The students were asked about the specific motives for taking part or avoiding active engagement in four categories of group tasks (competitive games, non-competitive games, role plays, and group discussion).

The findings of the study indicated that the learners were encouraged to participate in communicative tasks by seven motivating themes (Table 3). Similarly, demotivating factors were consolidated into six themes (Table 3).

**Table 3**

*Eddy-U's (2015) framework of motivating and demotivating variables*

Motivating factors	Demotivating factors
<ul style="list-style-type: none"> <li>▪ interest</li> <li>▪ effective for L2 learning</li> <li>▪ good groupmates</li> <li>▪ social situation</li> <li>▪ personal vision</li> <li>▪ self-confidence</li> <li>▪ marks</li> </ul>	<ul style="list-style-type: none"> <li>▪ disinterest</li> <li>▪ ineffective for L2 learning</li> <li>▪ bad groupmates</li> <li>▪ bad classroom atmosphere</li> <li>▪ lack of personal vision</li> <li>▪ lack of confidence</li> </ul>

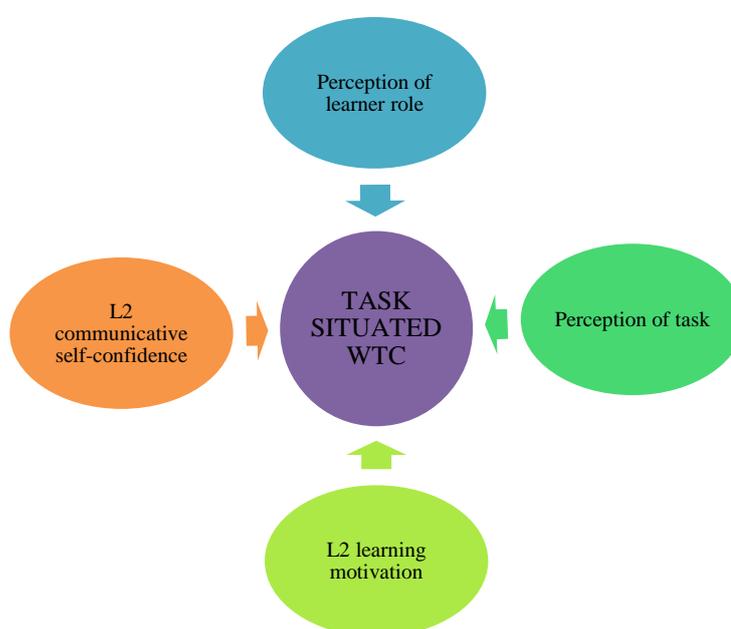
*Note.* This table shows Eddy-U's (2015) framework of motivating and demotivating variables that influence WTC in English. Adapted from "Motivation for participation or non-participation in group tasks: A dynamic systems model of task-situated willingness to communicate" by M. Eddy-U, 2015, *System*, 50, 43–55.

In a general sense, the attractiveness and easiness of topics in role-plays and group discussion were recognised as very beneficial because they facilitated active involvement in communicative interactions. Social influences, such as good groupmates (talkative, initiative, responsible), and a good classroom situation (positive classroom atmosphere, teacher encouragement, desire to maintain social relationships with classmates) were found to promote WTC in English (Eddy-U, 2015). On the negative side, uncooperative and irresponsible groupmates had a detrimental impact on a readiness to speak as a threatening classroom environment discouraged communication. The data analysis also showed that the students appreciated role-plays and discussions as they offered a variety of communicative perspectives. It was reported that self-confidence in group tasks alleviated language anxiety, especially in terms of a fear of making mistakes resulting in embarrassment.

Eddy-U (2015) proposed the task-situated WTC model (Figure 3) that consists of the perception of the learner’s role (task partner(s), the teacher, the classroom atmosphere, and the learning institution), perception of the task (the class, course, institution and L2, and other affective factors at a given point in time), L2 learning motivation (short-term goals, such as getting extra credit marks, and potential impact of long-term vision), L2 communicative self-confidence (which is affected by language anxiety and perceived ability).

**Figure 4**

*Eddy-U’s (2015) proposed task-situated WTC model*



*Note.* This figure presents Eddy-U’s (2015) proposed task-situated WTC model. Adapted from “Motivation for participation or non-participation in group tasks: A dynamic systems model of task-situated willingness to communicate” by M. Eddy-U, 2015, *System*, 50, 43–55.

As suggested by Eddy-U (2015, p. 52), it is clearly evident that the learners “were conflicted” about their participation, and they might feel “motivated for some reasons but demotivated for other reasons”. Hence, an individual’s general language experience should be taken into account. Also, the teacher ought to give priority to developing a laid-back atmosphere, and increasing student friendships by preparing tasks based on a variety of classroom interactions.

## **4.2. The mixed-methods approach towards WTC research**

It is essential at this point to focus on the mixed-methods approach that is based on triangulating quantitative and qualitative methods that allows researchers to eliminate the weaknesses of one methodology, and complement it by a different method (Zarrinabadi & Tanbakooei, 2016). Triangulation refers to the application and combination of several research methods in the study in order to investigate the same phenomenon from a different perspective, as well as to gain a more detailed picture that may be compared to “a careful medical diagnosis” (Wilczyńska & Michońska-Stadnik, 2010, p. 143).

In the case of WTC studies, it is necessary to “revisit the pyramid”, and apply various instruments with a view of identifying the factors that fluctuate rapidly, as well as the ones which change slowly in time (MacIntyre, 2020, p. 119-120). What is of paramount importance is the fact that the mixed methods approach attempts to “integrate the strength of both quantitative and qualitative approaches”, and it helps to produce generalisable results that take trait-like and situational WTC into account (Zarrinabadi & Tanbakooei, 2016, p. 40).

The following subsections elucidate the most prominent studies that investigated WTC by means of the mixed-methods approach.

### **4.2.1. Cao and Philp’s (2006) study**

A noteworthy mixed-methods study was conducted by Cao and Philp (2006) who explored the interrelationships between trait WTC and L2 WTC behaviours in whole class, pair, and small group interactions in the classroom settings. In order to investigate state predisposition to communicate, a WTC questionnaire was used whereas state level of WTC was measured by means of observation of classroom behaviours, audio recordings of group and dyadic work, and an interview with individual learners.

The participants were eight students who attended an English course in New Zealand. The students’ actual in-class behaviour was identified using a classroom observation scheme comprising seven categories, such as “volunteer an answer”, “give an answer to the teacher’s question”, “ask the teacher a question”, “guess the meaning of an unknown word”, “try out a difficult form in the target language”, “present own opinions in class”, and “volunteer to participate in class activities” (Cao & Philp, 2006, p. 484). The categories were based on previous descriptions of highly motivated students or learners with high WTC, and they were modified after a piloting procedure. The authors also made a distinction between the teacher’s presence and without his or her presence during pair and group work. Additionally, the

students' standpoints about various factors contributing to their readiness to communicate (motivation, anxiety level, perceived competence) were obtained using structured interviews, and introspective comments were elicited when the subjects listened individually to excerpts of audio recordings of their task performance. The last phase of the interview included questions based on their communicative behaviours in various in-class contexts.

The data revealed that there was a mismatch between the students' self-reports of WTC and the participants' actual in-class behaviours because the scale turned out to be too general, and it was not constructed to measure communicative behaviours in actual instructional settings (Cao & Philp, 2006). The findings showed that WTC might be pushed or dragged by various situation-specific factors, such as topic, interlocutor, and confidence of the learner relative to the task. Basically, the highest degree of WTC was reported in pair work, and the lowest in the whole class situations during which the students manifested a lack of self-confidence. The majority of the subjects appreciated an interlocutor's participation, and the degree of familiar with the partner was an influential factor. The learners were more willing to speak with more familiar peers. When it comes to the topic, content knowledge and familiarity with a particular register might enhance individual's WTC whereas lack of knowledge resulted in hampering one's linguistic self-confidence and inhibiting communication.

#### **4.2.2. De Saint-Léger and Storch's (2009) study**

With a view of investigating learners' perceptions of their communicative abilities, contributions to speaking activities, and their attitudes towards these tasks, de Saint-Leger and Storch (2009) carried out a study in which data were collected mainly by self-assessment questionnaires. The participants (32 students of French) were asked to fill them in three times during the semester. The questionnaire comprised multiple choice items, open-ended questions, and self-rating scales ranging from 1 (the lowest) to 10 (the highest) evaluating students' perception of their oral proficiency in French and class participation. Also, the authors employed semi-structured interviews and focus groups.

The findings demonstrated that the greatest concern involved fluency, vocabulary, and lack of confidence in communicative interactions whereas perceived strengths were associated with grammatical knowledge and pronunciation even though some grammatically-oriented students tended to feel apprehensive during L2 communication (De Saint-Léger & Storch, 2009). On the positive side, the learners admitted that their linguistic abilities,

particularly in such areas as lexical resources, fluency, and confidence improved over the semester. Also, the whole class discussion was viewed as most demanding mainly owing to the risk of being negatively evaluated by peers. Less competent students felt insecure when expressing their opinions in front of the rest of the group since they felt less knowledgeable, and thus reticent in the classroom context.

De Saint-Léger and Storch (2009) emphasised that strong peer pressure and the dominance of more proficient speakers might result in the feeling of being intimidated or threatened to be actively engaged in L2 communication. On the other hand, the opinions about small group discussions were not consistent. Some students claimed that they reduced state anxiety and enhanced opportunities for peer interactions while others found it unnatural and strange. Hence, the scholars remark that L2 communication in small group tasks “may not be easily achieved because strong intergroup affiliation may deter students from using the L2”, reducing their desire to speak the target language in classroom settings (De Saint-Léger & Storch, 2009, p. 280).

#### **4.2.3. MacIntyre and Legatto’s (2011) study**

A new method for measuring moment-by-moment fluctuations in L2 WTC was developed by MacIntyre and Legatto (2011). The scholars used an “idiodynamic approach” where “idio” refers to a focus on the individual, and “dynamic” to rapid changes over a short period of time, for instance during task performance (MacIntyre, 2012). As mentioned by MacIntyre (2020, p. 121), “it became obvious that the trait approach was working on a timescale that did not allow us to study fluctuations in WTC as communications unfolds”.

MacIntyre and Legatto’s (2011) study aimed to identify shifts in WTC and the learner’s reasons for the changes. The research included four stages, and eight tasks (e.g., “describe what you are wearing”, “discuss the education system of your home province in some detail”, “describe your hobbies” or “describe what you see happening in this painting”) (MacIntyre & Legatto, 2011, p. 154). First, the participants (eight university students) took part in a communication task that was recorded, and immediately afterwards, the recorded material was watched by the subject. While watching, the learner was to complete a moment-to-moment rating of their WTC with the help of the researchers’ assistant and specially developed software. The ratings of WTC involved clicking a computer mouse to indicate an increase or decrease in the level of WTC shown on one window (ranging from -5 to +5) while watching the material on the other. The data were presented by means of bitmap graphs of the

WTC ratings, and a spreadsheet with WTC and time data. The participants were also requested to watch the video for the second time, and they were encouraged to comment on each noticeable change in their WTC level. In the last stage, the research assistant viewed the videos, and generated a narrative report about the learner's affective reactions (MacIntyre & Legatto, 2011).

When it comes to the fluctuations in WTC during task performance, remarkable changes over a few minutes were reported, and there was a consistent trend linked to the exercises, such as a decrease in WTC ratings during the discussion about education which was found to be difficult. In a general sense, the inability to find L2 vocabulary items negatively shaped WTC. Interestingly, the learners' self-ratings of WTC were not always affected by anxiety which can rise and fall leaving an unchanged level of readiness to communicate. MacIntyre and Legatto (2011, p. 164) acknowledged that fluctuations in WTC "seem to be somewhat independent of anxiety when considered within a person on a moment-by-moment basis".

The authors also noted that these situations may be associated with "the butterfly effect" also known as "non-linearity" or "threshold effects" (MacIntyre & Legatto, 2011, p. 165). This notion suggests that small shifts on one part of the system might have large effects on the whole system, but also that large changes in one part of the system may generate a slight change in the overall system. Likewise, changes over time can be partially dependent on different systems, namely linguistic, social, cognitive, and emotional. When the systems function together, they may foster WTC. MacIntyre (2020, p. 123) remarks: "The ways in which long-term processes, such as personality or prior experience with the language, combine with short-term processes, such as emotional arousal or cognitive difficulties, implicates a process by which several influences can be combined in real time".

#### **4.2.4. Peng's (2014) study**

A mixed-method approach was also applied by Peng (2014) who used a questionnaire to examine communication, confidence, motivation, and learner belief in the classroom context. Additionally, the scholar designed a multiple-case study with the aim of examining individual and contextual factors affecting WTC in English as a foreign language in China.

The participants were four university students, and the data were collected through semi-structured interviews, non-participant classroom observations, and learning journals where the students completed regular entries about their feelings, perceptions, performance in

the classroom environment. The students were also asked to indicate the time they were most and least eager to communicate on a scale from 0 (very unwilling) to 100 (very willing) (Peng, 2014, p. 183).

The results indicated that WTC was synergistically influenced by a range of individual and environmental variables. Individual beliefs about the classroom were substantial, and the learners typically appeared to be reluctant to speak up frequently in class. This derived from the fact that they wished to avoid dominating communication or tended to be afraid of face losing which is of unquestionable relevance from the Chinese cultural perspective (Peng, 2014). Learning expectations and attitudes also shaped a level of WTC. Two participants, who represented exam-oriented motives, were not interested in benefiting from classroom interactions, whereas the two others exhibited positive attitudes towards L2 communication as they hoped to enhance their English proficiency. It was also reported that a lack of topical knowledge or interest resulted in low WTC while familiar topics stimulated high WTC.

Similarly, linguistic factors, namely difficulties in comprehension and lack of vocabulary hampered the readiness to speak, and led to switching into the native language (Peng, 2014). Reticence in L2 communication stemmed from anxiety and anticipation of negative judgment. The participants felt apprehensive mainly during whole-group discussions. As regards the classroom environment, teacher factors, such as teaching styles, methods, and classroom procedures were significant, and the students highly appreciated teacher support and immediacy. Learning tasks constituted another vital environmental variable, and it was declared that activities based on a meaningful interaction promoted WTC, especially those involving face-to-face interviews with peers.

Peng (2014, p. 163) summarised that a supportive teacher should design “intellectually meaningful and challenging tasks” that are likely to generate high WTC in the classroom context. Also, in order to encourage maximum student involvement and enthusiasm, a dynamic adjustment of lesson plans are necessary in the teaching process. Much prominence ought to be given to cooperation and group cohesion as WTC may be facilitated when class members are consistently committed to accomplishing mutual learning goals.

#### **4.2.5. Mystkowska-Wiertelak and Pawlak’s (2014) study**

Another study within the mixed-methods approach was conducted by Mystkowska-Wiertelak and Pawlak (2014) who attempted to record WTC fluctuations that college learners in Poland underwent during performance of a communicative exercise. In the first

stage of this classroom-based research, 44 students in dyads were requested to perform a monologue (describing a picture), and a dialogue (discussion). During the task performance, they were also asked to self-rate their WTC on a scale from -10 (extreme reluctance to speak) to +10 (extreme readiness to speak) on a special grid after hearing a beep every 30 seconds. The second stage involved filling in a battery of questionnaires concerning, among others, WTC in English, perceived competence, and communication anxiety (Mystkowska-Wiertelak & Pawlak, 2014).

The analysis of minute-by-minute changes of the young adults' WTC showed that the monologue generated higher levels of the respondents' WTC. The researchers believe that the monologue was not dependent on another person's opinions or decisions, and thus the subjects could plan their contribution on their own (Mystkowska-Wiertelak & Pawlak, 2014). Undoubtedly, having a greater control over the activity lowered anxiety leading to a higher level of WTC. It also seems essential to note that initially the high WTC in the monologue tended to decrease during the task performance which might result from tiredness and running out of arguments. Interestingly, a reverse trend was reported in the case of the dialogue. The unwillingness to communicate at the beginning was prone to fade away as the learners became more absorbed in the activity. A possible interpretation of this situation might be the fact that they started to be interested in arguments raised by their partners.

Significantly, low correlations between WTC in the course of the task performance and factors scrutinised in the study were revealed suggesting that "speaking on one's own and interacting with others may place quite different demands on learners" (Myskowska-Wiertelak & Pawlak, 2014, p. 255). The authors admitted that the tool applied in the study proved to be unable to determine a relationship between the learners' self-ratings in the monologue and dialogue and the variables leading to communication in the FL.

#### **4.2.6. Pawlak and Mystkowska-Wiertelak's (2015) study**

The same authors applied a similar design in the study set out to investigate the changes in students' WTC over the course of a conversation about upbringing performed in pairs (Pawlak & Mystkowska-Wiertelak, 2015). During task performance, the participants (eight college students) were asked to indicate the level of their WTC on a specifically designed grip (every 30 seconds in answer to a computer-generated beep). The learners could choose from -10 (extreme unwillingness) to +10 (extreme willingness). Having completed the exercise, they were to fill in a questionnaire regarding such items as the topic, the partner's

contribution, agreeing or disagreeing with the interlocutor, difficulty in understanding the partner's argument, and the presence of the teacher.

The data revealed moderate levels of WTC during the task performance, however, the difference between the maximum and minimal WTC varied considerably from one student to another (Pawlak & Mystkowska-Wiertelak, 2015). The person who started the conversation tended to inhibit higher levels of WTC while WTC decreased in the course of listening, and it grew or it was relatively stable when the student was expressing his or her opinions. Importantly, the participants' WTC decreased when they faced problems with inadequate language knowledge, and insufficient lexical resources. WTC was hampered by an inability to find necessary vocabulary during dyadic interaction. As a result, the students were likely to lose confidence and become anxious.

The ups and downs of the learners' WTC were caused by a multitude of factors that "are intricately interwoven, interact in unpredictable ways and are often themselves in a state a flux" (Pawlak & Mystkowska-Wiertelak 2015, p. 8). The role of the topic is important, although the choice of a suitable one may be problematic, and thus supplying prompts is substantial. The time to plan an individual's contribution can serve as a motivating factor which facilitates WTC and increases confidence. Familiarity with the speaker, his or her involvement and communicative behaviours may positively or negatively shape an individual's WTC. For instance, a student may be overwhelmed by the partners' enthusiasm or the fluency of his or her output (Pawlak & Mystkowska-Wiertelak, 2015). The presence of the teacher appeared to be a beneficial variable, however, a closer supervision may also drag learners' WTC leading to much less involvement in communicative tasks.

Overall, the author demonstrated that students ought to be trained in how to discuss a topic, effectively giving both arguments and counterarguments, as well as how to show interest and respect for the interlocutor's views. It is advisable to pay attention to group composition, and to be aware of the fact that more proficient or self-confident learners could dominate a communicative interaction resulting in an immediate drop in the partner's readiness to speak (Pawlak & Mystkowska-Wiertelak, 2015).

#### **4.2.7. Mystkowska-Wiertelak and Pawlak's (2017) macro- and micro-perspective of WTC**

A significant large-scale study was also conducted by Mystkowska-Wiertelak and Pawlak (2017) who have proposed to integrate "a macro" and "a micro" perspective in order

to gain a more comprehensive conceptualisation of L2 WTC. The authors introduced a reliable instrument whose goal was to identify the influences on advanced learners' readiness to communicate in English in the Polish context. This approach has been labelled as "the macro-perspective" whereas the research project aimed at providing "a more fine-grained picture of the factors" impacting students' WTC during regular conversation classes has been viewed as "the micro-perspective" (Mystkowska-Wiertelak & Pawlak, 2017, p. 117). In brief, the macro-perspective addresses stable and linear relationships between trait-like WTC, and the micro-perspective pays due attention to investigating situational desire to communicate and its context-sensitive changes over time (e.g., Zhang et al., 2018).

Mystkowska-Wiertelak and Pawlak (2017) adapted existing WTC questionnaires and developed a new measurement tool designed for the Polish context. The scale was implemented in a group of 614 university students majoring in English, and it comprised eight factors, such as communication confidence, ought-to self, classroom environment, international posture (openness to experience), unplanned in-class WTC, international posture (interest in international affairs), practice-seeking WTC, and planned in-class WTC.

The data analysis revealed the mutual influences among the variables, and thus a hypothesised model of WTC as a predictor of communication in a FL was constructed (Mystkowska-Wiertelak & Pawlak, 2017). It turned out that communication confidence played a substantial role in affecting two dimensions of international posture, and it might determine the existence of a communicative intention, the readiness to interact with foreigners, as well as the desire to find out about their culture. The participants seemed to be aware of the fact that their academic, personal, and professional life depended on successful communication in English both inside and outside the classroom. Another vital correlation was the one between communication confidence and the different aspects of WTC involving planned and unplanned communicative interactions in the classroom settings. Without a doubt, an individual needs to feel confident at least to some extent in order to accomplish the desired goal in FL communication. Likewise, Mystkowska-Wiertelak and Pawlak (2017) acknowledged that the classroom environment was reported to be less important as a WTC correlate while ought-to self was of practically no significance. The scholars realised that individual difference variables, such as the type of programme, the level of proficiency, and learning styles may be relevant for shaping WTC.

When it comes to a micro-perspective, the study aimed to demonstrate the situational and dynamic nature of WTC by means of a detailed analysis of the variables "shaping learners' readiness to contribute to ongoing classroom interaction" (Mystkowska-Wiertelak

& Pawlak, 2017, p. 117). This micro-perspective research was intended to pinpoint individual and contextual factors influencing WTC, and the fluctuations of 48 university students' eagerness to communicate. The participants (divided into three groups) were majoring in English, and they were enrolled in year one and two of a bachelor programme at one of the Polish universities. The study was conducted during conversation classes, and the main focus of the class was crime and punishment (group 1 and 2), and dreams and imagination (group 3). All the classes lasted 90 minutes, however, for logistical reasons only 60 – 65 minutes were considered in the analysis (Mystkowska-Wiertelak & Pawlak, 2017).

The data were collected by means of the WTC grid with a timeline with five-minute intervals in which the learners were instructed to rate their level of WTC in response to a pre-recorded beep using a scale -10 (total unwillingness) to +10 (total willingness). Also, at the end of the lesson, the students were asked to fill in a questionnaire with the objective of identifying the variable that might contribute to enhancing or hampering WTC. The factors involved the mode of classroom organisation, the interlocutor, the interlocutor's level of proficiency, the tasks, and the topics (Mystkowska-Wiertelak & Pawlak, 2017, p. 131).

The results showed that the students were most willing to communicate in group 3 during the class which may have resulted from the fact that the lessons focused on a different topic related to dreams and imagination (Mystkowska-Wiertelak & Pawlak, 2017). It was found that the level of WTC was the highest at the onset, and the lowest at the end of the class. Group 1 manifested the lowest WTC levels at the beginning, an increase during small group discussion, and a drop during the watching of a video. Although the students generally tended to be eager to speak, the overall level of WTC indicated that they were not overly willing to do so. Also, the level of WTC rose as the class progressed. The participants from group 2 were reluctant to communicate during the first 15 minutes, and it tended to rise as the task was in progress.

Significantly, the scholars in-depth analysis provided a number of contextual and individual factors that had an impact on fostering and reducing WTC. It was suggested that the stage of the class may drag or push WTC. Initial eagerness to speak plays an important role as low WTC at the onset provides room for improvement while high initial WTC has the opposite effect (Mystkowska-Wiertelak & Pawlak, 2017). Tasks and topics are also of great relevance. Activities based on language production tend to generate higher readiness to communicate than those based on comprehension. Extensive pre-task and post-task stages can be a negative influence whereas novelty, creativity, and opportunities to express individual's opinions facilitate WTC. In a similar manner, topics related to real-life experience are

substantial while those which require content knowledge and sophisticated vocabulary lead to lower levels of WTC (Mystkowska-Wiertelak & Pawlak, 2017).

It is worth noting that dyadic work is more beneficial than group work whereas whole-class teaching may foster or hamper WTC depending on individual differences. The authors emphasised that the mode of organisation interacts with various factors, one of which is the interlocutor (Mystkowska-Wiertelak & Pawlak, 2017). For example, conversational partners who represent the same or similar proficiency level are likely to increase WTC. Also, students have a preference to cooperate with class members they know well while the effect of less familiar learners may be positive or negative. Needless to say, partners who are engaged in task performance may enhance an individual's readiness to speak.

Mystkowska-Wiertelak and Pawlak (2017) stated that the student-related variable, namely lack of interest, boredom, fatigue or low proficiency may inhibit WTC. On the other hand, involvement, positive attitudes or good preparation generate high WTC. The impact of the teacher-related variable is equally important as his or her engagement in the supervision of exercises as well as feedback play a decisive role in shaping WTC. The ability to provide a laid-back classroom environment is of great help with regard to increasing social networks between peers. WTC may also be fostered or hampered by external factors (time of day, the weather), educational context (scarce access to the target language, classes after a long break), and the level of the programme (bachelor, master).

What should be highlighted here is that the contribution of the identified variables may vary in different contexts, and they are frequently mediated by other factors. However, as stressed by Mystkowska-Wiertelak and Pawlak (2017, p. 185), their study sheds some light on “how the constellations of such influences may lead to ebbs and flows in WTC levels in real time”.

#### **4.2.8. Gałajda's (2017) study**

Another interesting study was conducted by Gałajda (2017), who also investigated WTC in L1 (Polish) and FL (English). The main data collection instrument was a questionnaire that attempted to measure the levels of participants' (80 fifth-year students majoring in foreign language teaching) WTC, communication apprehension, self-perceived communicative competences, and the learners' perceptions of the dynamics of their group.

When it comes to WTC in English, the students were asked to self-evaluate their level of WTC on a scale from 0% (absolutely unwilling to communicate) to 100% (absolutely

willing to communicate). Also, the subjects were to write a narrative text which helped to explore their perceptions of WTC. Gałajda (2017, p. 69) noted that the importance of narrative essays is “to understand and evaluate not only past experiences but also concepts in general”. Similarly, classroom observations were used throughout the whole study (five months). They mainly focused on communication in the L1, communication in English, and the dynamics of the group.

The results showed that the students were most willing to communicate with their university friends. Surprisingly, they were also eager to talk with their lecturer, which as Gałajda (2017) remarked, had been assumed to be the major source of anxiety and reluctance. The participants were less willing to talk with a university acquaintance and a stranger. It should be mentioned that they were rather willing to communicate in a group or in front of a group, and a higher level of WTC was reported in case of conversation in a group of strangers than in a group of acquaintances. Communication in a FL in front of strangers appeared to generate less anxiety regarding making mistakes as an individual feels more anonymous (Gałajda, 2017).

As far as the perceptions of communication competence in a FL are concerned, they were considered more positive in a group of acquaintances. Communication with the lecturer led to a strong communication apprehension since the teacher gives feedback on accuracy, and making mistakes may cause insecurity and anxiety. In brief, according to the learners, WTC hinged mainly upon the type of interlocutor and the purpose of communication (Gałajda, 2017).

What also ought to be noted is that the dynamics of the participants’ group was viewed quite positively in the social dimension of a language classroom and group cohesiveness. The learners were attached to group members, and they found cooperation motivating as it gave them a sense of satisfaction. This might stem from the fact that as novice English teachers, they realised that group cohesion may play a pertinent role in establishing a good classroom atmosphere (Gałajda, 2017). Therefore, positive classroom dynamics is of unquestionable significance because students learn more eagerly, as well as they feel more relaxed and less apprehensive of interaction with their group members and the teacher. Gałajda (2017, p. 109) summarised that learners “who feel safe in their learning groups are not only less anxious about communicating in a foreign language but also their self-perception changes and becomes more positive”.

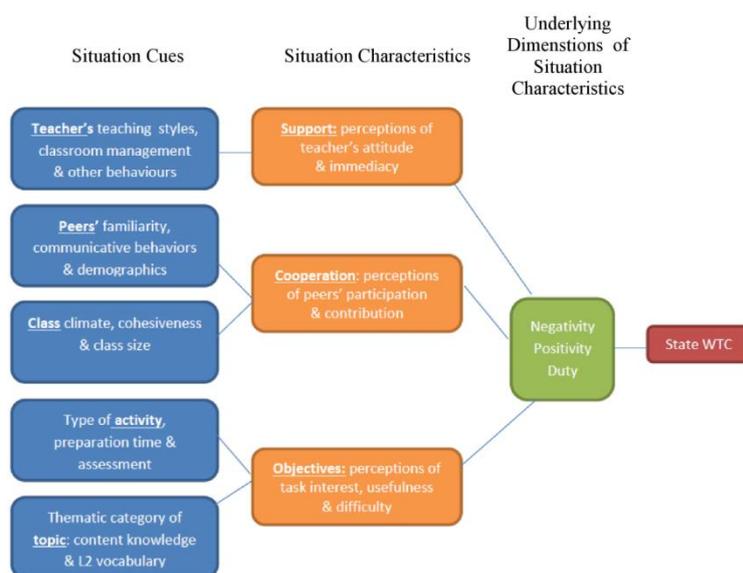
### 4.3. Zhang et al.'s (2018) proposed framework of situational characteristics

What appears to be critical is that state L2 WTC hinges upon a variety of factors which may fluctuate over a certain period of time. Zhang et al. (2018) attempted to provide an overview of the most relevant studies on state WTC in order to identify major situational antecedents of state WTC. The authors analysed 35 studies (cross-sectional, small-scale, and case studies) where data were gathered by means of different data collection methods. The participants involved primarily university students from Asian countries (e.g., China, Korea, Japan), and only a few studies involved students from Canada, Poland, and Australia.

Based on the literature review of empirical evidence, Zhang et al. (2018) proposed a multi-layered framework of situational variable in which antecedents of state WTC are combined into three layers, namely, situation cues, situation characteristics, and the underlying dimensions of situational antecedents.

**Figure 5**

*Zhang et al.'s (2018) framework of situational antecedents of state WTC*



*Note.* This figure depicts Zhang et al.'s (2018) framework of situational antecedents of state WTC. Adapted from “To talk or not to talk: A review of situational antecedents of willingness to communicate in the second language classroom” by J. Zhang, N. Beckmann, & J. F. Beckmann, 2018, *System*, 72, 226–239.

As can be seen in Figure 5, in the proposed framework, situation characteristics, which are defined as “subjective perceptions of situations” individually interpreted by students, are considered to have three dimensions, such as negativity, positivity, and duty (Zhang et al., 2018, p. 228). According to the authors, negativity is viewed as “any sort of negative feeling

caused by the situation” (Zhang et al., 2018, p. 233). It involves the lack of self-confidence, anxiety, fear of losing face or fear of making mistakes which were demonstrated in the studies by, among others, Pawlak and Mystkowska-Wiertelak (2015), Eddy-U (2015), as well as Cao and Philp (2006). By contrast, positivity represents “the elation” prompted by the situation (Zhang et al., 2018, p. 234). As suggested by Zhang et al. (2018), it refers to interest and excitement. Duty, as the last dimension, is linked to Kang’s (2005) notion of responsibility, and students’ perceptions about accomplishing a task.

As regards situation characteristics, Zhang et al. (2018, p. 228) summarised three specified ones (support, cooperation, objectives) that are associated with situation clues known as “the objective features of situations” (e.g., teacher, peers, class, activity, and topic).

Support concerns the teacher immediacy that may positively prompt communicative interactions (e.g., Zhang & Oetzel, 2006). Individual student’s perceptions of the teacher support are principally based on the instructor’s teaching style and classroom management. It has been emphasised that giving students time for preparing an activity, topic choice, error correction or feedback provision are perceived to be relevant in generating state WTC (e.g., Mystkowska-Wiertelak & Pawlak, 2017; Zarrinabadi, 2014).

Cooperation involves learners’ perceptions of peers’ participation and contribution. As previously noted, an interlocutor’s behaviours in the classroom context exert an influence on an individual’s WTC. Students who tend to be engaged and cooperative positively shape learner’s WTC (Pawlak & Mystkowska-Wiertelak, 2015; Eddy-U, 2015). In a similar manner, students have a preference to speak with a familiar partner as they have some bonds with each other, and as a result, they may feel more relaxed and open (e.g., Cao & Philp, 2006; Kang, 2005). Good cooperation between students is also a substantial element that creates and maintains class cohesiveness (e.g., Peng & Woodrow, 2010; Gałajda, 2017). Wen and Clément pointed out that there might be difficulties in achieving group cohesiveness in larger groups of students, and thus big class size might markedly reduce the level of WTC. Likewise, the classroom environment, which has been commonly discussed by different scholars, is one of the most essential factors influencing state WTC (e.g., Deweale & Deweale, 2019; Peng & Woodrow, 2010; Riasati, 2018). As previously discussed, a laid-back classroom climate created both by classmates and the teacher is of utmost importance in encouraging learners’ communicative behaviours.

Zhang et al. (2018) also highlighted the importance of objectives related to students’ perceptions of a certain task according to task interest, task usefulness, and task difficulty. The researchers acknowledged that state WTC hinges upon the type of activity

(e.g., whole-class, dyadic, group work), preparation time and assessment. Riasati and Rahimi (2018) stressed that students are unwilling to speak when they are aware that they will be assessed, while Eddy-U (2015) suggested that evaluation contributes to pressure that may have a good impact on students, as it can help them to overcome anxiety. Importantly, a crucial situation cue is also the thematic category of the topic, particularly context knowledge and L2 vocabulary (e.g., Pawlak & Mystkowska-Wiertelak, 2015; Peng, 2014). Certainly, topical knowledge and thematic lexical resources enhance students' confidence and increase L2 WTC (e.g., De Léger & Storch, 2009; MacIntyre & Legatto, 2011).

Overall, Zhang et al. (2018) admitted that their framework of situation characteristics and cues was constructed with the aim of providing a systematic organisation of situational antecedents of WTC that may facilitate or hamper learners' communicative behaviours. What should be remembered is that learners' subjective perceptions of situation cues may be of great help in gaining a more comprehensive understanding of the nature of state WTC that changes over time.

At this juncture, one needs to remember about positivity, which may have a great impact on generating foreign learners' WTC (cf. Zhang et al., 2018). Therefore, two following subsections present WTC with reference to motivation and foreign language enjoyment.

## **5. WTC and motivation**

One of the most essential individual difference variables that influences language learner's success to a large degree is motivation (e.g., Pawlak, 2016). Dörnyei (2001, p. 2) remarks that motivation is believed to be "one of the most basic aspects of the human mind, and most teachers and researchers would agree that it has a very important role in determining success or failure in any learning situation". Motivation, which constitutes intermediate layers of the heuristic model of L2 WTC (MacIntyre et al., 1998), appears to be of pivotal importance among the factors that may influence one's readiness to communicate in a foreign language (Macintyre, 2007).

Studies on L2 motivation were initiated by Gardner and Lambert (1972, as cited in Dörnyei, 2003) in Canada. The scholars stated that language learning was affected by sociocultural factors which are principally responsible for facilitating or hampering intercultural communication and affiliation (Dörnyei, 1994). This approach proposed that attitudes towards the language learners' motives fall into two broad categories, such as

integrative and instrumental motivation (Dörnyei, 2001). *Integrative motivation* is viewed as “reasons related to interaction and communication with members of the L2 community for social-emotional purposes” (Noels, 2001, p. 108). *Instrumental motivation*, on the other hand, refers to “the potential pragmatic gains of L2 proficiency such as getting a better job or a higher salary” (Dörnyei, 1994, p. 274). This socio-educational framework of motivation (Gardner and Lambert, 1972, as cited in Dörnyei, 2003) was advanced by Gardner (1985), and as such it has become one of the most influential frameworks of motivation and L2 acquisition. This model presupposes that individual differences in L2 learning may be explained by a broader concept known as an *integrative motive* that comprises of three components, such as *integrativeness* (reflecting integrative orientation, interest in foreign languages, and attitudes towards the L2 community), *attitudes towards the learning situation* (comprising attitudes towards the teacher and a language course), and *motivation* (desire to learn the language and attitudes towards learning the language) (Peng, 2007). Students with a higher level of integrativeness are expected to have a stronger motivation to learn a foreign language, as well as interact with a L2 language group more eagerly than individuals with a lower level of integrativeness and motivation (Yashima, 2002).

Another motivation framework is *self-determination theory* (SDT) that “highlights the importance of humans’ evolved inner resources for personality development and behavioural self-regulation” (Ryan & Deci, 2000, p. 68). In order to be motivated, individuals have to satisfy three basic psychological needs, namely *autonomy* (one’s control over his or her actions), *competence* (one’s knowledge and abilities necessary to achieve a certain outcome), and *relatedness* (relationships with others) (Ryan & Deci, 2000). SDT distinguishes two types of motivation, namely intrinsic and extrinsic motivation (Ryan & Deci, 1985, as cited in Dörnyei, 1994). *Intrinsic motivation* refers to “natural inclination toward assimilation, mastery, spontaneous interest and exploration” (Ryan & Deci, 2000, p. 70). It involves “enjoyment and a satisfactory feeling associated with an activity”, and it comprises “three substrates: knowledge, accomplishment, and stimulation” (Peng & Woodrow, 2010, p. 839). Dörnyei (2001, p. 10) mentions that it concerns “behaviour performed for its own sake in order to experience pleasure and satisfaction”. Noels, Clément, and Pelletier (2001, p. 426) believe that “intrinsically motivated students are expected to maintain their effort and engagement in the L2 learning process, even when no external rewards are provided”. Intrinsic motivation may be enhanced by opportunities and choices leading to self-direction and autonomy (cf. Noels, 2001). By contrast, *extrinsic motivation* is recognised as “the performance of an activity in order to attain some separable outcome”, which basically means

learning for instrumental goals (Ryan & Deci, 2000, p. 71). There are four levels of extrinsic motivation in the context of FL education: *external regulation* (learning an L2 is determined by sources external to the individual, such a tangible benefits or costs), *introjected regulation* (involves internalised reasons for learning a FL, that is performing an activity owing to some kind of pressure that a person has incorporated into the self), *identified regulation* (refers to a conscious behaviour that produces a certain outcome), and *integrated regulation* (includes an various identified regulation that are integrated with one another creating a coherent hierarchy) (Ryan & Deci, 1985, as cited in Carriera, 2005). Integrated regulation is perceived as the most autonomous form of external motivation, but it still seems to achieve separable outcomes (i.e., self-selected goals) rather than internal satisfaction and enjoyment (Ryan & Deci, 2000).

Noels et al. (2000) employed a self-determination framework, and the scholars indicated that both intrinsic and extrinsic motivation are relevant for L2 learning. The authors demonstrated a clear distinction between less self-determined forms of motivation (i.e., external and interjected regulation), and more self-determined forms of motivation (i.e., identified regulation and intrinsic motivation). Integrated regulation was excluded from the research as it was evident only among advanced learners (Noels, 2001). It was emphasised that students who reflect a natural enjoyment in learning an L2 may not necessarily feel personally engaged in the learning process since they can treat language learning as “a puzzle or a language game that has few repercussions in everyday life” (Noels et al., 2000, p. 75). Significantly, more self-determined forms of motivation are related to an increased perception of freedom of choice and perceived competence. As asserted by Noels et al. (2000, p. 76), “students who learn an L2 in an autonomy-supportive environment where feedback enhances their sense of competence in the learning tasks are likely to be those students who learn because it is pleasurable or because it appeals to their self-concept”.

In a similar study, Noels (2001) and her associates examined the relationship between intrinsic, extrinsic, and, additionally, the integrative orientation among francophones in the Canadian immersion context. The data showed that learning English might help them achieve a personal goal (e.g., getting a good job). Some participants reported that learning English was valuable and fun which, additionally may enhance their learning autonomy, effort, and engagement. Noels et al. (2001) found that integrative motivation was more similar to intrinsic motivation in the case of the francophones as they primarily find interacting with members of the English community satisfying and enjoyable. It is supported by MacIntyre’s

(2007, p. 566) view who acknowledges: “The major motivation to learn another language is to develop a communicative relationship with people from another cultural group”.

Dincer and Yeşilyurt (2017) studied the motivation to speak English among Turkish undergraduate students who reported to have little contact with the target community, and they practised speaking mainly in the classroom context. It turned out that the participants were mostly intrinsically motivated as they wished to master communicative skills for their own personal satisfaction and interests. The students also declared that an attentive and autonomy-supportive teacher might have a positive impact on their motivation. The authors suggested that EFL teachers who promote learners’ autonomy during classes “boost students’ speaking performance and integrate reluctant or reticent EFL speakers into teaching activities” (Dincer & Yeşilyurt, 2017, p. 18). Also, Jones et al. (2009) indicated that implementing a FL course with tasks fostering students’ autonomy enhanced their intrinsic motivation. The scholars pointed out that review sessions and feedback increased learners’ competence and led to feelings of enjoyment. The review sessions were very beneficial in terms of relatedness as the adult participants could observe that the teacher was eager to dedicate time and energy to facilitate his or her students’ learning process (Jones et al., 2009). Additionally, one’s self-determination might also be improved by promoting peer interactions especially among low-ability students as they had time to gain more self-confidence to share their knowledge and ideas in front of the group.

When it comes to studies on L2 WTC and motivation, early research employed the assumptions of the socio-educational model (Mystkowska-Wiertelak & Pawlak, 2017). MacIntyre and Charos (1996) hypothesised a path leading from WTC to motivation, however, this path was not statistically supported. In a similar manner, based on the original L2 WTC model (MacIntyre et al., 1998), Yashima (2002) failed to find a direct path from motivation to L2 WTC among Japanese learners as motivation directly affected self-confidence in L2 communication that might lead to readiness to communicate. In contrast, Hashimoto (2002) replicated MacIntyre and Charos’ (1996) study among students in the Japanese context. The author identified a significant path from WTC to motivation. Also, the positive correlation between L2 WTC and motivation suggested that highly motivated students are more willing to communicate and to use the target language. The result was confirmed by Riasati (2018) in the Iranian context.

MacIntyre et al. (2003) found that integrativeness was significantly positively correlated with L2 WTC among immersion students, but the correlation was not significant in a non-immersion group. Likewise, WTC correlated with motivation for language learning

among students with immersion and other intensive English learning experience. The scholars emphasise that learners who are most likely to initiate communication are also most motivated to learn (MacIntyre et al., 2003). Peng (2007) evidenced that L2 WTC among Chinese students correlated with integrative motivation which turned out to be the strongest predictor of L2 WTC. The researcher asserts that “in a EFL context, motivation is an important impetus in stimulating learners to persevere in both L2 learning, and possibly L2 communication” (Peng, 2007, p. 48).

As far as self-determination theory is concerned, it has been employed in the study by Peng and Woodrow (2010) who aptly stated that SDT corresponds with classroom dynamics, and the factors that influence the Chinese foreign language classroom, such as group cohesiveness, teacher support, and attachment to group members. Likewise, SDT is more suitable for the Chinese monocultural and monolingual than the socio-educational model that investigates motivation from “a macro interethnic perspective” (Peng & Woodrow, 2010, p. 840). It was found that intrinsic and extrinsic motivation had a direct path to communication confidence in English, but it exerted an indirect influence on WTC. This derives from the fact that Chinese students, who are motivated to learn English are not necessarily willing to speak English. This finding is supported by a large-scale questionnaire study conducted by Peng (2014). The researcher also indicated an indirect relationship between L2 WTC and motivation. Chinese students are determined to achieve their academic goals (passing exams) which is not associated with communicative skills in the Chinese educational system. In a general sense, Chinese learners tend to focus on satisfying their learning aims, and they are not likely to establish relationships with foreigners (Wen & Clément, 2003).

It may be concluded that the link between L2 WTC and motivation differs depending on the cultural context and the types of motivation (cf. Myskowska-Wiertelak & Pawlak, 2017). However, it has been well-established that individuals are more motivated to learn a FL when they reflect positive emotions towards the learning process (cf. MacIntyre & Vincze, 2017). Piechurska-Kuciel (2017) believes that much prominence should be given to enjoyment since it plays a powerful role in the second language learning classroom.

## **6. WTC and foreign language enjoyment**

It is worthwhile noting that long before investigating positive emotions, negative emotions, particularly anxiety has been extensively studied in the context of WTC (e.g., Eddy-U, 2015; MacIntyre & Legatto, 2010; Peng, 2014). Zhang et al. (2018) remarks

that in the literature of the subject, more emphasis has been placed on negative thoughts and feelings that impact FL communication. However, due to the concept of positive psychology (Seligman and Csikszentmihalyi, 2000), there has been a shift to a holistic view on humans which in SLA means moving away from negative emotions and including language learners' positive emotions, such as language enjoyment (Dewaele et al., 2017).

The notion of positive psychology was introduced into SLA research by MacIntyre and Gregerson (2012). It is based on Fredrickson's (2003) "broad and build" theory which posits that positive emotions may broaden individuals' mind allowing them to build intellectual, physical, social, and psychological resources for the future actions. The scholar states that positive emotions help to solve problems regarding personal growth and development, and "experiencing a positive emotion leads to states of mind and to modes of behaviour that directly prepare an individual for later hard times" changing how people think and how they behave (Fredrickson, 2003, p. 332). Therefore, positive emotions in language learning help learners to notice the importance of language input, as well as raise their awareness that enables them to absorb more language knowledge (MacIntyre & Gregerson, 2012).

Recently, one of the most commonly studied positive emotions in SLA is by far language enjoyment, which may be interpreted as "good feelings" that lead an individual to personal growth and long-term happiness (Csikszentmihalyi, 2014, p. 293). Enjoyment should be distinguished from a different positive emotion which is basically pleasure. Boudreau, MacIntyre, and Dewaele (2018, p. 153) suggest: "If pleasure can occur simply by performing an activity or completing an action, enjoyment takes on additional dimensions such as an intellectual focus, heightened attention, and optimal challenge". Notably, there are two key sources of enjoyment in the process of foreign language learning, namely developing interpersonal relationships and making progress toward a goal (Dewaele & MacIntyre, 2014).

When it comes to the process of L2 learning, Dewaele and MacIntyre (2014) developed the Foreign Language Enjoyment (FLE) scale that consists of 21 items concerning positive emotions towards the learning experience, peers, and the teacher. The scholars combined these statements with eight items reflecting Foreign Language Classroom Anxiety (FLCA) scale. The results of this large-scale questionnaire study conducted among multilinguals indicated that learners older and more advanced in the FL reported less FLCA and significantly higher levels of FLE. Studying more FLs was related to more FLE, but not with FLCA. The data revealed that there was a tendency for enjoyment to increase and anxiety to decrease in students beyond the intermediate level. The respondents who declared feeling higher in the hierarchy of their peers showed high levels of FLE and lower levels of

FLCA. Additionally, Asian learners indicated the lowest levels of FLE and the higher levels of FLCA (Dewaele & MacIntyre, 2014). Compared to male respondents, female participants reported both high anxiety and enjoyment. Qualitative analysis of the feedback on enjoyable episodes in the FL classroom revealed that some specific activities (e.g., role-plays, debates, preparing group presentation) could boost their enjoyment. Likewise, enjoyment may be fostered by a friendly classroom atmosphere that is created by a positive, humorous, and supportive teacher. Importantly, peer emotional support may reduce FLCA (Jin & Dewaele, 2018). Also, the teacher may encourage the improvement of students' skills which seems to be essential in the case of shy learners who typically avoid speaking. Mercer and MacIntyre (2014, p. 156) state that communication and meaningful interactions may be facilitated by positive classroom dynamics, and positive emotions that appear to be necessary "for the long-term undertaking of learning a foreign language", as well as developing and maintaining one's motivation. In a similar manner, Piechurska-Kuciel (2017, p. 108) rightly asserts that "the socially united learning environment is likewise an indispensable part of the enjoyment experience".

