

ESCOLA DE HUMANIDADES  
PROGRAMA DE PÓS-GRADUAÇÃO EM LETRAS  
MESTRADO EM LETRAS

LIVIA SCHLEDER DE BORBA

**O ADULTO IDOSO APRENDIZ DE LÍNGUA ADICIONAL: PERFIL COGNITIVO E SÓCIO-AFETIVO**

Porto Alegre/RS  
2021

PÓS-GRADUAÇÃO - *STRICTO SENSU*



Pontifícia Universidade Católica  
do Rio Grande do Sul

PONTIFÍCIA UNIVERSIDADE CATÓLICA DO RIO GRANDE DO  
SUL  
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Dissertação de Mestrado apresentada como requisito parcial para obtenção do título de Mestre em Letras pelo Programa de Pós-graduação em Letras da Escola de Humanidades da Pontifícia Universidade Católica do Rio Grande do Sul.

Área de Concentração: Linguística

Orientadora: Prof. Dra. Lilian Cristine Hübner

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Aprovada em: \_\_\_\_\_ de \_\_\_\_\_ de \_\_\_\_\_.  
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Porto Alegre/RS

2021

*Dedico este trabalho à minha mãe,  
apoiadora incondicional de todos os  
meus esforços.*

*Às alunas e aos alunos idosos que  
passaram pelo meu caminho e me  
mostraram que a vontade de aprender  
não tem idade e que o ensino de línguas  
deve ser inclusivo e acolhedor.*

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## RESUMO

Estudos na área de bilinguismo já encontraram evidências de que o domínio de mais de uma língua pode trazer benefícios cognitivos ao longo da vida, mas poucos estudos tem se atido aos efeitos cognitivos e sócio-afetivos do aprendizado de língua(s) adicional(is) em uma idade mais avançada. Levando em conta que as diferenças individuais entre aprendizes de língua adicional se acentuam com o passar dos anos, o presente estudo buscou traçar um perfil cognitivo e sócio-afetivo do aprendiz adulto idoso de línguas adicionais com a utilização de um questionário de perfil de aprendiz criado a partir de evidências da literatura. Para isso, dois estudos foram analisados: o Estudo 1, que apresenta uma revisão sistemática de trabalhos que associaram aspectos cognitivos e sócio-afetivos do adulto idoso ao aprendizado de língua adicional, e o Estudo 2, no qual 18 participantes aprendizes idosos de línguas adicionais responderam a três instrumentos: um instrumento de classificação socioeconômica, um questionário de perfil linguístico e um questionário de perfil de aprendiz de língua adicional. Os resultados da análise mostram que no Estudo 1 ainda não há consenso na literatura acerca dos benefícios cognitivos do aprendizado de língua adicional iniciado na terceira idade. Reconhece-se, no entanto, que o adulto idoso pode se beneficiar do processo de aprendizado de língua adicional na dimensão sócio-afetiva. Em conjunto com esses dados, o perfil do aprendiz adulto idoso encontrado no Estudo 2 tem alto status socioeconômico e escolaridade, tem o inglês como língua adicional de preferência e tem dificuldades no desenvolvimento de estratégias de estudo que melhorem a sua memorização de vocabulário. Além disso, ele associa ao processo de envelhecimento a maior parte das dificuldades que encontra como aprendiz. Desse modo, o estudo do perfil do adulto idoso aprendiz de línguas adicionais traz um aporte teórico e metodológico para a geragogia, fundamentando escolhas de ensino, de aprendizado, assim como contribui para a elaboração de material didático voltado para essa população.