Dewaele and MacIntyre (2016, p. 225) also identified two sub-dimensions of FLE, such as social and private FLE. A social FLE refers to relationships with the teacher and peers and "the social life of the classroom", and the satisfaction one may gain from a positive FL classroom. A private FLE is linked to internal positive feelings (e.g., pride, satisfaction) "a learner may experience when something difficult has been achieved" (Dewaele & MacIntyre, 2016, p. 233). Li, Jiang, and Dewaele (2018) used a three-factor model of FLE in the Chinese context. The findings showed that EFL students reported most FLE on the dimension of FLE- Teacher (teacher practices, teacher recognition, and support), followed by FLE- Private, and FLE- Atmosphere (peer interaction, positive atmosphere, engagement). The author stated that high school students in China might be viewed as "enjoying the fun, accomplishments, and interesting things in their EFL learning, teachers' encouraging and supportive attitudes towards them, pedagogical practices, and the positive atmosphere for EFL learning" (Li et al., 2018, p. 189).

Mierzwa (2019, p. 180) investigated language teachers' perceptions concerning students' sources of enjoyment in Poland. The author also underscored that the vast majority of teachers indicated that the strongest predictors of their learners' enjoyment were the teacher's positive attitudes towards students, and the ability to create a classroom that is "a positive and emotionally safe place". Dewaele and Dewaele (2020) point out that FLE is strongly linked to learner-external variables (the teacher, peers), and thus it tends to be

state-like and sensitive to everything that happens in the classroom. The scholars explain that “teachers differ in their ability to regulate the emotional temperature in their classroom and, by extension, the FLE and the longer-term motivation of their students” (Dewaele & Dewaele, 2020, p. 59).

As regards the relationship with WTC and enjoyment, Khajavy et al. (2017) conducted a study among secondary school students in Iran. The researchers sought to examine the relationship among the classroom environment, anxiety, enjoyment, and WTC. It turned out that there was a stronger correlation between FLE and WTC than between anxiety and WTC. It is generally believed that language learners who enjoy their learning experience tend to be more eager to grasp a communicative opportunity when it occurs. The participants reported that a joyful classroom facilitated the WTC, and thus, Khajavy et al. (2017) suggested that the positive role of enjoyment may be more beneficial in promoting WTC than the negative role of anxiety in hampering the readiness to communicate. The authors confirmed Dewaele and MacIntyre’s (2014) findings that positive, happy, and supportive language instructors and peers play a pivotal role in enhancing enjoyment. Kun, Senom, and Peng (2020) also found a moderately strong correlation between WTC in English and FLE among undergraduate students in China. The scholars indicated that the level of students’ WTC could be fostered when FL learners were able to perceive their learning progress, and an interesting experience in FL learning, as well as an inspiring teacher who might support their performance in class. The role of enjoyment in the WTC is substantial as it might promote learners’ involvement in communicative interactions which “establish a unique climate that governs the life of the group” (Gabryś-Barker, 2016, p. 157).

D’Orazzi (2021) also indicated that FLE appears to be a highly relevant factor that may drive learners at Australian universities to FLs. The participants, who were beginner students of French, German, Italian, and Spanish, agreed that they enjoyed their FL learning process, and they highlighted the significance of having an enjoyable FL learning classroom environment which encouraged them to continue learning a FL. The students mostly reflected a strong FLE-private and internal satisfaction when they were capable of producing the first sentences in a FL. It was also demonstrated that students possessed a desire to communicate in a FL when starting FLL process. They were excited to talk in a FL in class as “WTC is mainly deemed as a goal that students set when they want to learn” (D’Orazzi, 2021, p. 282).

Much in a similar vein, Dewaele and Dewaele (2018) attempted to identify learner-internal and learner-external variables that had the strongest effect of secondary school students. The data showed that more advanced students tended to have higher levels of WTC.

FLCA turned out to have a heavy impact of WTC. Moreover, the amount of FL use by the teacher corresponded with a high WTC among the participants. Similarly, more FL use was linked to more FLE, but not more FLCA (Dewaele et al., 2017). Dewaele and Dewaele (2018, pp. 30-31) stress that “more advanced learners have a wider repertoire and more experience using the FL, which boosts their self-confidence in their ability to communicate successfully”. The data analysis also indicated that social FLE was a marginally significant positive predictor of WTC whereas private FLE was reported to be insignificant. As demonstrated in the previous studies (e.g., Mystkowska-Wiertelak & Pawlak, 2017; Cao, 2011), a low-threat positive classroom environment is crucial to motivate students to talk. As manifested by Gabryś-Barker (2016, p. 170), it is the teacher who “decides about the quality of a dialogue or an interaction that occurs in the classroom”. MacIntyre and Gregersen (2012, p. 209) suggest that humour and optimistic thinking are perceived as important “coping mechanisms” that reduce levels of stress. In this regard, they ought to be used by the teacher to promote a positive atmosphere, and those coping mechanisms could be “developed by learners through encouragement and the careful selection of language activities that also stimulate the development of resiliency of L2 contexts” (MacIntyre and Gregersen 2012, p. 209).

### *Summary*

Overall, the concept of WTC seems to be rather complex since it may be affected by a variety of state-like (e.g., personality, motivation, self-confidence) and situational factors (e.g., state anxiety, state communicative self-confidence, contextual variables: teacher, peers, tasks, topics). It is by all means certain that the readiness to speak in a FL may be promoted by both the teacher’s supportive attitudes towards students, as well as his or her positive approach towards the whole teaching process. In-class WTC is governed by the teacher who, as a manager, plans and prepares tasks providing communicative opportunities in the classroom context. The instructor also enables learners to interact with peers, which is of great help in building positive group dynamics. Positivity in class, which is fostered by – among others – interesting and familiar topics, teacher support, and peers’ involvement, has the potential of overcoming speaking barriers and encouraging language learners’ WTC.

## CHAPTER FOUR

### RESEARCH PROJECT DESIGN

As the literature review of WTC presented in Chapter Three suggests, WTC has been intensively studied among undergraduate, university and high school students (e.g., Cao & Philp, 2006; Mystkowska-Wiertelak & Pawlak, 2017; Peng & Woodrow, 2010; Piechurska-Kuciel, 2015). Yet, to the best of the present author's knowledge, except for one attempt (Borkowska, 2021), there are no publications explicitly referring to third agers' in-class WTC in English, and their views related to factors which may influence their WTC.

Therefore, Chapter Four focuses on the research project which was prompted by the lack of empirical research regarding WTC among older citizens. As the project comprises five different studies, firstly its general aim, participants, procedures, and instruments are introduced. The next part of this chapter discusses each of the five studies which separately indicates – among others – research aims, questions, results, and discussion.

#### **1. An overview of the research project**

The research project designed for this dissertation is based on a mixed-methods approach which has the potential of providing a comprehensive picture of the concept of WTC (cf. Wilczyńska & Michońska-Stadnik, 2010). MacIntyre (2020, p. 121) claims that qualitative data focus on “the interactions occurring at the exact time WTC changes” (e.g., during a particular task) whereas quantitative methods provide “rich descriptions of the processes involved in creating WTC”.

This research project includes five studies: Study 1 and 5 are quantitative questionnaire studies while Study 2, 3, and 4 are qualitative classroom-based studies. Three qualitative studies share some information concerning participants and instruments. Therefore, the following sections provide the common data as the present author found it unnecessary to repeat the same information separately for each study. Similarly, the general procedure of technical preparation of all five studies is also thoroughly presented.

Each study is then described separately including objectives, a short description of the subjects, instruments, procedure, study findings, and ending with a discussion.

## **1.1. The general aim of the research project**

The primary objective of the research project was to investigate the nature of older adults' WTC in English in the classroom context, and it was aimed to address 25 research questions which are presented in the short description of the research project (Appendix 1), and they are also discussed separately for each of the five studies in the following sections of this Chapter.

In general, Study 1 was intended to diagnose the seniors' motives to learn English and their needs concerning the teacher's personality traits and teaching approaches that might facilitate older learners' communicative behaviours. Study 2 set out to examine the participants' WTC during communicative class, identify tasks that generated the highest and lowest level of WTC in English, as well as to determine variables that might influence their WTC in a positive and negative manner. Similarly, the purpose of Study 3 was to investigate the third agers' WTC during dyadic interaction, as well as to scrutinise the application of communicative strategies. Study 4, on the other hand, was to explore the participants' WTC in English during a self-prepared presentation and while answering the teacher's questions. Finally, Study 5 sought to examine correlations among WTC in English, intrinsic motivation, foreign language enjoyment, classroom environment, and teacher immediacy.

Overall, the project also set out to explore factors that may facilitate and hamper older adults' WTC in English in the classroom environment. It may be hypothesised that the teacher would play a pivotal role in shaping readiness to communicate, as he or she provides communicative opportunities in class that might promote learners' WTC. Moreover, peers may be assumed to be a significant variable owing to the fact that seniors are prone to share their knowledge and experience with each other, and learning is viewed as a social activity that fosters interpersonal bonds.

## **1.2. General data about the participants in Study 2, 3, and 4**

Contrary to Study 1 and 5, which involved members of different TAUs (details in the following sections), the subjects participating in Study 2, 3, and 4 were only the members of the TAU in Nowy Targ who had been attending English courses for seniors at Podhale State College of Applied Sciences in Nowy Targ (2 didactic hours a week)<sup>4</sup>. In a general sense,

---

<sup>4</sup> English courses for seniors have been organised by the present researcher since 2016. The present author, as a lecturer in the English Philology Department at Podhale State College of Applied Sciences in Nowy Targ, regularly cooperates with the members of the TAU in Nowy Targ. According to the present author (the teacher),

they represented the A1 and A2 level of proficiency, and thus they were members of two different proficiency groups. The participants reported that their previous occupations were as follows: nurse, engineer, economist, physiotherapist, office worker, teacher, manager, physical worker, accountant, and doctor.

When it comes to other personal data (i.e., gender, age, place of residence, education, the duration of learning English, the knowledge of other languages), they differ slightly in each study, and thus the information is discussed separately for each study in the following sections.

### **1.3. The instrument used in Study 2, 3, and 4**

The instrument used in all three qualitative studies was a self-assessment questionnaire (Appendix 3, 4, 5, part 1) adapted from Peng's (2014) scale measuring the level of WTC inside the classroom, and Gałajda's (2017) WTC scale where the participants were to use percentage scale to indicate the frequency of their readiness to communicate in English (0% - never, 100% - always). In Study 2, 3, and 4, the respondents were asked to indicate how willing they were to do a certain task (0% - full unwillingness, 100% - full willingness). The scale was structured in an increasing way every 10% (Appendix 3, 4, and 5). In addition, the third-age students were asked to explain why they had chosen a particular level of WTC in English.

The self-assessment questionnaire was filled in after each task as seniors could capture their perceptions the moment they finished their task performance. Such an approach enabled the older adults to concentrate on evaluating their WTC in a non-disruptive manner, and it gave the participants necessary time to provide answers (cf. Jaroszewska, 2010).

Much in a similar vein, the students were to provide demographic information which included: gender, age, place of residence, and education (Appendix 3, 4, 5, part 4). The participants were also asked about the duration of learning English throughout their life, and during English courses for third agers. Likewise, the subjects were to report their knowledge of foreign languages other than English, and whether they were learning different foreign languages at an advanced age.

---

there are no good coursebooks available for this cohort. Hence, the teacher uses "English File Pre-intermediate" (Latham, Oxenden, & Seligson, 2012) in the A2 group and "English File Beginner" (Latham-Koenig & Oxenden, 2014) in the A1 group. Those coursebooks, however, mainly determine topics, grammatical structures, and vocabulary during classes because the teacher uses loads of her on teaching materials (also prepared on various educational platforms, e.g., wordwall) that are specially adapted to particular groups of senior learners.

#### **1.4. General information about the procedure**

Four studies (Study 2, 3, 4, and 5) included different tools and scales originally designed in English while Study 1 consisted of questions entirely provided by the present author. The participants were given a questionnaire including original items translated into Polish to eliminate the risk of being misunderstood by the senior learners. As an initial step, the instruments used in all five studies were given to one of the present author's colleagues. She provided valuable feedback concerning corrections or paraphrases of Polish translations with a view of constructing very clear items. Importantly, the surveys were prepared to accommodate specific seniors' needs, that is to reduce difficulties resulting from potential age-related impairments. Therefore, the font size was 14 points, and in-between line space was 1.5 points (cf. Ramírez Gómez, 2016b). The participants signed consents for each study. They were also ensured that all data would be gathered for scientific purposes only.

Once the questionnaires were collected and coded, Microsoft Excel was used to calculate the total means and standard deviations for all the items. Cronbach's alpha values were calculated by means of the appropriate formulas in Microsoft Excel.

What should not be ignored is that Study 2, 3 and 5 were conducted during the pandemic. Study 5, which was mainly administered by means of online Google forms and sent as a link, was not affected as the classroom environment was not required. However, the pandemic circumstances forced the members of the TAU in Nowy Targ to have regular online classes (from March 2020 to June 2020, and from October 2021 to June 2021). Owing to the fact that the research aims of Study 2, 3, and 4 were to scrutinise WTC in English in the classroom settings, the seniors were asked to come to extra classes at Podhale State College of Applied Sciences in Nowy Targ. As noted earlier, the participants attended two different levels of proficiency groups (i.e., A1 and A2). According to sanitary rules and regulations at that time, in-person gatherings could involve only five people, and thus the older students were divided into subgroups consisting of 4 learners. Before the study, the third agers signed a special consent concerning the acceptance of sanitary rules.

At this juncture, it is reasonable to present and analyse all of the five studies in detail.

#### **2. Study 1: Questionnaire study**

The following subsections introduce Study 1 which was a questionnaire quantitative research (Appendix 2).

## 2.1. Research aims and questions

The overall aim of Study 1 was to identify which English language skills were the most fundamental for the older adults, as well as those which they found the easiest and the most difficult to learn. The study objective was also to scrutinise the third agers' perceptions of their in-class WTC, and to determine which factors may foster and inhibit their in-class WTC in English. Likewise, the participants were to report their expectations concerning an English teacher. More specifically, the research set out to investigate the following questions:

1. Which language skills are considered to be the most important to third-age learners?
2. Which language skills are deemed to be the easiest and the most difficult to learn?
3. Which form of interaction motivates seniors to communicate during English classes most?
4. What are the respondents' expectations referring to an English instructor?
5. Which teacher characteristics may discourage the older citizens from active communication in English?
6. Which components of classroom instruction facilitate in-class WTC in English the most?
7. Which factors hamper WTC in English in a classroom setting the most?

## 2.2. Participants

The informants were 63 members of the Third Age University in Nowy Targ and Zakopane who had been regularly attending English courses for seniors (2 didactic hours a week). Table 4 presents the age of the participants while Table 5 shows the older adults' gender, place of residence, and education.

**Table 4**

*Study 1 – the age of the participants*

years old	<b>50 – 55</b>	<b>56 – 60</b>	<b>61 – 65</b>	<b>66 – 70</b>	<b>71 – 75</b>	<b>75 and older</b>
No. (%)	<b>3 (5%)</b>	<b>5 (8%)</b>	<b>19 (30%)</b>	<b>25 (40%)</b>	<b>10 (16%)</b>	<b>1 (1%)</b>

*Note.*  $N = 63$ .

**Table 5**

*Study 1 - The participants' gender, place of residence, and education*

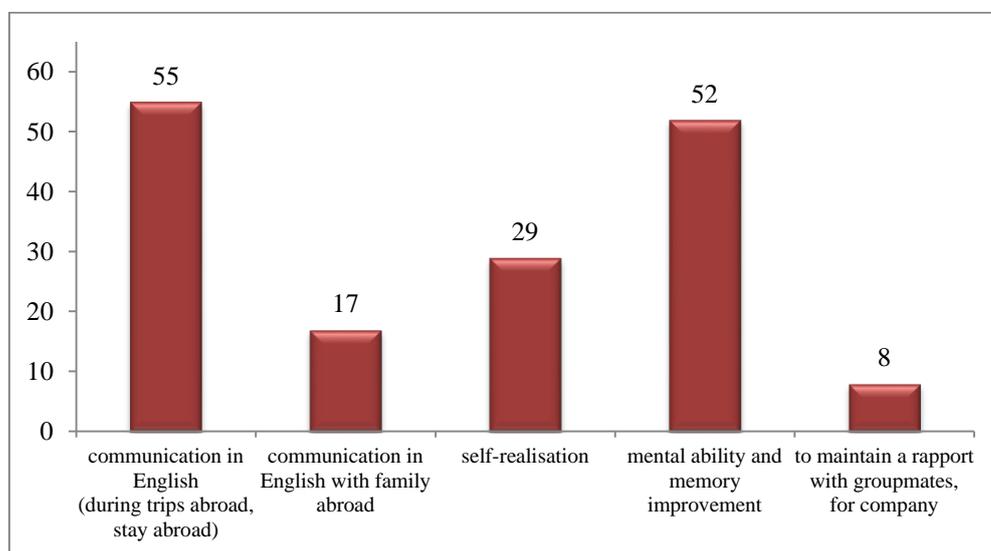
<b>Gender</b>		<b>Place of residence</b>			<b>Education</b>	
male	female	village	town up to 50,000 residents	town/city with more than 50,000 residents	tertiary	secondary
<b>5</b> (8%)	<b>58</b> (92%)	<b>6</b> (10%)	<b>57</b> (90%)	—	<b>38</b> (60%)	<b>25</b> (40%)

*Note.*  $N = 63$ .

The participants were also asked about learning English throughout their life, and during the English courses at the Third Age University. The analysis showed that 3 subjects had been learning English for less than one year, 22 students between 1 – 3 years, 12 informants between 3 – 5 years, 10 seniors between 5 – 7 years, 5 respondents 7 – 10 years, 5 third agers between 10 – 15 years, and 6 learners more than 15 years. As far as the English courses for seniors were concerned, most of the informants (41 subjects, 65%) declared 1 – 3 years of attendance. Figure 6 depicts the seniors' motives to learn English at an advancing age.

**Figure 6**

*The participants' motives for learning English in senior years*



*Note.* The figure illustrates the participants' motives to learn English at an advanced age. The participants could choose more than one answer.  $N = 63$ .

The participants mainly represented intrinsic reasons for learning English (i.e., mental ability and memory improvement – 53 students, self-realisation – 29 students), as well as instrumental motives (i.e., communication in English during trips – 55 learners, and with family abroad – 17 learners). It also needs to be noted that most of the subjects (53 students, 84%) admitted knowing other foreign language(s), mainly Russian (43 informants, 68%) and German (24 learners, 38%). The knowledge of French, Italian, Latin and Slovakian was also mentioned.

### **2.3. Research instrument and procedure**

The instrument adapted to this study was a questionnaire (Appendix 2) comprising biodata items, two open-ended questions referring to learning English throughout the participants' life and exclusively during English courses for seniors at the TAU (Questions 5 and 6). There was a closed-ended question related to the most vital reasons for learning English (Question 7). The informants were also asked about the knowledge of other foreign languages (Question 17). Additionally, the subjects were to indicate which language skills they found the most substantial, the easiest and the most difficult to learn (Questions 8 – 10). The further part of the survey included four closed-ended questions associated with communication and in-class WTC in English (Questions 11 – 14).

It should be mentioned that multiple choice options to questions 13 and 14 were adapted from the study conducted by Borkowska (2021) where the participants identified components of classroom instruction that were considered to foster in-class WTC, as well as the factors which were deemed to hinder WTC in English.

The questionnaire also included two open-ended questions concerning an English teacher, namely the third-agers' expectations and teacher characteristics which might discourage from active communication in a classroom setting.

As far as the members of the TAU in Nowy Targ are concerned, the questionnaire was administered by the present author (their teacher) who ensured the informants that all the data would be gathered and analysed only for scientific purposes. The third-age learners were also informed to ask questions in case they had any doubts or problems while filling out the questionnaire. When it comes to the third agers from Zakopane, the questionnaire was conducted by their teacher after the researcher had received the students' consent. The survey was completed during the seniors' regular class time, and it took the respondents approximately 15 minutes to fill out all the questions.

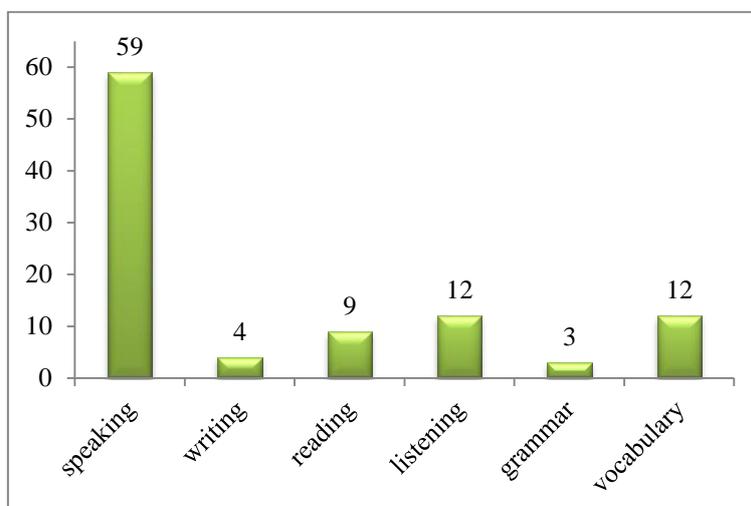
### **2.4. Study findings**

#### **2.4.1. Language skills**

The participants were to identify the most important, the easiest and the most difficult skills to study. They could choose between four language skills and two subsystems, namely grammar and vocabulary. Figure 7 illustrates the most important skills according to the subjects.

**Figure 7**

*The most substantial skills for the third agers*

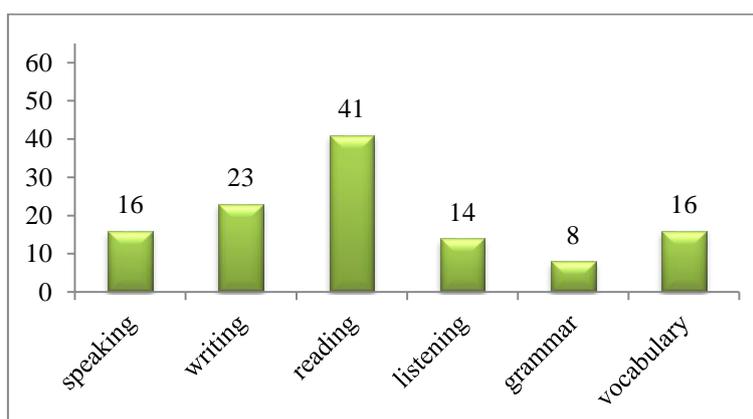


*Note.* This figure shows the most essential skills according to the older adults. The participants could choose more than one answer.  $N = 63$ .

The data revealed that 59 students (94%) acknowledged that speaking was the most significant skill. Both listening and vocabulary were found to be essential for 12 learners (19%). The least weight was given to grammar (3 subjects, 5%).

**Figure 8**

*The easiest skills according to the informants*

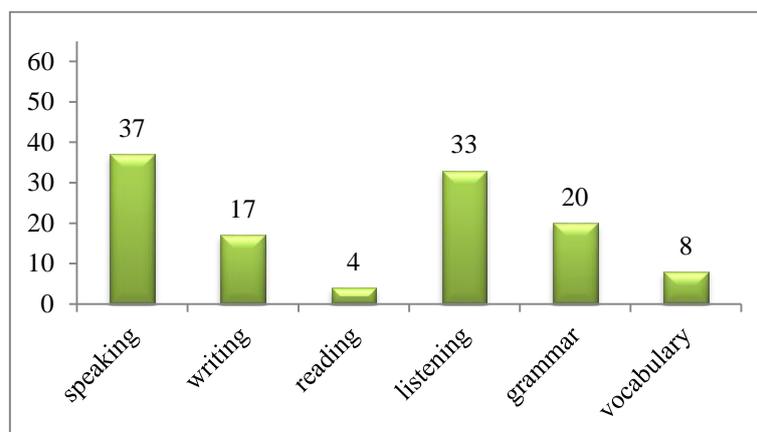


*Note.* This figure indicates the easiest skills according to the seniors. The participants could choose more than one answer.  $N = 63$ .

Furthermore, as can be seen in Figure 8, reading was perceived to be the easiest skill by 41 seniors (65%). The following effortless skill was writing (23 students, 37%) and vocabulary (16 third agers, 25%). Only eight students (13%) found grammar the simplest.

**Figure 9**

*The most difficult skills according to the seniors*



*Note.* This figure depicts the most difficult skills according to the third agers. The participants could choose more than one answer.  $N = 63$ .

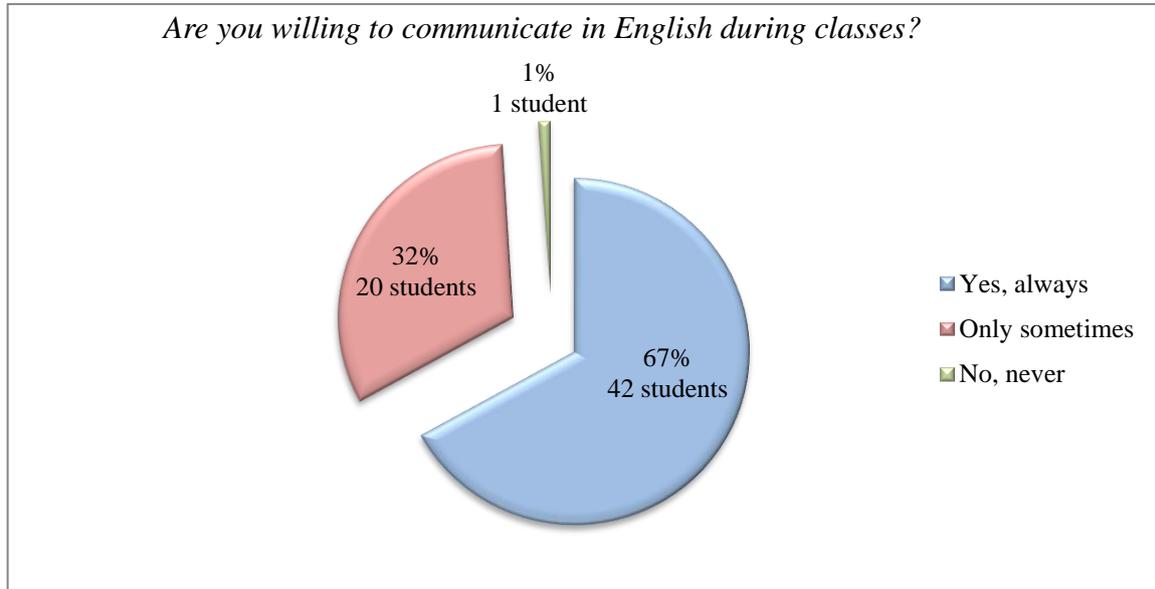
By contrast, speaking turned out to be the most difficult for the majority of the informants (Figure 9) which is quite inconsistent since, as previously indicated, grammar was considered to be the most demanding. Also, 32 students (52%) admitted that listening was the most difficult, which is rather unsurprising because, in a general sense, seniors are prone to hearing deficiencies that may hamper listening comprehension. The second productive skill, namely writing was deemed to be difficult for only 17 learners (27%). This might suggest that the older adults appeared to deal with a huge difference between English pronunciation and spelling quite positively. In addition, the finding that reading was seen as the least difficult skill, since only four seniors found it difficult, supports the students' standpoints presented above. Similarly, listening was considered to be the most difficult by over 50% of the participants.

#### **2.4.2. Communication and in-class WTC in English**

What the data suggested was that the older students were basically willing to communicate in English during classes, and only one person reported the unwillingness to communicate (Figure 10).

## Figure 10

*The older adults' WTC during English classes*

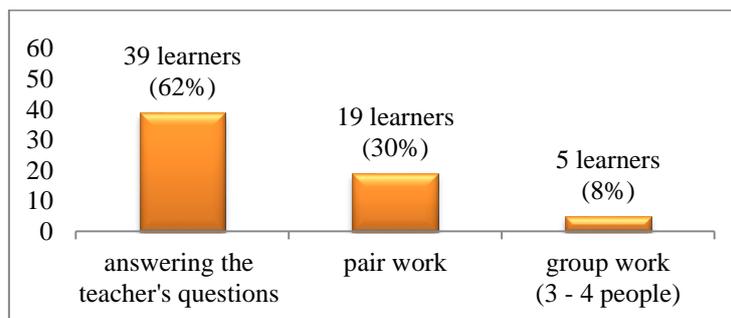


*Note.* This figure indicates the participants' perceptions about their WTC.  $N = 63$ .

As regards the type of interaction that motivated them to speak English during classes most, answering the teacher's questions turned out to be the strongest encouragement to interact (Figure 11). One plausible explanation for this situation may be the fact that the teacher is treated as an authority in the classroom, and the senior learners, who typically have a strong sense of duty and respect, felt obliged to interact with the teacher. It may also be hypothesised that most classes for seniors are teacher-centred, and thus older citizens are basically used to communicating with the teacher as opposed to interacting with a peer or peers.

## Figure 11

*The most preferable forms of interaction motivating to communicate in English*



*Note.* This figure presents the most preferable forms of interaction in class.  $N = 63$ .

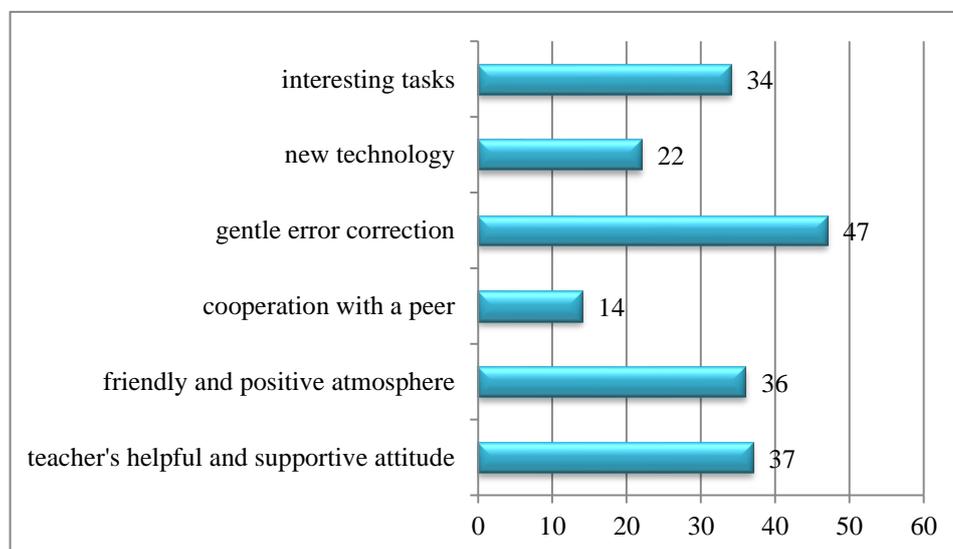
As also depicted in Figure 11, 19 students appeared to be motivated to communicate while working in dyads. Undoubtedly, this kind of interaction is believed to provide room for seniors to share their ideas and thoughts with a partner they usually know and enjoy learning with. In a language classroom setting, third agers prefer sitting and working with same partners which gives them a feeling of security and support. The data also revealed that the least encouraging form of classroom interaction was by all means group work (5 students). This might suggest that older citizens were conscious of more limited communicative opportunities when speaking with more than one peer.

### 2.4.3. The components of classroom instruction fostering in-class WTC in English

When it comes to in-class WTC in English, the participants indicated that gentle error correction is the most fundamental component of language instruction which fostered eagerness to speak (Figure 12).

**Figure 12**

*The components of classroom instruction increasing WTC in English*



*Note.* The participants could choose more than one answer.  $N = 63$ . As elucidated earlier, the components of classroom instruction fostering WTC were based on “In-class willingness to communicate in English among third agers: Results of a questionnaire study” by A. Borkowska, 2021, pp. 95–114. Copyright 2021 by Springer.

More than half of the students (36 students, 57%) admitted that a friendly and positive atmosphere, and the teacher's helpful and supportive attitude (37 subjects, 59%) were of paramount relevance for them. The teacher appeared to be a crucial figure, as his or her positive approach towards the students could generate a genuine interest in the older citizens' communitive engagement. The language instructor's gentle attitude towards error correction, and an ability to create a laid-back atmosphere might enhance in-class WTC by reducing potential anxiety which might accompany students' oral production of English.

The respondents also placed an emphasis on new technology in a classroom environment. What the analysis revealed was that multimedia devices were appreciated mainly by the learners who had had a chance to be taught by means of modern technology. The researcher's observations indicated that the students who were used to multimedia devices as teaching tools acknowledged the prominence of new technology used by the teacher. However, the seniors with whom they had classes in a very traditional classroom, where only a blackboard and a CD player were available, did not find the modern technology useful and beneficial in the classroom context.

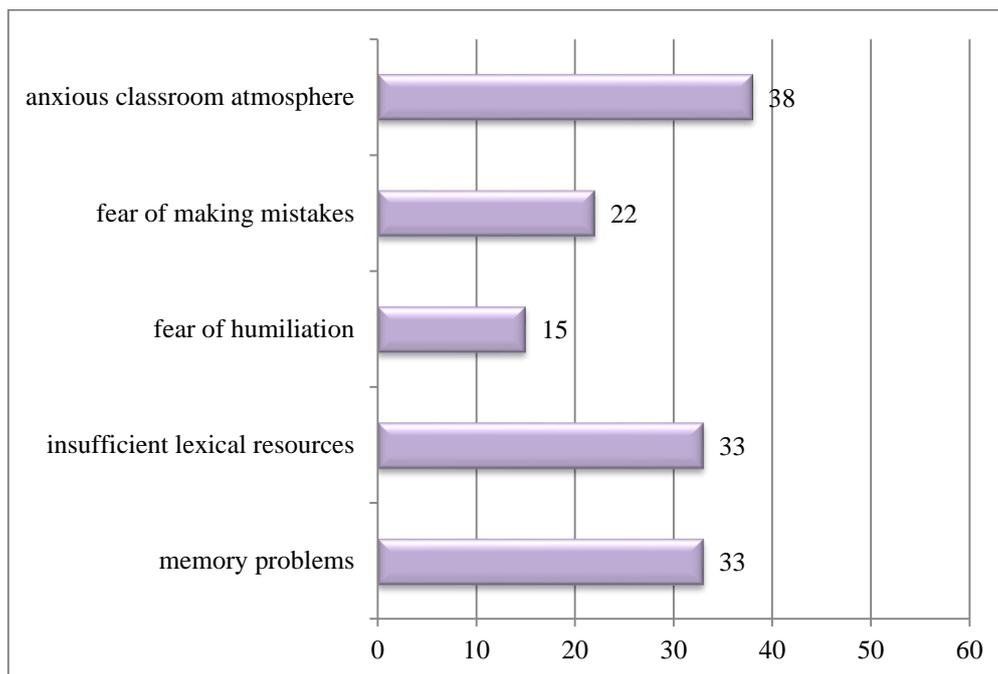
Significantly, 34 subjects (54%) reported that interesting tasks played a key role in boosting in-class readiness to speak. In this respect, it may be assumed that the older citizens gave high priority to exercises which could absorb and motivate them to active involvement. Much in a similar vein, some participants (14 students, 22%) admitted that cooperation with a peer might facilitate their WTC as they might have felt less insecure and more likely to interact.

#### **2.4.4. The factors hindering in-class WTC in English**

According to the third agers, the factors that could generate low WTC in English was an anxious classroom atmosphere (Figure 13). Thirty-eight students reported that a stressful climate might inhibit their eagerness to speak. This supports the finding mentioned above that a classroom atmosphere was of unquestionable significance for the older adults.

**Figure 13**

*The factors hampering in-class WTC in English*



*Note.* The participants could choose more than one answer.  $N = 63$ . As already mentioned, the components of classroom instruction inhibiting WTC were based on “In-class willingness to communicate in English among third agers: Results of a questionnaire study” by A. Borkowska, 2021, pp. 95–114. Copyright 2021 by Springer.

As illustrated in Figure 13, the same amount of the participants, namely 33 learners (52%) indicated that insufficient lexical resources and memory problems might exert a negative influence on WTC inside the classroom. Unsurprisingly, poor vocabulary knowledge appeared to block language students from using English in speech which, in the case of the third agers, is also related to the slower process of recollection. It is reasonable to hypothesise at this juncture that memory problems might be primarily associated with the retrieval of English words during conversation tasks, and thus, the older citizens may experience a greater fear and anxiety when compared to younger age groups. As regards a fear of making mistakes, 22 respondents (35%) declared that it affected their eagerness to communicate when 15 students (24%) indicated a fear of humiliation was deemed to have one of the most detrimental effects on their openness to speak.

#### **2.4.5. The teacher**

The data suggested that the older adults had quite heterogeneous and thought-provoking opinions and standpoints referring to a language instructor. The written responses,

which were collected by two open-ended questions (Question 15 and 16), were divided into two categories within the seniors' expectations, such as the teacher's personality features and the expectations referring to the components of classroom instruction, and within the teacher characteristics discouraging students' from active communication, namely the teacher's personality traits, and the detrimental factors affecting in-class WTC in English.

*The third agers' expectations about the language instructor*

Table 6 presents the most vital characteristics of an English teacher mentioned by the subjects.

**Table 6**

*The most crucial teacher characteristics named by the seniors*

No.	The most salient teacher's characteristics	No. of students
1.	understanding, emphatic	13
2.	patient	12
3.	cheerful, friendly	9
4.	helpful and supportive	8
5.	professional	7
6.	communicative	4
7.	motivating	3
8.	humorous	3
9.	tolerant	3
10.	strict	3

*Note.* This table shows the most substantial teacher characteristics mentioned by the seniors. The data were collected by means of an open-ended question.

As emphasised by the older learners, the language instructor needed to be understanding, emphatic and patient. One of the participants reported: “[the teacher] should be patient because a senior often has unreliable memory”<sup>5</sup> (S34). He or she was also required to be helpful and supportive which confirms the finding already discussed (Figure 12). Friendliness and cheerfulness were also indicated as one of the most preferable teacher's traits.

---

<sup>5</sup> All the older adults' opinions and views in all five studies were translated into English by the present author.

Table 7 shows that 15 students viewed a positive atmosphere as a substantial element of both the teaching and learning processes.

**Table 7**

*The most fundamental components of English classroom instruction for the older students*

No.	The participants' expectations from an English teacher	No. of students
1.	create a nice and friendly atmosphere	15
2.	prepare interesting lessons	9
3.	correct students' pronunciation	8
4.	prepare conversation tasks and dialogues	6
5.	prepare frequent revision exercises	6
6.	have clear pronunciation	5
7.	maintain a slow pace of a lesson	3
8.	communicate in English during classes	2
9.	give homework	2
10.	give clear and precise instructions	2

*Note.* This table illustrates the most crucial components of English language instruction for the older adults. The data were collected by means of an open-ended question.

As outlined by some older adults: “Professionalism, engagement, the ability to create a friendly atmosphere which gives students courage” (S57); “[the teacher should be] understanding, likeable with a great sense of humour with reference to an imperfect language group, an atmosphere in the group should be friendly” (S17). The age-advanced learners highlighted the importance of the teacher’s professionalism and methodological knowledge. They placed an emphasis on pronunciation correction and interesting tasks mainly in the form of conversation tasks, dialogues and revision exercises: “An English teacher for seniors should be understanding when it comes to our bad memory. Teaching material should be introduced in small amounts, frequent revision tasks and a lot of dialogues” (S47). What the data suggested was that the teacher was expected to have clear pronunciation and good communication skills. It may come as a surprise that two third agers gave prominence to homework, and one of them reported: “[the teacher] should force us to more intellectual effort by means of homework” (S31). What is more, two students pointed out that English ought to be the language of classroom instruction.

*The teacher characteristics discouraging the older students from active communication*

As presented in Table 8, an anxious teacher had a debilitating effect on in-class WTC among the third age learners as he or she was deemed to create and maintain a stressful classroom climate.

**Table 8**

*The most demotivating teacher characteristics*

No.	Teacher's characteristics that discouraged from communication in English during classes	No. of students
1.	anxious	11
2.	impatient	8
3.	critical	6
4.	unsupportive	4
5.	chaotic	4
6.	arrogant	3
7.	humiliating	2
8.	indifferent	2
9.	unpleasant	2
10.	uninvolved	2

*Note.* This table depicts the most demotivating teacher characteristics mentioned by the senior. The data were collected by means of an open ended question.

The mindful teacher, who wishes to work with seniors, should also bear in mind that impatience and criticism may exert a negative influence on older citizens' eagerness to interact. In a general sense, an impatient teacher may have undue expectations and conduct a lesson in a fast manner: "(...) an anxious atmosphere, fast-paced lessons, an anxious teacher, a lack of understanding when it comes to students' age and abilities" (S43); "(...) a very fast speed when I am not able to understand everything, a chaotic introduction of a new material, an anxious atmosphere" (S31).

Also, a lack of methodological knowledge may have a negative effect on in-class WTC (Table 9).

**Table 9***The affective factors influencing in-class WTC in English*

No.	Detrimental factors affecting in-class communication in English mentioned by the senior learners	No. of students
1.	anxious classroom atmosphere	9
2.	undue expectations	9
3.	fast pace of a lesson	7
4.	lack of methodological knowledge	5
5.	infrequent revision	2
6.	lack of communication skills	2
7.	poor English skills	2

*Note.* This table shows the affective factors influencing in-class WTC in English among the seniors.

It might be assumed that the negative teacher attributes could result in an inability to conduct a well-organised and interesting lesson, as well as an indifference towards the seniors: “(...) a stressful attitude towards students, a chaotic teaching style and an inability to maintain discipline” (S41); “(...) a lack of interest in learners, namely boring, uninteresting and unprepared lessons” (S60); “(...) an unwilling attitude, too brutal remarks about mistakes and an arrogant attitude” (S17).

## 2.5 Discussion

The present study shed some light on the third agers’ opinions about learning English at an advancing age, and the role the teacher played with reference to shaping their eagerness to speak. What should be underscored is that the vast majority of the students declared that speaking was the most substantial skill, yet it was also viewed as the most difficult language skill. It is reasonable to hypothesise that seniors generally realise that speaking English is quite complex, and it requires a knowledge of vocabulary and grammar, not to mention, appropriate timely reactions to the interaction, which may be disturbed by a slower recollection of lexical resources (cf. Kołodziejczyk, 2007). Such a viewpoint is supported by the study by Matusz and Rakowska (2019). The researchers found that speaking as such may generate in-class discomfort among third-age learners as it appeared the most difficult to acquire. An interesting fact is that although speaking was found the most demanding, the results of Study 1 indicated that the great majority of the participants were still willing to communicate in English during classes. This stems from the fact that their most essential

motives to learn English was improving speaking abilities (cf. Derenowski, 2021; Garcia, 2017).

Importantly, listening was perceived to be problematic. This may be associated with older people's potential auditory issues (cf. Jaroszevska, 2013b). It is noteworthy that most language textbooks are not specifically designed for older adults who require clear articulation. However, Ramírez Gómez (2019) indicated that a careful selection of listening tasks may have a beneficial effect on third agers' process of learning. An analysis of Study 1 also showed that reading was the easiest skill. One possible corollary for this situation is that older adults are used to being taught English in a traditional method in the past which was popular when they learnt a language in a formal class (Derenowski, 2021). Therefore, reading, as one of the most fundamental techniques in grammar translation seems to be "effective in developing their [seniors'] competence in English" (Grotek, 2018, p.135). Also, senior learners appear to transfer skills from their native language, and use them as a learning strategy (cf. Grotek & Ślęzak-Świat, 2018). In a similar manner, writing turned out to be the second easiest skill. The present author's numerous observations confirm the fact that older students tend to note down everything they are taught, and it seems to be one of the most effective strategies, which also derives from a traditional method. Derenowski (2021, p. 120-121) remarks that note taking is a commonly used strategy among seniors as they "probably make use of the experiences from previous stages of education".

What also seems to be critical is that interaction with a teacher was reported to be the most motivating, and it had the potential to generate a high level of in-class WTC in English among the seniors. This result stands in contrast to previous studies in which communication in dyads was deemed to be less anxiety-provoking and engaging than teacher-led tasks (e.g., Mystkowska-Wiertelak, 2016; de Saint Léger & Storch, 2009). It is worth noting that older students view the teacher as an authority in the classroom, and thus, they appear to be more willing to speak English with him or her. It may be hypothesised here that this form of communication may be treated as a duty or obligation (cf. Derenowski, 2018).

Undoubtedly, the teacher is at the heart of their learning process, and he or she remains a vital figure in a classroom setting. It is fairly evident that the respondents placed utmost importance on the language instructors, their personality features, as well as their classroom management and teaching style (cf. Grotek, 2018). The teacher as such ought to be able to build interpersonal relationships with students, provide support and patiently correct mistakes in a gentle manner as his or her positive attitudes towards older learners may enhance their eagerness to use English orally. Additionally, educators who work with age-advanced

EFL learners are required to be experienced enough to be able to come up to their expectations, and be aware of the fact that seniors have a lifelong knowledge, wisdom and pragmatism. Typically, seniors give priority to the instructor's professionalism, experience and teaching skills (e.g., Derenowski, 2019).

In this study, the respondents also acknowledged that a positive classroom climate, where the fundamental element was the teacher support, broadened and facilitated their communicative behaviours (cf. Kacelt & Klímová, 2021). It seems to be rather clear that a friendly classroom environment and teacher immediacy exerts an influence on students' WTC regardless of their age. As outlined by some scholars (e.g., Lee, 2009; Piechurska-Kuciel, 2014), both a supportive climate and teacher support are potent variables affecting in-class WTC. By contrast, a negative and stressful atmosphere leads to lower levels of in-class WTC, and an anxious teacher, according to the third agers, discouraged them from active involvement most. Negative teacher emotions may affect his or her students' performance in the classroom context, and result in a higher level of self-stereotyping in the case of older adults (cf. Pawlak & Kruk, 2021)

In this context, it needs to be stated that the third agers' well-being in the classroom environment should be of great value, both for the teacher and students themselves. The classroom atmosphere as such may be perceived as one of the most substantial variables which may push or halt students' WTC (e.g., Eddy-U, 2015). A negative climate inside a language classroom appeared to generate a more powerful fear of humiliation or making mistakes, which may result in older learners' passivity, discouragement and demotivation. Needless to say, adults at a senior age are more prone to losing their state confidence and self-esteem since there is a high probability that anxiety and stress might block or decrease their memory capacity which has already been affected by ageing (cf. Oxford, 2018).