**Palavras-chave:** Aprendizagem. Língua Adicional. Envelhecimento. Cognição. Sócio-afetivo.

## **ABSTRACT**

Studies in the field of bilingualism have found evidence that the mastery of more than one language can result in cognitive benefits throughout life, but few studies have addressed the cognitive and socio-affective effects of additional language learning in old age. Taking into account that individual differences among additional language learners increase over the years, the present study sought to trace a cognitive and socio-affective profile of the older adult learner of additional languages using a learner profile questionnaire created from evidence in the literature. To achieve this goal, this work analyzes two studies: Study 1, which is a systematic review aimed at bringing together works that associated cognitive and socio-affective aspects of the older adult with additional language learning, and Study 2, in which 18 additional language older learners responded to three instruments: a socioeconomic classification instrument, a linguistic profile questionnaire and an additional language learner profile questionnaire. The results of this analysis show that in Study 1 there is still no consensus in the literature about the cognitive benefits of additional language learning initiated in old age. It is recognized, however, that the older adult can benefit from the additional language learning process in the socio-affective dimension. Corroborating to this data, the profile of the older learner found in Study 2 showed that older students have high socioeconomic status and education, have English as an additional language of preference and have difficulties in developing study strategies that improve their vocabulary learning. In addition, they associate most of the difficulties they encounter as learners with the aging process. As such, the profile of older adults learning additional languages presented here brings theoretical and methodological contributions to geragogy, offers foundation for teaching and learning choices, and contributes to the creation of teaching material aimed at this population.

**Keywords:** Learning. Additional language. Aging. Cognition. Socio-affective.

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## LISTA DE SIGLAS

### Em Português:

GE = Geragogia Crítica  
GEC = Gerontologia Educacional Crítica  
HPC = Hipótese do Período Crítico  
LA = Língua Adicional  
MT = Memória de Trabalho

### Em Inglês:

AL – Additional Language  
EFL = English as a Foreign Language  
ESL = English as a Second Language  
FL = Foreign Language  
MoCa = Montreal Cognitive Assessment  
PT-BR = Brazilian Portuguese  
UCLA = University of California Loneliness Assessment

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## 1 INTRODUÇÃO

A população que mais cresce é a de pessoas com mais de 65 anos. Dados de 2019 da Divisão de População do Departamento de Assuntos Sociais e Econômicos da ONU mostram que, até 2050, uma em cada seis pessoas terá mais de 65 anos, ou seja, 16% da população. Além disso, segundo os números da ONU, em 2018, pela primeira vez na história, o número de pessoas com mais de 65 anos superou o número de crianças com mais de cinco anos. Desses dados globais, ressalta-se que há uma projeção de que a população com 65 ou mais dobre na América Latina. Dados locais apresentados pelo Instituto Brasileiro de Geografia e Estatística (IBGE) (2018) mostraram que em 2060 o percentual da população com 65 anos ou mais de idade chegará a 25,5% (58,2 milhões de adultos idosos), enquanto em 2018 essa proporção era de 9,2% (19,2 milhões). Dessa forma, fazem-se necessárias medidas em todos os campos do conhecimento que tenham como objetivo atender a essa população.

Esses números são impactantes em diferentes esferas sociais. Enquanto cabe a governantes a criação de políticas públicas de atendimento à população idosa, cabe também aos educadores compreenderem as peculiaridades do público idoso. Isso porque, com o crescimento no número de idosos, mais presentes eles se farão em ambientes antes dominados por pessoas mais jovens, inclusive na sala de aula. Cabe aqui, entretanto, uma caracterização de quem é o idoso neste trabalho. No Brasil, segundo o Estatuto do Idoso, publicado em 2003, idoso é aquele com idade igual ou superior a sessenta anos. Como afirma Moen (2011, p. 15), “idade é um indicador de tempo biológico associado a mudanças fisiológicas e cognitivas que ocorrem ao longo da vida e que limitam o comportamento social”. Logo, a idade serve como um parâmetro estático para delimitação do início da fase idosa da vida. Aqui, concorda-se com Oxford (2018) e Andrew (2012), para quem o conceito de terceira idade, e, portanto, a idade cronológica a ele associado, é uma construção social atrelada a fatores socioeconômicos, culturais, religiosos, educacionais e até de gênero. Um grupo de pessoas da mesma idade pode ser muito heterogêneo a depender do seu contexto geográfico e social.

Assim, considera-se que os idosos da chamada terceira idade são aqueles que, em geral, estão aposentados das suas funções laborais e que,

dispondo de tempo livre, encontram motivação, energia e propósito em se dedicarem a outras atividades (OXFORD, 2018). Carr e Komp (2011) definem a terceira idade como um período de “aposentadoria saudável” (*Ibidem*, p. 04). Pensa-se aqui no idoso que tem acesso à medicina e a recursos que permitem a ele alcançar a longevidade com qualidade de vida. Além disso, o adulto idoso do qual se trata aqui é aquele que está passando por um processo típico de envelhecimento, que é o que caracteriza o período antes do surgimento de patologias (que podem não emergir) e quando se observam alterações modestas nas habilidades cognitivas do indivíduo (SCHAIE, 2016).

Cientes da importância de manterem-se intelectualmente ativos, muitas vezes os idosos buscam na sala de aula de língua adicional (doravante LA) uma oportunidade para atingirem esse objetivo. Além disso, muitos buscam em um ambiente de ensino uma oportunidade de manutenção ou criação de laços sociais, já que a aposentadoria muitas vezes significa um abrupto corte em contatos sociais. Estudos já revelaram que o aprendizado de uma LA ao longo da vida e o processo de aprendizagem já em idade avançada podem trazer benefícios tanto no que diz respeito à cognição quanto ao bem-estar social desses adultos (ANTONIOU; WRIGHT, 2017; GABRYS-BARKER, 2018). Entretanto, como afirmam Pfenninger e Polz (2018) e Kliesch et al. (2018), estudos sobre o processo de ensino-aprendizagem de LA por adultos idosos ainda são incipientes. Pouco se sabe como esses adultos idosos aprendem e, mais especificamente, como eles aprendem uma LA.

Prefere-se aqui utilizar os termos língua adicional em referência a todas as línguas que um indivíduo aprende depois da sua primeira língua, em conformidade com Judd, Tan e Walberg (2004). Isso porque o uso do termo “segunda língua” parece criar uma hierarquia entre as línguas, enquanto o termo “língua estrangeira” parece criar uma barreira entre aquilo que é parte da identidade do falante e o que é a ele externo ou estrangeiro. Ao utilizar os termos língua adicional, “quebra-se (...) também o mito do falante nativo, em oposição ao ‘falante estrangeiro’, como sendo o único falante legítimo da língua” (SANTOS, 2017, p. 56).

Levando em conta que o aprendiz idoso de LA é peculiar, faz-se um levantamento de quais aspectos cognitivos e sócio-afetivos podem impactar o seu processo de aprendizagem de LA. Por exemplo, estudos mostram que

existem declínios cognitivos associados ao envelhecimento, como problemas de memória, déficits nas funções cognitivas e diminuição na velocidade de processamento (REUTER-LORENZ; PARK, 2014). Em contrapartida, a literatura neurocognitiva indica não apenas que o cérebro mantém a sua capacidade para novos aprendizados ao longo da vida (SINGLETON; PFENNINGER, 2018), como a mantém na terceira idade. Além disso, estudos mostram que é possível a intervenção tardia, o que inclui o aprendizado de LA já na terceira idade, para criar reserva cognitiva e aprimorar o *scaffolding* cerebral (PARK; REUTER-LORENZ, 2014; STERN, 2009). Já na esfera sócio-afetiva, observou-se que adultos idosos sofrem com falta de autoconfiança e tendem ao isolamento social (GABRYS-BARKER, 2018), também foi notado que a presença de estereótipos associados ao envelhecimento pode prejudicar o desempenho físico e cognitivo de indivíduos idosos (LEVY, 2003, 2009), esse último com possibilidade de impactar a aprendizagem de línguas.

Dessa forma, parece ser relevante considerar como as características cognitivas e sócio-afetivas do adulto idoso podem afetar o seu processo de aprendizado de LA e, por outro lado, como o aprendizado de LA pode ser benéfico para o aprendiz idoso. O aprendizado de uma LA vem sendo apontado tanto como um meio de contribuir para o envelhecimento saudável, para a promoção de plasticidade neural e para o incentivo tanto de interações sociais, quanto como uma contribuição para a mobilidade e com a autonomia desse grupo (PFENNINGER; SOLZ, 2018). Entretanto, é importante salientar que esses benefícios dependem grandemente da adaptação da sala de aula de LA a esse novo tipo de aprendiz. Ramírez Gómez (2016a) considera que há quatro dimensões a serem consideradas quando se pensa no processo de ensino-aprendizagem de adultos idosos: a dimensão cognitiva, a dimensão física, a dimensão psicológica e a dimensão da experiência, a última sendo relacionada ao papel da experiência que o aprendiz tem em ambientes de educação formal. Nesse trabalho, focamos na dimensão cognitiva e na dimensão psicológica, que chamamos de sócio-afetiva.