The data also suggested that gentle error correction constituted a key element in boosting WTC in English. Feedback ought to be given in a stress-free manner, as it has a positive impact on shaping higher level of WTC (e.g., Zarrinabadi, 2014). One needs to bear in mind that non-threatening correction helps third agers to become more open to experiment with a foreign language on a regular basis, and consequently, their low self-esteem might be enhanced. The data showed that third agers paid due attention to correct pronunciation, and they frequently expect the teacher to correct their pronunciation mistakes. In this respect, a tolerant approach to error correction intends not only to make students' communication more effective, but it also results in boosting students' readiness to speak (cf. Matusz & Rakowska, 2019).

It is also noteworthy that the older people put an emphasis on interesting tasks. This resonates with the previous research conducted by Zhang, Beckmann, and Beckmann (2019) in which task interest was found to serve as a facilitator of state WTC. The researchers write that “language teachers who would like to encourage state WTC in language classrooms should not underestimate the impact of students’ interest in the form and context in which language learning is embedded” (Zhang et al, 2019, p. 21). In the case of third agers, one needs to remember about a variety of revision tasks, topics which present positive images of retirement and successful ageing, as well as modern teaching devices which may inspire students to explore language not only in-class but also at home (e.g., Piechurska-Kuciel & Szyszka, 2018). New technology is also of utmost importance, as seniors are likely to use Internet applications on a daily basis (e.g., Pawlak et al., 2018).

It may be concluded that in order to enhance senior learners’ communicative behaviors in the classroom context, teacher support and positive personality traits are of unquestionable importance as older adults feel secure to share their knowledge. What needs to be remembered is that senior learners attend foreign language classes mainly because they wish to spend time together in a comfortable atmosphere that boosts their well-being and self-confidence (Pfenninger & Polz, 2018).

### **3. Study 2: In-class WTC in English during the communicative class**

At this point, it is worthwhile to analyse the seniors’ in-class WTC during the communicative class. The following subsections presents the first of three classroom-based studies (Study 2).

#### **3.1. Research aims and questions**

The primary objective set to Study 2 was to scrutinise third agers’ WTC during their task performance, as well as to identify tasks which generate the highest and the lowest levels of in-class WTC. More specifically, the research was aimed at addressing the following questions:

1. What is the seniors’ WTC during the task performance?
2. Which tasks generate the highest and the lowest levels of WTC in English?
3. How do the third agers assess the tasks performed during the communicative class?
4. Which tasks are reported to most facilitate and hamper in-class WTC in English during the communicative class?

### 3.2. Participants

The informants were 16 students of the TAU in Nowy Targ. Table 10 presents their personal data.

**Table 10**

*Study 2 – the participants' personal data*

Gender		Age			Place of residence		Education		Proficiency level	
male	female	maximal	average	minimal	village	town up to 50,000 residents	tertiary	secondary	A1	A2
-----	<b>16</b>	<b>72</b>	<b>66</b>	<b>57</b>	<b>2</b>	<b>14</b>	<b>10</b>	<b>6</b>	<b>12</b>	<b>4</b>

*Note.* N = 16.

On average, the older adults reported to have been learning English for eight years. When asked about English courses for seniors, the mean length of participation was three years. Regarding the knowledge of foreign language(s), the data revealed that six students knew Russian, two participants knew only German and three reported to know both Russian and German. A knowledge of Italian, French and Latin was also mentioned.

### 3.3. Research instruments

As already mentioned, the first instrument was a self-assessment questionnaire (Appendix 2, part 1) adapted from Peng's (2014) and Gałajda's (2017) WTC. Also, the Classroom Environment Scale (Fraser, Fisher, & McRobbie, 1996) was used to measure task orientation (Appendix 3, items 1 – 5). Originally, this scale consisted of 13 statements regarding teacher support, group cohesiveness, and task orientation. This study, however, was intended to concentrate on assessing tasks, and thus, only items concerning task orientation were utilised. It was the present author's intension to refer all the items to Study 2 and tasks conducted during that particular communicative class, and thus all the items were transformed to the past tense. The scale was designed as a 6-point Likert scale (1 – I strongly disagree, 6 – I strongly agree). Some items on the scale for task orientation were as follows: "Tasks designed in this class were useful", "Activities in this class were clearly and carefully planned". In addition, the students were also asked to choose one task which had facilitated

(Appendix 3, part 2, question 6) and inhibited (Appendix 3, part 2, question 7) their WTC in English most during the communicative classes, and they were to answer why they had indicated those particular tasks.

### 3.4. Tasks

As illustrated in Table 11, the first two activities were form-focused whereas Tasks 3 and 4 were meaning-focused. Tasks 1 and 2 were completed individually with the teacher (the researcher) while Tasks 3 and 4 were done in dyads.

**Table 11**

*The short description of tasks completed during Study 2*

No.	Name	Pattern of interaction	Grouping	Focus	Time
1.	Brainstorm	T-S	individual work	form	ca. 5 min
2.	Describing the pictures	T-S	individual work	form	ca. 25 min
3.	Asking and answering questions	S-S	pair work	meaning	ca. 15 min
4.	Questions about future holidays	S-S	pair work	meaning	ca. 5 min

Note. The exercises were specially designed for this study by the present author (the teacher).

#### *Task 1 - Brainstorm*

Firstly, the students were asked to brainstorm words connected with the summer holidays. The participants voluntarily named vocabulary which was written on the board by the teacher.

#### *Task 2 - Describing the pictures*

The second task, namely describing the pictures was prepared and performed by means of a PowerPoint presentation and a multimedia board. The seniors were shown six slides and each one consisted of a set of four pictures associated with the summer holiday period:

- I. places: city, mountains, lake, sea
- II. countries: the UK, Italy, Brazil, Japan

- III. transport: car, bus, tram, bike
- IV. activities: meeting friends, reading a book, swimming, going to museums
- V. fruit: strawberries, bananas, oranges, apples
- VI. food: pizza, hamburger, salad, French fries

One student was asked to describe one picture from the set. The teacher intended to give each student an opportunity to describe at least one picture, and thus the third agers were assigned to do the task randomly by the instructor.

*Task 3 - Asking and answering the questions*

The task was also prepared on slides, and was done in pairs. There were four slides, each one with one question, and some thematic pictures which could inspire and prompt the students' answers. First, one senior asked their partner the question. Having answered the questions, the roles were then swapped. Then, the teacher moved on to the next slide. The questions were as follows:

1. Where do you like going on holiday?
2. How do you like travelling?
3. What do you like doing during your holiday? Do you prefer an active or passive holiday?
4. What do you eat during your holiday?

*Task 4 – Questions about future holidays*

The last task was performed in the same pairs as Task 3. The students were presented with questions on the slide which contained one main question and two alternative answers followed by two different sets of questions:

<b>ARE YOU PLANNING TO GO ON HOLIDAY THIS SUMMER?</b>	
<b>YES</b>	<b>NO</b>
1. When are you going on holiday?	1. What are you planning to do in your hometown?
2. Where are you going on holiday?	2. Are you planning to go on short trips?
3. Are you going to use English on holiday?	3. Are you planning to learn English at home?

When the partner was interviewed, the roles were then swapped.

### 3.5. Procedure

The study was conducted during the students' regular classes (2 didactic hours), separately in the A1 and A2 group during the last lesson before summer break. It was the present author's intention to conduct the research in June since that time could additionally motivate the participants to share their thoughts and opinions about their upcoming holiday. The study covered 50 minutes of the classes. It took about 15 minutes to explain the procedure to the students, and about 25 minutes to fill in the survey.

At the beginning of the class, the students were given one questionnaire (Appendix 3). They were informed that they would be guided step by step when to fill in each part. They were assured that all opinions were significant for the teacher, and there were no incorrect answers.

After performing Task 1, the teacher asked the third graders in Polish to fill in a self-assessment scale, that is to indicate the level of in-class WTC in English during the task and to answer the question as to explain why that particular level had been chosen (Appendix 3, part 1). The students were given about 5 minutes to fill in a self-assessment scale, and the teacher waited for all respondents to finish in order to give them time to think thoroughly about their answers. The same procedure was continued after Tasks 2, 3 and 4.

As shown in Table 11, Tasks 1 and 2 were done individually. The teacher paid attention to accuracy, and thus, all the mistakes were corrected. As regards Tasks 3 and 4, the seniors were working with partners. They were free to choose their partners. All of them decided to work with partners sitting at the same desk. The teacher was monitoring each pair in a non-disturbing manner.

Having completed all tasks and the levels of WTC in English, the informants were asked to fill in parts 2 and 3 of the survey. They were given about 10 minutes to fill in those parts of the questionnaire.

Once the surveys were collected and coded, Microsoft Excel was used to calculate the total means and standard deviations for all items. This was followed by tallying Cronbach's alpha by means of the appropriate formula in Microsoft Excel. The data concerning the tasks that enhanced and hampered WTC were gathered through open-closed questions (Appendix 3, part 2, questions 6 and 7). The seniors' opinions were counted, and divided into situation cues, as proposed by Zhang et al. (2018) in the framework of situational antecedents of state WTC (see Chapter 3).

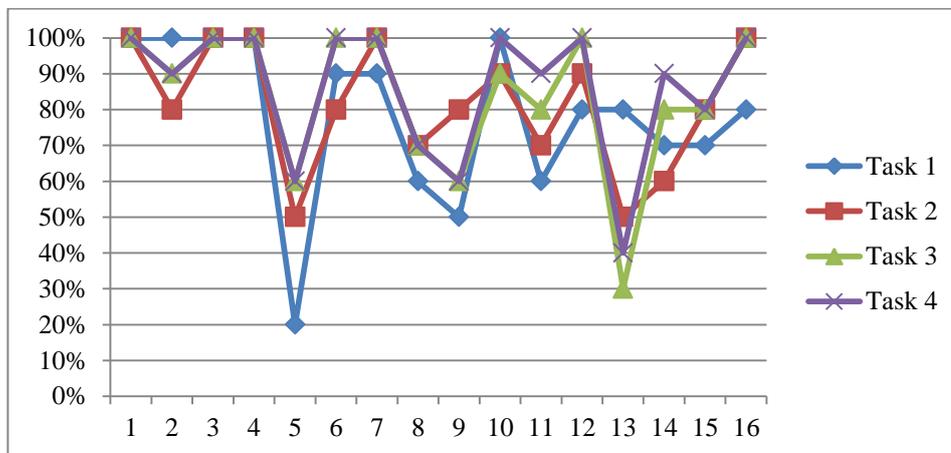
### 3.6. Study findings

#### 3.6.1. The third agers' WTC in English during the communicative class

What the data revealed is that the mean in-class WTC in English during the whole communicative class was 82.35%, which is considered to be very high. As illustrated in Figure 14, the lowest individual WTC was noted in Task 1 – 20%, and in Task 3 – 30%.

**Figure 14**

*The levels of WTC for Tasks 1, 2, 3, 4 for individual students*



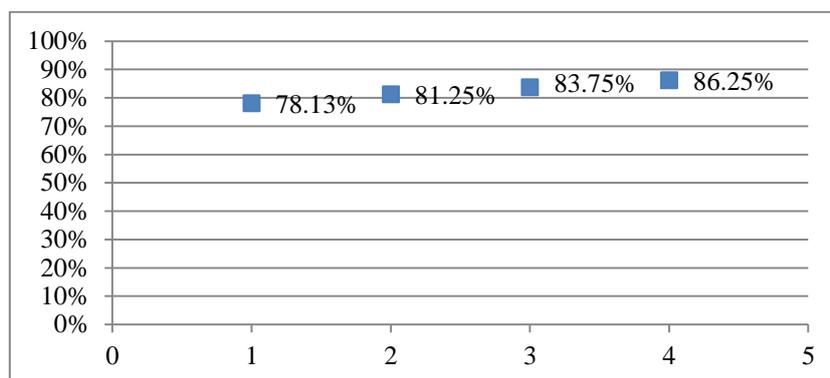
*Note.* This figure illustrates the individual learners' levels of WTC for four tasks performed during the communicative classes.  $N = 16$ .

The greatest number of maximum WTC in English was reported in Task 4 (8 students). The lowest number of the maximum in-class WTC was declared in Task 1 and Task 2 by five participants, while seven students reported 100% WTC in Task 3. The most diverse levels of WTC in English between the participants were noted in Task 1, whereas the most homogenous responses were observed in Task 2.

As presented in Figure 15, there was a gradually increasing trend in WTC in English during the task performance. In-class WTC among the third agers did not radically grow over time and the starting level of WTC was already quite high.

## Figure 15

*The means of in-class WTC in English during the task performance*



*Note.* This figure presents average levels of WTC in four tasks.  $N = 16$ .

On average, the first task generated the lowest level of in-class WTC (78.13%), whereas the last task indicated the highest-level WTC (86.25%) among the respondents. One plausible explanation for this is that the third agers felt insecure and less eager to speak at the beginning of the class. Also, Tasks 1 and 2 were teacher-centred, and thus the seniors might have avoided the possible risk of making mistakes in front of the group. The students were likely to experience discomfort while brainstorming (Task 1) as such a task is primarily based on vocabulary retrieval. It is commonly known that senior learners tend to stereotype and think negatively about their memory, which might also hamper their WTC. Likewise, naming holiday words without any context was not inspiring. It may have been treated as a warm-up task, the primary goal of which was to activate the students. Student 5, who reported only 20% WTC, admitted to not having felt well during the task.

As depicted in Table 11, Tasks 1 and task 2 were form-focused exercises. Task 2 was based on the pictures which stimulated the participants' descriptions. The third-age students declared a slightly higher level of in-class WTC in English during the second task, which may come as a surprise, since it was much longer than Task 1 (ca. 5 minutes), and it lasted about 25 minutes. Further, the pictures were not described voluntarily. Each student was given a communicative opportunity to express thoughts at their own pace which might have fostered the readiness to speak as every participant felt obliged to complete it.

When it comes to meaning-focused tasks, that is Task 3 and task 4, the data revealed that the older adults were the most willing to complete the last task (Figure 15). A possible corollary to this situation may be the structure of the activity. As opposed to Task 3, which was based on asking the same questions to each other, Task 4 offered two alternative sets of questions which made it more intriguing and challenging. Moreover, Task 3 involved sharing

opinions about repeated activities while Task 4 required exchanging information about the nearest future and expectations that might additionally develop a positive view of the exercise.

The students' standpoints given after having completed every task were consistent for both form-focused and meaning-focused activities. The most common situation cue that facilitated their WTC in English during the task performance was principally the type of exercise. As highlighted by the senior learners, Task 1 and Task 2 aided them to revise their vocabulary: "You need to think fast in English which is difficult at times but these types of exercises are very interesting and I like them" (S12); "I like being motivated to recall vocabulary, a particular topic helps to put vocabulary in order" (S2); "Asking questions creates utterances, increases lexical resources" (S3). By contrast, Task 3 and Task 4 eased their conversations owing to dyadic interaction. The students reported that: "It is easier to ask and answer questions with a friend, less stress" (S14); "It is easier to communicate with a friend I have known for many years. We know what we like and how we spend our holiday so there is more vocabulary" (S8); "I like Task 3 because it is both pleasant and useful, we are always in a good mood with my friend and we communicate well" (S12).

The factor which hampered WTC most was a lack of FL vocabulary. In brief, the third-age learners admitted that insufficient vocabulary resources inhibited their desire to communicate: "It is more difficult to answer questions on your own because of insufficient vocabulary" (S9); "My vocabulary is not sufficient enough and that's why my WTC is not 100%" (S14); "At times I become blocked when it comes to retrieval of holiday words" (S10).

### 3.6.2. The older adults' perceptions of the tasks

Table 12 presents the means and the standard deviations for the task orientation items.

**Table 12**

*The means and standard deviations for task orientation*

No.	Item	<i>M</i>	<i>SD</i>
1.	Tasks designed in this class were useful.	5.81	0.40
2.	Tasks designed in this class were attractive.	5.75	0.58
3.	I know what I was trying to accomplish in this class.	5.50	0.63
4.	Activities in this class were clearly and carefully planned.	5.63	0.62
5.	Class assignments were clear so everyone knew what to do.	5.69	0.60
Total		5.68	0.60

*Note.* The Cronbach's alpha value for task orientation was acceptable and amounted to 0.72.  
*N* = 16.

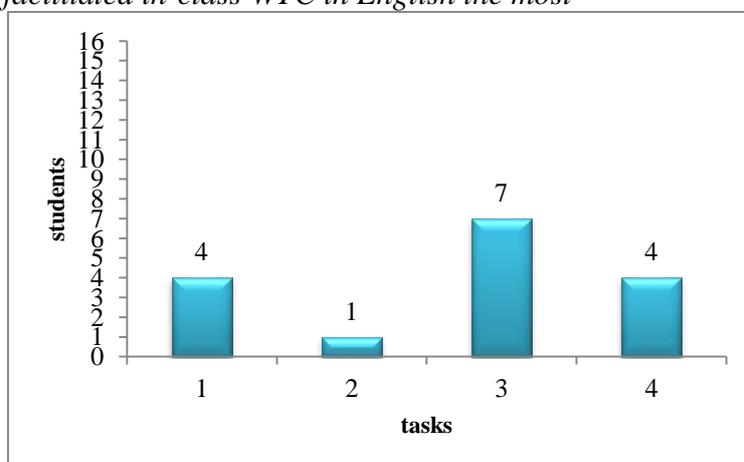
The third agers found the activities useful ( $M = 5.81$ ) and attractive ( $M = 5.75$ ). It ought to be underscored that regardless of the proficiency level or linguistic difficulties, they seemed to be genuinely engaged in competing all tasks. Likewise, the respondents admitted that the exercises were clearly and carefully planned ( $M = 5.63$ ), which surely broadened and enhanced active involvement. Also, it was acknowledged that the class assignments were clear ( $M = 5.69$ ) which served as a prominent factor influencing WTC. The lowest, but still a relatively high score, was reported in item 5 ( $M = 5.50$ ) associated with the awareness of class aims. The third-age students appeared to be so overwhelmed by completing the exercises that they may have become unaware that active participation was the primary objective of the communicative class. What also needs to be pointed out is that the standard deviation of task orientation was relatively low (0.60). This suggests that the older adults' responses were rather homogeneous. As previously discussed, the type of activity was deemed to be the strongest predictor of high level of WTC in English, and it also turned out to be the most fundamental situation cue which fostered the readiness to communicate in the classroom settings.

### 3.6.3. The task that fostered WTC in English most during the communicative class

As illustrated in Figure 16, the task which increased the respondents' readiness to communicate most was Task 3. This finding stands in contrast to the previous result that has indicated that Task 4 generated the highest mean level of in-class WTC in English during the task performance (Figure 15).

**Figure 16**

*The tasks which facilitated in-class WTC in English the most*



*Note.* This figure depicts the older adults' answers regarding the tasks that had fostered their WTC the most during the class.  $N = 16$ .

The seniors admitted that Task 3 was associated with something pleasant, stress disappeared because, “I could speak with my partner and I did not speak and present my opinions publicly” (S5); “I think it was very interesting” (S15); “The task done with a friend made my communication easier” (S8).

The analysis of situation cues revealed that the senior learners enjoyed this type of task (Table 13).

**Table 13**

*Situation cues mentioned for Task 3*

Situation cues	No. of students
teacher (teaching style, classroom management, other behaviours)	3
peers (familiarity, communicative behaviours, demographics)	3
class (climate, cohesiveness, class size)	0
activity (type, preparation time, assessment)	4
topic (thematic category, content knowledge, FL vocabulary)	0

*Note.* This table shows the situation cues mentioned by the third agers for Task 3. Situation cues were based on “To talk or not to talk: A review of situational antecedents of willingness to communicate in the second language classroom” by J. Zhang, N. Beckman, & J. F. Beckman, 2018, *System* 72, 226–239.

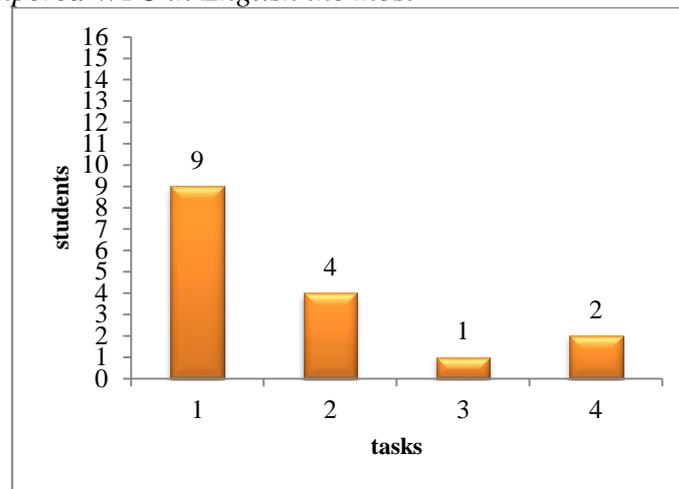
It is reasonable to hypothesise that dyadic interaction was pleasant and interesting, since the role of the partner was also mentioned as a positive variable because the students appreciated the interlocutor’s involvement. Surprisingly, although Task 3 was student-centred, the teacher seemed to be a key figure as well. It was emphasised that the instructor’s supervision was of great value as it motivated students to speak in pairs more. The class or topic were not perceived as situation cues affecting WTC in English in the case of Task 3.

#### **3.6.4. The task that inhibited WTC in English most during the communicative class**

The activity that hampered the seniors’ WTC in English during the communicative class most was Task 1, which was chosen by nine students (Figure 17). This finding is consistent with what has been discussed earlier, that is Task 1 was also indicated as the one which had generated the lowest level of WTC among the seniors.

**Figure 17**

*The tasks which hampered WTC in English the most*



*Note.* This figure depicts the older adults' answers regarding the tasks that had inhibited their WTC the most during the class.  $N = 16$ .

Interestingly, the students justified their answers in a much more diverse way than in the case of the exercise that facilitated their WTC. What had inhibited their readiness to speak were not primarily situation cues, but student-related variables. When it comes to the negative dimension of situation cues connected with Task 1, two students mentioned the type of activity (Table 14). The students acknowledged that insufficient FL vocabulary in the topic category hampered her WTC. Although Task 1 was teacher-centred, the instructor was mentioned only once: “The task done with a teacher was quite stressful, but it forced thinking” (S12).

**Table 14**

*Situation cues mentioned for Task 1*

Situation cues	No. of students
teacher (teaching style, classroom management, other behaviours)	1
peers (familiarity, communicative behaviours, demographics)	0
class (climate, cohesiveness, class size)	0
activity (type, preparation time, assessment)	2
topic (thematic category, content knowledge, FL vocabulary)	1

*Note.* This table shows the situation cues mentioned by the subjects for Task 1. Situation cues were based on “To talk or not to talk: A review of situational antecedents of willingness to communicate in the second language classroom” by J. Zhang, N. Beckman, & J. F. Beckman, 2018, *System* 72, 226–239.

What is worth underscoring here is that the subjects gave more prominence to learner-internal factors. When it comes to affective variables, it was reported that Task 1 decreased in-class WTC most owing to fear (2 students), lack of confidence (1 student), becoming blocked (2 students), fatigue (1 student), stress (1 student) and memory problems (1 student). It was acknowledged that “I was so stressed out that I couldn’t recall words” (S5); “I became blocked. I didn’t know what to expect” (S8); “Fear of saying a word, fatigue, I was thrown in at the deep end” (S11). The participants seemed to blame themselves for a lower level of WTC. Although state WTC was prompted by situation cues, their own subjective feelings were reported to drag their desire to speak.

### **3.7. Discussion**

The findings of the present study provided valuable insights into the nature of in-class WTC in English during the communicative class. It must be acknowledged that the seniors’ WTC in English was relatively high from the onset of the class (Figure 15). This finding is consistent with Nizegorodcew’s (2018) study in which teacher trainees admitted that senior learners appeared to be willing to speak and share their opinions in class. In the case of older adults, communicative opportunities during language classes may have a potent effect on third-age students’ social life and general well-being as conversations with other people in helping them in maintaining interpersonal bonds (Pfenninger & Polz, 2018). Likewise, learners with a high WTC are likely to “function as autonomous learners, making independent efforts to learn the language through communication, without teacher’s help” (Kang, 2005, p. 278).

The high level of WTC in English may also be linked to usefulness and attractiveness of the tasks performed during the class (Table 12). In a general sense, the participants found the tasks interesting probably owing to the topic and types of interaction. It is well-established that older adults have a preference for life-directed topics (Gabryś-Barker, 2020). Such topics may help seniors achieve practical goals of learning English, that is improving communicative skills (e.g., Derenowski, 2019). They find communicative tasks enjoyable since they provide room for sharing their extensive experience and knowledge (Eguz, 2019). Notably, as noted by Dewaele and MacIntyre (2014, p. 261), a sense of enjoyment “might be the emotional key to unlocking language learning potential of adults”.

It turned out that Task 3 enhanced in-class WTC in English among the greatest number of the seniors examined (Figure 16). This result may be supported by Borkowska’s

(2021) study in which older learners demonstrated much higher WTC in English in meaning-focused activities than in form-focused ones. It is reasonable to hypothesise that meaning-focused tasks foster seniors' readiness to speak as they stimulate meaningful communication that constitutes the core of learning English in late adulthood (cf. Matusz & Rakowska, 2019). The participants also indicated that the partner played an important role in completing Task 3. Working in dyads is likely to foster learners' readiness to speak regarding – among others – familiarity with an interlocutor (Riasati, 2018). In the study by Mystkowska-Wiertelak and Pawlak (2017), younger adults admitted that they were more willing to talk with a groupmate they knew. The scholars point out that “being forced to complete an activity with individuals whom they [students] did not know very well diminished rather than enhanced their eagerness to make a contribution to the ongoing interaction” (Mystkowska-Wiertelak & Pawlak, 2017, p. 160). Also, the seniors admitted that the teacher was a powerful situation cue in the case of Task 3 (Table 13). They highlighted the importance of the instructor's monitoring and supervision. Sheybani (2019, p. 8) aptly notes that “teacher immediacy is one of the constituents of EFL learners' WTC and that their WTC is likely to increase when teachers demonstrate immediacy behaviors while teaching”. This finding is in line with previous studies which indicate that teacher immediacy may contribute to fostering in-class WTC and maintaining a good rapport with students (e.g., Peng, 2012). The present author deliberately allowed the students to work with partners they liked cooperating with, as it may be hypothesised that changing the partners would have ruined a friendly and positive atmosphere (cf. Oxford, 2018).

What the data analysis also revealed is that Task 1 was declared to inhibit the older adults' WTC in English most (Figure 17). The participants noted that its type had a negative impact on WTC in English. It comes as no surprise that exercises based on vocabulary retrieval (e.g., brainstorming) tend to create potential difficulties for older students as their WM capacity decays with age slowing down the process of cognitive functioning (e.g., Findsen & Formosa, 2011). Therefore, Task 3 evoked negative emotions, such as fear, lack of confidence, and stress. MacIntyre (2016, p. 6) states that anxiety is related to fear, “which tends to produce avoidance behaviour”, and learners simply avoid using a FL. In the framework of situational antecedents of state WTC, Zhang (2018) and her associates emphasise that time given for task preparation is also vital. Zarinnabadi (2014, p. 292) mentions the importance of “extended teacher's wait time” that is fundamental for those learners “who tend to think about the linguistic characteristics of their speech before initiating

a response or speaking”. When students are not given enough time to respond, they are likely to be afraid of making mistakes (Riasati, 2012).

Compared to younger adults, the teacher should give high priority to giving older adults more time to complete tasks at their own pace (Grotek, 2018). Too fast tempo of teaching and eliciting information from older adults may evoke negative emotions which, in turn, will affect their self-esteem and exacerbate self-stereotyping process (cf. Oxford). In this regard, the comprehensive knowledge of a particular language group based on needs analysis plays a powerful role in adapting the pace of the lesson to older adults’ expectations (e.g., Derenowski, 2021).

#### **4. Study 3: In-class WTC during the information-gap activity**

When it comes to Study 3, it is introduced and analysed in the following subsections.

##### **4.1. Research aims and questions**

The main objective set to Study 3 was to investigate the third agers’ in-class WTC in English during an information-gap activity, as well as to identify the application of communication strategies during this task performance. The older adults were also to self-evaluate their participation in the task, and to answer questions regarding their WTC in English in dyadic interaction. In particular, the present study was conducted to address the following questions:

1. What is the level of in-class WTC in English during the information-gap activity?
2. How do the seniors self-assess their participation in the task?
3. What is the older adults’ in-class WTC during interaction in pairs?
4. Which communication strategies do the third agers use during the task performance?

##### **4.2. Participants**

Table 15 presents the third agers’ personal data.

**Table 15***Study 3 – the participants’ personal data*

Gender		Age			Place of residence		Education		Proficiency level	
male	female	maximal	average	minimal	village	town up to 50,000 residents	tertiary	secondary	A1	A2
<b>1</b>	<b>15</b>	<b>75</b>	<b>69</b>	<b>61</b>	<b>1</b>	<b>15</b>	<b>12</b>	<b>4</b>	<b>8</b>	<b>8</b>

*Note. N = 16.*

The mean duration of learning English throughout the older learners’ life was eight years. Also, on average, they reported to have been attending English courses for senior learners for four years. Nine older adults admitted knowing Russian, five students knew German, and reported a knowledge of Italian. Two students declared that English was the only language they knew, and all the participants were not learning any other foreign language at a senior age.

### 4.3. Research instruments

The first instrument used in this study was a self-assessment questionnaire adapted from Peng’s (2014) and Gałajda’s (2017) WTC Scales (Appendix 4, part 1). Additionally, the third agers were to self-evaluate their participation in the task, and thus a 5-item tool was constructed (Appendix 4, part 2). The statements were designed as a 6-point Likert scale (1 – I strongly disagree to 6 – I strongly agree), and it comprised of the following items: “I found asking questions more difficult than answering them”, “I found answering questions easier than asking them”, “Asking questions had a positive impact on my WTC in English during the task”, “Answering questions had a positive effect on my in-class WTC in English”, and “I was willing to take part in this activity”.

Also, Fushino’s (2010) Willingness to Communicate in L2 Group Work tool was adapted. The scale was intended to measure WTC in a FL in group interaction. The original instrument consists of 10 items. In the present study, the scale was designed as a 6-point Likert scale (1 – I strongly disagree to 6 – I strongly agree), and six original statements were used (Appendix 3, part 3, items 2, 4, 6, 7, 8, 9). In order to adapt the tool to dyadic interaction, some modifications were needed, and thus “group members” were changed into “a partner”. The items were as follows: “If a partner asks me questions in English, I am willing to answer

them in English”, “If I need help from my partner, I am willing to ask him/her in English”, “I am willing to ask questions in English if a partner says something unclear to me”, “I am willing to ask questions in English if the task is simple”, “If I have a different idea or opinion from my partner, I am willing to say it in English”, and “I am willing to express complex ideas in English”. The present researcher’s intention was also to identify the older adults’ opinions about dyadic work during English classes. As a consequence, four new statements were added (Appendix 3 part 4, items 1, 3, 5, 10): “I am willing to participate in communicative tasks in dyads during English classes”, “I am willing to perform communicative exercises with a person I know”, “The change of my partner to another person causes anxiety<sup>6</sup>”, and “Working in pairs has a beneficial effect on my in-class WTC in English”.

#### 4.4. Task

The students were to perform an information-gap activity called “Interview”. The exercise was exclusively designed for this study. As shown in Figure 18, Student B<sup>7</sup> was to ask a partner questions regarding their name, surname, age, nationality, job, free time, favourite day, breakfast, yesterday evening, and next weekend whereas Student A was supported to answer those questions using given information.

**Figure 18**

*Interview – set 1*

A	code:	B	code:
Tell your partner about:		Ask your partner about:	
1. name:	<b>Fatima</b>	1. name	
2. surname:	<b>Brown</b>	2. surname	
3. age:	<b>55</b>	3. age	
4. nationality:	<b>Indian</b>	4. nationality	
5. job:	<b>doctor</b>	5. job	
6. free time:	<b>Nordic walking and yoga</b>	6. What/like/free time?	
7. favourite / day:	<b>Monday</b>	7. favourite / day?	Why?
8. breakfast:	<b>tuna sandwich, white coffee</b>	8. what / eat / breakfast?	
9. yesterday evening:	<b>7 00 p.m.</b>	9. what time /were /at home/ yesterday evening?	
10. next/weekend:	<b>best friend</b>	10. where/go/next weekend?	

*Note.* This figure illustrates the task designed by the present author.

<sup>6</sup> Reverse-coded item.

<sup>7</sup> Sets 1 and 2 were cut into two parts. Each student was given only the part concerning his or her role.

Similarly, Student A was to ask questions about their name, surname, age, country, hobby, every Saturday, favourite month, cooking, last weekend, and tomorrow while Student B was to give responses based on the provided information (Figure 19).

**Figure 19**

*Interview – set 2*

A	code:	B	code:
Ask your partner about:		Tell your partner about:	
1. name		1. name:	<b>Robert</b>
2. surname		2. surname:	<b>Smith</b>
3. age		3. age:	<b>66</b>
4. country		4. country:	<b>Scotland</b>
5. hobby		5. hobby:	<b>do gardening</b>
6. What/do/every Saturday?		6. every Saturday:	<b>clean my flat and cook dinner</b>
7. favourite / month? Why?		7. favourite month:	<b>May</b>
8. How often / cook?		8. cooking:	<b>every morning</b>
9. Where/were/ last weekend?		9. last weekend:	<b>opera with my cousin</b>
10. What/do/tomorrow?		10. tomorrow:	<b>drink red wine and relax</b>

*Note.* This figure illustrates the task designed by the present author.

The partners were taking turns, and when Student B was interviewed, the roles were swapped.

#### **4.5. Procedure**

As already mentioned, owing to the circumstances of the pandemic, the study was during extra classes in the classroom settings. In practice, there were only two pairs in the classroom. While one pair of students was performing the information-gap activity, the other one was to complete vocabulary revision exercises. The teacher (the present researcher) was not allowed to help the participants to complete the task, however, the students were informed that they could help each other in case of any communicative problems. Having completed the interview, the seniors were given the questionnaire (Appendix 4) to fill in and the next pair was preparing to perform the task.

Once the study was completed, the questionnaires were collected and coded. The means and standard deviations of the items were calculated by means of Microsoft Excel. In order to determine the application of communication strategies, the interview was audio

recorded by means of a voice recorder. The recordings were transcribed<sup>8</sup>, and the communication strategies were coded on the basis of Dörnyei and Scott's (1995a, 1995b) taxonomy. The authors identified three basic categories, namely direct, interactional, and indirect strategies which were classified in terms of resolving communicative problems (Dörnyei & Scott, 1997). *Direct strategies* contain such subcategories as resource deficit-related strategies (e.g., word-coinage, restructuring, code switching, retrieval), own-performance problem-related strategies (self-rephrasing, self-repair), and other-performance problem-related strategies (other repair). In a similar vein, *interactional strategies* were subdivided into resource deficit-related strategies (appeal for help), own-performance problem-related strategies (comprehension check, own-accuracy check), and other-performance problem-related strategies (e.g., asking for repetition, asking for clarification, guessing). When it comes to *indirect strategies*, they were subcategorised into processing time pressure-related strategies (use of filters, repetitions), own-performance problem-related strategies (verbal strategy filters), and other-performance problem-related strategies (feigning understanding).

The present author concentrated on the application of direct and interactional strategies as they directly contribute to “achieving mutual understanding” while indirect strategies, are not “meaning-related”, and they are not treated as “strictly problem-solving devices” (Dörnyei & Scott, 1997, p. 198).

## **4.6. Study findings**

### **4.6.1. Seniors' WTC in English during the interview**

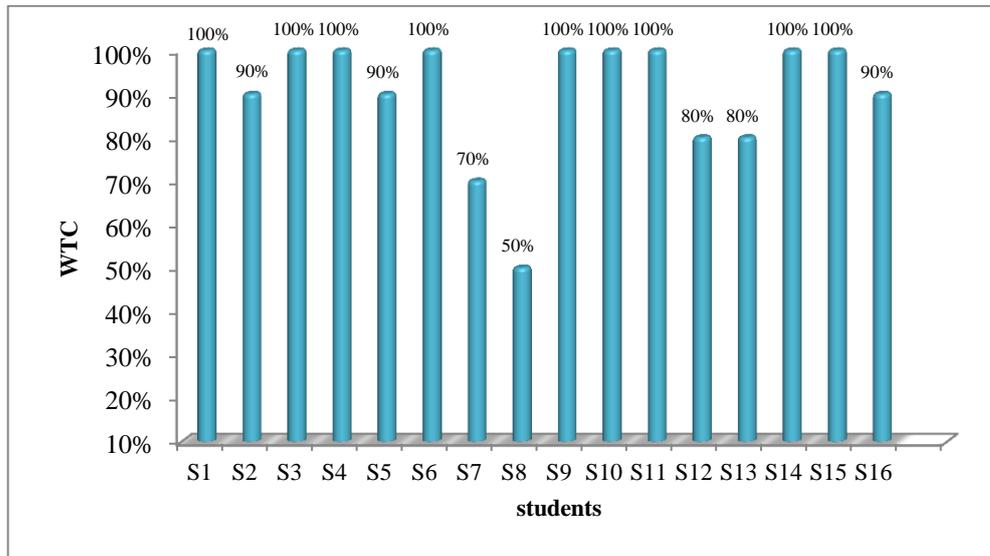
The data analysis indicated that the average readiness to communicate in English during dyadic interaction was very high, and it amounted to 91%. When it comes to individual levels of in-class WTC among older adults, the data is presented in Figure 20.

---

<sup>8</sup> All the extracts in Study 3 were transcribed according to the Jefferson Transcription System (Jefferson, 2004, pp. 13-23).

**Figure 20**

*Individual levels of in-class WTC in English during the information-gap activity*



*Note.* This figure depicts levels of in-class WTC in English of individual students.  $N = 16$ .

It is noteworthy that more than a half of the third agers (9 students) reported the maximum WTC, and three learners admitted to being ready to communicate in English in 90%. They paid due attention to communication in English: “I’m learning English as to be able to communicate” (S3), “Communicating in English gives me a lot of pleasure” (S15), “I practise speaking, and it gives me communicative competence in English” (S6). Two older learners highlighted the importance of classroom atmosphere during the task performance: “(...) good, friendly atmosphere” (S9), “The atmosphere was supportive and my conversation was very relaxed” (S14). Two students appreciated the task itself: “It is nice to check the level of my progress while asking and answering questions” (S10), “(...) because it [the exercise] is hilarious and you can get more information about the person you’ve talked to” (S4). Some students also emphasised the role of a partner: “I’m more secure when I speak with a partner” (S1), “I am very willing to communicate with another person since conversation allows me to improve a foreign language” (S2).

Two students reported to be willing to speak English at 80%. One of them acknowledged that dialogues had an advantageous effect on her English knowledge: “Communicating during the task makes it possible to overcome a barrier and I felt motivated to ask questions, and when it comes to answering questions, it also improves my knowledge” (S13).

As illustrated in Figure 20, the minimal level of WTC was declared by Student 8 (50%) who claimed that “I’ve been trying hard but it is not always as I would like it to be”. Likewise, Student 7, whose level of readiness to communicate in English was 70%, pointed out that she required some time to make a response: “Because I need time to think about what I should answer, I have problems with responses”.

#### 4.6.2. The older learners’ self-evaluation of the task performance

Table 16 demonstrates the seniors’ opinions about the information-gap activity, and its impact on their in-class WTC in English.

**Table 16**

*The older learners’ self-assessment of the task performance*

No.	Item	<i>M</i>	<i>SD</i>
1.	I found asking questions more difficult than answering them.	4.00	1.50
2.	I found answering questions easier than asking them.	4.69	1.57
3.	Asking questions had a positive impact on my WTC in English during the task.	5.00	1.22
4.	Answering questions had a positive effect on my in-class WTC in English.	5.19	1.18
5.	I was willing to take part in this activity.	5.25	1.20
	Total	4.83	1.34

*Note.* This table indicates the seniors’ self-assessment of the information-gap exercise. The internal consistency calculated by means of a special formula in Microsoft Excel was acceptable ( $\alpha = 0.663$ ).  $N = 16$ .

What the data revealed was that the participants’ responses to the statements were rather heterogamous ( $SD = 1.34$ ). In a general sense, they were eager to take part in the task (item 5,  $M = 5.25$ ). They reported that answering questions was easier than asking them, and this may be the reason why they also admitted that answering questions had a slightly more beneficial influence on their in-class WTC in English (item 4,  $M = 5.19$ ) than asking questions (item 3,  $M = 5.00$ ). One possible explanation here is that giving responses provided room for using the given information in a more spontaneous way. Also, the seniors may have been more accustomed to answering questions in English which basically comes more naturally in the classroom environment. Even though the third agers found answering questions easier than asking them, their responses were the most diverse here ( $SD = 1.57$ ) which may derive from individual preferences. Additionally, the informants rather agreed that asking questions appeared to be more difficult than answering them (item,  $M = 4.00$ ). Yet again, it is worth noting that their standpoints here were also very heterogeneous ( $SD = 1.50$ ).

### 4.6.3. The older adults' in-class WTC in English in pair work

As indicated in Table 17, the mean seniors' in-class WTC in pair work was high ( $M = 4.94$ ) with relatively diverse individual responses ( $SD = 0.72$ ).

**Table 17**

*The participants' in-class WTC in English during dyadic interaction*

No.	Item		<i>M</i>	<i>SD</i>
1.	I am willing to participate in communicative tasks in dyads during English classes.		5.25	0.56
2.	If a partner asks me questions in English, I am willing to answer them in English.		5.31	0.68
3.	I am willing to perform communicative exercises with a person I know.		5.44	0.50
4.	If I need help from my partner, I am willing to ask him/her in English.		5.31	0.58
5.	The change of my partner to another person causes anxiety. <sup>9</sup>		3.19	1.29
6.	I am willing to ask questions in English if a partner says something unclear to me.		4.88	0.70
7.	I am willing to ask questions in English if the task is simple.		5.44	0.61
8.	If I have a different idea or opinion from my partner, I am willing to say it in English.		4.81	0.63
9.	I am willing to express complex ideas in English.		4.25	1.09
10.	Working in pairs has a beneficial effect on my in-class WTC in English.		5.50	0.61
		Total	4.94	0.72

*Note.* This table indicates the seniors' perceptions of dyadic interaction. The internal consistency of the scale calculated by means of a special formula in Microsoft Excel was acceptable ( $\alpha = 0.664$ ).  $N = 16$ .

The highest mean was reported in item 10 concerning the fact that working in pairs positively influenced the older learners' WTC in English. The next highest mean was obtained in items 3 and 7 ( $M = 5.44$ ) where the students declared that they were eager to ask questions in English if the exercise was simple, and they also acknowledged that they were ready to perform a speaking task with a partner I knew. In general, the seniors were willing to take part in communicative activities in dyads. Moreover, they appeared to express their readiness to use English when it comes to answering questions and asking their partner for help.

Overall, it may be deduced that, even though the participants represented a relatively low level of proficiency, they wished to communicate in pairs. The lowest mean indicated in item 5 ( $M = 3.19$ ) suggested that the seniors were not likely to feel insecure and anxious when they were to complete a task with a different partner. It may be surmised that the seniors constituted cooperative and friendly language groups, and interaction with another groupmate was not a source of insecurity and apprehension.

<sup>9</sup> Item 5 was reverse-coded.

#### 4.6.4. The application of communication strategies

As far as communication strategies are concerned, the older participants employed mainly direct strategies in the course of the dyadic interaction. The most commonly used was surely resource deficit-related strategies, classified as retrieval which are presented in Extracts 1A, 1B, 1C, and 1D.

##### Extract 1A

S9: What time what time (1.4) do you *what time* (1.7) *what time were were* you at home yesterd yesterday evening?

S10: I was at home yesterday evening at 7:00 p.m.

##### Extract 1B

S15: What's your favourite day?

S16: My *favour favourite* day is Monday.

S15: Yes, why?

S16: Why? (3.1) er because er is er ... because it is start week.

##### Extract 1C

S14: What's your hobby?

S13: My hobby er (0.8) do *gar ... gardening gardening*.

##### Extract 1D

S15: What do you do?

S16: Do you do?

S15: What's your job?

S16: *My job ... my job* er ... a doctor.

Retrieval appeared to be of great relevance while communicating in dyads. One possible explanation for this is that older adults typically require more time to recall information owing to slower cognitive processing which can be disturbed by working memory overload. Additionally, in some cases, the data analysis suggested that retrieval as such helped the seniors to gain time which resulted in providing correct answers by means of self-repair (Extract 2A, Extract 2B, and Extract 2C).

##### Extract 2A

S4: Where are you going to go on the next weekend?

S3: To my best friend er *visit* I ... *I'm going to visit* my best friend ... my best friend.

Extract 2B

S14: What are you doing tomorrow?

S13: *I'm ... reading ... I'm reading a book ... drink .. I drink read ... I'm ... drinking red wine and relaxing.*

Extract 2C

S5: Do you have some plan plan for next weekend where you want to go?

S6: Next weekend ... I (2.2) *I meet* my best friend next week.

S5: Ok.

S6: *I'm meeting ... I'm meeting* my best friend the next weekend.

What should also be remembered at this point is that the senior students also applied self-repair as a single strategy. Self-repair, as well as self-paraphrasing, which are is subcategorised as own-performance problem-related strategies, were also employed by the older adults (Table 18).

**Table 18**

*Own-performance problem-related strategies in direct strategies applied by the seniors*

<b>self-rephrasing</b>	<b>self-repair</b>
S15: <i>What do you do?</i> S16: Do you do? S15: <i>What's your job?</i> S16: My job ... my job er ... a doctor.	S7: What's your favourite month? Why? S8: My favourite month is May because my birthday is <i>on ... in</i> May.
S2: <i>What do you want to do tomorrow?</i> S1: Tomorrow?= S2: = <i>What do you like to do tomorrow to do what what would you like to do tomorrow?</i> S1: Tomorrow?	S14: <i>Where are you where were you sorry ... where were you last weekend?</i> S13: I was er (2.4) in the opera with my cousin last weekend.
	S8: What's your nationality? S7: <i>My nationality</i> (1.1) er <i>I'm ... I'm Indian.</i>

*Note.* This table presents the subcategories of direct strategies, such as own-performance problem-related strategies employed by the seniors during the task performance.

Interestingly, one student, who declared to know German, used code switching to the third language, and instead of using “free”, the student used “frei” (Extract 3).