O objetivo central desse trabalho é traçar um perfil de aprendiz do adulto idoso aprendiz de LA. Para tanto, é feito um levantamento dos aspectos cognitivos e sócio-afetivos que caracterizam o envelhecimento típico. Em seguida, com a finalidade de entender o estado da arte na área de ensino-

aprendizagem de LA para adultos idosos, é feita uma revisão sistemática dos estudos que relacionam aspectos cognitivos e sócio-afetivos de envelhecimento ao aprendizado de LA. A partir desses levantamentos, criou-se um questionário de perfil de aprendiz, que foi aplicado em uma amostra de 18 aprendizes idosos de LA.

Essa dissertação está organizada em torno da análise dois estudos destinados ao aprofundamento dos conhecimentos acerca do tema. O Capítulo 1, contextualiza o trabalho e apresenta a sua organização. O Capítulo 2 apresenta a fundamentação teórica geral, a qual embasará a dissertação como um todo, tratando dos aspectos cognitivos e dos aspectos sócio-afetivos relativos ao envelhecimento típico. Aqui faz-se um resgate teórico relativo a esses aspectos, dando ênfase a como eles se relacionam ao aprendizado de LA. Em seguida, no mesmo capítulo, são apresentadas questões pertinentes ao ensino de língua adicional para adultos idosos. A seguir, no Capítulo 3, apresenta-se o Estudo 1, redigido em forma de artigo. O Estudo 1, intitulado “Cognitive and Socio-Affective Aspects of Additional Language Learning by Older Adults: A Systematic Review”, apresenta uma revisão sistemática dos estudos que associaram elementos cognitivos e sócio-afetivos do envelhecimento ao aprendizado de LA por adultos idosos. Em seguida, o Capítulo 4 apresenta o Estudo 2, intitulado “Who is the older learner of additional languages? A Learner Profile” e nele constam os resultados da aplicação de um questionário de perfil de aprendiz. O questionário foi criado a partir do levantamento teórico acerca dos aspectos cognitivos e sócio-afetivos do envelhecimento típico e foi respondido por 18 aprendizes adultos idosos de LA. Por fim, no Capítulo 5, serão feitas considerações finais acerca dos dois estudos a fim de discutir os seus resultados e sugerir caminhos futuros para as pesquisas no tema do ensino de língua adicional para adultos idosos.

## **2 FUNDAMENTAÇÃO TEÓRICA**

Essa seção conta com três subseções. A primeira dedica-se a apresentar um apanhado teórico acerca da literatura sobre envelhecimento cognitivo típico, ou seja, aquele considerado saudável, com foco nos aspectos que se relacionam ao ensino de LA. Segundo Drag e Bieliauskas (2010), há um consenso de que o envelhecimento saudável é acompanhado por alterações nas habilidades cognitivas. A segunda seção explora quais são os aspectos sócio-afetivos que caracterizam o envelhecimento saudável e como eles podem ter um papel relevante na sala de aula de LA. Por sócio-afetivo entende-se o entrecruzamento entre questões sociais, como o impacto de estereótipos culturais sobre o envelhecimento (OXFORD, 2018), e afetivas, como questões referentes à autoestima e à autoconfiança do adulto idoso. Vale ressaltar que, como afirma Ramírez Gómez (2016a), indivíduos da mesma faixa etária tendem a se tornar mais diferentes com o passar do tempo, ou seja, as diferenças individuais se acentuam. Isso quer dizer que em um grupo de adultos idosos é possível encontrar indivíduos com experiências pessoais e educacionais, além de capacidades físicas e cognitivas muito diversas. Portanto, informações que traçam aspectos cognitivos e sócio-afetivos de indivíduos idosos não podem ser analisadas sem que isso seja reconhecido. Por fim, a terceira subseção busca refletir acerca do ensino de língua adicional com foco no público idoso, trazendo a questão da idade de aquisição de LA, das características do aprendiz adulto e pressupostos teóricos da geragogia crítica, área da gerontologia educacional, aplicada ao ensino de LA (FORMOSA, 2002; FORMOSA, 2011; FINDSEN; FORMOSA, 2011; RAMÍREZ GÓMEZ, 2016a).

### **2.1. ASPECTOS COGNITIVOS DO ENVELHECIMENTO TÍPICO**

Sabe-se que o desempenho cognitivo de indivíduos idosos é diferente daquele de jovens adultos. Estudos comportamentais já demonstraram declínios nas funções cognitivas relacionados à velocidade de processamento, atenção, percepção, memória de trabalho e recuperação livre ou associada, mas também a manutenção de processos cognitivos associados a vocabulário e memória

semântica (DENNIS; CABEZA, 2008). As mudanças cognitivas pelas quais passam o cérebro idoso são de natureza funcional e estrutural (DRAG; BIELIAUSKAS, 2010) e o processo típico de envelhecimento envolve, em uma perspectiva neurobiológica,

Atrofia do cérebro, especialmente em áreas frontais do cérebro e regiões que auxiliam a memória declarativa, perda de conexões sinápticas e a emergência de sintomas neuropatológicos associados à demência (ANTONIOU; WRIGHT, 2017, p. 01.).<sup>1</sup>

Talvez as mudanças cognitivas advindas do envelhecimento mais relevantes no que concerne o aprendizado de uma LA sejam àquelas relativas às funções executivas. Segundo Diamond (2006), as funções executivas incluem três habilidades fundamentais para o desempenho cognitivo: inibição, memória de trabalho e flexibilidade cognitiva. A inibição, também chamada de controle inibitório ou cognitivo, é a forma como indivíduos lidam com distrações ou informações conflitantes (FREEMAN et al., 2018). A memória de trabalho (MT) é, de uma maneira geral, segundo Baddeley (2009), a capacidade que um indivíduo tem de manter informações ativas durante a execução de tarefas complexas. O impacto de uma baixa capacidade de MT no aprendizado de LA se apresentaria na dificuldade na retenção e recuperação de informações recém aprendidas. Já uma melhor MT fortalece as conexões entre novos aprendizados e memórias já armazenadas na memória de longo prazo (RAMÍREZ GÓMEZ, 2016a). Por fim, a flexibilidade cognitiva diz respeito à habilidade e à disposição de perceber alternativas comunicativas e adaptar-se a diferentes situações (MARTIN; ANDERSON, 1998).

Estudos já demonstraram que adultos idosos tiveram desempenho inferior a jovens adultos na tarefa de Simon (SIMON; RUDELL, 1967, HEJAZI et al., 2019). Nessa tarefa, os participantes devem responder a determinados estímulos e não a outros. Segundo Hejazi et al. (2019), esses resultados mostram um declínio associado à idade na habilidade de controle inibitório, com adultos idosos tendo mais dificuldade em resistir a interferências. Algumas teorias do envelhecimento sugerem que os lobos frontais sofrem alterações

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<sup>1</sup> No original: *The typical aging process involves cognitive decline related to brain atrophy, especially in frontal brain areas and regions that subserve declarative memory, loss of synaptic connections, and the emergence of neuropathological symptoms associated with dementia.*