### Extract 3

S9: What ... What do you like ... What do you like er do in your *frei* time?

S10: I like Nordic walking and yoga.

When it comes to interactional strategies, the age-advanced learners applied other-performance problem-related strategies, such as asking for repetition (Extract 4A, Extract 4B) and confirmation (Extract 5).

### Extract 4A

S6: What is your surname, Robert?

S5: My surname is Smith. Sound very specially.

S6: *Can you repeat me I don't (2.1) Can repeat your surname?*

S5: Smith.

S6: Smith. Thank you.

### Extract 4B

S13: What time were ... at home yesterday evening?

S14: *Repeat, please.*

S13: What time were you at home yesterday evening?

### Extract 5

S2: What do you do every Saturday?

S1: *Only only in Saturday?* on on

S2: Every every every

S1: *Every Saturday?*

S2: Every Saturday.

What seems essential is that the senior learners did their best to solve communication problems during task performance, and they were eager to ask an interlocutor for help. It may be concluded that although the participants experienced some communication difficulties, they managed to complete the exercise successfully by means of direct and interactional strategies.

#### 4.7. Discussion

The results of the present study helped to gain a more comprehensive view of the seniors' WTC in English during the dyadic task. The level of their readiness to speak in pairs was very high (Figure 20). As a matter of fact, older adults generally enjoy communicating with groupmates in a classroom environment as communication is their main motive to learn a second language at a senior age (e.g., Matuszek & Rakowska, 2019). Age-advanced learners are likely to practise English, and take advantage of each communicative opportunity. They seem to be aware of the fact that in order to be an effective FL speaker, "they need to develop their communicative skills so that they become authentic communicators – people who are able to realise their communicative goals" (Gałajda, 2017, p. 141).

What is more, the data analysis showed that they appreciated both a partner and a supportive atmosphere which helps learners to express themselves as they "are not afraid of making mistakes and then being ridiculed" (Riasati, 2012, p. 1294). A laid-back atmosphere and cooperative interlocutors may surely reduce students' communication apprehension and foster their WTC (Mystkowska-Wiertelak & Pawlak, 2017). This may be supported by Cao and Philp (2006, p. 488) who remark that the interlocutor may be recognised as a "pulling force" since "the speaking interaction of an individual with a low task attitude would improve if he/she was paired up with a more motivated peer".

What should not be ignored at this point is that the third agers had a strong desire to take part in the information-gap task, and they pointed out that asking and answering questions had a beneficial effect on their in-class WTC (Table 16). Basically, as stressed by Zhang et al. (2018), a type of activity is a crucial situation cue that exerts a powerful influence on state WTC as cooperation in dyads appears to be more motivating than individual work. Owing to an interlocutor's active participation and contribution that the learner's level of WTC is facilitated as he or she may feel more secure and confident (Riasati & Rahimi, 2018). It needs to be noted, on the one hand, that the older adults enjoyed working with a familiar partner, but on the other, the change of the interlocutor seemed not to alleviate their anxiety (Table 17). This may indicate that the need to interact and communicate was significant as they typically pay due attention to establishing new relationships and sustaining interpersonal bonds (e.g., Derenowski, 2021). Also, rather unsurprisingly, the subjects were willing to ask questions in English if the task was simple, and they felt less eager to express complex ideas in English (Table 17). One plausible corollary for this situation is that their level of English was relatively low, and thus, they might lack linguistic knowledge about complicated topics in

English (cf. Cao, 2011). Additionally, complex tasks might require more attentional resources, and according to Anderson and Craik (2000, p. 418) “a fundamental consequence of age-related of attention resources would be that fewer attentional resources would be available for cognitive control”.

As regards the application of communication strategies, the seniors tended to overcome breakdowns mainly by means of direct strategies, such as retrieval, self-repair, and self-paraphrasing. This finding seems to be in line with Posiadała’s (2017) study. The author conducted a study among seven senior learners of German. The participants frequently used retrieval and self-repair while performing a role-play activity.

It may be surmised that retrieval might be perceived as the most effective strategy since it helped to reduce potential difficulties with memory recall (cf. Posiadała, 2017). It is noteworthy that late language learners experience a decline in general cognitive functioning, and as outlined by Ramírez Gómez (2016b, p. 40), “older learners conduct themselves more slowly”. In consequence, ageing brain tries to compensate for mental declines using different strategies (cf. Park & Reuter-Lorenz, 2009). Time gained by retrieval helped the participants to self-correct their mistakes and resolve communication difficulties. The use of self-repair and self-paraphrasing highlighted that fact that older adults tend to confront with learning problems, and they appear to be more eager to take an active part in FL communication (cf. Pawlak, 2014). This, in turn, may be associated with the fact that old age as such is represented by self-reflection, self-awareness, and determination which have a positive impact on achieving their learning goals (cf. Findsen & Formosa, 2011).

It may be concluded at this juncture that dyadic interaction between the learners at an advanced age plays a pivotal role at multiple levels. Firstly, it helps them to practise English in speech which accommodates specific learning needs and indicates that “mutual understanding is a function of the successful execution of both pair parts of the exchange” (Dörnyei & Scott, 1997, p. 199). Secondly, it provides opportunities to communicate with each other during English lessons that may be of practical relevance outside the classroom. And, last but not least, it may be a source of enjoyment as older citizens have a great need for company and sustaining social bonds (Derenowski, 2019).

## 5. Study 4: In-class WTC in English during the self-prepared presentation of a picture

Study 3 indicated the seniors' communicative behaviours in dyads whereas the following subsections discuss the older adults' WTC during the monologue and while answering the teacher's questions (Study 4).

### 5.1. Research aims and questions

The main focus of Study 4 was to identify the participants' in-class WTC in English during the self-prepared description of the picture (phase 1), and during an interaction with the teacher who asked questions based on the topic presented in the photo (phase 2). The older adults were also to self-assess the level of their WTC during phase 1 and phase 2, as well as to self-evaluate their participation in the task. Additionally, the objective of the study was to scrutinise the readiness to speak English regarding the topic and teacher-centred tasks. More precisely, the study set out to investigate the following research questions:

1. What is the level of in-class WTC in English during the self-prepared presentation?
2. What is the level of in-class WTC in English while answering the teacher's questions?
3. How do the seniors self-evaluate their participation in the task?
4. What is the seniors' readiness to speak English concerning the topic and teacher-centred exercises?

### 5.2. Participants

Table 19 illustrates the older students' personal data.

**Table 19**

*Study 4 – the participants' personal data*

Gender		Age			Place of residence		Education		Proficiency level	
male	female	maximal	average	minimal	village	town up to 50,000 residents	tertiary	secondary	A1	A2
<b>1</b>	<b>16</b>	<b>75</b>	<b>68</b>	<b>61</b>	<b>1</b>	<b>16</b>	<b>14</b>	<b>3</b>	<b>9</b>	<b>8</b>

*Note.*  $N = 17$ .

On average, the respondents declared to have been learning English for seven years throughout their life, and the mean length of participation in English courses for senior learners was three years. When it comes to the knowledge of languages other than English, 13 seniors admitted knowing Russian, five students knew German, and two mentioned Italian. Two students declared that English was the only language they knew, and all the participants were not learning any other foreign language at an advanced age.

### **5.3. Research instruments**

Similarly to Study 2 and 3, the instrument was a self-assessment questionnaire adapted from Peng's (2014) and Gałajda's (2017) WTC scale (Appendix 5, part 1). As regards the participants' self-evaluation of the task, a 5-item tool was constructed (Appendix 5, part 2). The statements were designed as a 6-point Likert scale (1 – I strongly disagree to 6 – I strongly agree), and the statements were as follows: “Preparing the description of a picture enhanced my in-class WTC in English”, “I chose a picture that evokes positive emotions”, “I felt confident while presenting my picture”, “I was willing to participate in this exercise”, and “I found performing this activity satisfying”.

In order to investigate the third agers' willingness to speak English, Riasati's (2018) Willingness to Speak scale was adapted (Appendix 5, part 3). The original instrument consists of 27 items, however, only selected statements were adapted in Study 4. The present researcher's intention was to identify the influence of the topic, teacher-centred tasks and fear of correctness of speech on the seniors' WTC in English in the classroom environment. Four items regarding the topic were adapted (Appendix 5, part 3, items 7, 8, 9, 10): “I am willing to speak English about a topic I am familiar with”, “I am willing to speak English about a topic I am interested with”, “I am willing to speak English about a topic I am prepared”, and “I am willing to speak English about a topic I am comfortable with”. As regards the teacher-centred exercises, four items were used (Appendix 5, part 3, items 2, 3, 4, 5): “I am willing to ask a question in English in class”, “I am willing to present my opinions in English in class”, “I am willing to help other classmates to answer a question”, “I am willing to volunteer to answer when a teacher asks a question”, and one item new item was constructed (Appendix 5, part 3, item 1): “I am willing to answer teacher's questions in English in class”. Item 6 “I am willing to speak English when I am sure that my answer is correct” regarded the fear of correctness of speech, and it was adapted from the original Riasati's (2018) tool.

#### **5.4. Task**

As the study was conducted during the pandemic, the older students were sent a set of pictures by mail. They were to choose one or they were allowed to select one of their private photos. One week before the study, during online classes, the learners informed the teacher (the researcher) which picture they had decided to describe. Each student had a different photo.

The seniors had a week to prepare their presentation on their own at home, and they were to be ready to describe the picture without looking at their notes in front of their peers. Having completed the presentation, the seniors were asked extra questions concerning their topic of presentation and personal experiences. For instance, one student was describing a picture with a woman reading a book. The questions asked were: “Do you like reading books?” “What are your favourite types of books?”, and “How often do you read books?”.

#### **5.5. Procedure**

Owing to the pandemic, extra classes were held at Podhale State College of Applied Sciences in Nowy Targ. As there were 17 participants, the third agers were divided into three groups consisting of three learners and one group including five students.

The picture was presented by one student at a time in front of the class. The photo was displayed on the multimedia board. During the presentation, the groupmates and the teacher were listening to the speaker. Next, the teacher asked three questions regarding the learners’ personal experiences with the topic. The two phases of the tasks lasted about 15 minutes. Once the participant answered the instructor’s questions, he or she was given about 15 minutes to fill in a survey. In the meantime, the groupmates were completing vocabulary tasks. Then, the procedure was continued with another student.

The questionnaires were coded, and means and standard deviations of the items were calculated by means of Microsoft Excel. Cronbach’s alpha was calculated by means of a special formula.

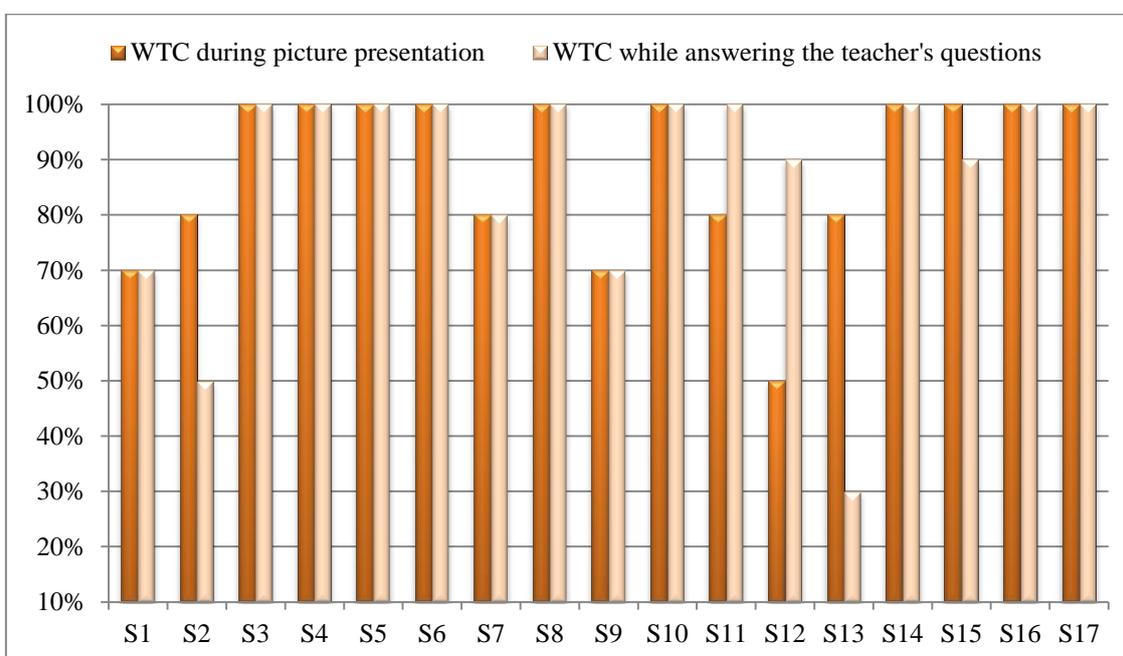
## 5.6. Study findings

### 5.6.1. Seniors' WTC in English during the presentation and while answering the teacher's questions

The analysis of the results showed that the older students' average WTC during the picture presentation was 89%. As illustrated in Figure 21, ten learners declared the maximum level of readiness to speak English whereas four seniors indicated 80%, and the lowest level of all was 50%.

**Figure 21**

*Individual levels of in-class WTC in English during the presentation and while responding to the teacher's questions*



*Note.* This figure shows the comparison of levels of WTC in English of individual learners during the presentation and while answering the teacher's questions.  $N = 17$ .

Basically, the students with 100% WTC acknowledged that the task was based on speaking English, which was the most crucial skill when it comes to learning a FL: "(...) the more I speak (I hope), the better at speaking I become" (S5). Also, describing a picture was perceived as a useful revision technique: "It helps to check my skills and recall my English words" (S8), "Because I'm learning to describe activities, people's appearance and their personality" (S2). Two students claimed that having an opportunity to prepare a description at home was valuable and encouraging: "I tried to be well-prepared" (S17), "This task prepared at home motivated me to learn English (vocabulary, phrases)" (S14).

On the other hand, Student 12, who declared to be the least eager to use English (50%), admitted that she felt insecure and anxious: “I have doubts about whether I build sentences in a correct way and whether my description was correct. I am rather anxious and stressed”. State anxiety, as well as the limited knowledge of vocabulary seemed to have a debilitating effect on WTC: “I would like to speak more, but I’m scared and I feel blocked” (S13).

As far as the level of the older learners’ WTC while answering the teacher’s questions is concerned, the mean level was 2% lower than during the presentation, and amounted to 87%. As shown in Figure 21, the majority of the participants reported the same level of WTC in the monologue as they did in responding to the questions. The seniors, whose WTC was the highest, pointed out that talking with the teacher was an attractive form of interaction: “This kind of conversation is a very interesting type of activity” (S8). What is more, the students also mentioned the role of the teacher: “Because it is feedback about my English knowledge” (S10), “I like communicating with the teacher since questions are asked in a correct way, and they allow me to correct my pronunciation, and [the teacher] corrects my mistakes” (S12).

On the negative side, anxiety and insecurity were indicated as detrimental factors shaping in-class WTC in English: “It seemed to me that I didn’t understand a question, and that is why I would be incapable of answering it. I was anxious and stressed” (S9), “(...) my lack of WTC results from stress which was petrifying” (S15). Student 2 who reported the 50% level of WTC stated that “I have difficulties in speaking English (...) I felt insecure whether I spoke correctly” (S2). Likewise, the lowest WTC was reported by Student 13 who acknowledged that her fear hampered her WTC to a large degree.

Overall, the data demonstrated only a slight discrepancy between WTC during the presentation and while answering the teacher’s questions. Although the older learners were able to prepare their description at home and the teacher’s questions required a spontaneous reaction, they appeared not to see a significant difference.

### **5.6.2. The third agers’ self-assessment of the task performance**

The internal consistency of five items prepared by the present author and concerning the task performance turned out to be unacceptable ( $\alpha = 0.32$ ). Therefore, this tool was excluded from further analysis. However, the analysis of the participants’ answers to the open-ended questions showed that they found the second phase (i.e., answering the teachers’ questions) more interesting: “an interesting way of learning English” (S6), “conversation

enables to learn and know a FL”. Also, some students stated that the teacher’s questions appeared to be simple: “The questions were easy and clear” (S16); “I understood the questions and I was able to answer them”. It is reasonable to hypothesise at this point that being prepared for the presentation was essential for the students, but still the attractiveness of the task based on the interaction with the teacher might be perceived as a powerful motivator that pushed the learners’ WTC. Although, on average, WTC in both phases of the task was similar, the older learners’ views indicated that negative emotions (i.e., fear and stress were mentioned by four participants) were evoked during the presentation in front of the class.

### 5.6.3. The older learners’ degree of willingness to speak

When it comes to the seniors’ degree of willingness to speak, Cronbach’s alpha was acceptable and amounted to 0.77. In general, the older adults’ willingness to speak was relatively high. Table 20 illustrates the effect of the teacher-centred tasks, correctness of speech, as well as topic on eagerness to speak in English.

**Table 20**

*The third agers’ willingness to speak in class*

No.	Item	<i>M</i>	<i>SD</i>
1.	I am willing to answer teacher's questions in English in class.	5.00	0.84
2.	I am willing to ask a question in English in class.	4.59	0.84
3.	I am willing to present my opinions in English in class.	4.35	0.68
4.	I am willing to help other classmates to answer a question.	4.88	0.68
5.	I am willing to volunteer to answer when a teacher asks a question.	4.65	0.84
6.	I am willing to speak English when I am sure that my answer is correct.	5.35	0.59
7.	I am willing to speak English about a topic I am familiar with.	5.00	0.69
8.	I am willing to speak English about a topic I am interested in.	4.88	0.68
9.	I am willing to speak English about a topic I am prepared.	5.53	0.50
10.	I am willing to speak English about a topic I am comfortable with.	5.24	0.73
	Total	4.95	0.71

*Note.* This table presents the seniors’ views of their willingness to speak in English in the classroom context. The internal consistency of the scale was calculated by means of a special formula in Microsoft Excel was good ( $\alpha = 0.77$ ).  $N = 17$ .

As concerns the topic, the participants reported to be the most eager to speak in English when they had a chance to be prepared (item 9,  $M = 5.53$ ), which comes as no surprise since the preparation itself seems to be a beneficial factor which boosts self-confidence and lowers state anxiety. It was also declared that item 9 had the lowest standard deviation ( $SD = 0.50$ ), and the learners’ answers were the most homogenous. It may be

hypothesised that they gave a high priority to being prepared to perform communicative tasks in the classroom. In a similar manner, the older adults admitted that they were very willing to communicate in English when they felt comfortable with a topic (item 10,  $M = 5.24$ ), and they were slightly less eager when it comes to a familiar topic (item 7,  $M = 5.00$ ). What ought to be vital at this point is the fact that the seniors had a strong desire to speak when they knew their answer was correct (item 6). Undoubtedly, they felt more secure and determined as that situation did not provoke the risk of losing face in class.

The data analysis also revealed that the subjects were generally eager to answer the teachers' questions (item 1,  $M = 5.00$ ), and they were slightly less willing to volunteer to answer them (item 5,  $M = 4.65$ ). When compared to asking a question in English, they admitted to be quite more ready to help classmates to answer a question in class (item 4,  $M = 4.88$ ). The lowest degree of willingness to speak was declared in item 3 concerning presenting students' opinions in-class. It may be surmised that their proficiency level might play a decisive role here, and the third agers could be aware of their limited linguistic skills and knowledge.

## **5.7. Discussion**

Study 4 examined the seniors' in-class WTC in English during the self-prepared presentation, as well as during the conversation with the teacher based on the picture. What should be underscored is that the older students demonstrated a very similar high level of WTC during both phases of the task (Figure 21). This confirms the teacher trainees' observations in Niżegorodcew's (2018) study. The author underscored the fact that the pre-service teachers who taught older adults "were impressed by the senior students' involvement, creativity and willingness to speak in class" (Niżegorodcew, 2018, p. 170).

In the present study, the participants also seemed to appreciate the type of exercise which promoted practising speaking skills. As aptly stated by Riasati (2012, p. 295), second language learners are conscious of the fact that "the more they expose themselves to the target language, the greater will be their chance of success in learning the language". It is especially important in the case of age-advanced students who place a huge amount of emphasis on improving communication skills in the classroom context (e.g., Gabryś-Barker, 2020). The results of Study 4 are not in accordance with the fact that performing a task in front of the class generates a low degree of WTC in English (Riasati & Rahimi, 2018). By contrast, it is consistent with Mystkowska-Wiertelak and Pawlak's (2017) research. The scholars pointed

out that tasks based on productive skills positively influence WTC. They also acknowledged that interaction with the teacher is considered to be a beneficial factor underpinning WTC as the instructor's involvement motivates students to active participation.

The present findings indicated that seniors were generally willing to talk with the teacher, and even volunteer to answer his or her questions (Table 20). Some participants, however, found conversations with the teacher anxiety-provoking. It ought to be borne in mind that the teacher may also be treated as a direct source of apprehension (Jiang & Dewaele, 2019). It is also noteworthy at this point that those negative emotions may derive from the fact that the teacher is recognised as an authority, and third agers wish to do their best so as not to let the educator down (e.g., Derenowski, 2021). Also, they have a highly developed sense of duty, which may be presumed to drive them to complete an exercise well (cf. Pawlak et al., 2018).

This study also supports the fact that language students tend to be willing to talk about the topic they feel comfortable with, and the one they are familiar with (Table 20). As mentioned previously, the students could select the most preferable photos that dictated the actual topic of presentation. As a matter of fact, Zarrinabadi (2014) pointed out the importance of topic choice. The scholar stated that undergraduate students' high level of WTC and participation was the result of the fact that they "seemed to appreciate being given the chance to choose the discussion topic in the classroom" (Zarrinabadi, 2014, p. 242). This might lead to positive emotions, such as excitement, known as "a feeling of elation about the act of talking" in the context of FFL (Kang, 2005, p. 284). Kang (2005) posits that excitement, which partly rests on the topic, stems from learners' interest in a topic, as well as an individual's familiarity with the topic.

The desire to speak is also fostered when students are sure that their answer is correct (Riasati, 2018). Rather unsurprisingly, the third agers were most eager to speak about a topic they had prepared. Yet again, this finding appears to be consistent with Zarrinabadi's (2014) research where time given for task preparation proved to encourage communicative behaviours and decrease state anxiety. In the case of third agers, time for preparation might not only boost their linguistic self-confidence, but it may also be a cognitive training exercise that has a positive impact on mental processes in late adulthood (Park & Reuter-Lorenz, 2009).

Overall, Study 2, 3, and 4 depicted the seniors' communicative behaviours in the classroom settings during the actual didactic practice. The performance of different tasks indicated the discrepancies in the levels of WTC and variables that had the potential to drag

down or push forward the eagerness to speak. At this point, it was critical to examine WTC expanding the scope of the study and including members of different TAUs in Poland.

## **6. Study 5: The relationship among the third agers' WTC in English, intrinsic motivation, language enjoyment, classroom environment, as well as teacher immediacy**

For this reason, Study 5 was designed to investigate the older participants' perceptions of WTC in a larger sample scale as the quantitative study helped to gain a more detailed picture of the third agers' WTC.

### **6.1. Research aims and questions**

The primary objective of Study 5 was to scrutinise in-class WTC in English among the older adults, as well as to investigate the relationship among WTC in English and other factors. Study 5 also sought to determine whether the seniors found meaning-focused or form-focused activities more relevant in the classroom context. Additionally, it was intended to explore the participants' standpoints regarding their internal motives to learn English at an advanced age.

As previously discussed, senior citizens tend to choose social activities which bring them joy and evoke positive emotions (e.g., Carstensen et al., 2003). Therefore, the purpose of Study 5 was to explore whether the older learners found English classes enjoyable and interesting, and investigate the connection between WTC in English and foreign language enjoyment.

Similarly, as already elucidated, both peers and the teacher may exert an impact on an individual's WTC (e.g., Cao & Philp, 2006; Pawlak & Mystkowska-Wiertelak, 2015). Hence, Study 5 examined the correlation among the older participants' in-class WTC in English and the classroom environment and teacher immediacy. Additionally, it set out to identify the third agers' perceptions of the relationships with class members (group cohesiveness), and the teacher (teacher immediacy and support). In particular, Study 5 aimed to address the following questions:

1. What is the correlation among the third agers' WTC in English, their intrinsic motivation, foreign language enjoyment, classroom environment, as well as teacher immediacy?
2. What is the correlation between WTC and the participants' age, as well as WTC and their English learning experience?

3. Is there any discrepancy between the level of WTC among the seniors representing different educational levels?
4. Is there any discrepancy between the WTC levels among the older adults who knew only English and those who declared the knowledge of other foreign language(s)?
5. To what extent are the third agers willing to communicate in English both in meaning-focused and form-focused tasks inside classroom settings?
6. Which aspects of intrinsic motivation, classroom environment, teacher immediacy and foreign language enjoyment are the most eminent among the seniors?

## 6.2. Participants

The informants were 79 students of the TAU in Cracow (28 students), Leszno (2 students), Nowy Targ (31 students), Rabka-Zdrój (9 students), and Zakopane (9 students). All the participants had been regularly attending English courses for seniors in their TAUs. As regards gender, place of residence, and education, the data are presented in Table 21.

**Table 21**

*Study 5 – the participants’ personal data*

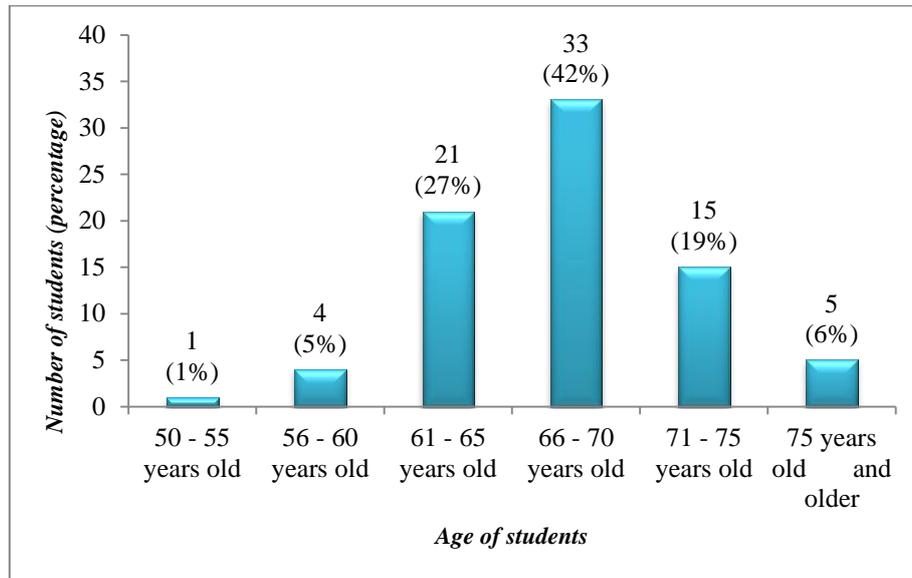
Gender		Place of residence			Education	
male	female	village	town up to 50,000 residents	town/city with more than 50,000 residents	tertiary	secondary
7 (9%)	72 (91%)	4 (5%)	45 (57%)	30 (38%)	57 (72%)	22 (28%)

*Note.*  $N = 79$ .

Importantly, there were only seven males and seventy-two females. The majority of the seniors (57%) declared living in a town up to 50,000 residents while 38% reported living in a town/city with more than 50,000 residents. Moreover, 72% admitted having a tertiary education, whereas 28% reported having graduated from a secondary school. When it comes to the participants’ age, the data illustrated in Figure 22 revealed that 33 students were between 66 – 70 years of age, 21 learners reported to be between 61 – 65, 15 respondents were between 71 – 75 years old, 5 subjects declared to be 75 years old and older. Four students were between 56 – 60 whereas only one person was between 50 – 55 years of age.

**Figure 22**

*Study 5 – the age of the participants*

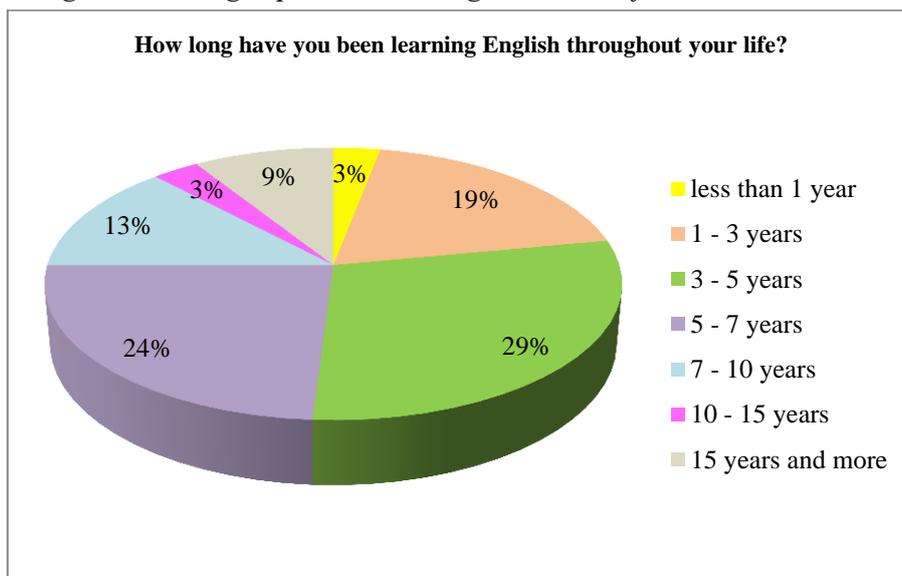


*Note.* This figure illustrates the participants' age divided into six subgroups.  $N = 79$ .

As far as the students' English learning experience is concerned, Figure 22 and Figure 23 show the seniors' duration of English learning experience throughout their life and during English courses for third agers.

**Figure 23**

*The seniors' English learning experience throughout their life*



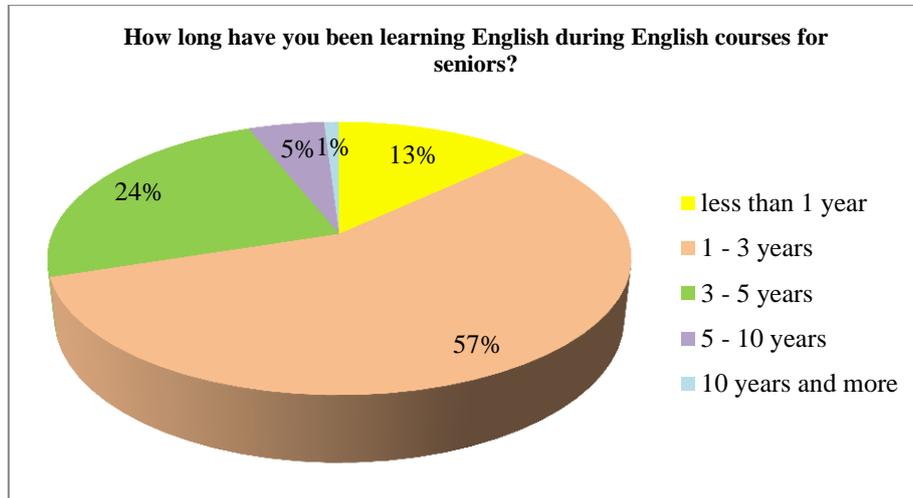
*Note.* This figure depicts the older adults' duration of learning English throughout their life.  $N = 79$ .

As indicated in Figure 23, 29% (23 students) had studied English for 3 – 5 years, 24% (19 learners) for 3 – 5 years, 19% (15 subjects) for 1 –3 years, and 13% (10 informants) for

7 – 10 years. Taking the English courses into account, the majority of the third agers declared 1 – 3 years of attendance (Figure 24).

**Figure 24**

*The older adults' English learning experience during English courses for seniors*

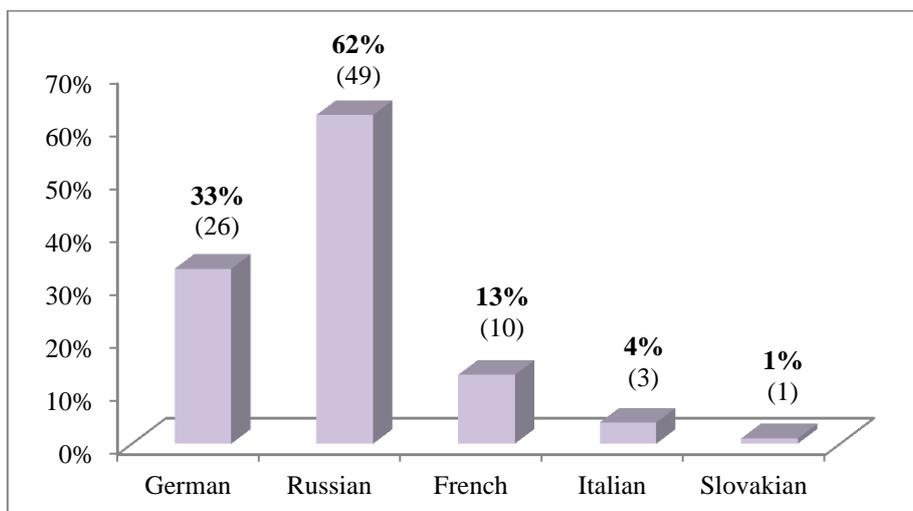


*Note.* This figure illustrates the older adults' duration of learning English only during English courses for seniors.  $N = 79$ .

As regards the seniors' knowledge of other foreign language(s), 81% (64 students) declared knowing at least one other foreign language whereas 19% (15 learners) knew only English.

**Figure 25**

*The third agers' knowledge of other foreign languages*



*Note.* This figure indicates the seniors' knowledge of other foreign languages.  $N = 64$ .

As Figure 25 shows, the participants knew mainly Russian and German. The majority of the subjects admitted knowing Russian and 33% knew German. The knowledge of French, Italian and Slovakian was also mentioned.

### **6.3. Research instruments**

The instrument adapted to this study was a questionnaire (Appendix 6) which included demographic information: gender (male, female), age (between 50 – 55 years old, between 56 – 60 years old, 61 – 65 years old, between 66 – 70 years old, between 71 – 75 years old, 75 years old and older), place of residence (village, town up to 50,000 residents, town/city with more than 50,000 residents), and education (tertiary, secondary, primary). Likewise, the seniors were asked about the duration of learning English throughout their life, and during English courses for third agers. The informants were also to report their knowledge of foreign language(s) other than English. The questionnaire comprised five scales (WTC in English, Intrinsic Motivation, Language Enjoyment, Classroom Environment, and Teacher Immediacy), and responses to their items were given on a six-point Likert scale ranging from 1 – I strongly disagree to 6 – I strongly agree.

In order to measure their WTC in English in the classroom, an in-class WTC in English scale was used (Peng & Woodrow, 2010). The aim of this scale was to scrutinise seniors' WTC in English both in meaning-focused and form-focused tasks, as well as to confirm whether activities based on meaningful communication would shape a higher level of WTC when compared to tasks based on forms. The original tool consisted of six items referring to meaning-focused exercises, and four statements concerning form-focused activities. Sample items in Study 5 included: "I am willing to do a role play standing in front of the class in English (e.g., ordering food in a restaurant)", "I am willing to ask the teacher to repeat what he/she just said in English because I didn't understand" or "I am willing to ask my groupmates in English how to pronounce a word in English". One item was modified as the present researcher intended to adapt it to older adults' language classroom settings in terms of topic and real-life communication. Therefore, the statement "I am willing to give a short speech in English to the class about my hometown with notes" was replaced by "I am willing to give a short speech in English to the class about my family without notes". In addition, one item regarding translation, namely "I am willing to translate a spoken utterance from Chinese into English in my group" was eliminated, and a new statement, which was based on the present author's observation in the actual didactic practice, was constructed: "I

am willing to translate a question from English into Polish out loud before answering it in English”.

Another scale was Intrinsic Motivation (Noels et al., 2001). This 9-item scale was adapted to determine the senior learners’ intrinsic motivation to learn English, and to examine whether the subjects would be mainly encouraged and motivated by the ability to communicate in English inside and outside the classroom. The tool originally referred to French, and thus this language was changed into English, as, for instance in the following item: “For the enjoyment I experience when I grasp a difficult construct in English”. The main question to all items was changed to “Why are you learning English in your senior age?” 5 original items were used. Sample items were: “For the pleasure I get from hearing English spoken by English people/foreigners”, “For the satisfied feeling I get in finding out new things”. Four items were excluded because they were unsuitable in the case of third agers, for example: “For the pleasure I experience when I surpass myself in English studies”. In order to adapt the scale to specific seniors’ motives to learn English, four new statements were added: “Because it has a positive influence on my brain and memory”, “For the pleasure I experience when I can use English abroad”, “For the satisfaction I feel when I communicate in English during classes”, and “For the high I experience when I can use newly learnt vocabulary”.

Another tool, the Foreign Language Enjoyment scale (Deweale & MacIntyre, 2014) was designed to reflect various private aspects of language enjoyment (creativity, pride, interest, fun), as well as the social aspects of foreign language enjoyment, namely a positive classroom environment created by the teacher and peers. In Study 5, it was utilised with a view of investigating older adults’ perceptions of their English learning process in the classroom context. In addition, the scale was also adapted to show the most essential facets of language enjoyment among the senior students. It may be hypothesised that the participants would find FLL enjoyable and interesting since they attend classes voluntarily at a senior age, and thus it needs to provide them with a sense of self-satisfaction and self-achievement. The original scale included 21 items, and six of them were used in the present study. Sample statements were: “In class, I feel proud of my accomplishments”, “We laugh a lot” or “The peers are nice”. One item was modified, namely, “I learn to express myself better in the FL” was changed to “I learn to express myself better in English”. One statement was paraphrased from “We have a common “legends”, such as running jokes” into “We like telling jokes during classes”. One item was expanded from “I’ve learnt interesting things” to “I’ve learnt and I’m learning interesting things”. In order to examine whether English could be viewed as a hobby, one new item was added: “Learning is my hobby”.

Another scale, Classroom Environment (Fraser, Fisher, & McRobbie, 1996) aimed to provide information about task orientation, group cohesion, and teacher support. In Study 5, task orientation was excluded as the main purpose was to scrutinise how relationships between the older learners and their peers (group cohesiveness), as well as between the seniors the teacher (teacher support) would affect in-class WTC. This scale was also to indicate which items subcategorised as group cohesion, and teacher support, would be reported to have the highest means, and to be of the greatest importance for the subjects. Four items measuring group cohesiveness were used, and sample items included: “I am friendly to members of this class”, “I help other class members who are having trouble with their work”. As regards teacher support, one item was excluded, namely “The teacher smiles at the class while talking”, and two new statements were constructed: “The teacher praises students”, and “The teacher creates a positive and supportive atmosphere during classes”.

The Teacher Immediacy Scale (Zhang & Oetzel, 2006) was applied to estimate instructional immediacy, relational immediacy, and personal immediacy. As it was the author’s intention to concentrate on a classroom context, personal immediacy was eliminated from the current study. Therefore, nine original statements were used: four items concerning instructional immediacy and five referring to relational immediacy. This tool was used to explore the third agers’ perceptions of the instructor’s attitudes towards his or her teaching, and behaviours towards his or her learners. Moreover, the scale was adapted to indicate the most vital aspects of teacher immediacy in the case of senior learners. The examples of instructional immediacy were as follows: “The teacher is well-prepared in teaching”, “The teacher answers questions earnestly”. Sample items of relational immediacy were: “The teacher respects students”, “The teacher does not hurt students’ self-respect”.

#### **6.4. Procedure**

It is important to note that the starting point of Study 5 was a pilot study conducted in order to assess the internal consistency of the scales, and to answer three research questions, namely “To what extent are the third agers willing to communicate in English both in meaning-focused and form-focused tasks inside classroom settings?”, “Which aspects of intrinsic motivation, classroom environment, and teacher immediacy are the most eminent among the seniors?”, and “What is the relationship among the third agers’ WTC in English, intrinsic motivation, classroom environment, as well as teacher immediacy?” (Borkowska, in press). The instruments were four scales, such as in-class WTC in English (Peng & Woodrow,

2010), Intrinsic Motivation (Noels et al., 2001), Classroom Environment (Fraser et al., 1996), and Teacher Immediacy (Zhang & Oetzel, 2006). The participants were 30 members of the TAU in Nowy Targ and Zakopane.

The reliability of the three tools in the pilot study were acceptable: WTC in English ( $\alpha = 0.72$ ), Intrinsic Motivation ( $\alpha = 0.76$ ), Classroom Environment ( $\alpha = 0.74$ ). The internal consistency for Teacher Immediacy in the pilot study was good with Cronbach's alpha equalling 0.85. The findings showed that WTC in English was higher in meaning-focused tasks, and WTC had a strong correlation with Intrinsic Motivation. Overall, only positive corrections among four instruments were revealed. As explained in the pilot study, the present author's main objective was to expand the scope of the study, and to scrutinise in-class WTC both among older students learning English in towns and cities. In order to increase the reliability of the items, two items in in-class WTC were changed to "I am willing to give a short speech in English to the class about my family without notes", and "I am willing to translate a question from English into Polish out loud before answering it in English". As previously mentioned, they were constructed on the basis of the present researcher's didactic practice with senior students. Likewise, one vital aspect of the seniors' motivation was added to the Intrinsic Motivation Scale, namely "Because it has a positive influence on my brain and memory".

What should also be noted is that the final version of Study 5 utilised one more tool, the Foreign Language Enjoyment Scale (Deweale & MacIntyre, 2014). This tool was added with the aim of identifying how the third agers' positive emotions might be heightened in class. It seemed reasonable to hypothesise here that older learners would perceive English classes as a positive experience owing to the fact that they learn by choice, and thus, learning English as such ought to be self-rewarding and motivating at a senior age. Also, in order to gain more understanding of the nature of WTC, three research questions to Study 5 were added (questions 2, 3, and 4).

As regards the proper study, the questionnaire was written in Polish (Appendix 6), and distributed as pen-and-paper surveys in the towns. An online version prepared in Google forms and shared as a link and was available for the seniors from the cities. The pen-and-paper surveys was administered by the present author (Nowy Targ and Zakopane) whereas the link was sent after the present researcher had been given a consent from the chair of the TAUs (Cracow and Leszno). When it comes to the third agers from Rabka-Zdrój, the questionnaires were sent by post as the members of the TAU in Rabka-Zdrój were incapable of filling them in online.

Once the questionnaires were collected and coded, Microsoft Excel was used to calculate the total means and standard deviations for all the items. This was followed both by tallying Cronbach's alpha for each scale. Also, the statistical analysis was conducted using IBM SPSS v26. Basic descriptive statistics with Shapiro-Wilk's test for normality of distributions, *t* test for independent samples, as well as Pearson's *r* and Spearman's *rho* correlations were performed. The significance level was set to  $\alpha = 0,05$ .

## 6.5. Study findings

### 6.5.1. Basic descriptive statistics with test for normality of distributions

Table 22 presents Cronbach's alpha for five scales.

**Table 22**

*The values of Cronbach's alpha for WTC in English, Intrinsic Motivation, Foreign Language Enjoyment, Classroom Environment and Teacher Immediacy*

Scale	no. of items	$\alpha$
WTC in English	10	0.78
Intrinsic Motivation	9	0.90
Foreign Language Enjoyment	11	0.92
Classroom Environment	9	0.88
Teacher Immediacy	9	0.95

*Note. N = 79*

The analysis revealed that WTC in English was acceptable, and the internal reliability for Classroom Environment was good. Cronbach's alpha values calculated for Intrinsic Motivation, Foreign Language Enjoyment, and Teacher Immediacy were characterised by a high internal consistency reliability.

In order to investigate the distributions of the measured quantitative variables, the basic descriptive statistics were analysed together with the Shapiro-Wilk's test for the normality of distributions. The results of all calculated statistics, together with the test for the normality of the distribution are presented in Table 23.

**Table 23***Basic descriptive statistics and test for the normality of distributions*

	<i>M</i>	<i>Me</i>	<i>SD</i>	<i>Sk.</i>	<i>Kurt.</i>	<i>Min.</i>	<i>Max.</i>	<i>W</i>	<i>p</i>
WTC in English	4.01	4.10	0.77	-0.41	-0.23	2.10	5.50	0.98	0.128
Intrinsic motivation	5.01	5.00	0.78	-0.71	-0.03	3.00	6.00	0.92	<0.001
Foreign language enjoyment	5.20	5.27	0.69	-1.11	1.01	3.00	6.00	0.91	<0.001
Classroom environment	5.34	5.56	0.55	-1.04	0.77	3.67	6.00	0.92	<0.001
Teacher immediacy	5.66	6.00	0.50	-1.46	1.14	4.11	6.00	0.72	<0.001

*Note.* *M* – mean; *Me* – median; *SD* – standard deviation; *Sk.* – skewness; *Kurt.* – kurtosis; *Min.* - minimal value; *Max.* – maximal value; *W* – Shapiro-Wilk’s test result; *p* – significance. *N* = 79.

The result of the Shapiro-Wilk’s test turned out to be statistically significant for the vast majority of the analysed variables. This means that these distributions differed from the Gaussian curve. Nevertheless, the value of the skewness in no case exceeded the conventional absolute value of 2. Thus, the distributions of the factors may be considered sufficiently close to the normal distributions to perform parametric statistical tests.

When it comes to the means and standard deviations for five scales, the high mean was reported in Teacher immediacy ( $M = 5.66$ ), and the value of the standard deviations here was low amounting to 0.50. This suggests that the seniors’ responses were rather homogenous, and their standpoints about their language instructors were quite similar. Also, it is plausible to think that the participants enjoyed spending time in-class with the teacher as they may have appreciated a good rapport with him or her, as well as his or her didactic knowledge.

A relative high mean was also declared in Classroom Environment ( $M = 5.34$ ), the purpose of which was to evaluate group cohesiveness and teacher support in the current study. The standard deviation was quite low ( $SD = 0.55$ ). Significantly, the high mean indicated that the older adults placed great weight on both interaction with peers during English classes and teacher support during the process of learning English.

Much in a similar vein, Foreign Language Enjoyment was found to have a high mean ( $M = 5.20$ ), and a relatively high value of standard deviation ( $SD = 0.69$ ). It transpires that the students gave much prominence to a good classroom environment, and the positive emotions that learning English in-class might arouse, such as pride, interest and joy.

As far as Intrinsic Motivation is concerned, the mean was 5.01, and the standard deviation was high ( $SD = 0.78$ ). In essence, the third agers were highly motivated to learn

English at an advanced age, however, they were motives that were rather heterogeneous. The most essential motives are analysed in a later part of the study findings.

A relatively high mean (4.01) was found in WTC in English. Also, the value of standard deviation was rather high amounting to 0.77 revealing the fact that the seniors' responses were very diverse.

### 6.5.2. Correlations among five scales

A Pearson's product-moment correlation was run to assess the correlations among five scales. As illustrated in Table 24, only positive and statistically significant correlations among In-class WTC in English (WTC), Intrinsic Motivation (IM), Foreign Language Enjoyment (FLE), Classroom Environment (CE), and Teacher Immediacy (TI) were revealed.

**Table 24**

*Pearson's  $r$  correlations' coefficients between measured scales*

	1.	2.	3.	4.	5.
1. WTC	-	0.36**	0.54***	0.53***	0.45***
2. IM		-	0.74***	0.55***	0.50***
3. FLE			-	0.81***	0.73***
4. CE				-	0.86***
5. TI					-

*Note.* \*\*\* -  $p < 0.001$ ; \*\* -  $p < 0.01$ ; \* -  $p < 0.05$ .  $N = 79$ .

The strongest correlation was found between CE and TI ( $r = 0.86$ ). Rather unsurprisingly, the teacher as a key figure played a crucial role in creating a good classroom environment. Also, another strong and positive correlation was reported between CE and FLE ( $r = 0.81$ ) which may suggest that the third agers found learning enjoyable and interesting in the classroom context. FLE and IM indicated a strong linear relationship ( $r = 0.74$ ). Likewise, a high-degree of positive correction was reported between FLE and TI ( $r = 0.73$ ) which might result from the fact that the language instructors were capable of conducting inspiring classes, and their verbal and non-verbal behaviours boosted the participants' positive emotions about the process of learning.

What the data analysis also showed is a moderate correlation between WTC and FLE ( $r = 0.54$ ), and between WTC and CE ( $r = 0.53$ ). This finding suggests that both FLE and CE had influence on WTC. The moderate correlation coefficient was obtained between WTC and

TI ( $r = 0.45$ ). Significantly, the weakest relationship was reported between WTC and IM ( $r = 0.36$ ).

It may be surmised at this point that a high level of readiness to communicate in English among the senior learners hinged mainly upon teacher support, group cohesion, and enjoyment. Intrinsic motivation could be viewed as a stable feature that might heavily depend on WTC, and TI, which had a moderate relationship with the eagerness to speak, and was found to be the most crucial in terms of building a supportive classroom environment.

### 6.5.3. Correlations between WTC and selected variables

When it comes to the relationship between in-class WTC in English and the older participants' age, it was assessed by Spearman's rank-order correlation. Table 25 illustrates that there was no statistically significant correlation between these two variables.

**Table 25**

*Spearman's  $r$  correlations' coefficients between WTC and the participants' age*

	Age
WTC	0.10

*Note.* \*\*\* -  $p < 0.001$ ; \*\* -  $p < 0.01$ ; \* -  $p < 0.05$ .  $N = 79$ .

As regards the correlation between WTC and the duration of learning English throughout the senior learners' lives and during the English courses for seniors, Spearman's rank-order correlation revealed that the relationships between WTC and the length of learning English were, yet again, statistically insignificant. The statistical analysis is presented in Table 26.

**Table 26**

*Spearman's  $r$  correlations' coefficients between WTC and duration of learning English*

	WTC
Duration of learning English throughout the whole life	0.01
Duration of learning English at the TAU	0.06

*Note.* \*\*\* -  $p < 0.001$ ; \*\* -  $p < 0.01$ ; \* -  $p < 0.05$ .  $N = 79$ .

In a similar vein, Table 27 depicts the WTC scores between the participants who reported having a secondary and higher education. An independent samples *t* test was conducted.

**Table 27**

*A comparison of WTC scores based on the participants' level of education*

	Secondary education ( <i>n</i> = 22)		Higher education ( <i>n</i> = 57)		<i>t</i>	<i>p</i>	95% <i>CI</i>		Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			<i>LL</i>	<i>UL</i>	
	WTC	4.02	0.89	4.01			0.72	0.08	

*Note.* *n* – number of observations; *M* - mean; *SD* – standard deviation; *t* – *t* test's result; 95% *CI* – 95% confidence interval; *LL* and *UL* – upper and lower limit.

Despite the unequal groups, the assumption for homogeneity of variances was not violated. As shown in Table 28, the difference between the compared groups was statistically insignificant. This basically means that the different educational backgrounds seemed to have no relevance in terms of WTC levels.

Moreover, WTC scores between the older adults who had declared to know only English and those who reported the knowledge of other language(s) were compared (Table 28).

**Table 28**

*A comparison of WTC scores between the participants who knew only English and those who declared a knowledge of other language(s)*

	only English ( <i>n</i> = 15)		language(s) other than English ( <i>n</i> = 64)		<i>t</i>	<i>p</i>	95% <i>CI</i>		Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			<i>LL</i>	<i>UL</i>	
	WTC	3.87	1.03	4.05			0.70	-0.64	

*Note.* *n* – number of observations; *M* - mean; *SD* – standard deviation; *t* – *t* test's result; 95% *CI* – 95% confidence interval; *LL* and *UL* – upper and lower limit.

Owing to unequal groups, the homogeneity of variance assumption was violated, and thus, Welch's correction was applied. As shown in Table 28, there was no statistically significant difference between the compared groups. A possible explanation is the fact that the older participants knew other FL(s) had an insignificant influence of the levels of WTC in English.

#### 6.5.4. The older adults' classroom WTC in English

Table 29 shows the means and the standard deviations for all individual items of the In-class WTC in English scale. As previously elucidated, the total mean for all the instruments was rather high ( $M = 4.01$ ).

**Table 29**

*The means and the standard deviations for In-class WTC in English*

	No.	Item	<i>M</i>	<i>SD</i>
meaning-focused tasks	1.	I am willing to do a role play standing in front of the class in English (e.g., ordering food in a restaurant).	4.18	1.13
	2.	I am willing to give a short self-introduction without notes in English to the class.	4.30	1.20
	3.	I am willing to give a short speech in English to the class about my family without notes.	4.23	1.09
	4.	I am willing to translate a question from English into Polish out loud before giving an answer in English.	3.49	1.52
	5.	I am willing to ask the teacher in English to repeat what he/she just said in English because I didn't understand.	4.71	1.31
	6.	I am willing to do a role play at my desk, with a peer (e.g., ordering food in a restaurant).	4.53	0.88
form-focused tasks	7.	I am willing to ask my peer sitting next to me in English the meaning of an English word.	3.91	1.64
	8.	I am willing to ask my groupmates in English the meaning of word I do not know.	3.59	1.57
	9.	I am willing to ask my groupmates in English how to pronounce a word in English.	3.47	1.48
	10.	I am willing to ask my peer sitting next to me in English how to say an English phrase to express the thoughts in English.	3.70	1.30
Total			<b>4.01</b>	<b>1.28</b>

*Note.* This table depicts the means and the standard deviations for individual statements for in-class WTC in English.  $N = 79$ .

However, bearing in mind the fact that the scale was subdivided into meaning-focused and form-focused tasks, a different data set was brought to light. Basically, as illustrated in Table 30 and Table 31, WTC in meaning-focuses exercises was much higher than in tasks concentrating on form.

**Table 30***The means and the standard deviations for meaning-focused tasks*

Meaning-focused activities		
Item	<i>M</i>	<i>SD</i>
1	4.18	1.13
2	4.30	1.20
3	4.23	1.09
4	3.49	1.52
5	4.71	1.31
6	4.53	0.88
<b>total</b>	<b>4.24</b>	<b>1.19</b>

*Note.* This table illustrates the means and the standard deviations for individual statements for meaning-focused activities which are a subgroup in the In-class WTC in English Scale.  $N = 79$ .

**Table 31***The means and the standard deviations for form-focused exercises*

Form-focused activities		
Item	<i>M</i>	<i>SD</i>
7	3.91	1.64
8	3.59	1.57
9	3.47	1.48
10	3.70	1.30
<b>total</b>	<b>3.66</b>	<b>1.49</b>

*Note.* This table presents the means and the standard deviations for individual statements for form-focused activities which are a subgroup in the In-class WTC in English Scale.  $N = 79$ .

The total mean in meaning-focused tasks was 4.24, and the value of standard deviation was 1.19. The highest means was reported in item 5 “I am willing to ask the teacher in English to repeat what he/she just said in English because I didn't understand” (Table 30). Also, this item was characterised with the highest standard deviation ( $SD = 1.31$ ). The next highest mean was declared in item 6 concerning doing a role play at their desk with a peer ( $M = 4.53$ ). It is noteworthy that the same role play performed in front of the class obtained a relatively lower mean amounting to 4.18. Additionally, item 4, which referred to translating a question from English into Polish out loud, turned out to have the lowest mean and the highest standard deviation ( $M = 3.49$ ,  $SD = 1.52$ ). As stated above, this statement was constructed by the present researcher who had observed that seniors are prone to translate a question first before answering it. However, what can be seen from the data analysis is that

this strategy was not as commonly used by the older adults as expected, and the heterogeneity of the answers ( $SD = 1.52$ ) also indicated that the students reported inconsistent views about that kind of learning behaviour.

When it comes to form-focused tasks, the total mean amounted to 3.66, and it was much lower than in meaning-focused exercises. Also, as presented in Table 31, the total standard deviation was very high ( $SD = 1.49$ ) suggesting a fundamental discrepancy between the respondents' answers. The highest mean in activities based on grammar was reported in item 7 regarding asking the seniors' peer sitting next to them in English the meaning of an English word. The value of standard deviation was also the highest in this statement ( $SD = 1.64$ ). The lowest mean was obtained in item 9 "I am willing to ask my groupmates in English how to pronounce a word in English" (Table 31). A possible reason for this could be the fact that the third agers were likely to ask the teacher about the pronunciation as, according to them, he or she might be the only reliable resource of correct pronunciation.

#### **6.5.5. The most prominent aspects of Intrinsic Motivation, Foreign Language Enjoyment, Classroom Environment, and Teacher Immediacy among the senior learners**

As regards the most important aspects of the third agers' motives of learning English at an advanced age, the data are depicted in Table 32.

**Table 32**

*The means and the standard deviations for Intrinsic Motivation*

No.	Item	<i>M</i>	<i>SD</i>
1.	Because I enjoy the feeling of acquiring knowledge about the English community and their way of life.	4.37	1.31
2.	Because it has a positive influence on my brain and memory.	5.53	0.75
3.	For the satisfied feeling I get in finding out new things.	5.35	0.77
4.	For the pleasure I experience when I can use English abroad.	5.23	1.06
5.	For the satisfaction I feel when I communicate in English during classes.	4.94	1.11
6.	For pleasure I get from hearing English spoken by English people/foreigners.	4.82	1.13
7.	For the high I experience when I can use newly learnt vocabulary.	5.11	0.96
8.	For the enjoyment I experience when I grasp a difficult construct in English.	4.92	1.10
9.	For the satisfaction I feel when I am in the process of accomplishing difficult exercises in English.	4.81	1.22
	Total	<b>5.01</b>	<b>1.05</b>

*Note.* This table depicts the means and the standard deviations for individual statements for Intrinsic Motivation  $N = 79$ .

Crucially, the highest mean was obtained in item 2 “Because it has a positive influence on my brain and memory”. The participants’ responses were the most homogenous here ( $SD = 0.75$ ). The next highest means were reported both in items 3 and 4 concerning using English abroad and finding out new things. The students reported to be motivated by using newly learnt vocabulary ( $M = 5.11$ ). Also, they declared that communicating in English during classes was vital as well ( $M = 4.94$ ).

When it comes to Foreign Language Enjoyment, the respondents mainly appreciated the fact that their peers were nice, and that they formed a tight group (Table 33).

**Table 33**

*The means and the standard deviations for Foreign Language Enjoyment*

	No.	Item	<i>M</i>	<i>SD</i>
private	1.	I don't get bored during English classes.	5.56	0.75
	2.	I enjoy English classes.	5.53	0.71
	3.	Learning English is my hobby.	4.61	1.16
	4.	I learn to express myself better in English.	5.25	0.84
	5.	I've learnt and I'm learning interesting things during English classes.	5.14	0.84
	6.	In class, I feel proud of my accomplishments.	4.67	1.13
	7.	Making errors is part of the learning process.	5.41	0.86
social	8.	The peers are nice.	5.53	0.64
	9.	We form a tight group.	5.28	0.93
	10.	We like telling jokes during classes.	5.15	1.06
	11.	We laugh a lot.	5.05	1.17
		Total	<b>5.20</b>	<b>0.91</b>

*Note.* This table indicates the means and the standard deviations for individual statements for Foreign Language Enjoyment.  $N = 79$ .

As can be seen in Table 33, the highest mean was also reported in item 3 “I don't get bored during English classes” ( $M = 5.56$ ). The slightly lower means were obtained in statement 2 where the participants admitted to enjoying English classes ( $M = 5.53$ ). The older students also acknowledged that they learnt to express themselves better in English ( $M = 5.25$ ) and that making errors might be perceived as the part of the learning process ( $M = 5.41$ ). As far as FLE-social is concerned, the seniors’ answers in item 8 “The peers are nice” were the most homogenous with the standard deviation amounting to 0.64. Likewise, the seniors appreciated the fact that they formed a tight group ( $M = 5.28$ ). This may suggest that the relationships between the peers were of much significance for the older participants.

As far as Classroom Environment is concerned, the data were subcategorised into group cohesiveness and teacher support, both of which are presented in Table 34.

**Table 34***The means and the standard deviations for Classroom Environment*

	No.	Item	<i>M</i>	<i>SD</i>
group cohesiveness	1.	I work well with other class members.	5.22	0.71
	2.	I am friendly to members of this class.	5.41	0.63
	3.	I make friends among students in this class.	4.72	1.03
	4.	I help other class members who are having trouble with their work.	4.94	0.94
teacher support	5.	The teacher is patient in teaching.	5.71	0.51
	6.	The teacher provides a timely response to students' concerns.	5.56	0.69
	7.	The teacher praises the students.	5.42	0.78
	8.	The teacher creates a positive and supportive atmosphere during classes.	5.63	0.74
	9.	The teacher asks questions that solicit viewpoints or opinions.	5.42	0.86
		Total	<b>5.34</b>	<b>0.77</b>

*Note.* This table depicts the means and the standard deviations for individual statements for Classroom Environment.  $N = 79$ .

As regards group cohesion, both item 1 “I work well with other class members” ( $M = 5.22$ ,  $SD = 0.71$ ) and item 2 “I am friendly to members of this class” ( $M = 5.41$ ,  $SD = 0.63$ ) were perceived as being the most vital, and the answers were the least diverse here as well. The data analysis in the second category, teacher support, showed that the third agers placed emphasis on the educator’s patience ( $M = 5.71$ ), and the ability to create a positive a supportive atmosphere during classes ( $M = 5.63$ ). Patience in teaching was reported to have the least diverse answers ( $SD = 0.51$ ) indicating that this teacher’s personality trait appeared to be fundamental for the older students. In addition, much prominence was given to a timely response to students’ concerns, and to the fact the instructor should ask questions about the older adults’ viewpoints ( $M = 5.56$ ).

**Table 35***The means and the standard deviations for Teacher Immediacy*

	No.	Item	<i>M</i>	<i>SD</i>
instructional immediacy	1.	The teacher is committed to teaching.	5.65	0.75
	2.	The teacher is well-prepared in teaching.	5.71	0.64
	3.	The teacher is passionate about teaching.	5.63	0.72
	4.	The teacher answers questions earnestly.	5.77	0.42
relational immediacy	5.	The teacher understands students.	5.52	0.80
	6.	The teacher treats students fairly and equally.	5.52	0.77
	7.	The teacher respects students.	5.66	0.60
	8.	The teacher does not hurt students' self-esteem.	5.65	0.62
	9.	The teacher encourages students.	5.54	0.75
		Total	<b>5.66</b>	<b>0.67</b>

*Note.* This table shows the means and the standard deviations for individual statements for Teacher Immediacy.  $N = 79$ .

As presented in Table 35, the last scale, Teacher Immediacy, was also divided into two categories, such as instructional and relational immediacy. What needs to be highlighted here is the fact that there were only slight discrepancies between the statements. The seniors demonstrated very consistent views about their teachers because the standard deviations for the items were rather similar. The highest mean (5.77) was obtained in item 4 “The teacher answers questions earnestly” in the first category, and the standard deviation for this item was the lowest (0.42). The next highest means were reported in statement 2 “The teacher is well-prepared in teaching”. Taking the rapport between the teacher and the students into account, statements 7 “The teacher respects students” ( $M = 5.66$ ), and statement 8 “The teacher does not hurt students’ self-esteem” ( $M = 5.65$ ) obtained the highest means. Similarly, the students admitted that the teacher not only encouraged them to learn ( $M = 5.54$ ), but he or she also understood ( $M = 5.52$ ) and treated them fairly ( $M = 5.52$ ).

## 6.6. Discussion

Study 5 shed some light on the third agers’ in-class WTC, and its correlations with various factors. Importantly, the data revealed only positive correlations between the variables.

The findings showed a strong correlation between WTC and CE, as well as between WTC and FLE (Table 24). What this basically means is that an engaging classroom environment may have had the potential to enhance the level of readiness to communicate, and a constant friendly atmosphere helped older learners “to develop a rewarding feeling about speaking” (Peng & Woodrow, 2010, p. 857). Likewise, FLE may facilitate WTC which suggests that positive emotions motivated the participants to learn English as older citizens tend to choose social activities which bring them “emotional pleasure” and well-being (Sigelman & Rider, 2015, p. 439). The positive correlation between WTC and FCE seems to echo Dewaele’s (2019, p. 13) view that shaping high levels of learners’ WTC “involves creating a friendly and sufficiently challenging and interesting emotional classroom environment, and picking conversation topics that match the students’ interests”. It is especially true in the case of senior learners who, according to the socioemotional selectivity theory (Carstensen et al., 2003, p. 119), choose those social relationships and emotional experiences that “fulfil the goals that they value most highly, maximizing life satisfaction and maintaining a high level of emotional well-being”.

The data also indicated a moderate correlation between WTC and TI (Table 24). Significantly, the teacher may boost students' WTC by encouraging active involvement in class (Deweale & MacIntyre, 2014; Riasati & Rahimi, 2019). In this context, teaching style and the language of instruction is of great interest. Deweale and Deweale (2018, p. 35) acknowledged that the teacher's frequent use of the target language corresponds with high WTC among older and more advanced learners while less advanced individuals "need more gentle coaching and encouragement to find their voice in the FL".

A weak correlation was found between WTC and IM (Table 24). This finding is not in line with the results of the pilot study where the data revealed a strong correlation between WTC and IM (Borkowska, in press). A possible explanation for the weak correlation is that motivation as such may be considered to be a trait-like factor seems to be rather stable in the process of learning (MacIntyre et al., 1998). Basically, the seniors were highly motivated students, and their WTC hinged upon more transient variables that changed at a particular time and situation (e.g., MacIntyre, 2020). Due to the fact that they are interested in learning English at an advanced age, they are eager to speak the language frequently inside the classroom (e.g., Riasati, 2018).

The strongest correlation was revealed between CE and TI (Table 24). This indicates that the teacher plays a pivotal role in creating and maintaining a relaxed atmosphere that may reduce distance and foster close relationships with students (e.g., Derenowski, 2018). Also, CE had a strong correlation with FLE indicating that enjoyment may facilitate group cohesion and teacher support. The strong correlation between FLE and TI also shows that the teacher's behaviours had a potent influence on the older students' classroom enjoyment. As suggested by Deweale and Deweale (2020, p. 57), FLE may be viewed as a "state-like" factor which means that "teachers have to work hard to create the optimal emotional climate in their classroom to allow learners to enjoy the class". Study 5 seems to confirm the fact that seniors enjoyed English classes and appreciated their instructors' teaching styles and professionalism (Table 34 and Table 35). What is also significant is that FCE had a strong positive relationship with IM. It turned out that FLE could enhance the third agers' intrinsic reasons to learn English (Table 24).

When it comes to the correlation between WTC and selected variables, the statistical analysis revealed only insignificant relationships. Also, the discrepancy between WTC and the participants' level of education was not statistically significant, as well as the difference between the seniors' foreign language experience. A possible explanation here may be the fact that learner-external factors (i.e., classroom environment, the teacher, peers) had

a powerful impact on the older adults' WTC, and learner-internal factors (i.e., age, education, English learning experience) appeared to be of no or less importance (cf. Dewaele & Dewaele, 2018).

As regards the third agers' WTC, the data analysis revealed that the older adults were more eager to speak English in meaning-focused (Table 30) than in form-focused exercises (Table 31). This result confirms the fact that seniors placed weight on enhancing communicative skills during language classes (e.g., Jaroszewska, 2013; Pawlak et al., 2018). They especially appreciated opportunities to interact with a peer in dyads as it provides room for students to build and maintain social bonds (cf. Niżegorodcew, 2016). Pair work gives learners a sense of security and comfort since it is less anxiety-provoking than teacher-oriented tasks (e.g., Cao, 2011; Mystkowska-Wiertelak, 2016). Study 5 also indicated that the subjects were very willing to ask the teacher questions in English when they had not understood him or her. This may be associated with the fact that age-advanced students tend to view the teacher as an authority whose instructions need to be followed in the classroom context (cf. Derenowski, 2018).

As far as form-focused activities are concerned (Table 31), asking a peer in English the meaning of an English word was reported to be the most eminent, however, the seniors' responses were the most heterogeneous here. It is apparent that opinions about the tasks concentrated on grammar generated a diverse picture of the older students who typically pay scarce attention to accuracy than to meaningful communication (e.g., Gabryś-Barker, 2018). This supports the view that foreign language lessons should not be grammar-oriented because third agers' ultimate goal is gaining the ability to take part in face-to-face interactions (Singleton, 2018).

The findings concerning intrinsic motivation (Table 32) are echoed in the previous studies where the older adults were primarily motivated by communication in English abroad (e.g., Piechurska-Kuciel, 2018). Significantly, the most fundamental aspect of motivation was also the fact that learning English had a positive influence on the brain and memory since older adults seek "the opportunity to engage in stimulating mental activities" (Słowik, 2019, p. 198). It is worthwhile mentioning that FLL may have a beneficial effect on brain plasticity, and working memory capacity (cf. Goral, 2019). Also, what should not be neglected is that the participants had a strong desire to learn new things. This supports the view that learning English may lead to self-realisation that improves life satisfaction and the quality of life in late adulthood (Ardelt & Jacobs, 2009).

As regards foreign language enjoyment (Table 33), Study 5 indicated that English classes were a source of positive emotions among the age-advanced learners. Typically, the subjects paid due attention to the fact that their peers were nice, and they formed a tight group. Therefore, there was no pressure that might result in increasing the level of anxiety, and eliminating the readiness to engage actively in FL communication (Dewaele, 2019; Dörnyei, 2007). Also, the students admitted that they enjoyed the classes, and they found them interesting. As pointed out by Dewaele and MacIntyre (2014, p. 257), the core of enjoyment in the foreign language classroom, is “the match between the challenge of the activity and the skill of the learner” as this approach sustains language students’ interest and motivation. Kacelt and Klímová (2021, p. 7) also remark that FLL brings older adults “subjective feelings of happiness, satisfaction and positive motivation and thus positively affects their mental health and expands their social networks”.

In a similar manner, the seniors highlighted the importance of the classroom environment in the process of learning (Table 34). Taking group cohesion into account, they pointed out that they worked well with their groupmates, and that all the group members were friendly towards each other. This suggests that the participants tended to have a good cooperation with peers which can be treated as a motivating tool that promotes a communicative task performance (cf. Grotek, 2018). The finding, however, is not supported by a study by Pawlak et al. (2018) in which the older adults found interaction with each other challenging and difficult. It is plausible to think that this inconsistency may have resulted from the level of familiarity of the participants’ peers or being accustomed to dyadic or small group cooperation during classes (cf. Kang, 2005). Additionally, Study 5 indicated that the seniors gave much prominence to the teacher’s ability to create a relaxed and supportive atmosphere, and teacher support manifested by patience when it comes to slower pace of the lesson, as well as the older adults’ potential physical and mental limitations (cf. Ramírez Gómez, 2019). Likewise, Derenowski (2019, p. 21) underscores that owing to decreased self-confidence and self-esteem, seniors “should feel continuous support and trust from the foreign language teachers throughout the whole foreign language process”.

As far as teacher relational immediacy is concerned, the participants underscored the fact that the instructor was capable of understanding and respecting their students. Also, they appreciated the fact that their self-esteem was not hurt in the course of learning process, and the teacher was believed to treat them fairly and equally. The sense of fairness, however, seemed to be less vital in Derenowski’s (2018) study where the teacher was perceived as an authority, and thus, his or her judgment should not be questioned. Similarly, in his subsequent

study, Derenowski (2021, p. 141) pointed out that being fair is not as important to third agers who believe “it is an attribute that is mandatory for any professionally active teacher”. Likewise, the most substantial aspects of instructional immediacy was the fact that the teacher was likely to answer questions earnestly. The seniors gave priority to the educator’s commitment and passion towards teaching as well. This lends some support to the fact that both patience and professional commitment are considered to be the most desirable characteristic features of language instructors working with third agers on a daily basis (e.g., Jaroszevska, 2013b).

Overall, it may be surmised that the seniors’ WTC was primarily shaped by FLE, CE, as well as TI. Student-related variables were insignificant in the context of WTC which clearly shows that a positive classroom environment appears to be of unquestionable relevance in fostering in-class WTC in English among the older participants.

### ***Summary***

The analysis of the five studies included in the research project clearly indicated that the senior learners were actively engaged in the FLL inside the classroom. Speaking activities, which were designed for the purpose of this project appeared to promote their readiness to communicate in English in different forms of interaction. Additionally, the classroom environment positively impacted WTC by underscoring the importance of peers and the teacher.

At this juncture, however, it is critical to recapitulate all the findings and summarise the variables that have the potential to affect in-class WTC in English among the third-age learners.

## CHAPTER FIVE

### FINDINGS AND CONCLUSIONS

Chapter Five concentrates on the study findings, and summarises the variables that might have an impact on the shaping of older adults' WTC in a classroom context. The present author also presents the limitations of the research project. Likewise, the pedagogical implications are presented, while the directions for future studies discuss the ideas to explore older adults' WTC in relation to other vital variables that may shape communicative behaviours in class.

#### 1. A recapitulation of the study findings

Taking into account the results of all five studies presented and analysed in Chapter Four, it may be summarised that the senior learners were willing to speak English in the classroom context. Basically, during the communicative class, they tended to express higher WTC in meaning-focused tasks performed in a dyadic interaction (Study 2, Figure 15). Similarly, this finding was also confirmed by the findings of the qualitative study (Study 5) where the participants declared higher levels of readiness to communicate in meaning-focused exercises (Table 30). This may suggest that older adults are typically aware of their learning goals being linked to authentic and meaningful communication (cf. Garcia, 2017). It is worthwhile mentioning that meaning-focused tasks tend to involve learners "in using the TL [target language] to convey messages in tasks requiring information-exchange, problem-solving or opinion-sharing" (Pawlak, 2006, p. 18). Those kinds of activities require learners' life and language learning experience, and thus they may be treated as experiential techniques (cf. Knowles et al., 2020). It is also justifiable to note that meaning-oriented tasks help older adults realise their communicative goals, and they provide room for learners' autonomy which, in turn, shows that "the richest resources for learning reside in the adult learners themselves" (Knowles et al., 2020, p. 44).

The fact that the seniors demonstrated higher WTC in meaning-focused tasks than in form-focused exercises (Table 31) is in contrast to Peng's (2014) study. The author conducted their research among Chinese university students who expressed relatively higher in-class WTC in form-focused tasks. In a general sense, Asian learners' language goal is principally passing exams, and thus accuracy is of great interest in a formal education context. Chinese

culture is equally important as it considerably affects the classroom environment (Wen & Clément, 2003). As stressed by Peng (2014), the teacher is perceived as an authority and learners' silence during classes is a sign of showing respect and politeness. In this perspective, older citizens also treat the teacher as an authority which may be translated as completing all assignments diligently and appreciating the instructor's preparation for classes and his or her professionalism (cf. Grotek, 2018).

In a similar manner, older adults attend English classes voluntarily mostly for intrinsic reasons that govern their process of learning (Table 32). Therefore, they wish to practise English communicatively as it is of great help outside the classroom. Third agers are likely to realise that "English is seen as not just a language for interpersonal interaction, but also a way of keeping in touch with the rest of the world" (Zhang et al., 2019, p.3). As presented in Study 2, 3, and 4, many older participants appreciated pair work and the role of a partner who encouraged them to more active involvement. Also, some scholars have remarked that students with lower language competence prefer dyadic interaction as turn-taking is deemed to be less competitive which may have a positive influence on their eagerness to enter into communication (e.g., Mystkowska-Wiertelak, 2016; Cao, 2011). In addition, pair work gives learners greater opportunities to express themselves than in the case of speaking individually which, in most cases, tends to evoke higher level of state anxiety (e.g., Cao and Philp, 2006; Riasati, 2018). Significantly, the present researcher let the seniors choose their interlocutors, and thus it is reasonable to think that they may have decided to perform the tasks with the peers they were familiar with, and the ones they enjoyed working with (e.g., Eddy-U, 2015). An interesting finding is that the seniors admitted that changing their partner would not cause anxiety (Table 17) while performing the information-gap activity (Study 3). The reason for this may be the fact that the participants were the members of one TAU and they had attended English classes for approximately five years, and thus they had created a tight group. Another explanation is that, as pointed out by Peng (2007), group cohesion contributes to a pleasant classroom climate which promotes WTC in a FL. In this regard, it may be deduced that the fact that the older students were all familiar and willing to cooperate with each other resulted in higher levels of their readiness to communicate (cf. Mystkowska-Wiertelak & Pawlak, 2017).

Notably, group cohesiveness might boost the seniors FLE giving them a sense of security and increasing self-esteem (Sigelman & Rider, 2015). Positive group dynamics may be of great value in eliminating negative self-perceptions that concern FLL at an advanced age (cf. Ramírez Gómez, 2016b). Oxford (2018, p. 10) remarks that "getting rid of

debilitating stereotypes is a fundamental step in being able to learn another language or anything else as an older adult.” Gałajda (2017, p. 132) also believes that “the development of positive self-image of the learners” have the potential to boost FL communication in the classroom context.

What also appears to be critical is that the results of all five studies yielded vital insights into variables that might enhance or inhibit seniors’ WTC in English in class. As illustrated in Table 36, the factors have been divided into five categories, namely environmental, linguistic, affective, cognitive, and demographic.

**Table 36**

*A summary of the situation-specific variables influencing third agers’ in-class WTC in English*

<b>ENVIRONMENTAL FACTORS</b>	<b>LINGUISTIC FACTORS</b>	<b>AFFECTIVE FACTORS</b>	<b>COGNITIVE FACTORS</b>	<b>DEMOGRAPHIC FACTORS</b>
<i>teacher</i> (teaching style, classroom management, personality features)  <i>atmosphere</i> (supportive/safe/friendly, anxious/stressful)  <i>peers</i> (familiar, cooperative, involved)  <i>task</i> (meaning-focused, form-focused, dyadic, dialogue teacher-fronted, monologue, revision, productive, receptive(?), time for preparation)  <i>topic</i> (interesting, enjoyable, attractive, familiar)	<i>level of proficiency?</i>  <i>the knowledge of lexical resources</i> (content knowledge)  <i>strategic competence</i> (communication strategies)	<i>positive emotions</i> (enjoyment, interest)  <i>negative emotions</i> (anxiety, fear, stress)  <i>psychological well-being</i>  <i>physical well-being</i>  <i>self-perceptions about old age and aging</i>	<i>memory</i> (slower processing)  <i>attention?</i> (decline in selective and divided attention)	<i>age?</i>  <i>education?</i>  <i>English learning experience?</i>  <i>the knowledge of other language(s)?</i>

*Note.* This table presents a summary of the variables influencing the older adults’ WTC in English. Potential factors (?) have also been added.

When it comes to the environmental factors, the teacher was reported to be a key figure in the senior language classroom. His or her teaching style, personality, and attitude towards older learners were frequently mentioned in all five studies. The participants admitted that a patient, emphatic, as well as professional teacher may enhance their communicative behaviours (Study 1). They also appreciated the teacher who prepared conversation tasks and dialogues as they had a preference for peer cooperation (Table 7). However, as shown in Study 4, the seniors also liked the picture presentation and reported high levels of WTC as well (Table 21). It may be hypothesised that their WTC during the monologues was fostered by the fact that they had been given time to prepare the oral presentation. Zarrinabadi (2014) found that time preparation may boost an individual's WTC. The high WTC in the presentation may also have resulted from the fact that the subject could choose the picture they liked and it dictated the topic of the monologue. As presented in Table 20, the seniors were very eager to talk about the topic they were prepared for and interested in. Derenowski (2021) notes that older adults prefer topics regarding family and everyday life, as well as practical issues. Andrew (2012, p. 160) also emphasises that "the language-learning experience touches the lives of the students as persons who inhabit a much larger world than the classroom, and for this reason, their interests and aspirations are of paramount importance".

The fact that the findings indicated that the seniors' WTC was affected by insufficient vocabulary knowledge and memory problems is also noteworthy (Table 13). This finding was also in accordance with Borkowska's (2021) previous study in which the third agers underscored that they needed some time to retrieve a necessary word or they reported the lack of lexical knowledge. It may be surmised that older adults are prone to feel intimidated by the fact that they have problems with vocabulary recollection. Certainly, age-related WM capacity declines are not uniform, but they are more pronounced in later life (Stuart-Hamilton, 2012). In order to help learners ease into their learning process, it is substantial to adapt the pace of the lesson to the particular individuals the teacher works with (cf. Jaroszewska, 2013b). As illustrated in Table 9, the tempo of delivery may affect in-class communication and discourage older learners from active involvement.

Likewise, negative emotions, such as fear, anxiety, stress were perceived to hamper WTC (Study 2 and 4). Komorowska (2016) underscores the role of fear in the classroom context:

In language education, fear will result in [a] lower willingness to communicate, less interpersonal contact, less intercultural competence, and lower fluency levels together

with a tendency to ignore one's problems and avoid difficulty connected with direct face-to-face communication. (p. 52)

Negativity tended to occur during the monologue and the form-focused task that generated the lowest levels of WTC in Study 2 (Table 11, Task 1). In Study 4, some participants mentioned fear and stress while answering the teacher's questions. It seems that the interactions with the instructor might evoke negative emotions (cf. Cao, 2011). Although the negative emotions did not heavily influence the level of WTC during the picture presentation, they seemed to cause insecurity associated with being in front of the peers and the possible "fear of losing face by making mistakes" (Kang, 2005, p. 282). Likewise, the negative emotions linked to brainstorming might result from vocabulary retrieval or the type of the task, which was teacher-fronted (Riasati, 2018). De Saint-Legér and Storch (2010, p. 277) note that learners feel "vulnerable when expressing an opinion in front of the whole class".

As regards the participants' strategic competence, Study 3 showed that the seniors applied self-rephrasing and self-repair (Table 9). They also employed retrieval that helped them gain time to express their thoughts (Extract 2A, Extract 2B, and Extract 2C). Overall, the participants were capable of overcoming communicative problems (cf. Ohly, 2007). Nizęgorodcew (2018, p. 161) points out that "senior students' success in foreign language study depends not only, and not primarily, on how old they are, but on their choice of study objectives and learning strategies.

Importantly, WTC had a positive correlation with FLE. This essentially means that positive emotions seemed to have a potent effect on seniors' readiness to speak English in class. It is reasonable to note that FL communication may evoke language enjoyment since speaking was the most crucial skill for age-advanced learners (Figure 7). According to Gregersen (2016, p. 71), experiencing positive emotions provide "language learners with the resilience to continue on what is often perceived as a long and complicated journey toward greater proficiency".

Much in a similar vein, one of the most fundamental elements of classroom instruction, which was frequently mentioned by the participants in all five studies, was a non-threatening atmosphere. It is fairly evident that "the students will become not only less apprehensive about their abilities but also more willing to talk in a foreign language as often as possible" when the educator is capable of creating a relaxed and welcoming classroom environment (Gałajda, 2017, p. 136). Such an approach might eliminate older learners' potential negative self-perceptions which hamper their sense of self-accomplishment

(Ramírez Gómez, 2016a). Likewise, according to Gabryś-Barker (2016, p. 156) that positive psychology posits that the “classroom climate plays a role not only in fostering foreign language learning, but also in personal development and the well-being of teachers and learners”. For this reason, it is important to remember that learning a FL in the senior years may promote positive ageing since it contributes to establishing new relationships, boosting mental well-being, evoking positive emotions, as well as facilitating active involvement (cf. Gergen & Gergen, 2001).

When it comes to the potential factors that may affect in-class WTC in English, Table 36 illustrates the demographical variables, such as – among others – education, English language experience, and a knowledge of other foreign language(s). Study 5 indicated insignificant correlations between WTC and those variables. However, it seems plausible to think that further empirical studies might provide significant data that will find demographic variables substantial in the context of WTC in a FL among older adults.

It may be deduced at this juncture that the most fundamental variables that may affect older adults’ WTC in English are environmental factors because a mindful and professional teacher, as well as a positive classroom environment and supportive peers can help to overcome negativity and potential doubts concerning one’s communicative abilities in a specific classroom-based situation. Therefore, the present author’s hypotheses that both the teacher and peers would play a significant role in shaping the older learners’ WTC has been confirmed in all five studies.

## **2. The limitations of the research project**

Although the present research project has surely contributed to a better understanding of senior learners’ in-class WTC in English, it is not without limitations. First of all, Study 1 included only members of the TAU in Nowy Targ and Zakopane. Both of those towns are located in the south of Poland and its residents frequently immigrate to English-speaking countries or they are likely to have their friends and families abroad. This basically means that senior citizens from Nowy Targ and Zakopane might have homogenous backgrounds, and thus they represented the profile of an older person in the south of Poland. Extending the scope of this study could indicate how seniors’ opinions in different parts of Poland vary.

Additionally, Study 2, 3, and 4 seemed to be limited in terms of the relatively small sample size. Also, the fact that participants were regularly taught by the present researcher, who had been working with them for five years, may be perceived as problematic. Although

the present author did her best to be an objective instructor, the seniors might have shown that they enjoyed communicative classes and activities more as they wished to show their appreciation for her preparation and engagement. On the positive side, however, it is reasonable to think that the older adults would not have agreed to take part in so many various studies if they had not known and trusted their educator.

What also appears significant is that Study 3 and 4 were conducted during extraordinary circumstances that might have had an impact on the participants' views about their own WTC. The isolation from the period of the lockdowns could have either blocked individual students' speaking skills more and revealed their eagerness to communicate since they were able to meet face-to-face and share their opinions with groupmates.

When it comes to Study 5, the participants were members of five different TAUs in Poland. Even though the present author asked their consent to conduct the study in various TAUs in Poland, ultimately only members of five TAUs were eager to participate. This may also have been the result of the pandemic period or simply, a general unwillingness to fill in surveys. Additionally, it may be hypothesised that a bigger sample size could have contributed to gaining a more detailed picture of the variables affecting in-class WTC in English and the possible significant data might have indicated the importance of the demographic factors in shaping senior learners' WTC.

### **3. The pedagogical implications for glottogeragotics**

As regards the pedagogical implications for glottogeragotics, language teachers need to remember that older adults are eager to use English communicatively even when they represent low proficiency levels. The classroom-based studies presented in this dissertation indicated that when an opportunity arose, seniors tended to speak English both in pairs and teacher-fronted tasks. However, they should feel teacher support, and ought to be surrounded by cooperative and friendly peers. In order to foster group cohesion, which is of great importance for seniors, the teacher is to provide a non-threatening atmosphere that promotes WTC. The social bonds established during English classes may additionally motivate third agers to attend the course regularly as they facilitate learners' well-being and eliminate the potential sense of isolation. On the other hand, letting an older student who represents a higher proficiency level to attend a weaker group only because his or her friend is the member of that group is a very risky solution. This, unfortunately, destroys positive group

dynamics and discourages other learners from active involvement as their linguistic confidence and self-esteem are automatically lowered.

Another important implication is that the preferable organisational mode is dyadic interaction, which should be supervised by the teacher. The present author's observations clearly show that seniors enjoy it when the educator approaches them, asks some extra questions, offers advice, and gives individual feedback. This seems to encourage them to further practice and enhance their self-esteem. The fact that the teacher is a crucial factor during FFL means that glottogeragogists ought to prepare teacher-fronted activities as well because the educator's questions may be found interesting and stimulating. The fact that most of language activities should be based on meaningful communication, and mistakes should be corrected in a gentle manner is also highly noteworthy.

On the negative side, it is justifiable to mention the potential problems with discipline during classes. As seniors are very willing to talk, even when one student is assigned to answer the teacher's question, there is a tendency that most of them will try to answer it at the same time. Moreover, when an individual needs more time to retrieve a word or to create a sentence, some students impatiently say the answer and do not let the chosen learner recollect the information. Certainly, this active involvement should be appreciated by the instructor. However, in order to enhance seniors' sense of success and self-accomplishment, the teacher is to manage the task performance in such a manner that all students could feel secure and safe. The present author's suggestion is to explain the importance of time given for linguistic retrieval. Another practical implication is to use a sense of humour which always lifts seniors' spirits, and it prevents the destruction of a positive classroom environment. The management of discipline may be especially challenging for teachers who start their work with seniors. The educators need to find their own techniques to give all students opportunities to talk and that does not allow any one student to dominate, since this situation may have a detrimental effect on in-class WTC.

Likewise, it is advisable to prepare revision tasks on a daily basis as they stimulate seniors' memory. Similarly, short vocabulary quizzes appear to be a driving force to revise learning material at home, and good marks might evoke positive emotions and reactions worth citing: "I will show the test to my son/daughter as he/she never believes that I can learn anything".

In order to provide as many communicative opportunities as possible, grammar exercises, vocabulary revision, reading comprehension tasks, and writing activities should be assigned as homework because older adults are eager to learn at home, and they never come

to classes unprepared or without homework. As far as listening tasks are concerned, it is suggested to prepare activities based on older adults' favourite songs because, in a general sense, this technique may encourage and show them that they are capable of listening and understanding simple sentences and words.

In actual didactic practice, senior learners enjoy the tasks presented on a multimedia board, especially vocabulary revision tasks or creating questions (e.g., prepared by means of the educational platform - wordwall.net) because they become familiar with new technology solutions. Significantly, all teaching materials are to be adapted for students' age-related limitations as to eliminate potential difficulties that may hamper the learning process.

#### **4. Concluding remarks and directions for future research**

Clearly, the research project analysed and discussed in Chapter 4 yielded vital insights into the nature of age-advanced learners' in-class WTC in English. Seniors are very willing to communicate in the classroom context, since the improvement of speaking abilities constitutes the core of their intrinsic motivation. Hence, "the ability to accomplish their communicative goals (...) is of vital importance from the very beginning as they find themselves in a foreign language environment" (Mystkowska-Wiertelak & Pawlak, 2017, p. 187). Likewise, the fact that learning a FL has a beneficial effect on the functioning of the human brain may be treated as a crucial determinant that motivates older students to active involvement in class.

WTC hinges heavily on the teacher and his or her teaching style, as well as the ability to create and sustain a laid-back atmosphere that stimulates and promotes interpersonal bonds that are of great interest among seniors. Real-life interactions may also have a potent impact on WTC as they help students gain skills which might be used in natural settings. Cooperation gives older adults a sense of belonging to the group, and from the socio-psychological perspective, provides room for self-realisation and the achieving of new fulfilling learning aims in late adulthood.

What ought to be noted at this point is that future investigations concerning third agers' in-class WTC in English are needed. Future research might focus on examining other positive emotions (e.g., curiosity, interest) in relation to WTC as it could help to analyse the factors that might have the strongest effect on WTC levels. On the other hand, determining the influence of negative emotions (e.g., anxiety, fear) on the readiness to speak could indicate a more comprehensive picture of the role of emotions in shaping WTC in the

classroom context. It also should be underscored, however, that in the case of senior learners, studies that may direct students' attention to negativity and their potential deficiencies should be conducted in a careful and sensible manner, so as not to affect the sensitive nature of third agers' self-esteem.

When it comes to the classroom-based studies, it could be beneficial to explore WTC among more advanced older learners who represent B1 or B2 proficiency levels. These investigations would possibly capture the role of seniors' level of proficiency in creating in-class WTC, and compare the WTC between lower-proficiency and more advanced students.

As a practitioner, the present author strongly believes that the training of communicative strategies and raising seniors' awareness in terms of overcoming communicative breakdowns would be of unquestionable relevance. Such interventions could not only enable third agers to gain pragmatic knowledge about communicative strategies, but the training might also help them become more effective strategy users.

Undoubtedly, future empirical research would surely be of paramount importance for foreign language instructors working with seniors on a regular basis since it could provide vital implications for teaching practice. Greater efforts are still needed to draw teachers' attention to this cohort, and future findings in the field of glottogeragotics might be an essential next step in confirming the significance of learning a FL in the senior years.

### *Summary*

The recapitulation of the findings clearly shows that the older adults constitute an interesting and intriguing group of language learners. They are open to active participation in class and their WTC in English may be facilitated by various environmental variables that, in turn, have the potential to influence seniors' emotions and promote communicative behaviours. Therefore, positive teachers and positive classroom dynamics are of unquestionable relevance in shaping older learners' readiness to be communicative in English in class.