estruturais ao longo do processo de envelhecimento, o que afetaria também as funções executivas, já que elas, ainda que de natureza diversa, dependem inteiramente do córtex pré-frontal (DRAG; BIELIAUSKAS; 2010). Como o uso de LA obriga que uma língua seja inibida para o uso da outra, é de se esperar que déficits no controle executivo tenham consequências no processo de aprendizado de LA do adulto idoso. Estudos que focaram no impacto do bilinguismo ao longo da vida no processo envelhecimento demonstraram que adultos idosos bilíngues tiveram resultados melhores em tarefas de controle inibitório que adultos idosos monolíngues (BIALYSTOK et al., 2004; BIALYSTOK et al., 2005). Ainda que estudos não tenham conseguido o mesmo sucesso na busca pela vantagem bilíngue (SANDERS et al., 2012; BILLIG; SCHOLL, 2011, LAWTON et al. 2015; PAAP et al., 2018) e que estudos acerca do impacto do ensino de LA para adultos idosos tenham questionado a comparabilidade entre o bilinguismo ao longo da vida e o aprendizado tardio de LA (BERGGREN et al., 2020; RAMOS et al., 2016; ANTONIOU et al., 2013), o que resta saber é se o aprendizado tardio de uma LA poderia proporcionar um benefício semelhante.

A memória de trabalho armazena e processa informações necessárias à realização de tarefas complexas temporariamente (HEJAZI et al., 2019). Segundo Baddeley (2009), há um consenso geral de que a memória de trabalho é suscetível aos efeitos da idade, embora não esteja sempre claro exatamente que aspectos são mais vulneráveis (*Ibidem*, p. 315). Drag e Bieliauskas (2010) estabelecem uma relação entre o controle inibitório e a memória de trabalho, já que, se há decréscimo na capacidade inibitória, pode haver a entrada de informações irrelevantes na memória de trabalho, tornando a manipulação e a recuperação de informações da memória de trabalho um processo dificultoso. Acredita-se que a memória de trabalho seja fundamental para o aprendizado de uma LA. O input linguístico deve ser filtrado e manipulado de forma seletiva, e o indivíduo faz o processamento e o armazenamento de informações ao mesmo tempo em que lida com as demandas de uma interação comunicativa (MACHEY; SACHS, 2012). Além disso, o próprio modelo de memória de trabalho de Baddeley (2009), chamado de modelo multicomponente, faz essa associação entre a memória de trabalho e a língua: nele um componente chamado de alça fonológica é responsável pela “gravação de sequências acústicas ou itens baseados na fala” (BADDELEY, 2009, p. 57). Em Mackey et al. (2010),

demonstrou-se que os aprendizes com os melhores resultados em testes de memória de trabalho responderam melhor a interações com feedback corretivo. Ramírez Gómez (2016a) explica alterações na memória de trabalho podem explicar as dificuldades que muitos adultos idosos relatam em memorizar novo vocabulário. Dessa forma, mais uma vez, pode-se considerar que uma função executiva, agora MT, seja um elemento particularmente relevante no aprendizado de língua adicional por aprendizes idosos.

Conforme Burke e Shafto (2004), o processo *de* envelhecimento é caracterizado por alguns declínios na produção linguística. Uma dessas falhas é o fenômeno *tip-of-the-tongue* (ToT), ou ponta da língua, em que o falante tem dificuldade para evocar uma palavra conhecida ao tentar produzi-la. Em contrapartida, o processamento semântico permanece inalterado durante o envelhecimento. “A recuperação do sentido das palavras e outros processos semânticos envolvidos na compreensão da linguagem apresentam pouca alteração no envelhecimento”<sup>2</sup> (BURKE; SHAFTO, 2004, p. 01). Assim, a memória semântica, que armazena o conhecimento de mundo, inclusive o sentido das palavras, não é prejudicada pelo envelhecimento típico, mas sim é aprimorada por ele (DRAG; BIELIAUSKAS, 2010). Essa melhora é justificada pelos autores por meio do acúmulo de conhecimento factual ao longo da vida. Park et al. (2002) demonstraram que habilidades semânticas como o vocabulário apresentaram um padrão contrário daquele da memória de trabalho e da velocidade de processamento.