## REFERENCES

- Abutalebi, J., Canini, M., Rosa, P., Green, D., & Weekes, B. (2015). The neuroprotective effects of bilingualism upon the inferior parietal lobule: A structural neuroimaging study in aging Chinese bilinguals. *Journal of Neurolinguistics*, *33*, 1–13. <http://doi.org/10.1016/j.jneuroling.2014.09.008>
- Adamczyk, M. D. (2017). Starzenie się społeczeństwa polskiego wyzwaniem dla zrównoważonego rozwoju. *Zeszyty Naukowe Politechniki Śląskiej*, *1981*, 105–113.
- Alladi, S., Bak, T., Duggirala, V., Surampudi, B., Mekala, S., Shukla, A., Chaudhuri, J. R., & Kaul, S. (2013). Bilingualism delays age at onset of dementia, independent of education and immigration status. *Neurology*, *81*(22), 1938–1944. <http://doi.org/10.1212/01.wnl.0000436620.33155.a4>
- Almond, N. M. (2014). The use-it-or-lose-it theory; the cognitive reserve hypothesis and the use-dependency theory: Methodological issues, previous research, current research and future perspectives. In K. Edison (Ed.), *Episodic memory: Formation, clinical disorders and role of aging* (pp. 27–84). Nova.
- Anderson, N. D., & Craik, F. I. M. (2000). Memory in the aging brain. In E. Tulving, & F. I. M. Craik (Eds.), *The Oxford handbook of memory* (pp. 411–425). Oxford University Press.
- Anderson, B. A., Jacoby, L. L., Thomas, R. C., & Balota, D. A. (2010). The effects of age and divided attention on spontaneous recognition. *Memory and Cognition*, *38*, 725–735. <http://doi.org/10.3758/s13421-010-0046-z>
- Andrew, P. (2012). *The social construction of age: Adult foreign language learners*. Multilingual Matters.
- Antoniou, M. (2019). The advantages of bilingualism debate. *Annual Review of Linguistics*, *5*, 395–415. <http://doi.org/10.1146/annurev-linguistics-011718-011820>
- Antoniou, M., Gunasekera, G. M., & Wong, P. C. M. (2013). Foreign language training as cognitive therapy for age-related cognitive decline: A hypothesis for future research. *Neuroscience & Biobehavioral Reviews*, *37*(10), 2689–2698. <http://doi.org/10.1016/j.neubiorev.2013.09.004>
- Antoniou, M., & Wright, S. M. (2017). Uncovering the mechanisms responsible for why language learning may promote healthy cognitive aging. *Frontiers in Psychology*, *8*, 1–12. <http://doi.org/10.3389/fpsyg.2017.02217>
- Ardelt, M. (2000a). Intellectual versus wisdom-related knowledge: The case for a different kind of learning in the later years of life. *Educational gerontology*, *26*(8), 771–789. <http://doi.org/10.1080/036012700300001421>
- Ardelt, M. (2000b). Antecedents and effects of wisdom on old age: A longitudinal perspective on aging well. *Research on Aging*, *22*(4), 360–394.
- Ardelt, M., & Jacobs, S. (2009). Wisdom, integrity, and life satisfaction in very old age. In M. C. Smith (Ed.), *Handbook of research on adult learning and development* (pp. 732–760). Routledge.
- Argimon, I., Esteves, C., Cerutti, F. & Mosquera, J., & Stobäus, C. (2015). How to get better aging, bet on positive psychology. *Psychology*, *6*, 1855–1860. <http://doi.org/10.4236/psych.2015.614182>
- Asker, B. (1998). Student reticence and oral testing: A Hong Kong study of willingness to communicate. *Communication Research Reports* *15*(2), 162–169.
- Aspin D. N., & Chapman J. D. (2007). Lifelong learning: Concepts and conceptions. In D. N. Aspin (Ed.), *Philosophical perspectives on lifelong learning*. *Lifelong learning book series*, vol. 11. Springer. [https://doi.org/10.1007/978-1-4020-6193-6\\_1](https://doi.org/10.1007/978-1-4020-6193-6_1)

- Baddeley, A., Gathercole, S., & Papagno, C. (1998). The phonological loop as a language learning device. *Psychological Review*, *1*(105), 158–173.
- Bak, T., Nissan, J., Allerhand, M., & Deary, I. (2014). Does bilingualism influence cognitive aging? *Annals of Neurology*, *75*, 959–963. <http://doi.org/10.1002/ana.24158>
- Baltes, M., & Carstensen, L. (1996). The process of successful ageing. *Ageing and Society*, *16*(4), 397–422. <http://doi.org/10.1017/S0144686X00003603>
- Baran-Łucarz M. (2015). Foreign language self-assessment and willingness to communicate in and outside the classroom. In E. Piechurska-Kuciel, & M. Szyszka (Eds.), *The ecosystem of the foreign language learner. Second language learning and teaching* (pp. 37–57). Springer.
- Bardus, M., & Raso, G. (2014). Social context. In P. Escuder-Mollón, & S. Cabedo (Eds.), *Education and quality of life of senior citizens* (pp. 70–102). <http://doi.org/10.6035/EducationQuality2014>
- Bellander, M., Berggren, R., Mårtensson, J., Brehmer, Y., Wenger, E., Li, T.-Q., Bodammer, N., Shing Y.-L., Werkle-Bergner, M. & Lövdén, M. (2016). Behavioral correlates of changes in hippocampal grey matter structure during acquisition of foreign vocabulary. *NeuroImage*, *131*, 205–213. <http://doi.org/10.1016/j.neuroimage.2015.10.020>
- Bialystok, E., Anderson, J., & Grundy, J. (2018). Interpreting cognitive decline in the face of cognitive reserve: Does bilingualism affect cognitive aging?. *Linguistic Approaches to Bilingualism*, *11*, 1–20. <http://doi.org/10.1075/lab.18040.bia>
- Bialystok, E., Craik, F., & Freedman, M. (2007). Bilingualism as protection against the onset of symptoms of dementia. *Neuropsychologia*, *45*, 459–464. <http://doi.org/10.1016/j.neuropsychologia.2006.10.009>
- Bialystok, E., Craik, F. I. M., Green, D. W., & Gollan, T. H. (2009). Bilingual minds. *Psychological Science in the Public Interest*, *10*(3), 89–129. <http://doi.org/10.1177/1529100610387084>
- Bialystok, E. & DePape, A.-M. (2009). Musical expertise, bilingualism, and executive functioning. *Journal of Experimental Psychology, Human Perception and Performance*, *35*, 565–74. <http://doi.org/10.1037/a0012735>
- Bonk, E. (2013). Rola prowadzącego zajęcia z seniorami. In K. Lipka-Szostak (Ed.), *Edukacja osób starszych. Uwarunkowania, trendy, metody* (pp. 89–94). Stowarzyszenie Trenerów Organizacji Pozarządowych.
- Bopp, K., & Verhaeghen, P. (2005). Aging and verbal memory span: A meta-analysis. *The Journals of Gerontology Series B Psychological Sciences and Social Sciences*, *5*(40), 223–233. <http://doi.org/10.1093/geronb/60.5.P223>
- Borkowska, A. (2021). In-class willingness to communicate in English among third agers: Results of a questionnaire study. In M. Pawlak (Ed.), *Investigating individual learner differences in second language learning* (pp. 95–114). Springer. <https://doi.org/10.1007/978-3-030-75726-7>
- Borkowska, A. (in press). The relationship among age-advanced learners' in-class willingness to communicate in English, intrinsic motivation, classroom environment and teacher immediacy: A pilot study. *Theory and Practice of Second Language Acquisition*.
- Boudreau, C., MacIntyre, P. D., & Dewaele, J.-M. (2018). Enjoyment and anxiety in second language communication: An idiodynamic approach. *Studies in Second Language Learning and Teaching*, *8*(1), 149–170. <http://doi.org/10.14746/ssl.t.2018.8.1.7>
- Bowling, A., & Dieppe, P. (2005). What is successful ageing and who should define it? *British Medical Journal*, *331*, 1548–1551.
- Bowling, A. & Iliffe, S. (2011). Psychological approach to successful ageing predicts future quality of life in older adults. *Health and Quality of Life Outcomes*, *9*(13), 1–10. <http://doi.org/10.1186/1477-7525-9-13>
- Burgoon, J. K. (1976). The unwillingness-to-communicate scale: Development and validation. *Communication Monographs*, *43*, 60–69.

- Burke, D. M., Mackay, D. G., & James, L. E. (2000). Theoretical approaches to language and aging. In T. J. Perfect, & E. A. Maylor (Eds.), *Models of cognitive aging* (pp. 204–237). Oxford University Press.
- Cabeza, R. (2002). Hemispheric asymmetry reduction in older adults: The HAROLD model. *Psychology and Aging, 17*(1), 85–100. <http://doi.org/10.1037/0882-7974.17.1.85>
- Cabeza, R., Dennis, N. A. (2013). Frontal lobes and aging. Deterioration and compensation. In D. T. Struss, & R. T. Knight (Eds.), *Principles of frontal lobe function* (2nd ed.) (pp. 628–652). Oxford University Press.
- Cabeza, R., Grady, C. L., Nyberg, L., McIntosh, A. R., Tulving, E., Kapur, S., Jennings, J. M., Houle, S., & Craik, F. I. M. (1997). Age-related differences in neural activity during memory encoding and retrieval: A positron emission tomography study. *The Journal of Neuroscience, 17*(1), 391–400.
- Calvo, N., García, A. M., Manoilloff, L., & Ibáñez, A. (2016). Bilingualism and cognitive reserve: A critical overview and a plea for methodological innovations. *Frontiers in Aging Neuroscience, 7*, 1–17. <http://doi.org/10.3389/fnagi.2015.00249>
- Canale, M. (1983). From communicative competence to communicative language pedagogy. In J. C. Richards, & R. W. Schmidt (Eds.), *Language and communication* (pp. 2–27). Longman.
- Cappell, K., Gmeindl, L., & Reuter-Lorenz, P. A. (2006, November). Age differences in DLPFC recruitment during verbal working memory maintenance depend on memory load. Paper presented at the annual meeting of the Society for Neuroscience, Atlanta, GA.
- Carreira, J. (2005). New framework of intrinsic/extrinsic and integrative/instrumental motivation in second language acquisition. *The Keiai Journal of International Studies, 6*, 39–64.
- Carstensen, L. L., Fung, H. H., & Charles, S. T. (2003). Socioemotional selectivity theory and the regulation of emotion in the second half of life. *Motivation and Emotion, 27*(2), 103–123. <https://doi.org/10.1023/A:1024569803230>
- Castel, A. D., McGillivray, S., & Friedman, M. C. (2012). Metamemory and memory efficiency in older adults: Learning about the benefits of priority processing and value-directed remembering. In M. Naveh-Benjamin, & N. Ohta (Eds.), *Memory and aging: Current issues and future directions* (pp. 245–270). Psychology Press.
- Cao, Y. (2011). Investigating situational willingness to communicate within second language classrooms from an ecological perspective. *System, 39*(4), 468–479.
- Cao, Y., & Philp, J. (2006). Interactional context and willingness to communicate: A comparison of behavior in whole class, group and dyadic interaction. *System, 34*(4), 480–493.
- Celce-Murcia, M., Dörnyei, Z., & Thurrell, S. (1995). A pedagogically motivated model with content specifications. *Issues in Applied Linguistics, 6*, 5–35.
- Chai, W. J., Hamud, A. S. A., & Abdullah, J. M. (2018). Working memory from the psychological and neurosciences perspectives: A review. *Frontiers in Psychology, 9*(401), 1–16. <http://doi.org/10.3389/fpsyg.2018.00401>
- Chalofsky, N. (1992). A unifying definition of the HRD profession. *Human Resource Development Quarterly, 2*(3), 175–182.
- Chasteen A. L., Cary L. A., & Iankilevitch M. (2017). Age stereotyping and discrimination. In N. A. Pachana (Ed.), *Encyclopedia of geropsychology* (pp. 96–104). Springer. [http://doi.org/10.1007/978-981-287-082-7\\_4](http://doi.org/10.1007/978-981-287-082-7_4)
- Cheng, S.-T., Fung, H. H., Li, L. W., Li, T., Woo, J., & Chi, I. (Eds.). (2015). *Successful aging: Asian perspectives* (pp. 1–20). Springer.
- Chertkow, H., Whitehead, V., Phillips, N., Wolfson, C., Atherton, J., & Bergman, H. (2010). Multilingualism (but not always bilingualism) delays the onset of Alzheimer disease: Evidence from a bilingual community. *Alzheimer Disease & Associated Disorders, 24*, 118–125.

- Christoffels, I. K., de Groot, A. M. B., & Kroll, J. F. (2006). Memory and language skills in simultaneous interpreters: The role of expertise and language proficiency. *Journal of Memory and Language*, 54, 324–345.
- Clément, R. (1986). Second language proficiency and acculturation: An investigation of the effects of language status and individual characteristics. *Journal of Language and Social Psychology* 5(4), 21–37.
- Cochrane, A., Simmering, V., & Green, C. S. (2019). Fluid intelligence is related to capacity in memory as well as attention: Evidence from middle childhood and adulthood. *PLOS ONE* 14(8), 1–24. <http://doi.org/10.1371/journal.pone.0221353>
- Commission of the European Communities. (2001). *Communication from the Commission of 21 November 2001 on making a European area of lifelong learning a reality*.
- Cowan, N. (2015). Second-language use, theories of working memory, and the Vennian mind. In Z. Wen, M. B. Mota, & A. McNeill (Eds.), *Working memory in second language acquisition and processing* (pp.1–11). Multilingual Matters.
- Cox, J. (2017). Explicit instruction, bilingualism, and the older adult learner. *Studies in Second Language Acquisition*, 39, 29–58.
- Cox, J., & Sanz, C. (2015). Deconstructing PI for the ages: Explicit instruction vs. practice in young and older adult bilinguals. *International Review of Applied Linguistics in Language Teaching*, 53(2), 225–248. <http://doi.org/10.1515/iral-2015-0011>
- Crăciun, I. C. (2019). (Ed.). Positive aging theories and views on aging. *Positive aging and precarity. International perspectives on aging*, vol. 21 (pp. 17–34). Springer. [http://doi.org/10.1007/978-3-030-14255-1\\_2](http://doi.org/10.1007/978-3-030-14255-1_2)
- Craik, F. (2002). Human memory and aging. In L. Bäckman, & C. von Hofsten (Eds.), *Psychology at the turn of the millennium, Vol. 1. Cognitive, biological, and health perspectives* (pp. 261–280). Psychology Press.
- Craik, F., Bialystok, E., & Freedman, M. (2010). Delaying the onset of Alzheimer disease. Bilingualism as a form of cognitive reserve. *Neurology*, 75, 1726–1729. <http://doi.org/10.1212/WNL.0b013e3181fc2a1c>
- Craik, F. I. M., & Jennings, J. M. (1992). Human memory. In F. I. M. Craik & T. A. Salthouse (Eds.), *The handbook of aging and cognition* (pp. 51–110). Lawrence Erlbaum Associates.
- Csikszentmihalyi, M. (2014). *Flow and the foundations of positive psychology: The collected works of Mihaly Csikszentmihalyi*. Springer. <http://doi.org/10.1007/978-94-017-9088-8>
- Davey, J., & Glasgow, K. (2006). Positive ageing: A critical analysis. *Policy Quarterly*, 4(2), 21–27.
- Davis, K., Christodoulou, J., Seider, S., & Gardner, H. (2011). The theory of multiple intelligences. In R. Sternberg, & S. Kaufman (Eds.), *The Cambridge handbook of intelligence* (pp. 485–503). Cambridge University Press. <http://doi.org/10.1017/CBO9780511977244.025>
- Delors, J. (1996). *Learning: The treasure within*. UNESCO Publishing.  
Retrieved from: <http://eurlex.europa.eu/lexuriserv/lexuriserv.do?uri=com:2001:0678:fin:en:pdf>
- Dennis, N., & Cabeza, R. (2008). Neuroimaging of healthy cognitive aging. *Fundamenta Informaticae*, 3, 1–54.
- Derenowski, M. (2018). Identifying the characteristics of foreign language teachers who work with senior learners. In D. Gabryś-Barker (Ed.), *Third age learners of foreign languages* (pp. 145–160). Multilingual Matters.
- Derenowski, M. (2019). Developing motivation in the foreign language classroom among senior learners. *Polish Journal of Continuing Education*, 3, 16–26. <http://doi.org/10.34866/4v50-jd79>
- Derenowski, M. (2021). *Insights into senior foreign language education*. Multilingual Matters. <https://doi.org/10.21832/DERENO2217>

- De Saint Léger, D., & Storch, N., (2009). Learners' perceptions and attitudes: Implications for willingness to communicate in an L2 classroom. *System*, 37, 269–285.
- Dewaele, J. M. (2019). The effect of classroom emotions, attitudes toward English, and teacher behavior on willingness to communicate among English foreign language learners. *Journal of Language and Social Psychology*, 4(38), 523–535.
- Dewaele, J.-M., & Dewaele, L. (2018). Learner-internal and learner-external predictors of willingness to communicate in the FL classroom. *Journal of the European Second Language Association*, 2(1), 24–37. <http://doi.org/10.22599/jesla.37>
- Dewaele, J.-M., & Dewaele, L. (2020). Are foreign language learners' enjoyment and anxiety specific to the teacher? An investigation into the dynamics of learners' classroom emotions. *Studies in Second Language Learning and Teaching*, 10(1), 45–65. <http://doi.org/10.14746/ssl.t.2020.10.1.3>
- Dewaele, J.-M., & MacIntyre, P. D. (2014). The two faces of Janus? Anxiety and enjoyment in the foreign language classroom. *Studies in Second Language Learning and Teaching*, 4(2), 237–274. <http://doi.org/10.14746/ssl.t.2014.4.2.5>
- Dewaele, J. & MacIntyre, P. (2016). Foreign language enjoyment and foreign language classroom anxiety: The right and left feet of the language learner. In P. MacIntyre, T. Gregersen, & S. Mercer (Eds.), *Positive psychology in SLA* (pp. 215–236). Multilingual Matters. <http://doi.org/10.21832/9781783095360-010>
- Dewaele, J.-M., Witney, J., Saito, K., & Dewaele, L. (2017). Foreign language enjoyment and anxiety: The effect of teacher and learner variables. *Language Teaching Research*, 1–24. <http://doi.org/10.1177/1362168817692161>
- Dincer, A., & Yeşilyurt, S. (2017). Motivation to speak English: A self-determination theory perspective. *PASAA: A Journal of Language Teaching and Learning in Thailand*, 53, 1–25.
- Dionigi, R. (2015). Stereotypes of aging: Their effects on the health of older adults. *Journal of Geriatrics*, 1–9. <http://doi.org/10.1155/2015/954027>
- D'Orazi, G. (2021). Influences of willingness to communicate and foreign language enjoyment on second language learners' motivation. *Konin Language Studies*, 8(3), 263–293. <http://doi.org/10.30438/ksj.2020.8.3.3>
- Dörnyei, Z. (1994). Motivation and motivating in the foreign language classroom. *Modern Language Journal*, 78(3), 273–284. <http://doi.org/10.2307/330107>
- Dörnyei, Z. (2001). *Motivational strategies in the language classroom*. Cambridge University Press. <http://doi.org/10.1017/CBO9780511667343>
- Dörnyei, Z. (2003). Attitudes, orientations, and motivations in language learning: Advances in theory, research, and applications. *Language Learning*, 53, 3–32. <http://doi.org/10.1111/1467-9922.53222>
- Dörnyei, Z., & Scott M. L. (1995a). Communication strategies: What are they and what are they not? Paper presented at the Annual Conference of the American Association for Applied Linguistics (AAAL). Long Beach, CA.
- Dörnyei, Z., & Scott, M. L. (1995b). Communication strategies: An empirical analysis with retrospection. In J. S. Turle, & K. Lusby (Eds.), *Selected papers from the proceedings of the 21<sup>st</sup> Annual Symposium of the Deseret Language and Linguistics Society* (pp. 155–168). Brigham Young University.
- Dörnyei, Z., & Scott, M. L. (1997). Communication strategies in a second language: Definitions and taxonomies. *Language Learning*, 1(47), 173–210.
- Eddy-U, M. (2015). Motivation for participation or non-participation in group tasks: A dynamic systems model of task-situated willingness to communicate. *System*, 50, 43–55. <http://doi.org/10.1016/j.system.2015.03.005>

- Eguz, E. (2019). Learning a second language in late adulthood: Benefits and challenges. *Educational Gerontology*, 45(12), 701–707. <http://doi.org/10.1080/03601277.2019.1690273>
- Eloniemi-Sulkava, U. (2014). Ageing. In P. Escuder-Mollón, & S. Cabedo (Eds.), *Education and quality of life of senior citizens* (pp. 52–66). Universitat Jaume I. <http://doi.org/10.6035/EducationQuality2014>
- Erikson, E. H. (1982). *The life cycle completed: A review*. W. W. Norton.
- Escuder-Mollón, P. (2014). Breaking down myths and stereotypes about the elderly. In P. Escuder-Mollón, & S. Cabedo (Eds.), *Education and quality of life of senior citizens* (pp. 66–69). Universitat Jaume I. <http://doi.org/10.6035/EducationQuality2014>
- Escuder-Mollón, P., & Esteller-Curto, R. (2014). Introduction. In P. Escuder-Mollón, & S. Cabedo (Eds.), *Education and quality of life of senior citizens* (pp. 30–51). <http://doi.org/10.6035/EducationQuality2014>
- Fabiś, A. (2014). Uczenie się osób starszych. In A. Chabior, A. Fabiś, & J. K. Wawrzyniak (Eds.), *Starzenie się i starość w perspektywie pracy socjalnej* (pp. 76–79). Agraftka.
- Farfel, J. M., Nitrini, R., Suemoto, C. K., Grinberg, L. T., Ferretti, R. E. L., Paraizo Leite, R. E., Tampelline, E., Lima, L., Farias, D. S., Rodriguez, R. D., Menezes, P. R., Fregni, F., Bennett, D. A., Pasqualucci, C. A., & Filho, W. J. (2013). Very low levels of education and cognitive reserve: A clinicopathologic study. *Neurology*, 81(7), 650–657. <http://doi.org/10.1212/WNL.0b013e3182a08f1b>
- Farrell, T. S. C. (2018). Foreword. In J. de Dios, & M. Agudo (Eds.), *Emotions in second language teaching. Theory, research and teacher education* (pp. vii–viii). Springer. <https://doi.org/10.1007/978-3-319-75438-3>
- Fernández-Ballesteros, R. (2011). Positive ageing: Objective, subjective, and combined outcomes. *E-Journal of Applied Psychology*, 7, 22–30. <http://doi.org/10.7790/ejap.v7i1.238>
- Fiema, M. (2016). Kształcenie językowe osób w wieku późnej dorosłości – proces standardowy czy wyzwanie? *Języki Obce w Szkole*, 4, 24–31.
- Findsen, B., & Formosa, M. (2011). *Lifelong learning in later life. A handbook on older adult learning*. Sense Publishers.
- Findsen B., Golding B., Jelenc Krašovec, S., & Schmidt-Hertha, B. (2017). Through life there is learning. *Australian Journal of Adult Learning*, 3(57), 508–525.
- Fjell, A. M., & Walhovd, K. B. (2010). Structural brain changes in aging: Courses, causes and cognitive consequences. *Reviews in the Neurosciences*, 21(3), 187–221. <https://doi.org/10.1515/REVNEURO.2010.21.3.187>
- Formosa, M. (2002). Critical geragogy: Developing practical possibilities for critical educational gerontology. *Education and Ageing*, 1(17), 73–86.
- Formosa, M. (2012). Critical geragogy: Situating theory in practice. *Contemporary Educational Studies*, 63, 36–54.
- Formosa, M. (2014). Lifelong learning in later life. Policies and practices. In B. Schmidt-Hertha, S. J. Krašovec, & M. Formosa (Eds.), *Learning across generations in Europe: Contemporary issues in older adult education* (pp. 11–21). Sense Publishers.
- Fortenbaugh, F. C., DeGutis, J. D., Germine, L., Wilmer, J., Grosso, M., Russo, K., & Esterman, M. (2015). Sustained attention across the lifespan in a sample of 10,000: Dissociating ability and strategy. *Psychological Science*, 26(9), 1497–1510. <http://doi.org/10.1177/0956797615594896>
- Fraser, B. J., Fisher, D. L., & McRobbie, C. J. (1996). Development, validation, and use of personal and class forms of a new classroom environment instrument. Paper presented at the annual meeting of the American Educational Research Association, New York.

- Fredrickson, B. (2003). The value of positive emotions: The emerging science of positive psychology in coming to understand why it's good to feel good. *American Scientist*, 91, 330–335. <http://doi.org/10.1511/2003.4.330>
- Freund, A. M., & Baltes, P. B. (2000). The orchestration of selection, optimization and compensation: An action–theoretical conceptualization of a theory of developmental regulation. In W. J. Perrig & A. Grob (Eds.), *Control of human behavior, mental processes, and consciousness: Essays in honor of the 60th birthday of August Flammer* (pp. 35–58). Lawrence Erlbaum Associates Publishers.
- Gabryś-Barker, D. (2014). Success: From failure to failure with enthusiasm. *Studies in Second Language Learning and Teaching*, 4(2), 301–325. <https://doi.org/10.14746/ssl1t.2014.4.2.7>
- Gabryś-Barker, D. (2016). Caring and sharing in the foreign language class: On a positive classroom climate. In D. Gabryś-Barker, & D. Gałajda (Eds.), *Positive psychology perspectives on foreign language learning and teaching* (pp. 155–174). Springer. <http://doi.org/10.1007/978-3-319-32954-3>
- Gabryś-Barker, D. (Ed.). (2018). *Third age learners of foreign languages* (pp. 8–16). Multilingual Matters.
- Gabryś-Barker, D. (2020). Teaching foreign language to seniors: Some insights from pre-service EFL teachers. *Revista de Estudos Linguísticos da Univerdade do Porto - N° Especial*, 157–170.
- Gałajda, D. (2017). *Communicative behaviour of a language learner. Exploring willingness to communicate*. Springer.
- Garcia, V. R. M. (2017). Learning English in the elderly: An analysis of motivational factors and language learning strategies. *Brazilian English Language Teaching Journal*, 2(8), 234–256. <http://doi.org/10.15448/2178-3640.2017.2.28264>
- Gardner, R. C. (1985). *Social psychology and second language learning. The role attitudes and motivation*. Edward Arnold.
- Gardner, H. (1999). *The disciplined mind: What all students should understand*. Simon and Schuster.
- Gardner, R. C., & Lambert, W. E. (1972). *Attitudes and motivation in second-language acquisition*. Newbury House Publishers.
- Geraci, L. (2006). A test of the frontal lobe functioning hypothesis of age deficits in production priming. *Neuropsychology*, 20, 539–548.
- Gergen, M. M., & Gergen, K. J. (2001). Positive aging: New images for a new age. *Ageing International*, 27(1), 3–23. <http://doi.org/10.1007/S12126-001-1013-6>
- Giannakouris, K. (2008). Ageing characterises the demographic perspectives of the European societies. *Eurostat Statistics in Focus*, 72, 1–12.
- Gilabert, R., & Muñoz, C. (2010). Differences in attainment and performance in a foreign language: The role of working memory capacity. *International Journal of English Studies*, 10(1), 19–42. <http://doi.org/10.6018/ijes/2010/1/113961>
- Githens, R. P. (2007). Older adults and e-learning: Opportunities and barriers. *Quarterly Review of distance Education*, 8(4), 329–338.
- Glisky, E. L., Rubin, S. R., & Davidson, P. S. R. (2001). Source memory in older adults: An encoding or retrieval problem? *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 5(27), 1131–1146. <http://doi.org/10.1037/0278-7393.27.5.1131>
- Glück, J. (2017). Psychology of wisdom. In N. A. Pachana (Ed.), *Encyclopedia of geropsychology* (pp. 1970–1974). Springer. <http://doi.org/10.1007/978-981-287-082-7>
- Głąbińska, K. (2015). The importance of lifelong learning in XXI century. *Central European Review of Economics & Finance*, 2(8), 51–61.

- Goh, J. O., & Park, D. C. (2009). Neuroplasticity and cognitive aging: The scaffolding theory of aging and cognition. *Restorative Neurology and Neuroscience*, 27, 391–403. <http://doi.org/10.3233/RNN-2009-0493>
- Goldberg, L. R. (1992). A student's contributions to second language learning: Part I. Cognitive variables. *Language Teaching*, 25, 211–220.
- Goldberg, L. R. (1993). The structure of phenotypic personality traits. *American Psychologist*, 48, 26–34.
- Gollan, T. H., Salmon, D. P., Montoya, D. R., & Galasko, D. R. (2011). Degree of bilingualism predicts age of diagnosis of Alzheimer's disease in low-education but not in highly educated Hispanics. *Neuropsychologia*, 49, 3826–3830.
- Gottfredson, L. S. (1998). The general intelligence factor. *Scientific American, Incorporated* 4, 24–29.
- Gow, A. J., Pattie, A., & Deary, I. J. (2017). Lifecourse activity participation from early, mid, and later adulthood as determinants of cognitive aging: The Lothian birth cohort 1921. *Gerontol B Psychol Sci Soc Sci*, 1(72), 25–37. <http://doi.org/10.1093/geronb/gbw124>
- Grady, C. L., Springer, M. V., Hongwanishkul, D., McIntosh, A. R., & Winocur, G. (2006). Age-related changes in brain activity across the adult lifespan. *Journal of Cognitive Neuroscience* 18(2), 227–241.
- Green, D. W. (2018). The interactional challenge: L2 learning and use in the third age. In D. Gabryś-Barker (Ed.), *Third age learners of foreign languages* (pp. 31–47). Multilingual Matters.
- Gregerson, T. (2016). The positive broadening power of a focus on well-being in the language classroom. In D. Gabryś-Barker, & D. Gałajda (Eds.), *Positive psychology perspectives on foreign language learning and teaching* (pp. 59–75). Springer. <http://doi.org/10.1007/978-3-319-32954-3>
- Grotek, M. (2018). Student needs and expectations concerning foreign language teachers in universities of the third Age. In D. Gabryś-Barker (Ed.), *Third age learners of foreign languages* (pp. 127–144). Multilingual Matters.
- Grotek M., & Kiliańska-Przybyło G. (2012). Rola czynników afektywnych w procesie nauki języka obcego przez osoby w wieku senioralnym. *Teraźniejszość-Człowiek-Edukacja*, 3 (59), 111–124.
- Grotek, M., & Ślezak-Świat, A. (2018). Balance and coordination vs reading comprehension in L2 in late adulthood. In D. Gabryś-Barker (Ed.), *Third age learners of foreign languages* (pp. 91–107). Multilingual Matters.
- Grymska, B. (2016). New conceptualisations of language aptitude – the potential of working memory in second language acquisition (SLA). *Theory and Practice of Second Language Acquisition*, 1(2), 103–118.
- Grzanka-Tykwińska, A., Chudzińska, M., Podhorecka, M., & Kędziora-Kornatowska, K. (2015). Universities of the Third Age yesterday, today and tomorrow. *Gerontologia Polska*, 4, 165–168.
- Guz, E., & Tetiurka, M. (2016). Positive emotions and learner engagement: Insights from an early FL classroom. In D. Gabryś-Barker, & D. Gałajda (Eds.), *Positive psychology perspectives on foreign language learning and teaching* (pp. 133–153). Springer. <http://doi.org/10.1007/978-3-319-32954-3>
- Habib, R., Nyberg, L., & Tulving, E. (2003). Hemispheric asymmetries of memory: The HERA model revisited. *Trends in Cognitive Science*, 6(7), 241–245.
- Halicki, J. (2013). Studia na kondycję edukacji dorosłych. *Edukacja Dorosłych*, 2, 9–18.
- Hashimoto, Y. (2002). Motivation and willingness to communicate as predictors of reported L2 use. *Second Language Studies* 20(2), 29–70.

- Hayflick, L. H. (1997). Mortality and immortality at the cellular level. A review. *Biochemistry*, *62*, 1180–1190.
- Hebda, J., & Biela, A. (2015). Znaczenie stereotypów i teorii starzenia się w postrzeganiu społecznym osób starszych. *Edukacja Etyczna*, *9*, 49–62.
- Heim, S., Stumme, J., Bittner, N., Jockwitz, C., Amunts, K., & Caspers, S. (2019). Bilingualism and “brain reserve”: A matter of age. *Neurobiology of Aging*, *81*, 157–165. <http://doi.org/10.1016/j.neurobiolaging.2019.05.021>
- Hill, R. (2011). A Positive aging framework for guiding geropsychology interventions. *Behavior therapy*, *42*, 66–77. <http://doi.org/10.1016/j.beth.2010.04.006>
- Hill, R. D., & Smith, D. J. (2015). Positive aging: At the crossroads of positive psychology and geriatric medicine. In P. A. Lichtenberg, B. T., Mast, B. D., Carpenter, & J. Loebach Wetherell (Eds.), *APA handbook of clinical geropsychology*, Vol. 1. *History and status of the field and perspectives on aging* (pp. 301–329). American Psychological Association. <http://doi.org/10.1037/14458-013>
- Houde, J. (2006). Andragogy and motivation: An examination of the principles of andragogy through two motivation theories. Retrieved from [http://www.lindenwood.edu/education/andragogy/andragogy/2011/Houde\\_2006.pdf](http://www.lindenwood.edu/education/andragogy/andragogy/2011/Houde_2006.pdf)
- Ivashko, O. (2018). Teaching foreign languages at third-year students in Poland. *The Modern Higher Education Review*, 81–91. <http://doi.org/10.28925/2518-7635.2018.3.12>
- Jagodzińska, M. (2008). *Psychologia pamięci*. Helion.
- Jakubaszek, W. (2014). Uniwersytet trzeciego wieku w edukacji całościowej. *Edukacja Ustawiczna Dorosłych*, *1*(84), 83–98.
- Jamadar, S. D. (2020). The CRUNCH model does not account for load-dependent changes in visuospatial working memory in older adults. *Neuropsychologia*, Vol. 142, 1–11. <http://doi.org/10.1016/j.neuropsychologia.2020.107446>
- Jaroszewska, A. (2009). Learning foreign languages as one of the forms of elderly people’s self-actualisation. *Applied Linguistics*, *1*, 115–125.
- Jaroszewska, A. (2010). Kilka uwag na temat metodologii badań prowadzonych wśród osób w wieku senioralnym. *Neofilolog*, *34*, 253–264. <https://doi.org/10.14746/n.2010.34.22>
- Jaroszewska, A. (2011). Współczesne determinanty badań glottodydaktycznych. O perspektywach rozwoju glottogeragogiki. *Neofilolog*, *37*, 87–100. <https://doi.org/10.14746/n.2011.37.7>
- Jaroszewska, A. (2013a). Gdzie, jak i dlaczego polscy seniorzy uczą się języków obcych? *Języki Obce w Szkole*, *4*, 89–94.
- Jaroszewska A. (2013b). *Nauczanie języków obcych seniorów w Polsce: Analiza potrzeb i możliwości w aspekcie międzykulturowym*. Impuls.
- Jaroszewska, A. (2014). O glottodydaktyce słowami glottodydaktyków. *Języki Obce w Szkole*, *4*, 52–66.
- Jefferson, G. (2004). Glossary of transcript symbols with an introduction. In G. H. Lemer (Ed.), *Conversation analysis: Studies from the first generation* (pp. 13–23). John Benjamins.
- Jiang, Y., & Dewaele, J.-M. (2019). How unique is the foreign language classroom and anxiety of Chinese EFL learners? *System*, *82*, 13–25. <http://doi.org/10.1016/j.system.2019.02.017>
- Jin, Y., & Dewaele, J.-M. (2018). The effect of positive orientation and perceived social support on foreign language classroom anxiety. *System*, *74*, 149–157.
- Jones, B. D., Llacer-Arrastia, S., & Newbill, P. B. (2009). Motivating foreign language students using self-determination theory. *Innovation in Language Learning and Teaching*, *3*(2), 1–20. <http://doi.org/10.1080/17501220802358210>
- Juffs, A. (2006). Working memory, second language acquisition and low-educated second language and literacy learners. *Lot Occasional Series*, *6*, 89–104.

- Kacetyl, J., & Klímová, B. (2021). Third-Age learners and approaches to language teaching. *Education Sciences*, 11(310), 1–9. <http://doi.org/10.3390/educsci11070310>
- Kaczmarczyk, M., & Trafiałek, E. (2007). Activating elderly people – a chance of good and satisfying aging. *Gerontologia Polska*, 4, 116–118.
- Kaczorowska-Bray, K., Milewski, S., & Michalik, M. (2020). *Starość – jak ją widzi logopedia*. Wydawnictwo Uniwersytetu Gdańskiego.
- Kang, S. J. (2005). Dynamic emergence of situational willingness to communicate in a second language. *System* 33, 277–292.
- Kaplan, A. (2016). Lifelong learning: Conclusions from a literature review. *International Online Journal of Primary Education*, 2(5), 43–50.
- Kaplan, H., Hill, K., Lancaster, J., & Huntado, A. M. (2000). A theory of human life history evolution: Diet, intelligence, and longevity. *Evolutionary Anthropology Issues News and Reviews*, 156–185. [http://doi.org/10.1002/1520-6505\(2000\)9:4<156::AID-EVAN5>3.0.CO;2-7](http://doi.org/10.1002/1520-6505(2000)9:4<156::AID-EVAN5>3.0.CO;2-7)
- Kennedy, S. R., Loeb, L. A., & Herr, A. L. (2012). Somatic mutations in aging, cancer and neurodegeneration. *Mechanisms of Ageing and Development*, 133, 118–126.
- Khajavy, G., MacIntyre, P., & Barabadi, E. (2017). Role of the emotions and classroom environment in willingness to communicate: Applying doubly latent multilevel analysis in second language acquisition research. *Studies in Second Language Acquisition*, 40(3), 605–624. <http://doi.org/10.1017/S0272263117000304>
- Kic-Drgas, J. (2010). Senior – (nie)zwykły uczeń w centrum zainteresowania glottodydaktyki. *Lingwistyka Stosowana*, 3, 197–207.
- Kilian, M. (2015). Methodological aspects of education of older adults. Basic instructions and principles. *Forum Pedagogiczne*, 1, 171–185. <http://doi.org/10.21697/fp.2015.1.13>
- Kievit, R. A., Davis, S. W., Mitchell, D. J., Taylor, J. R., Duncan, J., & Henson, N. A. (2014). Distinct aspects of frontal lobe structure mediate age-related differences in fluid intelligence and multitasking. *Nature Communications*, 5(5658), 1–10. <http://doi.org/10.1038/ncomms6658>
- Kijak, R. J., & Szarota, Z. (2013). *Starość. Między diagnozą a działaniem*. Centrum Rozwoju Zasobów Ludzkich.
- Kim, W., Kim, M., & Yoon, J. H. (2020). The tip-of-the-tongue phenomenon in older adults with subjective memory complaints. *PLoS ONE* 15(9), 1–13. <https://doi.org/10.1371/journal.pone.0239327>
- Kliesch, M., Giroud, N., Pfenninger, S. E., & Meyer, M. (2018). Research on second language acquisition in old adulthood: What we have and what we need. In D. Gabryś-Barker (Ed.), *Third age learners of foreign languages* (pp. 48–75). Multilingual Matters.
- Klimczuk, A. (2012). *Kapitał społeczny starych ludzi na podstawie mieszkańców miasta Białystok*. Wiedza i edukacja.
- Klímová, B. (2018). Learning a foreign language: A review on recent findings about its effect on the enhancement of cognitive functions among healthy older individuals. *Frontiers in Human Neuroscience*, 12(305), 1–7. <http://doi.org/10.3389/fnhum.2018.00305>
- Knowles, M. S. (1970). *The modern practice of adult education: From pedagogy to andragogy*. *Cambridge Adult Education*. Retrieved from: <https://pdfs.semanticscholar.org/8948/296248bbf58415cbd21b36a3e4b37b9c08b1.pdf>
- Knowles, M. S., Holton, E. F., & Swanson, R. A. (1998). *The adult learner: The definitive classic in adult education and human resources development* (5th ed.). Gulf.
- Knowles, M. S., Holton III, E. F., Swanson, R. A., & Robinson, P. A. (2020). *The adult learner: The definitive classic in adult education and human resource development* (9th ed.) Routledge.

- Knowlton, B. J., Moody, T., & Slegel, A. L. M. (2017). Procedural learning in humans. In J. H. Byrne, (Ed.), *Learning and memory: A Comprehensive reference* (2nd ed.) (pp. 295–312). Academic Press. <http://doi.org/10.1016/B978-0-12-809324-5.21085-7>
- Kołodziejczyk, I. (2007). Neuropsychologia starzenia poznawczego. *Kosmos*, 49–62.
- Komorowska, H. (2007). Issues in the language policy of the European Union. Motivation as a key factor in promoting language learning. *Glottodidactica*, Vol. XXXIII, 7–20.
- Komorowska, H. (2011). (Ed.). *Issues in promoting multilingualism. Teaching – learning – assessment* (pp. 13–38). Foundation for the Development of the Education System.
- Komorowska, H. (2016). Difficulty and coping strategies in language education: Is positive psychology misrepresented in SLA/FLT? In D. Gabryś-Barker, & D. Gałąjda (Eds.), *Positive psychology perspectives on foreign language learning and teaching* (pp. 39–58). Springer. <http://doi.org/10.1007/978-3-319-32954-3>
- Komorowska, H. (2020). Motywacja indywidualna a motywacje społeczne w polskiej edukacji językowej. Stare przyzwyczajenia, nowe potrzeby i kilka postulatów. *Języki Obce w Szkole, 1*, 5–11.
- Komorowska, H. (2021). The role of attention in teacher education: A Factor in the quality of European schooling. *Theory and Practice of Second Language Acquisition*, 7(1), 33-50. <https://doi.org/10.31261/TAPSLA.7928>
- Konieczna-Woźniak, R. (2013). Learning as a positive aging strategy. *Rocznik Andragogiczny*, 20, 185 – 200. <http://doi.org/10.12775/RA.2013.010>
- Kowalska-Dubas, E. (2020). Geragogy as a pedagogical subdiscipline. *Studia z Teorii Wychowania, XI*, 143–167. <http://doi.org/10.5604/01.3001.0014.3653>
- Kowoll, M., Degen, C., Gladis, S. & Schröder, J. (2015). Neuropsychological profiles and verbal abilities in lifelong bilinguals with mild cognitive impairment and Alzheimer's disease. *Journal of Alzheimer's disease: JAD*, 45, 1258–1268. <http://doi.org/10.3233/JAD-142880>
- Kozerska, A. (2016). Learning in late adulthood as an object of research. *Zeszyty Naukowe Wyższej Szkoły Humanitas, Pedagogika*, 239–247.
- Krajka, J. (2011). Cel kształcenia językowego – umiejętność posługiwania się technologią informacyjną i komunikacyjną. In H. Komorowska (Ed.), *Nauka języka obcego w perspektywie ucznia* (pp. 104–120). Oficyna Wydawnicza Łośgraf.
- Kramer, A. F., & Strayer, D. L. (2001). Influence of stimulus repetition on negative priming. *Psychology and Aging*, 16(4), 580–587. <http://doi.org/10.1037/0882-7974.16.4.580>
- Krashen, S. D. (1981). *Second language acquisition and second language learning*. Oxford University Press.
- Kun, Y., Senom, F., & Peng, C. F. (2020). Relationship between willingness to communicate in English and foreign language enjoyment. *Universal Journal of Educational Research*, 8(10), 4853–4862. <http://doi.org/10.13189/UJER.2020.081057>
- Kurcz, I. (1995). *Pamięć, uczenie się, język*. Wydawnictwo Naukowe PWN.
- Larrotta, C. (2019). *Narratives of adult English learners and teachers*. Multilingual Matters.
- Laslett, P. (1995). The third age and the disappearance of old age. In E. Heikkinen, J. Kuusinen, & I. Ruoppila (Eds.), *Preparing for aging* (pp. 9–16). Springer. [http://doi.org/10.1007/978-1-4615-1979-9\\_2](http://doi.org/10.1007/978-1-4615-1979-9_2)
- Latham-Koenig, C., & Oxenden, C. (2014). *English file. Beginner* (3rd ed.). Oxford University Press.
- Latham-Koenig, C., Oxenden, C., & Seligson, P. (2012). *English file. Pre-intermediate* (3rd ed.). Oxford University Press.
- Leary, M. R. (1983). *Understanding social anxiety: Social, personality, and clinical perspectives*. Sage.
- Lee, P.-L., Chang, H.-C., Huang, C. K., Cheng, W.-C., Lee, P.-Y., & Chao, H.-C. (2018). Memory training program for older adults. *Educational Gerontology*, 44(10), 1–13.

- Lemieux, A., & Martinez, A. (2000). *Gerontagogy beyond words: A reality*. *Educational Gerontology*, 26, 475–498.
- Levy, B. R. (2003). Mind matters: Cognitive and physical effects of aging self-stereotypes. *The Journals of Gerontology: Series B: Psychological Sciences and Social Sciences*, 58(4), 203–211. <http://doi.org/10.1093/geronb/58.4.P203>
- Levy, B. (2009). Stereotype embodiment: A psychosocial approach to aging. *Current Directions in Psychological Science*, 18(6), 332–336. <http://doi.org/10.1111/j.1467-8721.2009.01662.x>
- Levy, B. R., & Leifheit-Limson, E. (2009). The stereotype-matching effect: Greater influence on functioning when age stereotypes correspond to outcomes. *Psychology and Aging*, 24(1), 230–233. <http://doi.org/10.1037/a0014563>
- Levy, B. R., Slade, M. D., Kunkel, S. R., & Kasl, S. V. (2002). Longevity increased by positive self-perceptions of aging. *Journal of Personality and Social Psychology*, 83(2), 261–270. <http://doi.org/10.1037/0022-3514.83.2.261>
- Levy, B. R., Zonderman, A. B., Slade, M. D., & Ferrucci, L. (2009). Age stereotypes held earlier in life predict cardiovascular events in later life. *Psychological Science*, 20(3), 296–298. <http://doi.org/10.1111/j.1467-9280.2009.02298.x>
- Li, P. (2018). Knowledge and meta-knowledge: From the generating of knowledge to the management of knowledge. *Advances in Social Science, Education and Humanities Research*, 73–79. Retrieved from: <http://creativecommons.org/licenses/by-nc/4.0>
- Li, C., Jiang, G., & Dewaele, J.-M. (2018). Understanding Chinese high school students' foreign language enjoyment: Validation of the Chinese version of the foreign language enjoyment scale. *System*, 76, 183–196. <http://doi.org/10.1016/j.system.2018.06.004>
- Lighthall, N, Conner, L., & Giovanello, K. (2018). Learning and memory in the aging brain: The function of declarative and nondeclarative memory life span. *The Aging Brain*, 73–110. <http://doi.org/10.31234/osf.io/eqym4>
- Liu, J. (2002). Negotiating silence in American classrooms: Three Chinese cases. *Language and Intercultural Communication* 2(1), 37–54.
- Loeng, S. (2020). Self-directed learning: A core concept in adult education. *Education Research International*, 1–12. <http://doi.org/10.1155/2020/3816132>
- London, M. (2011). Lifelong learning: Introduction. *The Oxford handbook of lifelong learning* (pp. 1–16). <http://doi.org/10.1093/oxfordhb/9780195390483.013.0013>
- Löckenhoff, C., De Fruyt, F., Terracciano, A., McCrae, R., De Bolle, M. & Costa, P., Aguilar-Vafaie, M. E., Ahn, C.-K., Ahn, H.-N., Alcalay, L., Allik, J., Avdeyera, V. T. V., Barbaranelli, C., Benet-Matinez, V., Blatny, M., Bratko, D., Brunner-Sciarrà, M., Cain, T. R., Crawford, J. T. ... Yik, M. (2009). Perceptions of aging across 26 cultures and their culture-level associates. *Psychology and Aging*, 24, 941–54. <http://doi.org/10.1037/a0016901>
- Luk, G., Bialystok, E., Craik, F., & Grady, C. (2011). Lifelong bilingualism maintains white matter integrity in older adults. *The Journal of neuroscience: The Official Journal of the Society for Neuroscience*, 31, 16808–16813. <http://doi.org/10.1523/JNEUROSCI.4563-11.2011>
- MacIntyre, P. D. (1994). Variables underlying willingness to communicate: A casual analysis. *Communication Research Reports*, 11(2), 135–142.
- MacIntyre, P. D. (2007). Willingness to communicate in the second language: Understanding the decision to speak as a volitional process. *The Modern Language Journal*, 91(4), 564–576.
- MacIntyre, P. (2012). Examining willingness to communicate on multiple timescales. *Contact*, 12–22.
- MacIntyre, P. D. (2016). So far so good: An overview of positive psychology and its contributions to SLA. In D. Gabryś-Barker, & D. Gałajda (Eds.), *Positive psychology perspectives on foreign language learning and teaching* (pp. 3–20). Springer. <http://doi.org/10.1007/978-3-319-32954-3>

- MacIntyre, P. (2020). Expanding the theoretical base for dynamics of willingness to communicate. *Studies in Second Language Learning and Teaching*, 10 (1), 111–131. <http://doi.org/10.14746/ssllt.2002.10.1.6>
- MacIntyre, P. D., Baker, S. C., Clément, R., & Conrod, S. (2001). Willingness to communicate, social support, and language learning orientations of immersion students. *Studies in Second Language Acquisition*, 23(3), 369–388.
- Macintyre, P., Baker, S., Clément, R., & Donovan, L. (2003). Talking in order to learn: Willingness to communicate and intensive language programs. *Canadian Modern Language Review*, 59, 589–607. <http://doi.org/10.3138/cmlr.59.4.589>
- MacIntyre, P. D., & Charos, C. (1996). Personality, attitudes, and affect as predictors of second language communication. *Journal of Language and Social Psychology*, 15, 3–26.
- MacIntyre, P. D., Clément, R., Dörnyei, Z., & Noels, K. A. (1998). Conceptualizing willingness to communicate in a L2: A situational model of L2 confidence and affiliation. *The Modern Language Journal*, 82, 545–562.
- Macintyre, P., & Gregersen, T. (2012). Emotions that facilitate language learning: The positive-broadening power of the imagination. *Studies in Second Language Learning and Teaching*, 2(2), 193–213. <http://doi.org/10.14746/ssllt.2012.2.2.4>
- MacIntyre, P. D., & Legatto, J. J. (2011). A dynamic system approach to willingness to communicate: Developing an idiodynamic method to capture rapidly changing affect. *Applied Linguistics*, 32(2), 149–171.
- MacIntyre, P. D., & Mercer, S. (2014). Introducing positive psychology to SLA. *Studies in Second Language Learning and Teaching*, 4(2), 153–172. <http://doi.org/doi:10.14746/ssllt.2014.4.2.2>
- Macintyre, P., & Vincze, L. (2017). Positive and negative emotions underlie motivation for L2 learning. *Studies in Second Language Learning and Teaching*, 7(1), 61–88. <http://doi.org/10.14746/ssllt.2017.7.1.4>
- Mackey, A., & Sachs, R. (2012). Older learners in SLA research: A first look at working memory, feedback, and L2 development. *Language Learning*, 62(3), 704–740. <https://doi.org/10.1111/j.1467-9922.2011.00649.x>
- MacLaverly, S. N., & Hertzog, C. (2009). Do age-related differences in episodic feeling of knowing accuracy depend on the timing of the judgment? *Memory*, 17(8). <http://doi.org/10.1080/09658210903374537>
- Maderer, P., & Skiba, A. (2006). Integrative geragogy: Part 1: Theory and practice of a basic model. *Educational Gerontology*, 32, 125–145. <http://doi.org/10.1080/03601270500388158>
- Marcinek, P. (2007). Intellectual functioning in old age. *Gerontologia Polska*, 3, 69–75.
- Mårtensson, J., Eriksson, J., Bodammer, N., Lindgren, M., Johansson, M., Nyberg, L., & Lövdén, M. (2012). Growth of language-related brain areas after foreign language learning. *NeuroImage*, 63, 240–244. <http://doi.org/10.1016/j.neuroimage.2012.06.043>
- Matsumoto, D. (2019). Exploring third-age foreign language learning from the well-being perspective: Work in progress. *Studies in Self-Access Learning Journal*, 10(1), 111–116. <https://doi.org/10.37237/100107>
- Matusz, Ł., & Rakowska, M. R. (2019). Self-reported difficulties in learning English as a second language for third-age students in Poland. *Theory and Practice of Second Language Acquisition*, 5(1), 113–130.
- McCroskey, J. C. (1992). Reliability and validity of the willingness to communicate scale. *Communication Quarterly*, 40, 16–25.
- McCroskey, J. C., & Baer, J. E. (1985). Willingness to communicate: The construct and its measurement. Paper presented at the annual convention of the Speech Communication Association, Denver, CO, USA.

- McCroskey, J. C., & McCroskey, L. L. (1988). Self-report as an approach to measuring communication competence. *Communication Research Reports*, 5(2), 108–113.
- McCroskey, J. C., & Richmond, V. P. (1982). Communication apprehension and shyness: Conceptual and operational distinctions. *Central States Speech Journal*, 33, 458–468.
- McCroskey, J. C., & Richmond, V. P. (1987). Willingness to communicate. In J. C. McCroskey, & J. A. Daly (Eds.), *Personality and interpersonal communication* (pp. 129–156). Sage.
- McCroskey, J. C., & Richmond, V. P. (1990). Willingness to communicate: Differing cultural perspectives. *The Southern Communication Journal*, 56, 72–77.
- McCroskey, J. C., & Richmond, V. P. (1991). Willingness to communicate: A cognitive view. In M. Booth-Butterfield (Ed.), *Communication, cognition, and anxiety* (pp. 19–37). Sage.
- McCroskey, J. C., & Richmond, V. P. (1992). Increasing teacher influence through immediacy. In V. P. Richmond, & J. C. McCroskey (Eds.), *Power in the classroom: Communication, control, and concern* (pp. 101–119). Lawrence Erlbaum associates.
- McRae, K., & Jones, M. (2012). Semantic memory. In D. Reisberg (Ed.), *The Oxford handbook of cognitive psychology* (pp. 1–37). Oxford University Press.
- Mechelli, A., Crinion, J., Noppeney, U., O'Doherty, J., Ashburner, J., Frackowiak, R., & Price, C. (2004). Neurolinguistics: Structural plasticity in the bilingual brain. *Nature*, 431(7010), 757. <http://doi.org/10.1038/431757a>
- Metcalf, J., & Dunlosky, J. (2008). Metamemory. In J. H. Byrne (Ed.), *Learning and memory: A comprehensive reference* (pp. 349–362). Academic Press. <https://doi.org/10.1016/B978-012370509-9.00159-5>
- Mierzwa, E. (2019). Foreign Language learning and teaching enjoyment: Teachers' perspectives. *Journal of Education Culture and Society*, 10, 170–188. <http://doi.org/10.15503/jecs20192.170.188>
- Miszczak, E. (2008). Czy w Polsce występuje gerontofobia? In J. T. Kowaleski, & P. Szukalski (Eds.), *Pomyślne starzenie się w perspektywie nauk społecznych i humanistycznych* (pp. 156–167), Zakład Demografii i Gerontologii Społecznej UŁ.
- Morgan-Short, K., Faretta-Stutenberg, M., Brill-Schuetz, K. A., Carpenter, H., & Wong, P. M. (2013). Declarative and procedural memory as individual differences in second language acquisition. *Bilingualism: Language and cognition*, 1–17. <http://doi.org/10.1017/S1366728912000715>
- Morley, A. A. (1995). The somatic mutation theory of ageing. *Mutation Research*, 338, 19–23.
- Mortensen, D. C., Arnston, P. H., & Lustig, M. (1977). The measurement of verbal predispositions: Scale development and application. *Human Communication Research*, 3(2), 146–158.
- Mortimer, J. T., & Moen, P. (2016). The changing social construction of age and the life course: Precarious identity and enactment of “early” and “encore” stages of adulthood. In M. J. Shanahan, J. T. Mortimer, & M. Kirkpatrick Johnson (Eds.), *Handbook of the life course* (pp. 111–130). Springer. [http://doi.org/10.1007/978-3-319-20880-0\\_5](http://doi.org/10.1007/978-3-319-20880-0_5)
- Mystkowska-Wiertelak, A. (2016). Dynamics of classroom WTC: Results of a semester study. *Studies in Second Language Learning and Teaching*, 6(4), 651–676.
- Mystkowska-Wiertelak, A., & Pawlak, M. (2014). Fluctuations in learners' willingness to communicate during communicative task performance: Conditions and tendencies. *Research in Language*, 12(3), 245–260.
- Mystkowska-Wiertelak, A., & Pawlak, M. (2017). *Willingness to communicate in instructed second language acquisition: Combining a macro- and micro-perspective*. Multilingual Matters.
- Neugnot-Cerlioli, M., Gagner, C., & Beauchamp, M. (2017). Training of fluid and crystallized intelligence: A game-based approach in adolescents presenting with below average IQ. *Cogent Psychology*, 4(1), 1–15. <http://doi.org/10.1080/23311908.2017.1284360>

- Nagy, E. (2014). Staff and trainers. In P. Escuder-Mollón, & S. Cabedo (Eds.), *Education and quality of life of senior citizens* (pp. 198–222). <http://doi.org/10.6035/EducationQuality2014>
- Nickels, L., Hameau, S., Nair, V. K. K., Barr, P., & Biedermann, B. (2019). Ageing with bilingualism: Benefits and challenges. *Language and Hearing* 22(1), 32–50. <http://doi.org/10.1080/2050571X.2018.1555988>
- Niżegorodcew, A. (2016). Studying English in senior years: A Psycholinguistic perspective. In D. Gałajda, P. Zakrajewski, & M. Pawlak (Eds.), *Researching second language teaching. Studies in honor of Danuta Gabryś-Barker* (pp. 87–104). Springer.
- Niżegorodcew, A. (2018). Teaching English to senior students in the eyes of teacher trainees. In D. Gabryś-Barker (Ed.), *Third age learners of foreign languages* (pp. 161–175). Multilingual Matters.
- Noels, K. (2001). Learning Spanish as a second language: Learners' orientations and perceptions of their teachers' communication style. *Language Learning*, 51(1), 107–144. <http://doi.org/10.1111/1467-9922.53225>
- Noels, K. A., Clément, R., & Pelletier, L. G. (2001). Intrinsic, extrinsic, and integrative orientations of French Canadian learners of English. *Canadian Modern Language Review*, 57(3), 424–442. <http://doi.org/10.3138/cmir.57.3.424>
- Noels, K., Pelletier, L., Clément, R. & Vallerand, R. (2000). Why are you learning a second language? Motivational orientations and self-determination theory. *Language Learning*, 50, 57–85. <http://doi.org/10.1111/0023-8333.00111>
- Nosal, C. S. (2019). Jak starzeje się umysł? *Nauka*, 2, 47–62. <http://doi.org/10.24425/nauka.2019.126191>
- Nowicka, A., & Kopinec, P. (2020). Education of elderly people on the example of students of the Third Age Universities in Poland and Slovakia. *Rocznik Lubuski*, 1(46), 121–134. <https://doi.org/10.34768/rl.2020.v461.10>
- Ohly, K. (2007). Older learners of German and their use of language learning strategies. In C. Gabrielatos, R. Slessor, & J. W. Unger (Eds.), *Papers from LAEL PG 2006: Volume 1* (pp. 86–102). Lancaster University.
- Olszewski, H. (2018). Introduction to developmental psychology: Late adulthood. In W. Tłokiński, S. Milewski, & K. Kaczorowska-Bray (Eds.), *Gerontologopedia* (pp. 78–107). Harmonia Universalis.
- Oxford, R. (2018). A developmental perspective on third-age learning. In D. Gabryś-Barker (Ed.), *Third age learners of foreign languages* (pp. 3–18). Multilingual Matters.
- Paap, K., Johnson, H. & Sawi, O. (2015). Bilingual advantages in executive functioning either do not exist or are restricted to very specific and undetermined circumstances. *Cortex*, 69, 1–47. <http://doi.org/10.1016/j.cortex.2015.04.014>
- Park, D. C., Hedden, T., Davidson, N. S., Lautenschlager, G., Smith, A. D., & Smith, P. K. (2002). Models of visuospatial and verbal memory across the adult life span. *Psychology and Aging*, 2(17), 299–320.
- Park, D., & Reuter-Lorenz, P. (2009). The adaptive brain: Aging and neurocognitive scaffolding. *Annual Review of Psychology*, 60, 17–196. <http://doi.org/10.1146/annurev.psych.59.103006.093656>
- Parnowski, T. (2013). Jak się starzejemy? Wymiar biologiczny procesu starzenia się. In K. Lipka-Szostak (Ed.), *Edukacja osób starszych* (pp. 9–16). Stowarzyszenie Trenerów Organizacji Pozarządowych.
- Paúl C, & Lopes A. (2017). Active aging. In N. Pachana (Ed.), *Encyclopedia of geropsychology* (pp. 1–15). Springer.

- Pawlak, M. (2006). *The place of form-focused instruction in the foreign language classroom*. Wydział Pedagogiczno-Artystyczny UAM w Kaliszu.
- Pawlak, M. (2014). Strategie komunikacyjne w nauce języka obcego – próba integracji perspektyw. *Konińskie Studia Językowe*, 2(1), 11–33.
- Pawlak, M. (2016). Another look at the L2 motivational self-system of Polish students majoring in English: Insights from interview data. *Theory and Practice of Second Language Acquisition*, 2(2), 9–26.
- Pawlak, M., Derenowski, M., & Mystkowska-Wiertelak, A. (2018). The use of indirect language learning strategies by third-age learners. In D. Gabryś-Barker (Ed.), *Third age learners of foreign languages* (pp. 76–90). Multilingual Matters.
- Pawlak, M., & Kruk, M. (2021). Ciemna i jasna strona mocy, czyli o roli negatywnych oraz pozytywnych emocji w uczeniu i nauczaniu języka obcego. *Języki Obce w Szkole*, 2, 5–12. <http://doi.org/10.47050/jows.2021.2.5-12>
- Pawlak, M., & Mystkowska-Wiertelak, A. (2015). Investigating the dynamic nature of L2 willingness to communicate. *System*, 50, 1–9.
- Peng, J.-E. (2007). Willingness to communicate in an L2 and integrative motivation among college students in an intensive English language program in China. *University of Sydney Papers in TESOL*, 2, 33–59.
- Peng, J. E. (2012). Towards an ecological understanding of willingness to communicate in EFL classrooms in China. *System*, 2(40), 203–213. <https://doi.org/10.1016/j.system.2012.02.002>
- Peng, J. E. (2013). The challenge of measuring willingness to communicate in EFL contexts. *The Asia-Pacific Education Researcher* 22(3), 281–290.
- Peng, J. E. (2014). *Willingness to communicate in the Chinese EFL university classroom: An ecological perspective*. Multilingual Matters.
- Peng, J. E., & Woodrow, L. (2010). Willingness to communicate in English: A model in the Chinese EFL classroom context. *Language Learning*, 60(4), 834–876.
- Peterson, C., & Seligman, M. E. P. (2004). *Character strengths and virtues: A handbook and classification*. American Psychological Association, Oxford University Press.
- Pfenninger, S. E., & Polz, S. (2018). Foreign language learning in the third age: A pilot feasibility study on cognitive, socio-affective and linguistic drivers and benefits in relation to previous bilingualism of the learner. *Journal of the European Second Language Association*, 2(1), 1–13.
- Pfenninger, S., & Singleton, D. (2019). A critical review of research relating to the learning, use and effects of additional and multiple languages in later life. *Language Teaching*, 52, 1–68. <http://doi.org/10.1017/S0261444819000235>
- Piasecka, L. (2016). Activating character strengths through poetic encounters in a foreign language—A case study. In D. Gabryś-Barker & D. Gałajda (Eds.), *Positive psychology perspectives on foreign language learning and teaching* (pp. 75–92). Springer. <http://doi.org/10.1007/978-3-319-32954-3>
- Piechurska-Kuciel, E. (2015). Correlates predictors of L2 willingness to communicate in Polish adolescents. In M. Pawlak, & E. Waniek-Klimczak (Eds.), *Issues in teaching, learning and testing speaking in a second language. Second language learning and teaching*, vol. 27 (pp. 85–102). Springer. <http://doi.org/10.1007/978-3-642-38339-7>
- Piechurska-Kuciel E. (2017). L2 or L3? Foreign language enjoyment and proficiency. In D. Gabryś-Barker, D. Gałajda, A. Wojtaszek, & P. Zakrajewski (Eds.), *Multiculturalism, multilingualism and the self. Second language learning and teaching* (pp. 97–111). Springer. [http://doi.org/10.1007/978-3-319-56892-8\\_7](http://doi.org/10.1007/978-3-319-56892-8_7)

- Piechurska-Kuciel, E., & Szyszka, M. (2018). Compensatory strategies in senior foreign language students. In D. Gabryś-Barker (Ed.), *Third age learners of foreign languages* (pp. 108–126). Multilingual Matters.
- Pinto, C., & Tandel, K. Y. (2016). Cognitive reserve: Concept, determinants, and promotion. *Journal of Geriatric Mental Health*, 1(3), 44–51.
- Posiadała, K. (2017). Stosowanie strategii komunikacyjnych przez polskich seniorów uczących się języka niemieckiego jako obcego na przykładzie opiekunów osób starszych. *Konińskie Studia Językowe*, 5(3), 303–321. <http://doi.org/10.30438/ksj.2017.5.3.1>
- Posiadała, K. (2020). Development of self-assessment skills of foreign language learners aged 55+. *Neofilolog*, 54(1), 71–85.
- Pot, A., Keizer, M., & de Bot, K. (2018). Enhancing language awareness in migrants' third age to promote well-being. In D. Gabryś-Barker (Ed.), *Third age learners of foreign languages* (pp. 176–200). Multilingual Matters.
- Ramírez Gómez, D. (2014). Older adult FL learning: Instructors' beliefs and some recommendations. In N. Sonda, & A. Krause (Eds.), *JALT2013 Conference proceedings*. JALT.
- Ramírez Gómez, D. (2016a). *Critical geragogy and foreign language learning: An exploratory application*. *Educational Gerontology*, 42, 136–143. <http://doi.org/10.1080/03601277.2015.1083388>
- Ramírez Gómez, D. (2016b). *Language teaching and the older adult: The significance of experience*. Multilingual Matters.
- Ramírez Gómez, D. (2019). Developing a foreign language geragogy: Teaching innovations for older learners. In H. Reinders, S. Ryan, & S. Nakamura (Eds.), *Innovation in language teaching and learning. New language learning and teaching environments* (pp. 161–184). Palgrave Macmillan. [http://doi.org/10.1007/978-3-30-12567-7\\_9](http://doi.org/10.1007/978-3-30-12567-7_9)
- Ramírez Gómez, D., & Sanz, M. (2017). Corpus-based foreign-language textbooks: Using the cognitive resources of older learners efficiently. *Lingvarvm Arena*, 33–48.
- Raz, N., Lindenberger, U., Rodrigue, K. M., Kennedy, K., Head, D., Williamson, A., Dahle, C., Gerstorf, D., & Acker, J. D. (2005). Regional brain changes in aging healthy adults: General trends, individual differences and modifiers. *Cerebral Cortex*, 1676–1689. <http://doi.org/10.1093/cercor/bhi044>
- Reese, C. M., & Cherry, K. E. (2006). Effect of age and ability to self-reported memory functioning and knowledge of memory aging. *The Journal of Genetic Psychology*, 167(2), 221–240.
- Reichstadt, J., Sengupta, G., Depp, C., Palinkas, L., & Jeste, D. (2010). Older adults' perspectives on successful aging: Qualitative interviews. *The American Journal of Geriatric Psychiatry: Official Journal of the American Association for Geriatric Psychiatry*, 18, 567–75. <http://doi.org/10.1097/JGP.0b013e3181e040bb>.
- Reuter-Lorenz P. A., & Cappell, K. A. (2008). Neurocognitive aging and the compensation hypothesis. *Current Directions in Psychological Science*, 17(3), 177–182. <http://doi.org/10.1111/j.1467-8721.2008.00570.x>
- Riasati, M. J. (2012). EFL learners' perception of factors influencing willingness to speak English in language classrooms: A qualitative study. *World Applied Sciences Journal*, 17(10), 1287–1297.
- Riasati, M. J. (2018). Willingness to speak English among foreign language learners: A causal model. *Cogent Education*, 5(1), 1455332, 1–17. <http://doi.org/10.1080/2331186X.2018.1455332>
- Riasati, M. J., & Rahimi, F. (2018). Situational and individual factors engendering willingness to speak in English in foreign language classrooms. *Cogent Education*, 5(1), 1513313, 1–15. <http://doi.org/10.1080/2331186X.2018.1513313>

- Roediger, H., & Geraci, L. (2007). Aging and the misinformation effect: A neuropsychological analysis. *Journal of Experimental Psychology Learning Memory and Cognition*, 321–334. <http://doi.org/10.1037/0278-7393.33.2.321>
- Rowe, J. W., & Kahn, R. L. (1997). Successful aging. *The Gerontologist*, 4(37), 433–440.
- Róg, T. (2014). The shaping of applied linguistics and the emergence of glottodidactics. *Applied Linguistics*, 9, 117–131.
- Rudnik, A. (2017). Education in old age – a wish or opportunity for the prevention of marginalization of older people? *Pedagogika Społeczna*, 1(63), 111–128.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78. <https://doi.org/10.1037/0003-066X.55.1.68>
- Salthouse, T. A. (2006). Mental exercise and mental aging. Evaluating the validity of the “Use it or lose it” hypothesis. *Perspectives on Psychological Science*. <http://doi.org/10.1111/j.1745-6916.2006.00005.x>.
- Sanders, A., Hall, C., Katz, M., & Lipton, R. (2012). Non-native language use and risk of incident dementia in the elderly. *Journal of Alzheimer's disease: JAD*, 29, 99–108. <http://doi.org/10.3233/JAD-2011-111631>
- Schacter, D. L., & Tulving, E. (Eds.), (1994). *Memory systems 1994*. MIT Press.
- Schiller, E., Dorner, H., & Szabó, Z. A. (2020). Developing senior learners’ autonomy in language learning. An exploratory study of Hungarian adult educators’ support strategies. *Educational Gerontology*, 46, 1–11. <http://doi.org/10.1080/03601277.2020.1813974>
- Schweizer, T. A., Ware, J., Fischer, C. E., Craik, F. I. M., & Bialystok, E. (2012). Bilingualism as a contributor to cognitive reserve: Evidence from brain atrophy in Alzheimer’s disease, *Cortex*, 8(48), 991–996. <http://doi.org/10.1016/j.cortex.2011.04.009>
- Seligman, M., & Csikszentmihalyi, M. (2000). Positive psychology: An Introduction. *The American psychologist*, 55, 5–14. <http://doi.org/10.1037/0003-066X.55.1.5>
- Sheybani, M. (2019). The relationship between EFL Learners’ Willingness to Communicate (WTC) and their teacher immediacy attributes: A structural equation model. *Cogent Psychology*, 6, 1–14. <http://doi.org/10.1080/23311908.2019.1607051>
- Shing, Y. L., Werkle-Bergner, M., Li, S.-C., & Lindenberger, U. (2008). Associative and strategic components of episodic memory: A life-span dissociation. *Journal of Experimental Psychology: General*, 137(3), 495–513. <https://doi.org/10.1037/0096-3445.137.3.495>
- Sienkiewicz-Wilowska, J. (2013). Samopoczucie w okresie późnej dorosłości u uczestników terapii zajęciowej w dziennych domach pomocy społecznej. *Studia Psychologiczne*, 51, 19–34.
- Sigelman, C. K., & Rider, E. A. (2015). *Life-span human development*. Cengage Learning.
- Sikora, M. (2013). Potrzeby osób starszych w kontekście procesu uczenia się. In K. Lipka-Szostak (Ed.), *Edukacja osób starszych. Uwarunkowania, trendy, metody* (pp. 41–48). Stowarzyszenie Trenerów Organizacji Pozarządowych.
- Simpson, S. T. (2008). Western EFL teachers and east-west classroom-culture conflicts. *RELC Journal* 39(3), 381–394.
- Singleton, D. (2018). Really late learners: Some research contexts and some practical hints. In D. Gabryś-Barker (Ed.), *Third age learners of foreign languages* (pp. 19–30). Multilingual Matters.
- Singleton, D., & Pfenninger, S. (2018). L2 acquisition in childhood, adulthood and old age: Misreported and under-researched dimensions of the age factor. *Journal of Second Language Studies*, 1, 254–275. <http://doi.org/10.1075/jsls.00003.sin>
- Singleton, D. M., & Ryan, L. *Language acquisition: The age factor* (2nd ed.). Multilingual Matters.

- Słowik, A. (2016). Different perspectives on the use of L1 in teaching English to the elderly. *Journal of Education Culture and Society*, 2, 199–217. <http://doi.org/10.15503/jecs20162.199.216>
- Słowik-Krogulec, A. (2019). Developing efficient foreign language classroom environments for older adult learners. *Journal of Education Culture and Society*, 2, 189–200. <http://doi.org/10.15503/jecs20192.189.200>
- Squire, L. R. (1994). Declarative and nondeclarative memory: Multiple brain systems supporting learning and memory. In D. L. Schacter, & E. Tulving (Eds.), *Memory systems* (pp. 203–231). MIT Press.
- Squire, L. R., & Zola-Morgan, M. J. (1991). The brain and memory. *Cold Spring Harbor Perspectives in Biology*, 7, 1–14. <http://doi.org/10.1101/cshperspect.a021667>
- Stein, M., Winkler, C., Kaiser, A., & Dierks, T. (2014). Structural brain changes related to bilingualism: Does immersion make a difference? *Frontiers in Psychology*, 1–7. <http://doi.org/10.3389/fpsyg.2014.01116>
- Sterberg, R. J. (1997). The concept of intelligence and its role in lifelong learning and success. *American Psychologist*, 10(52), 1030–1037.
- Stern, Y. (2013). Cognitive reserve: Implications for assessment and intervention. *Folia Phoniatrica et Logopaedica*, 49–54. <http://doi.org/10.1159/000353443>
- Stern, Y., Barnes, C., Grady, C., Jones, R., & Raz, N. (2019). Brain reserve, cognitive reserve, compensation, and maintenance: Operationalization, validity, and mechanisms of cognitive resilience. *Neurobiology of Aging*, 83, 124–129. <http://doi.org/10.1016/j.neurobiolaging.2019.03.022>
- Stern, Y., Habeck, Ch., Moeller, J. & Scarmeas, N., Anderson, K. & Hilton, H., Flynn, J., Sackeim, H., & Van Heertum, R. (2005). Brain networks associated with cognitive reserve in healthy young and old adults. *Cerebral Cortex*, 15, 394–402. <http://doi.org/10.1093/cercor/bhh142>
- Steuden, S. (2011). *Psychologia starzenia się i starości*. Wydawnictwo Naukowe PWN.
- Stuart-Hamilton, I. (2012). *The psychology of ageing* (5th ed.). Jessica Kingsley Publishers.
- Stuart-Hamilton, I. (2014). *Introduction to the psychology of ageing for non-specialists*. Jessica Kingsley Publishers.
- Suwiński, E. (2018). Współczesny wymiar starzenia się i starości. *21st Century Pedagogy*, Vol. II (II), 49–66. <http://doi.org/10.2478/ped21-2018-0015>
- Szarota, Z. (2014). Era trzeciego wieku – implikacje edukacyjne. *Edukacja Ustawiczna Dorosłych* 1(84), 7–18.
- Szarota, Z. (2019). Despite – on individual learning experiences in retrospective accounts of adults. *E-mentor*, 5(82), 62–71. <http://doi.org/10.15219/em82.1446>
- Szepietowska, E. (2019). Concerning the positive influence of life activity (cognitive reserves) on cognitive functions in adults. *Problemy Higieny i Epidemiologii*, 100(1), 66–73.
- Świdorska, M., & Kapszewicz, P. (2015). Stereotypy dotyczące starzenia się i ludzi starych w opiniach studentów medycyny. *Pedagogika Rodziny*, 5(4), 185–199.
- Taranowicz, I. (2014). Deconstructing old age? On the evolution of social concepts of the late stage of life. In S. Grotowska, & I. Taranowicz (Eds.), *Understanding ageing in contemporary Poland: Social and cultural perspectives* (pp. 13–24). Instytut Socjologii Uniwersytetu Wrocławskiego.
- Tomaszewska-Hołub, B. (2019). Stereotypizacja starości – wybrane przejawy ageizmu. *Cywilizacja i Polityka*, 17(17), 90–101.
- Treder-Rochna, & Jodzio, K. (2018). Ageing mind from neuropsychological perspective. In W. Tłokiński, S. Milewski, & K. Kaczorowska-Bray (Eds.), *Genontologopedia* (pp. 59–77). Harmonia Universalis.
- Tulving, E. (1972). Episodic and semantic memory. In E. Tulving, & W. Donaldson (Eds.), *Organization of Memory* (pp. 381–403). Academic Press.

- Tylikowska, A. (2013). Jak się starzejemy? – aspekty psychologiczne. In K. Lipka-Szostak (Ed.), *Edukacja osób starszych* (pp. 17–26). Stowarzyszenie Trenerów Organizacji Pozarządowych.
- Ullman, M. T. (2004). Contributions of memory circuits to language: The declarative/procedural model. *Cognition*, 92, 231–270. <http://doi.org/10.1016/j.cognition.2003.10.008>
- Van Dyke, J. (2012). The role of memory in language and communication. *Cognition and Acquired Language Disorders*, 94–120. <http://doi.org/10.1016/B978-0-323-07201-4.00014-3>
- Velaso, E., & Guimarães, P. (2014). Education and empowerment in later life. In B. Schmidt-Hertha, S. J. Krašovec, & M. Formosa (Eds.), *Learning across generations in Europe: Contemporary issues in older adult education* (pp. 35–46). Sense Publishers.
- Viktorova, L. V. (2020). Educational conditions for implementation of adults' distance learning of foreign languages. *Information Technologies and Learning Tools*, 75, 13–25. <http://doi.org/10.33407/itlt.v75i1.2797>
- Wang, H.-Y., Jin, Y., Hendrie, H. C., Liang, C., Yang, L., Cheng, Y., Unverzagt, F. W., Ma, F., Hall, K. S., Murrell, J. R., Li, P., Bian, J., Pei, J.-J., & Gao, S. (2012). Late life leisure activities and risk of cognitive decline. *The journals of gerontology. Series A, Biological sciences and medical sciences*, 68(2), 205–213. <http://doi.org/10.1093/gerona/gls153>.
- Wang, J., & Puel, J.-L. (2020). Presbycusis: An update on cochlear mechanisms and therapies. *Journal of Clinical Medicine*, 9, 1–22. <http://doi.org/10.3390/jcm9010218>
- Wain, K. (2009). Lifelong learning and philosophy. In P. Jarvis (Ed.), *The Routledge handbook of lifelong education* (pp. 390–400). Routledge.
- Weaver, C. (2005). Using the Rasch model to develop a measure of second language learners' willingness to communicate within a language classroom. *Journal of Applied Measurement*, 6, 396–415.
- Wen, Z. (2012). Working memory and second language learning. *International Journal of Applied Linguistics*, 1(22), 1–22.
- Wen, W. P., & Clément, R. (2003). A Chinese conceptualisation of willingness to communicate in ESL. *Language, Culture and Curriculum* 16(1), 18–38.
- Wen, Z., & Li, S. (2019). Working memory in L2 learning and processing. In J. Schwieter, & A. Benati (Eds.), *The Cambridge handbook of language learning* (pp. 365–389). Cambridge University Press. <http://doi.org/10.1017/9781108333603.016>
- Werbińska, D. (2017). *Skuteczny nauczyciel języka obcego*. Fraszka Edukacyjna.
- Wieczorkowska, M. (2017). Role społeczne współczesnych polskich seniorów w świetle wyników badań. *Folia Sociologica*, 61, 77–97.
- Wilczyńska, W., & Michońska-Stadnik, A. (2010). *Metodologia badań w glottodydaktyce. Wprowadzenie*. Avalon.
- Włosowicz, T. M. (2016). Adult learners' expectations concerning foreign language teachers and the teaching-learning process. In D. Gabryś-Barker, & D. Gałajda (Eds.), *Positive psychology perspectives on foreign language learning and teaching* (pp. 267–288). Springer. [http://doi.org/10.1007/978-3-319-32954-3\\_15](http://doi.org/10.1007/978-3-319-32954-3_15)
- Wong, P., Ou, J., Pang, C., Zhang, L., Tse, C., Lam, L., & Antoniou, M. (2019). Language training leads to global cognitive improvement in older adults: A Preliminary study. *Journal of Speech, Language, and Hearing Research*, 62, 1–14. [http://doi.org/10.1044/2019\\_JSLHR-L-18-0321](http://doi.org/10.1044/2019_JSLHR-L-18-0321)
- Wood, D. (2012). Willingness to communicate and L2 fluency: Complexity and variety in a corpus of Japanese and Chinese ESL learner speech. *Contact*, 23–39.
- World Health Organisation. (2018). *Addressing the rising prevalence of hearing loss*. Switzerland.
- Yashima, T. (2002). Willingness to communicate in a second language: The Japanese EFL context. *Modern Language Journal* 86(1), 54–66. <http://doi.org/10.1111/1540-4781.0036>

- Zadworna, M., & Finogenow, M. (2012). Perspektywa pozytywnego starzenia się w okresie późnej dorosłości. *Family Pedagogy*, 2, 117–128.
- Zahodne, L., Nowinski, C., Gershon, R. & Manly, J.. (2014). Which psychosocial factors best predict cognitive performance in older adults? *Journal of the International Neuropsychological Society: JINS*, 20, 1–9. <http://doi.org/10.1017/S1355617714000186>
- Zajac-Lamparska, L. (2011). Wspomaganie funkcjonowania ludzi starzejących się. *Psychologia Rozwoju Człowieka*, 419–431.
- Zajac-Lamparska, L. (2012). Psychological concepts of successful aging. *Rocznik Andragogiczny*, 89–105.
- Zajac-Lamparska, L. (2018). Compensatory brain activity in older adults. *Gerontologia Polska*, 26, 54–58.
- Zarrinabadi, N. (2014). Communicating in a second language: Investigating the effect of teacher on learners' willingness to communicate. *System*, 42, 288–295.
- Zarrinabadi, N., & Tanbakooei, N. (2016). Willingness to communicate: Rise, development, and some future directions. *Language and Linguistics Compass*, 10. <http://doi.org/30-45.10.1111/lnc3.12176>
- Zeng, Z., Kalashnikova, M., & Antoniou, M. (2019). Integrating bilingualism, verbal fluency, and executive functioning across the lifespan. *Journal of Cognition and Development*, 5, 656–679. <http://doi.org/10.1080/15248372.2019.1648267>
- Zhang, J., Beckmann, N., & Beckmann, J. F. (2018). To talk or not to talk: A review of situational antecedents of willingness to communicate in the second language classroom. *System* 72, 226–239. <http://doi.org/10.1016/j.system.2018.01.003>
- Zhang, J., Beckman, N., & Beckman, J. F. (2019). One situation doesn't fit all: Variability and stability of state willingness to communicate in a Chinese college English classroom. *Language Teaching Research*, 1–26. <https://doi.org/10.1177/1362168819891330>
- Zhang, Q., & Oetzel, J. G. (2006). Constructing and validating a teacher immediacy scale: A Chinese perspective. *Communication Education*, 2(55), 218–241. <http://doi.org/10.1080/03634520600566231>
- Zimprich D., & Kurtz T. (2017) Process and systems views of aging and memory. In N. A. Pachana (Ed.), *Encyclopedia of Geropsychology* (pp. 1883–1893). Springer. [http://doi.org/10.1007/978-981-287-082-7\\_117](http://doi.org/10.1007/978-981-287-082-7_117)
- Zych, A. A. (1992). The development and main ideas of the pedagogy of aging and old age. In C. Berdes, A. A. Zych, & G. D. Dawson (Eds.), *Geragogics European research in gerontological education and educational gerontology* (pp. 23–43). The Haworth Press.
- Zych, A. A. (2018). Srebrny uniwersytet alternatywą dla polskich rozwiązań. *Gerontologia Współczesna*, 3, 109–115.
- Zych, A. A. (2019). Special geragogics: Pedagogy of the elderly with disabilities. *Labor et Educatio*, 7, 11–28. <http://doi.org/10.4467/25439561LE.19.001.11518>

## LIST OF TABLES AND FIGURES

### List of Tables

Table 1.	The key elements of a process model based on Knowles et al. (2020) .....	61
Table 2.	Kang’s (2005) situational factors influencing situational WTC .....	106
Table 3.	Eddy-U’s (2015) framework of motivating and demotivating variables .....	110
Table 4.	Study 1 – the age of the participants .....	138
Table 5.	Study 1 – the participants’ gender, place of residence, and education .....	138
Table 6.	The most crucial teacher characteristics named by the seniors .....	147
Table 7.	The most fundamental components of English classroom instruction for the older students .....	148
Table 8.	The most demotivating teacher characteristics .....	149
Table 9.	The affective factors influencing in-class WTC in English .....	150
Table 10.	Study 2 – the participants’ personal data .....	154
Table 11.	The short description of tasks completed during Study 2 .....	155
Table 12.	The means and standard deviations for task orientation .....	160
Table 13.	Situation cues mentioned for Task 3 .....	162
Table 14.	Situation cues mentioned for Task 1 .....	163
Table 15.	Study 3 – the participants’ personal data .....	167
Table 16.	The older learners’ self-assessment of the task performance .....	172
Table 17.	The participants’ in-class WTC in English during dyadic interaction .....	173
Table 18.	Own-performance problem-related strategies in direct strategies applied by the seniors .....	175
Table 19.	Study 4 – the participants’ personal data .....	179
Table 20.	The third agers’ willingness to speak in class .....	184
Table 21.	Study 5 – the participants’ personal data .....	188
Table 22.	The values of Cronbach’s alpha for WTC in English, Intrinsic Motivation, Foreign Language Enjoyment, Classroom Environment and Teacher Immediacy.....	195
Table 23.	Basic descriptive statistics and test for the normality of distributions .....	196
Table 24.	Pearson’s r correlations’ coefficients between measured scales .....	197
Table 25.	Spearman’s r correlations’ coefficients between WTC and the participants’ age...	198
Table 26.	Spearman’s r correlations’ coefficients between WTC and duration of learning English .....	198
Table 27.	A comparison of WTC scores based on the participants’ level of education .....	199
Table 28.	A comparison of WTC scores between the participants who knew only English and those who declared a knowledge of other language(s) .....	199
Table 29.	The means and the standard deviations for In-class WTC in English .....	200

Table 30.	The means and the standard deviations for meaning-focused tasks .....	201
Table 31.	The means and the standard deviations for form-focused exercises .....	201
Table 32.	The means and the standard deviations for Intrinsic Motivation .....	202
Table 33.	The means and the standard deviations for Foreign Language Enjoyment.....	203
Table 34.	The means and the standard deviations for Classroom Environment .....	204
Table 35.	The means and the standard deviations for Teacher Immediacy .....	204
Table 36.	A summary of situation-specific variable influencing third agers' in-class WTC in English .....	212

### List of Figures

Figure 1.	A summary of the main principles of CFLG (based on Ramírez Gómez, 2016a)....	64
Figure 2.	MacIntyre's (1994) model of L1 WTC using personality based variables .....	91
Figure 3.	MacIntyre et al.'s (1998) heuristic model of variables influencing WTC.....	94
Figure 4.	Eddy-U's (2015) proposed task-situated WTC model .....	111
Figure 5.	Zhang et al.'s (2018) framework of situational antecedents of state WTC .....	123
Figure 6.	The participants' motives for learning English in senior years .....	139
Figure 7.	The most substantial skills for the third agers .....	141
Figure 8.	The easiest skills according to the informants .....	141
Figure 9.	The most difficult skills according to the seniors .....	142
Figure 10.	The older adults' WTC during English classes .....	143
Figure 11.	The most preferable forms of interaction motivating to communicate .....	143
Figure 12.	The components of classroom instruction increasing WTC in English .....	144
Figure 13.	The factors hampering in-class WTC in English .....	146
Figure 14.	The levels of WTC for Tasks 1, 2, 3, and 4 for individual students .....	158
Figure 15.	The means of in-class WTC in English during the task performance .....	159
Figure 16.	The tasks which facilitated in-class WTC in English the most .....	161
Figure 17.	The tasks which hampered WTC in English the most .....	163
Figure 18.	Interview – set 1 .....	168
Figure 19.	Interview – set 2 .....	169
Figure 20.	Individual levels of in-class WTC in English during the information-gap activity.	171
Figure 21.	Individual levels of in-class WTC in English during the presentation and while responding to the teacher's questions.....	182
Figure 22.	Study 5 – the age of the participants .....	189
Figure 23.	The seniors' English learning experience thought their life .....	189
Figure 24.	The older adults' English learning experience during English courses for seniors ..	190
Figure 25.	The third agers' knowledge of other foreign languages .....	190

## APPENDICES

### Appendix 1: The short description of the research project

Study		Research questions	Research instruments	Tool/Scale														
1.	Questionnaire study	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">Q1</td> <td>Which language skills are considered to be the most important to third-age learners?</td> </tr> <tr> <td style="text-align: center;">Q2</td> <td>Which language skills are deemed to be the easiest and the most difficult to learn?</td> </tr> <tr> <td style="text-align: center;">Q3</td> <td>Which form of interaction motivates seniors to communicate during English classes most?</td> </tr> <tr> <td style="text-align: center;">Q4</td> <td>What are the respondents' expectations referring to an English instructor?</td> </tr> <tr> <td style="text-align: center;">Q5</td> <td>What teacher characteristics may discourage the older students from active communication in English?</td> </tr> <tr> <td style="text-align: center;">Q6</td> <td>Which components of classroom instruction facilitate in-class WTC in English the most?</td> </tr> <tr> <td style="text-align: center;">Q7</td> <td>Which factors hamper WTC in English in a classroom setting the most?</td> </tr> </table>	Q1	Which language skills are considered to be the most important to third-age learners?	Q2	Which language skills are deemed to be the easiest and the most difficult to learn?	Q3	Which form of interaction motivates seniors to communicate during English classes most?	Q4	What are the respondents' expectations referring to an English instructor?	Q5	What teacher characteristics may discourage the older students from active communication in English?	Q6	Which components of classroom instruction facilitate in-class WTC in English the most?	Q7	Which factors hamper WTC in English in a classroom setting the most?	Questionnaire (Appendix 2)	<ul style="list-style-type: none"> <li>▪ 17 questions designed by the present author. The answer options to question 13 and 14 (Appendix 2) were adapted from the results of Borkowska's (2021) study</li> </ul>
Q1	Which language skills are considered to be the most important to third-age learners?																	
Q2	Which language skills are deemed to be the easiest and the most difficult to learn?																	
Q3	Which form of interaction motivates seniors to communicate during English classes most?																	
Q4	What are the respondents' expectations referring to an English instructor?																	
Q5	What teacher characteristics may discourage the older students from active communication in English?																	
Q6	Which components of classroom instruction facilitate in-class WTC in English the most?																	
Q7	Which factors hamper WTC in English in a classroom setting the most?																	
2.	In-class WTC in English during the communicative class	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">Q1</td> <td>What is the seniors' WTC during the task performance?</td> </tr> <tr> <td style="text-align: center;">Q2</td> <td>Which tasks generate the highest and the lowest levels of WTC in English?</td> </tr> <tr> <td style="text-align: center;">Q3</td> <td>How do the third agers the tasks performed during the communicative class?</td> </tr> <tr> <td style="text-align: center;">Q4</td> <td>Which tasks are reported to most facilitate and hamper in-class WTC in English during the communicative class?</td> </tr> </table>	Q1	What is the seniors' WTC during the task performance?	Q2	Which tasks generate the highest and the lowest levels of WTC in English?	Q3	How do the third agers the tasks performed during the communicative class?	Q4	Which tasks are reported to most facilitate and hamper in-class WTC in English during the communicative class?	Questionnaire (Appendix 3)	<ul style="list-style-type: none"> <li>▪ self-assessment scale (Gałajda, 2017; Peng, 2014)</li> <li>▪ task orientation (Fraser et al., 1996)</li> </ul>						
Q1	What is the seniors' WTC during the task performance?																	
Q2	Which tasks generate the highest and the lowest levels of WTC in English?																	
Q3	How do the third agers the tasks performed during the communicative class?																	
Q4	Which tasks are reported to most facilitate and hamper in-class WTC in English during the communicative class?																	
3.	t h e i n f o	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">Q1</td> <td>What is the level of WTC in English during the</td> </tr> </table>	Q1	What is the level of WTC in English during the	Questionnaire (Appendix 4)	<ul style="list-style-type: none"> <li>▪ self-assessment scale (Gałajda,</li> </ul>												
Q1	What is the level of WTC in English during the																	

			information-gap activity?		2017; Peng, 2014)
		Q2	How do the seniors self-assess their participation on the task?		<ul style="list-style-type: none"> <li>5-item tool concerning the task performance constructed by the present author</li> </ul>
		Q3	What is the older adults' in-class WTC during interaction in pairs		<ul style="list-style-type: none"> <li>Fushino's (2010) WTC in L2 Group Work Scale</li> </ul>
		Q4	Which communication strategies do the third agers use during the task performance?		
4.	<b>In-class WTC in English during the self-prepared presentation of a picture</b>	Q1	What is the level of in-class WTC in English during the self-prepared presentation?	Questionnaire (Appendix 5)	<ul style="list-style-type: none"> <li>self-assessment scale (Gałajda, 2017; Peng, 2014)</li> <li>5-item tool regarding the picture presentation constructed by the present author</li> <li>Willingness to Speak Scale (Riasati, 2018)</li> </ul>
		Q2	What is the level of in-class WTC in English while answering the teacher's questions?		
		Q3	How do the seniors self-evaluate their participation in the task?		
		Q4	What is the seniors' readiness to speak English concerning the topic and teacher-centred exercises?		
5.	<b>The relationship among the third-agers WTC in English, intrinsic motivation, foreign language enjoyment, classroom environment, as well as teacher immediacy – quantitative study</b>	Q1	What is the correlation among the third agers' WTC in English, their intrinsic motivation, foreign language enjoyment, classroom environment, as well as teacher immediacy?	Questionnaire (Apeendix 6)	<ul style="list-style-type: none"> <li>In-class WTC in English Scale (Peng and Woodrow, 2010)</li> <li>Intrinsic motivation (Noels et al., 1999)</li> <li>Classroom Environment (Fraser et al., 1996)</li> <li>Chinese Teacher Immediacy Scale (Oetzel, 2006)</li> <li>Foreign Language Enjoyment (Dewaele &amp; MacIntyre, 2016)</li> </ul>
		Q2	What is the correlation between WTC and the participants' age, as well as WTC and their English learning experience?		
		Q3	Is there any discrepancy between the level of WTC among the seniors representing different educational levels?		
		Q4	Is there any discrepancy between the WTC levels among the older adults who knew only English and those who declared the knowledge of other foreign language(s)?		

		Q5	To what extent are the third agers willing to communicate in English both in meaning-focused and form-focused tasks inside classroom settings?		
		Q6	Which aspects of intrinsic motivation, classroom environment, teacher immediacy and foreign language enjoyment are the most eminent among the seniors?		

## Appendix 2: Questionnaire – Study 1

### ENGLISH VERSION

#### Questionnaire for senior learners

*Dear Sir or Madam,*

*Thank you for your consent to take part in the study. The questionnaire is completely anonymous.*

*The data will be analysed only for scientific purposes.*

**1. Sex:**

- female
- male

**2. Age:**

- 50 – 55 years old
- 56 – 60 years old
- 61 – 65 years old
- 66 – 70 years old
- 71 – 75 years old
- over 75 years old

**3. Place of residence:**

- village
- town up 50 000 residents
- town/city with more 50 000 residents

**4. Education:**

- tertiary
- secondary
- primary

**5. How long have you been learning English throughout your life?  
(including English courses for seniors at the Third Age University)**

- less than 1 year
- 1 – 3 years
- 3 – 5 years
- 5 – 7 years
- 7 – 10 years
- 10 – 15 years
- more than 15 years

**6. How long have you been learning English only at the Third Age University?**

- less than 1 year
- 1 – 3 years
- 3 – 5 years
- 5 – 10 years

- more than 10 years

7. **Why are you learning English? Choose the most important reason/reasons.**  
(You can choose more than one answer)

- communication in English (during trips abroad, stay abroad)
- communication in English with family abroad
- self-realisation
- mental ability and memory improvement
- to maintain a rapport with groupmates, for company
- no reason
- other reason (what?) \_\_\_\_\_

8. **Which language skill is the most important to you?**  
(You can choose more than one answer)

- speaking
- writing
- reading
- listening
- grammar
- vocabulary

9. **Which language skill do you find the easiest?**  
(You can choose more than one answer)

- speaking
- writing
- reading
- listening
- grammar
- vocabulary

10. **Which language skill is the most difficult for you to learn?**  
(You can choose more than one answer)

- speaking
- writing
- reading
- listening
- grammar
- vocabulary

11. **Are you willing to communicate in English during class?**

- Yes, always
- Only sometimes
- No, never

12. **Which form of interaction motivates you to communicate in English during classes most?**

Choose only **one** answer

- answering the teacher's questions
- pair work
- group work (3-4 people)

**13. What, according to you, increases in-class WTC in English?**

*(You can choose more than one answer)*

- interesting tasks
- new technology used by a teacher (multimedia board, projector, films, presentations, etc.)
- gentle error correction
- cooperation with a peer
- friendly and positive atmosphere
- teacher's helpful and supportive attitude
- other reason: \_\_\_\_\_

**14. What, according to you, inhibits in-class WTC in English?**

*(You can choose more than one answer)*

- anxious atmosphere
- fear of making mistakes
- fear of humiliation
- insufficient lexical resources
- memory problems
- other reason: \_\_\_\_\_

**15. What are your expectations when it comes to an English teacher?**

---



---



---

**16. Which teacher's characteristics, according to you, may discourage from active communication in English during classes?**

---



---



---

**17. Do you know any other language?**

- No
- Yes (which one?) \_\_\_\_\_

Thank you very much for completing the survey ☺

**POLISH VERSION**

Ankieta dla studentów UTW

*Szanowni Państwo,*

*bardzo dziękuję za zgodę na wypełnienie poniższej ankiety. Ankieta jest całkowicie anonimowa.*

*Zebrane dane zostaną wykorzystane wyłącznie do celów naukowych.*

**1. Płeć:**

- kobieta
  - mężczyzna
2. **Wiek:**
- 50 – 55 lat
  - 56 – 60 lat
  - 61 – 65 lat
  - 66 – 70 lat
  - 71 – 75 lat
  - powyżej 75 lat
3. **Miejsce zamieszkania:**
- wieś
  - miasto do 50 000 mieszkańców
  - miasto powyżej 50 000 mieszkańców
4. **Wykształcenie:**
- wyższe
  - średnie
  - podstawowe
5. **Jak długo uczy się Pan(i) języka angielskiego?  
(włącznie z zajęciami języka angielskiego na UTW)**
- krócej niż 1 rok
  - od 1 – 3 lat
  - od 3 – 5 lat
  - od 5 – 7 lat
  - od 7 – 10 lat
  - od 10 – 15 lat
  - dłużej niż 15 lat
6. **Jak długo uczy się Pan/Pani języka angielskiego tylko na UTW?**
- krócej niż 1 rok
  - od 1 – 3 lat
  - od 3 – 5 lat
  - od 5 – 10 lat
  - dłużej niż 10 lat
7. **Dlaczego uczy się Pan/Pani języka angielskiego? Proszę zaznaczyć najważniejszy powód/powody.  
(Można zaznaczyć więcej niż jedną odpowiedź)**
- komunikacja w języku angielskim (podczas wycieczek zagranicznych, pobytu za granicą)
  - porozumiewanie się w języku angielskim z rodziną za granicą

- realizacja własnych ambicji
- poprawa sprawności umysłowej i pamięci
- utrzymywanie kontaktu z członkami grupy, dla towarzystwa
- bez konkretnego powodu
- inny powód (jaki?) .....

**8. Która umiejętność językowa jest dla Pana/Pani najważniejsza?**

- umiejętność mówienia
- umiejętność pisania
- umiejętność czytania
- umiejętność słuchania
- ćwiczenie gramatyki
- ćwiczenie słownictwa

**9. Która umiejętność jest dla Pana/Pani najłatwiejsza podczas uczenia się języka angielskiego?**  
(Można zaznaczyć więcej niż jedną odpowiedź)

- umiejętność mówienia
- umiejętność pisania
- umiejętność czytania
- umiejętność słuchania
- ćwiczenie gramatyki
- ćwiczenie słownictwa

**10. Która umiejętność jest dla Pana/Pani najtrudniejsza podczas uczenia się języka angielskiego?**  
(Można zaznaczyć więcej niż jedną odpowiedź)

- umiejętność mówienia
- umiejętność pisania
- umiejętność czytania
- umiejętność słuchania
- ćwiczenie gramatyki
- ćwiczenie słownictwa

**11. Czy jest Pan/Pani chętny/a do komunikowania się w języku angielskim podczas zajęć językowych?**

- Tak, zawsze
- Tylko czasami
- Nie, nigdy

**12. Która forma ćwiczeń najbardziej motywuje Pana/Panią do komunikowania się w języku angielskim podczas zajęć. Proszę zaznaczyć TYLKO jedną odpowiedź.**

- odpowiadanie na pytania nauczyciela
- praca w parze

- praca w małej grupie (3-4 osoby)

**13. Co, według Pana/Pani, zwiększa chęć do komunikowania się w języku angielskim podczas zajęć?**

*(Można zaznaczyć więcej niż jedną odpowiedź)*

- interesujące ćwiczenia
- użycie nowej technologii przez nauczyciela (tablicy multimedialnej, rzutnika, filmików, prezentacji, itp.)
- łagodna, bieżąca poprawa błędów przez nauczyciela
- interakcja z partnerem (zadania wykonywane w parze)
- przyjacielska i pozytywna atmosfera
- pomoc i wsparcie nauczyciela
- inny: \_\_\_\_\_

**14. Co, według Pana/Pani, może wpłynąć na zmniejszenie chęci do komunikowania się w języku angielskim podczas zajęć?**

*(Można zaznaczyć więcej niż jedną odpowiedź)*

- niespokojna, stresująca atmosfera
- obawa przed zrobieniem błędu
- obawa przed ośmieszeniem się na forum grupy
- niewystarczająca znajomość słownictwa
- problemy z pamięcią
- inny powód: \_\_\_\_\_

**15. Jakie są Pana/Pani oczekiwania względem nauczyciela języka angielskiego?**

---

---

---

**16. Jakie cechy nauczyciela mogą, według Pana/Pani, zniechęcić do aktywnego używania języka angielskiego podczas zajęć? Dlaczego?**

---

---

---

**17. Czy zna Pan(i) jakiś inny język?**

- Nie
- Tak (jaki?) \_\_\_\_\_

Serdecznie dziękuję za wypełnienie ankiety



## Appendix 3: Questionnaire – Study 2

ENGLISH VERSION

### Part 1

#### **Task 1** – Brainstorm

**1. Indicate the level of your WTC in English during task 1:**

*0% - full unwillingness to communicate*

*100% - full willingness to communicate*

*Circle the answer*

0%      10%      20%      30%      40%      50%      60%      70%      80%      90%      100%

**Why?**

---

---

#### **Task 2** – Describing the pictures

**1. Indicate the level of your WTC in English during task 2:**

*0% - full unwillingness to communicate*

*100% - full willingness to communicate*

*Circle the answer*

0%      10%      20%      30%      40%      50%      60%      70%      80%      90%      100%

**Why?**

---

---

#### **Task 3** – Asking and answering the questions

**1. Indicate the level of your WTC in English during task 3:**

*0% - full unwillingness to communicate*

*100% - full willingness to communicate*

*Circle the answer*

0%      10%      20%      30%      40%      50%      60%      70%      80%      90%      100%

**Why?**

---

---

**Task 4**– Questions about the partner’s holidays

**1. Indicate the level of your WTC in English during task 4:**

0% - full unwillingness to communicate

100% - full willingness to communicate

Circle the answer

0%      10%      20%      30%      40%      50%      60%      70%      80%      90%      100%

**Why?**

---

---

Part 2

**Opinions about communication classes**

**1. Tasks designed in this class were useful.**

I strongly agree     I agree     I slightly agree     I slightly disagree     I disagree     I strongly disagree

**2. Tasks designed in this class were attractive.**

I strongly agree     I agree     I slightly agree     I slightly disagree     I disagree     I strongly disagree

**3. I know what I was trying to accomplish in this class.**

I strongly agree     I agree     I slightly agree     I slightly disagree     I disagree     I strongly disagree

**4. Activities in this class were clearly and carefully planned.**

I strongly agree     I agree     I slightly agree     I slightly disagree     I disagree     I strongly disagree

**5. Class assignments were clear so everyone knew what to do.**

I strongly agree     I agree     I slightly agree     I slightly disagree     I disagree     I strongly disagree

**6. Which task increased your WTC in English most?**

- Task 1
- Task 2
- Task 3
- Task 4

**Why do you think so?**

---

---

**7. Which task inhibited your WTC in English most?**

- Task 1
- Task 2
- Task 3
- Task 4

**Why do you think so?**

---

---

Part 3

**Biodata information**

1. **Gender:**
  - female
  - male
2. **Age:** ..... years old
3. **Place of residence**
  - village
  - town up to 50 000 residents
  - town/city with more than 50 000 residents
4. **Education:**
  - tertiary
  - secondary
  - primary
5. **Occupation before retirement:** .....
6. **How long have you been learning English throughout your life?** ..... years
7. **How long have you been learning English in the Third Age University?** ..... years
8. **Do you any other foreign language? YES NO**  
*If YES, which?* .....

Thank you very much for completing the survey ☺

*POLISH VERSION*

**Ćwiczenie 1**– Burza mózgów

1. **Zaznacz poziom chęci do komunikowania się podczas wykonywania ćwiczenia 1:**

*0% - całkowita niechęć do komunikowania się*

*100% - całkowita chęć do komunikowania się*

*zaznacz w kółeczko*

0%      10%      20%      30%      40%      50%      60%      70%      80%      90%      100%

**Dlaczego?**

---

---

### Ćwiczenie 2 – Opisywanie obrazków

**1. Zaznacz poziom chęci do komunikowania się podczas wykonywania ćwiczenia 2:**

*0% - całkowita niechęć do komunikowania się*

*100% - całkowita chęć do komunikowania się*

*Zaznacz w kółeczko*

0%      10%      20%      30%      40%      50%      60%      70%      80%      90%      100%

**Dlaczego?**

---

---

### Ćwiczenie 3 – Zadawanie i odpowiadanie na pytania

**1. Zaznacz poziom chęci do komunikowania się podczas wykonywania ćwiczenia 3:**

*0% - całkowita niechęć do komunikowania się*

*100% - całkowita chęć do komunikowania się*

*Zaznacz w kółeczko*

0%      10%      20%      30%      40%      50%      60%      70%      80%      90%      100%

**Dlaczego?**

---

---

### Ćwiczenie 4 – Pytania na temat wakacji partnera

**1. Zaznacz poziom chęci do komunikowania się podczas wykonywania ćwiczenia 4:**

*0% - całkowita niechęć do komunikowania się*

*100% - całkowita chęć do komunikowania się*

*Zaznacz w kółeczko*

0%      10%      20%      30%      40%      50%      60%      70%      80%      90%      100%

**Dlaczego?**

---

---

### Opinie na temat zajęć komunikacyjnych

**1. Ćwiczenia przygotowane przez nauczyciela były użyteczne i praktyczne.**

całkowicie się zgadzam       zgadzam się       raczej się zgadzam       raczej się nie zgadzam       nie zgadzam się       całkowicie się nie zgadzam

**2. Ćwiczenia były atrakcyjne.**

całkowicie się zgadzam       zgadzam się       raczej się zgadzam       raczej się nie zgadzam       nie zgadzam się       całkowicie się nie zgadzam

**3. Wiem jaki miałem/am cel uczestnicząc w tym zajęciach.**

całkowicie się zgadzam       zgadzam się       raczej się zgadzam       raczej się nie zgadzam       nie zgadzam się       całkowicie się nie zgadzam

**4. Zadania były jasno i dobrze zaplanowane.**

całkowicie się zgadzam       zgadzam się       raczej się zgadzam       raczej się nie zgadzam       nie zgadzam się       całkowicie się nie zgadzam

**5. Polecenia do zadań były jasne i każdy członek grupy wiedział, co należy zrobić**

całkowicie się zgadzam       zgadzam się       raczej się zgadzam       raczej się nie zgadzam       nie zgadzam się       całkowicie się nie zgadzam

**6. Które ćwiczenie najbardziej zwiększyło Twoją chęć do komunikowania się?**

- ćwiczenie 1
- ćwiczenie 2
- ćwiczenie 3
- ćwiczenie 4

**Jak myślisz, dlaczego?**

---

---

**7. Które ćwiczenie najbardziej hamowało Twoją chęć do komunikowania się?**

- ćwiczenie 1
- ćwiczenie 2
- ćwiczenie 3
- ćwiczenie 4

**Dlaczego?**

---

---

Ogólne informacje

**1. Płeć:**

- kobieta
- mężczyzna

**2. Wiek:** ..... lat/a

**3. Miejsce zamieszkania:**

- wieś
- miasto do 50 000 mieszkańców
- miasto powyżej 50 000 mieszkańców

**4. Wykształcenie:**

- wyższe
- średnie
- podstawowe

**5. Zawód wykonywany przed przejściem na emeryturę:** .....

6. **Jak długo uczy się Pan/i języka angielskiego?** ..... lat/a
7. **Jak długo uczy się Pan/i języka angielskiego na UTW?** ..... lat/a
8. **Czy zna Pan/i jakiś inny język? TAK NIE**  
*Jeśli TAK jaki?* .....

Serdecznie dziękuję za wypełnienie ankiety



## Appendix 4: Questionnaire – Study 3

ENGLISH VERSION

### Part 1

Interview

1. **Indicate the level of your WTC in English during the interview:**

*0% - full unwillingness to communicate*

*100% - full willingness to communicate*

*Circle the answer*

0%      10%      20%      30%      40%      50%      60%      70%      80%      90%      100%

**Why?**

---



---



---

### Part 2

#### Opinions about the task

Proszę zaznaczyć w jakim stopniu zgadza się Pan/i z następującymi zdaniami:

(Proszę zaznaczyć znak **X** w odpowiednim polu)

		I strongly agree	I agree	I slightly agree	I slightly disagree	I disagree	I strongly agree
1.	I found asking questions more difficult than answering them.						
2.	I found answering questions easier than asking them.						
3.	Asking questions had a positive impact on my WTC in English during the task.						
4.	Answering questions had a positive effect on my in-class WTC in English.						
5.	I was willing to take part in this activity.						

### Part 3

#### Opinions about pair work during English classes

Proszę zaznaczyć w jakim stopniu zgadza się Pan/i z następującymi zdaniami:

(Proszę zaznaczyć znak **X** w odpowiednim polu)

		I strongly agree	I agree	I slightly agree	I slightly disagree	I disagree	I strongly disagree
1.	I am willing to participate in communicative tasks in dyads during English classes.						
2.	If a partner asks me questions in English, I am willing to answer them in English.						
3.	I am willing to perform communicative exercises with a person I know.						
4.	If I need help from my partner, I am willing to ask him/her in English.						
5.	The change of my partner to another person causes anxiety.						
6.	I am willing to ask questions in English if a partner says something unclear to me.						
7.	I am willing to ask questions in English if the task is simple.						
8.	If I have a different idea or opinion from my partner, I am willing to say it in English.						
9.	I am willing to express complex ideas in English.						
10.	Working in pairs has a beneficial effect on my in-class WTC in English.						

#### **Part 4**

#### **Biodata information**

1. **Gender:**
  - female
  - male
2. **Age:** ..... years old
3. **Place of residence**
  - village
  - town up to 50 000 residents
  - town/city with more than 50 000 residents
4. **Education:**

- tertiary
  - secondary
  - primary
5. **Occupation before retirement:** .....
6. **How long have you been learning English throughout your life?** ..... years
7. **How long have you been learning English in the Third Age University?** ..... years
8. **Do you any other foreign language? YES NO**  
*If YES, which?* .....
9. **Are you currently learning another foreign language? YES NO**  
*If YES, which?* .....

Thank you very much for completing the survey ☺

*POLISH VERSION*

**Ćwiczenie**– Wywiad

**Proszę zaznaczyć poziom chęci do komunikowania się podczas wykonywania ćwiczenia- wywiadu:**

*0% - całkowita niechęć do komunikowania się*

*100% - całkowita chęć do komunikowania się*

*zaznacz w kółeczko*

0%    10%    20%    30%    40%    50%    60%    70%    80%    90%    100%

**Dlaczego?**

---



---



---

**INFORMACJE DOTYCZĄCE TYLKO ĆWICZENIA WYWIADU**

Proszę zaznaczyć w jakim stopniu zgadza się Pan/i z następującymi zdaniami:

(Proszę zaznaczyć znak **X** w odpowiednim polu)

		całkowicie się zgadzam	zgadzam się	raczej się zgadzam	raczej się nie zgadzam	nie zgadzam się	całkowicie się nie zgadzam
1.	Zadawanie pytań partnerowi/partnerce sprawiło mi większą trudność niż odpowiadanie na nie.						
2.	Odpowiadanie na pytania było łatwiejsze						

	niż zadawanie ich.						
3.	Zadawanie pytań wpłynęło pozytywnie na moją chęć do komunikowania się w języku angielskim podczas zadania.						
4.	Odpowiadanie na pytania wpłynęło pozytywnie na moją chęć do komunikowania się w języku angielskim podczas zadania						
5.	Chętnie brałem/am udział w zadaniu.						

### INFORMACJE OGÓLNE DOTYCZĄCE PRACY W PARACH PODCZAS ZAJEĆ JĘZYKA ANGIELSKIEGO

Proszę zaznaczyć w jakim stopniu zgadza się Pan/i z następującymi zdaniami:

(Proszę zaznaczyć znak **X** w odpowiednim polu)

		całkowicie się zgadzam	zgadzam się	raczej się zgadzam	raczej się nie zgadzam	nie zgadzam się	całkowicie się nie zgadzam
1.	Chętnie wykonuję zadania komunikacyjne w parze podczas zajęć języka angielskiego.						
2.	Jeśli partner(ka) w parze zadaje mi pytania po angielsku, chętnie na nie odpowiadam.						
3.	Chętnie wykonuję zadania komunikacyjne w parze z osobą, którą znam.						
4.	Jeśli potrzebuję pomocy partnera/partnerki, chętnie o nią proszę.						
5.	Zmiana partnera/partnerki na inną osobą powoduje we mnie niepokój i zdenerwowanie.						
6.	W przypadku niezrozumienia wypowiedzi partnera(ki), chętnie zadaję dodatkowe pytania po angielsku.						
7.	Chętnie zadaję pytania po angielsku, jeśli zadanie jest łatwe.						
8.	Jeśli mam inny pomysł lub zdanie niż mój partner(ka) jestem gotowy(a), aby to powiedzieć po						

	angielsku.						
9.	Jestem chętny(a), żeby wyrazić skomplikowane / złożone myśli lub pomysły po angielsku.						
10.	Współpraca w parach wpływa korzystnie na moją chęć do komunikowania się w języku angielskim podczas zajęć.						

### Ogólne informacje

1. **Płeć:**

- kobieta  
 mężczyzna

2. **Wiek:** ..... lat/a

3. **Miejsce zamieszkania:**

- wieś  
 miasto do 50 000 mieszkańców  
 miasto powyżej 50 000 mieszkańców

4. **Wykształcenie:**

- wyższe  
 średnie  
 podstawowe

5. **Zawód wykonywany przed przejściem na emeryturę:** .....

6. **Jak długo uczysz się języka angielskiego w ciągu całego życia? (włącznie z UTW)?**  
..... lat/a

7. **Jak długo uczysz się języka angielskiego tylko na UTW?** ..... lat/a

8. **Czy znasz jakiś inny język obcy? TAK NIE**  
*Jeśli TAK to jaki?* .....

9. **Czy uczysz się obecnie innego języka obcego? TAK NIE**  
*Jeśli TAK to jaki?* .....

Serdecznie dziękuję za wypełnienie ankiety



## Appendix 5: Questionnaire – Study 4

ENGLISH VERSION

### **Part 1**

Presentation of a picture

**1. Indicate the level of your WTC in English during the presentation of a photo:**

*0% - full unwillingness to communicate*

*100% - full willingness to communicate*

*Circle the answer*

0%      10%      20%      30%      40%      50%      60%      70%      80%      90%      100%

**Why?**

---



---



---

The teacher's questions

**2. Indicate the level of your WTC in English during the interview:**

*0% - full unwillingness to communicate*

*100% - full willingness to communicate*

*Circle the answer*

0%      10%      20%      30%      40%      50%      60%      70%      80%      90%      100%

**Why?**

---



---



---

### **Part 2**

#### **Opinions about the task**

Please indicate to what extent you agree with the following statements  
Put **X** in the appropriate box.

		I strongly agree	I agree	I slightly agree	I slightly disagree	I disagree	I strongly disagree
1.	Preparing the description of a picture at home enhanced my in-class						

	WTC in English.						
2.	I chose a picture that evokes positive emotions.						
3.	I felt confident while presenting my picture.						
4.	I was willing to participate in this exercise.						
5.	I found performing this activity satisfying.						

### **Part 3**

#### **Opinions about English classes**

Please indicate to what extent you agree with the following statements  
Put **X** in the appropriate box.

		I strongly agree	I agree	I slightly agree	I slightly disagree	I disagree	I strongly disagree
1.	I am willing to answer teacher's questions in English in class.						
2.	I am willing to ask a question in English in class.						
3.	I am willing to present my opinions in English in class.						
4.	I am willing to help other classmates to answer a question.						
5.	I am willing to volunteer to answer when a teacher asks a question.						
6.	I am willing to speak English when I am sure that my answer is correct.						
7.	I am willing to speak English about a topic I am familiar with.						
8.	I am willing to speak English about a topic I am interested in.						
9.	I am willing to speak English about a topic I am prepared.						
10.	I am willing to speak English about a topic I am comfortable with.						

### **Part 4**

#### **Biodata information**

1. **Gender:**

- female
- male

2. **Age:** ..... years old
3. **Place of residence**
- village
  - town up to 50 000 residents
  - town/city with more than 50 000 residents
4. **Education:**
- tertiary
  - secondary
  - primary
5. **Occupation before retirement:** .....
6. **How long have you been learning English throughout your life?** ..... years
7. **How long have you been learning English in the Third Age University?** ..... years
8. **Do you any other foreign language? YES NO**
- If YES, which?* .....
9. **Are you currently learning another foreign language? YES NO**
- If YES, which?* .....

Thank you very much for completing the survey ☺

*POLISH VERSION*

**Część 1**

Opis obrazka

1. **Proszę zaznaczyć poziom chęci do komunikowania się podczas wykonywania ćwiczenia- opis obrazka/ zdjęcia:**

*0% - całkowita niechęć do komunikowania się*

*100% - całkowita chęć do komunikowania się*

*zaznacz w kółeczko liczbę procentową*

0%      10%      20%      30%      40%      50%      60%      70%      80%      90%      100%

**Dlaczego?**

---



---



---

2. **Proszę zaznaczyć poziom chęci do komunikowania się podczas pytań do obrazka/zdjęcia zadawanych przez nauczyciela:**

0% - całkowita niechęć do komunikowania się

100% - całkowita chęć do komunikowania się

zaznacz w kółeczko liczbę procentową

0%      10%      20%      30%      40%      50%      60%      70%      80%      90%      100%

**Dlaczego?**

---

---

---

### Cześć 2

#### INFORMACJE DOTYCZĄCE TYLKO PREZENTACJI OPISU OBRAZKA/ZDJĘCIA

Proszę zaznaczyć w jakim stopniu zgadza się Pan/i z następującymi zdaniami:

(Proszę zaznaczyć znak **X** w odpowiednim polu)

		całkowicie się zgadzam	zgadzam się	raczej się zgadzam	raczej się nie zgadzam	nie zgadzam się	całkowicie się nie zgadzam
1.	Opracowanie opisu obrazka/ zdjęcia w domu zwiększyło moją chęć do jego prezentacji w języku angielskim podczas zajęć.						
2.	Wybrałem/am obrazek/ zdjęcie, który wywołuje u mnie pozytywne odczucia.						
3.	Opisując obrazek/zdjęcia, czułem/am się pewny/a siebie.						
4.	Chętnie brałem/am udział w zadaniu-opis obrazka/zdjęcia.						
5.	Jestem zadowolony/a w wykonaniu zadania-opis obrazka/zdjęcia.						

### Cześć 3

#### INFORMACJE OGÓLNE DOTYCZĄCE ZAJĘĆ JEZYKA ANGIELSKIEGO

Proszę zaznaczyć w jakim stopniu zgadza się Pan/i z następującymi zdaniami:

(Proszę zaznaczyć znak **X** w odpowiednim polu)

		całkowicie się	zgadzam się	raczej się zgadzam	raczej się nie zgadzam	nie zgadzam	całkowicie się nie
--	--	----------------	-------------	--------------------	------------------------	-------------	--------------------

		zgadzam				się	zgadzam
1.	Chętnie odpowiadam po angielsku na pytania nauczyciela podczas zajęć.						
2.	Chętnie zadaję pytania po angielsku podczas zajęć.						
3.	Chętnie wyrażam swoją opinię po angielsku podczas zajęć.						
4.	Chętnie pomagam członkom grupy w zadaniu pytania.						
5.	Kiedy nauczyciel zadaje pytanie po angielsku, chętnie zgłaszam się do odpowiedzi.						
6.	Chętnie mówię po angielsku, jeśli wiem, że moja odpowiedź jest poprawna.						
7.	Chętnie rozmawiam po angielsku na znany mi temat.						
8.	Chętnie rozmawiam po angielsku na temat, który mnie interesuje.						
9.	Chętnie rozmawiam po angielsku na przygotowany przeze mnie wcześniej temat.						
10.	Chętnie rozmawiam po angielsku na temat, który jest dla mnie przyjemny.						

Ogólne informacje

1. **Płeć:**

- kobieta  
 mężczyzna

2. **Wiek:** ..... lat/a

3. **Miejsce zamieszkania:**

- wieś  
 miasto do 50 000 mieszkańców  
 miasto powyżej 50 000 mieszkańców

4. **Wykształcenie:**

- wyższe
- średnie
- podstawowe

5. **Zawód wykonywany przed przejściem na emeryturę: .....**

6. **Jak długo uczysz się języka angielskiego w ciągu całego życia? (włącznie z UTW)?**  
..... lat/a

7. **Jak długo uczysz się języka angielskiego tylko na UTW? .....** lat/a

8. **Czy znasz jakiś inny język obcy? TAK NIE**

*Jeśli TAK to jaki? .....*

9. **Czy uczysz się obecnie innego języka obcego? TAK NIE**

*Jeśli TAK to jaki? .....*

Serdecznie dziękuję za wypełnienie ankiety ☺

## Appendix 6: Questionnaire – Study 5

### ENGLISH VERSION

#### Questionnaire for senior learners

*Dear Sir or Madam,*

*Thank you for your consent to take part in the study. The questionnaire is completely anonymous. The data will be analysed only for scientific purposes.*

**1. Gender:**

- female
- male

**2. Age:**

- 50 – 55 years old
- 56 – 60 years old
- 61 – 65 years old
- 66 – 70 years old
- 71 – 75 years old
- 75 years old and older

**3. Place of residence:**

- village
- town up 50 000 residents
- town/city with more 50 000 residents

**4. Education:**

- tertiary
- secondary
- primary

**5. How long have you been learning English throughout your life?  
(including English courses for seniors at the Third Age University)**

- less than 1 year
- 1 – 3 years
- 3 – 5 years
- 5 – 7 years
- 7 – 10 years
- 10 – 15 years
- more than 15 years

**6. How long have you been learning English only at the Third Age University?**

- less than 1 year
- 1 – 3 years

- 3 – 5 years
- 5 – 10 years
- more than 10 years

**7. Do you know any other foreign language?**

- No
- Yes (which one/ones?) \_\_\_\_\_

Please indicate to what extent you agree with the following statements  
Put **X** in the appropriate box.

**Opinions concerning FL communication during English classes**

		I strongly agree	I agree	I slightly agree	I slightly disagree	I disagree	I strongly disagree
1.	I am willing to do a role-play in front of the class in English (e.g., ordering food in a restaurant).						
2.	I am willing to give a short self-introduction without note in English to the class.						
3.	I am willing to give a short speech in English to the class about my family without notes						
4.	I am willing to translate a question from English into Polish out loud before answering it in English.						
5.	I am willing to ask the teacher in English to repeat what he/she just said in English because I didn't understand.						
6.	I am willing to do a role-play at my desk with my peer (e.g., ordering food in a restaurant).						
7.	I am willing to ask peer sitting next to me in English the meaning of an English word.						
8.	I am willing to ask my group mates in English the meaning of word I do not know.						
9.	I am willing to ask my group mates in English how to pronounce a word in English.						
10.	I am willing to ask my peer sitting next to me in English how to say an English phrase to express the thoughts in my mind.						

**Why are you leaning English in late adulthood?**

		I strongly agree	I agree	I slightly agree	I slightly disagree	I disagree	I strongly disagree
11.	Because I enjoy the feeling of acquiring knowledge about the English community and their way of life.						
12.	Because it has a positive influence on my brain and memory.						
13.	For the satisfied feeling I get in finding new things.						
14.	For the pleasure I experience when I can use English abroad.						
15.	For the satisfaction I feel when I communicate in English during classes.						
16.	For the pleasure I get from hearing English spoken by foreigners.						
17.	For the high I experience when I can use newly learnt vocabulary.						
18.	For the enjoyment I experience when I grasp a difficult construct in English.						
19.	For the satisfaction I feel when I am in the process of accomplishing difficult exercises in English.						

**English classes**

		I strongly agree	I agree	I slightly agree	I slightly disagree	I disagree	I strongly disagree
20.	I don't get bored.						
21.	I enjoy it.						
22.	Learning English is my hobby.						
23.	I learn to express better in English.						
24.	I've learnt and I'm learning interesting things.						
25.	In class, I feel proud of my accomplishments.						
26.	Making errors is part of the learning process.						
27.	The peers are nice.						
28.	We form a tight group.						
29.	We like running jokes during classes.						
30.	We laugh a lot.						

### Groupmates and the teacher

		I strongly agree	I agree	I slightly agree	I slightly disagree	I disagree	I strongly disagree
31.	I work well with other class mates.						
32.	I am friendly to members of this class.						
33.	I make friends among students in this class.						
34.	I help other class members who are having trouble with their work.						
35.	The teacher is committed to teaching.						
36.	The teacher is well-prepared in teaching.						
37.	The teacher is passionate about teaching.						
38.	The teaching answers questions earnestly.						
39.	The teacher is patient in teaching.						
40.	The teacher understands students.						
41.	The teacher treats students fairly and equally.						
42.	The teacher respects students.						
43.	The teacher does not hurt students' self-respect.						
44.	The teacher encourages students.						
45.	The teacher provides timely response to students' concerns.						
46.	The teacher praises students.						

Thank you very much for completing the survey ☺

### *POLISH VERSION*

#### Ankieta dla studentów UTW

*Szanowni Państwo,  
bardzo dziękuję za zgodę na wypełnienie poniższej ankiety. Ankieta jest całkowicie anonimowa.  
Zebrane dane zostaną wykorzystane wyłącznie do celów naukowych.*

**1. Płeć:**

- kobieta
- mężczyzna

**2. Wiek:**

- 50 – 55 lat
- 56 – 60 lat
- 61 – 65 lat

- 66 – 70 lat
- 71 – 75 lat
- powyżej 75 lat

**3. Miejsce zamieszkania:**

- wieś
- miasto do 50 000 mieszkańców
- miasto powyżej 50 000 mieszkańców

**4. Wykształcenie:**

- wyższe
- średnie
- podstawowe

**5. Jak długo uczy się Pan(i) języka angielskiego w ciągu całego życia?  
(włącznie z zajęciami języka angielskiego na UTW)**

- krócej niż 1 rok
- od 1 – 3 lat
- od 3 – 5 lat
- od 5 – 7 lat
- od 7 – 10 lat
- od 10 – 15 lat
- dłużej niż 15 lat

**6. Jak długo uczy się Pan/Pani języka angielskiego tylko na UTW?**

- krócej niż 1 rok
- od 1 – 3 lat
- od 3 – 5 lat
- od 5 – 10 lat
- dłużej niż 10 lat

**7. Czy zna Pan(i) jakiś inny język?**

- Nie
- Tak (jaki?) \_\_\_\_\_

Proszę zaznaczyć w jakim stopniu zgadza się Pan/i z następującymi zdaniami.  
Proszę zaznaczyć znak **X** w odpowiednim polu.

**OPINIE DOTYCZĄCE KOMUNIKACJI W JĘZYKU ANGIELSKIM PODCZAS ZAJĘĆ**

		całkowicie się zgadzam	zgadzam się	raczej się zgadzam	raczej się nie zgadzam	nie zgadzam się	całkowicie się nie zgadzam
1.	Chętnie odgrywam scenkę w języku angielskim przed całą grupą (np. zamawianie jedzenia w restauracji).						
2.	Chętnie opowiadam o sobie w języku angielskim na forum grupy nie korzystając z notatek.						
3.	Chętnie opowiadam grupie po angielsku o swojej rodzinie bez korzystania z notatek.						
4.	Przed odpowiedzią na pytanie, zazwyczaj głośno tłumaczę je z języka angielskiego na polski.						
5.	Kiedy nie rozumiem, co powiedział nauczyciel(ka), proszę go/ją po angielsku o wyjaśnienie.						
6.	Chętnie odgrywam role w języku angielskim w parze (np. zamawianie jedzenia w restauracji).						
7.	Kiedy nie rozumiem słówka, pytam po angielsku osobę siedzącą obok mnie o znaczenie.						
8.	Kiedy nie rozumiem słówka, pytam po angielsku członków grupy o znaczenie.						
9.	Kiedy nie wiem, jak wymówić słówko, pytam po angielsku o wymowę członków grupy.						
10.	Jestem chętny/a, aby zapytać po angielsku osobę siedzącą obok mnie jak wyrazić swoje myśli po angielsku.						

**DLACZEGO UCZY SIĘ PAN/PANI JĘZYKA ANGIELSKIEGO W WIEKU SENIORALNYM?**

		całkowicie się zgadzam	zgadzam się	raczej się zgadzam	raczej się nie zgadzam	nie zgadzam się	całkowicie się nie zgadzam
11.	ponieważ lubię mieć poczucie zdobywania wiedzy dotyczącej stylu życia osób z anglojęzycznego społeczeństwa.						

12.	ponieważ nauka języka angielskiego wpływa korzystnie na funkcjonowanie mózgu i pamięci.						
13.	dla satysfakcji, którą odczuwam dowiadując się nowych rzeczy.						
14.	dla przyjemności, którą czerpię komunikując się w języku angielskim za granicą.						
15.	dla satysfakcji jaką czuję, kiedy komunikuję się w języku angielskim podczas zajęć.						
16.	dla przyjemności jaką odczuwam, kiedy słyszę obcokrajowców używających języka angielskiego.						
17.	dla radości jaką odczuwam, kiedy mogę użyć w komunikacji nowo nauczonego słownictwa.						
18.	dla przyjemności jaką doświadczam, kiedy zrozumie trudną konstrukcję zdania w języku angielskim.						
19.	dla satysfakcji jaką czerpię, kiedy wykonuję trudne zadania w języku angielskim.						

### ZAJĘCIA JĘZYKA ANGIELSKIEGO

		całkowicie się zgadzam	zgadzam się	raczej się zgadzam	raczej się nie zgadzam	nie zgadzam się	całkowicie się nie zgadzam
20.	Nie nudzę się na zajęciach języka angielskiego						
21.	Lubię zajęcia języka angielskiego.						
22.	Nauka języka angielskiego to moje hobby.						
23.	Uczę porozumiewać się w języku angielskim podczas zajęć.						
24.	Nauczyłem/am i uczę się interesujących rzeczy podczas zajęć						
25.	Jestem dumny/a ze swoich osiągnięć i postępów językowych podczas zajęć.						
26.	Błędy są nieuniknione podczas procesu uczenia się języka.						
27.	Moje koleżanki i koledzy z grupy są mili i uprzejmi.						
28.	Tworzymy zgraną grupę.						

29.	Lubimy żartować podczas zajęć.						
30.	Śmiech bardzo często towarzyszy nam podczas zajęć.						

#### CZŁONKOWIE GRUPY I NAUCZYCIEL

		całkowicie się zgadzam	zgadzam się	raczej się zgadzam	raczej się nie zgadzam	nie zgadzam się	całkowicie się nie zgadzam
31.	Moja współpraca z innymi członkami grupy przebiega pomyślnie.						
32.	Jestem przyjaźnie nastawiony/a do innych członków grupy.						
33.	Przyjaźnię się z członkami grupy.						
34.	Pomagam partnerowi, kiedy ma trudności podczas wykonywania zadań.						
35.	Nauczyciel poświęca się w pełni nauczaniu.						
36.	Nauczyciel jest dobrze przygotowany do nauczania.						
37.	Nauczyciel jest pasjonatą swojego zawodu.						
38.	Nauczyciel rzetelnie odpowiada na pytania.						
39.	Nauczyciel wykazuje się cierpliwością podczas nauczania.						
40.	Nauczyciel rozumie swoich studentów.						
41.	Nauczyciel traktuje swoich studentów sprawiedliwie.						
42.	Nauczyciel szanuje swoich studentów.						
43.	Nauczyciel nie wpływa negatywnie na poczucie własnej wartości studentów.						
44.	Nauczyciel zachęca i motywuje swoich studentów do nauki.						
45.	Nauczyciel natychmiast reaguje na trudności podczas wykonywania zadań.						
46.	Nauczyciel chwali swoich studentów.						
47.	Nauczyciel tworzy pozytywną i wspierającą atmosferę podczas zajęć.						
48.	Nauczyciel zadaje pytania, aby poznać opinie studentów.						

Serdecznie dziękuję za wypełnienie ankiety



## STRESZCZENIE

Ze względu na zmiany demograficzne oraz rosnącą długość życia, osoby starsze coraz częściej skupiają zainteresowanie naukowców z różnych dziedzin, również z zakresu glottodydaktyki (por. Formosa i Findsen, 2011). Seniorzy to bez wątpienia wyjątkowi uczniowie, dla których praktyczne cele oraz potrzeba komunikacji stanowią elementarne motywy zachęcające do nauki języka obcego (np. Derenowski, 2021).

Celem niniejszej dysertacji było zbadanie gotowości komunikacyjnej (MacIntyre i in., 1998) osób starszych, które uczestniczyły w grupowych zajęciach języka angielskiego. Ponadto ważnym elementem prezentowanego projektu badawczego była identyfikacja czynników wpływających na gotowość komunikacyjną podczas uczenia się języka angielskiego w późnej dorosłości.

Praca składa się z pięciu rozdziałów. Pierwsze trzy stanowią teoretyczne tło dotyczące charakterystyki osób starszych, uczenia się w wieku senioralnym, jak również prezentują fundamentalne badania empiryczne związane z koncepcją gotowości komunikacyjnej w kontekście nauki języka obcego. W dwóch kolejnych rozdziałach przedstawiono projekt badawczy z uwzględnieniem opisu zasadniczych komponentów, wyników analizy i wniosków.

Rozdział pierwszy zawiera przegląd literatury z zakresu psychologii starzenia się i starości, a także sposób rozmiękania pojęć takich, jak trzeci wiek, starość oraz starzenie się. Prezentuje on informacje na temat zmian zachodzących w starzejącym się organizmie zarówno na poziomie biologicznym, jak i neuropsychologicznym. Omówione zostały badania neuronaukowe z uwzględnieniem korzyści wynikających z uczenia się języka drugiego. Ich wyniki wyraźnie wskazują na przewagę w umiejętnościach poznawczych u osób dwujęzycznych.

Rozdział drugi zawiera informacje na temat idei procesu uczenia się w wieku senioralnym. Mowa tutaj przede wszystkim o takich koncepcjach, jak uczenie się przez całe życie (lifelong learning), andragogika oraz geragogika, która stanowiła podstawę do zaproponowanej przez Ramírez Gómez (2016a) krytycznej geragogiki języków obcych (critical foreign language geragogy). Omówiona została także glottogeragogika wprowadzona do naukowego dyskursu w Polsce przez Jaroszewską (2011). Dalsza część rozdziału dotyczy osób starszych w aspekcie uczenia się języka obcego i prezentuje wyniki badań

empirycznych, zarówno z perspektywy studenta, jak i nauczyciela pracującego z osobami dorosłymi w zaawansowanym wieku.

Rozdział trzeci przedstawia koncepcję gotowości komunikacyjnej w języku drugim (MacIntyre i in., 1998). Uwzględnia początkowe badania empiryczne oraz kulturowy aspekt tej koncepcji. Następnie zostały omówione instrumenty badawcze oraz ich dynamiczne modyfikacje, służące bardziej precyzyjnej ocenie poziomu gotowości komunikacyjnej w środowisku naturalnym, jak również w środowisku klasowym. W omawianej części dysertacji przedstawiono wyniki dyskusji nad związkiem gotowości komunikacyjnej z motywacją oraz zadowoleniem z uczenia się języka obcego (foreign language enjoyment).

Rozdział czwarty zawiera szczegółowy opis projektu badawczego, którego zasadniczym celem było przeanalizowanie gotowości komunikacyjnej starszych dorosłych podczas wykonywania różnych ćwiczeń językowych w klasie. Autorka stworzyła własne skale, ale także wykorzystwała istniejące narzędzia, które zostały dostosowane do potrzeb osób w wieku powyżej 55 lat.

Realizacja projektu pozwoliła na szczegółowe zapoznanie się z zachowaniami komunikacyjnymi studentów podczas zajęć z języka angielskiego. Obliczenia statystyczne natomiast ukazały istotne korelacje, które umożliwiają analizę czynników pozytywnie wpływających na gotowość komunikacyjną osób starszych w środowisku klasowym. Czynniki te to między innymi zadowolenie wynikające z uczenia się języka angielskiego, wsparcie nauczyciela oraz spójność grupy językowej.

Rozdział piąty zawiera podsumowanie wyników przeprowadzonych badań oraz opis realnych i potencjalnych zmiennych istotnych w kształtowaniu gotowości komunikacyjnej w języku angielskim. Ponadto autorka przedstawia ograniczenia projektu badawczego oraz wskazówki dydaktyczne do pracy ze studentem w trzecim wieku. Rozdział jest zakończony podsumowaniem oraz sugestiami dotyczącymi dalszych badań z zakresu glottogeragogiki.

## SUMMARY

Nowadays, due to demographic changes and increasing life expectancy, researchers in various fields, including applied linguistics, have started to pay growing attention to older adults (cf. Formosa & Findsen, 2011). With regard to foreign language learning, seniors are undoubtedly self-directed and autonomous students whose motivation is strictly of a practical nature (e.g., Derenowski, 2021).

The main purpose of this dissertation was to investigate third agers' willingness to communicate (WTC) (MacIntyre et al., 1998) in English in the classroom. Also, the research project sought to identify the factors that might influence the seniors' WTC in English during a task communicative class and individual task performance.

The thesis includes five chapters. The three first chapters provide the theoretical background concerning the characteristics of older adults, learning in late adulthood, as well as empirical research related to the concept of WTC in a foreign language. The next two chapters present the research project in detail taking into account its fundamental components (i.e., research aims and questions, participants, instruments, procedure), results, and conclusions.

Chapter One introduces the review of the literature regarding the psychology of ageing and old age, and it explains such concepts as third age, old age, and ageing. The biological and neuropsychological changes in the ageing body are also discussed. Importantly, the latest neuroscience studies indicate the benefits of second language learning, which basically means a bilingual advantage in cognitive skills.

Chapter Two presents notions that constitute the core of the process of learning at an advanced age, that is the concept of lifelong learning, andragogy, and geragogy that have become the basis for critical foreign language geragogy (Ramírez Gómez, 2016a). Also, glottogeragogy, which was introduced to the scientific discourse in Poland by Jaroszewska (2011) was discussed. The later part of the chapter focuses on older adults as foreign language learners presenting the findings of numerous empirical studies, both from the students' and teachers' perspectives.

Chapter Three elucidates WTC in the second language (MacIntyre et al., 1998), and it presents early studies on WTC highlighting the importance of its cultural perspective. Likewise, research instruments and their dynamic modifications are discussed. Significantly,

the relationship between WTC and motivation, as well as WTC and foreign language enjoyment are thoroughly presented.

Chapter Four is a description of the research project. Its primary aim was to explore in-class WTC in English among senior learners during a communicative class. The present author used her own scales, but existing tools were also modified and utilised.

The project was based on a mixed-methods approach (two quantitative and three qualitative studies) which provided a comprehensive insight into the older adults' communicative behaviours during English classes. Additionally, the statistical calculations revealed significant correlations among WTC and the factors that positively impacted WTC in class.

Chapter Five is the recapitulation of the results of all five studies. It presents the most fundamental variables that had the potential to influence the seniors' WTC. The present author also concentrates on the limitations of the research project. Furthermore, the pedagogical implications related to promoting WTC among third agers are discussed. This chapter also includes concluding remarks and directions for future research in glottogeragotics.