Apesar disso, já são conhecidos mecanismos compensatórios que o cérebro idoso coloca em prática para lidar com o surgimento de declínios cognitivos e com o aparecimento de sintomas iniciais de demência. A Teoria de *Scaffolding* de Envelhecimento e Cognição, proposta por Reuter- Lorenz e Park em 2009 e depois revista em 2014, explica “como os efeitos combinados de processos neurais adversos e compensatórios produzem diferentes níveis de função cognitiva”<sup>3</sup> (REUTER-LORENZ; PARK, 2014, p. 355). O mecanismo compensatório descrito pela teoria funciona como uma forma de plasticidade

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<sup>2</sup> No original: *Retrieval of the meaning of words and other semantic processes involved in understanding language show little change with aging.*

<sup>3</sup> No original: *How the combined effects of adverse and compensatory neural processes produce varying levels of cognitive function.*

cerebral positiva que opera para contra-atacar os efeitos adversos da idade, chamados pelas autoras de desafios neurais e deterioração funcional, podendo ser descritos como uma forma negativa de plasticidade cerebral.

O *scaffolding* compensatório pode se dar por uma maior ativação ou recrutamento adicional de regiões cerebrais pré-frontais, pelo recrutamento bilateral de regiões que costumam ter atividade lateralizada em jovens adultos e pela neurogênese (REUTER-LORENZ; PARK, 2014). As mudanças estruturais negativas observadas no envelhecimento, portanto, servem como um estímulo à criação de mecanismos compensatórios com o objetivo de manter as funções cognitivas. No modelo original da teoria, sugere-se que o *scaffolding* pode ser aprimorado por meio de “intervenções explícitas que incluem diversas atividades como exercício físico, engajamento intelectual e novos aprendizados”<sup>4</sup> (Ibidem, p. 356). Assim, é possível pensar que o aprendizado de uma LA na terceira idade possa servir como uma dessas intervenções que facilitam a compensação dos declínios advindos do envelhecimento.

É importante ressaltar que o *scaffolding* compensatório é resultado da deterioração neurofisiológica que ocorre com a idade e que atitudes positivas ao longo da vida, com um impulso de uma genética favorável, podem atuar como medidas protetivas contra essa deterioração, o que consequentemente diminui a necessidade de atuação de mecanismos compensatórios. É por isso que o modelo revisado da teoria inclui “variáveis de estilo de vida que podem impactar a estrutura e o funcionamento do cérebro em envelhecimento”<sup>5</sup> (Ibidem, p. 360). Segundo as autoras, há um número considerável de estudos que sugerem que indivíduos engajados em atividades intelectuais e sociais durante a vida adulta têm um desempenho cognitivo melhor e que indivíduos com maior nível de escolaridade tendem a ser diagnosticados com demência mais tarde que indivíduos com baixa escolaridade. Além disso, altos níveis de exercícios físico cardiovascular, multilinguismo e o engajamento em atividades de lazer já tiveram resultados benéficos para o envelhecimento cognitivo (REUTER-LORENZ; PARK, 2014, p. 361). Ou seja, ao citarem o multilinguismo, pode-se esperar que

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<sup>4</sup> No original: *Explicit interventions that include various lifestyle activities including exercise, intellectual engagement and new learning.*

<sup>5</sup> No original: *Life-course variables that impact structure and function of the aging brain.*

aprender uma LA entre nesse modelo não só como uma nova aprendizagem ou treinamento cognitivo, mas também como uma forma de *scaffolding* cognitivo.

O conceito de reserva cognitiva de Stern (2009) é usado para explicar a observação de que alguns indivíduos têm melhor desempenho cognitivo que outros na presença de patologia cerebral. “A reserva cognitiva refere-se à habilidade de fazer um uso flexível e eficiente de redes cognitivas durante a execução de tarefas na presença de patologia cerebral”<sup>6</sup> (STERN, 2009, p. 50). Em um estudo de 1994 com indivíduos de sessenta anos ou mais (STERN et al., 1994), demonstrou-se que o risco de demência em indivíduos com baixa escolaridade (menos de oito anos) era duas vezes mais alto que em indivíduos com alta escolaridade e que o risco de demência também era maior em indivíduos com baixo engajamento profissional ao longo da vida. A hipótese dos autores foi de que os engajamentos intelectual e profissional aumentam a reserva cognitiva na presença de demência. Os estudos mostram, dessa forma, que o envolvimento em atividades intelectuais e de lazer, mesmo iniciados na terceira idade, pode impactar a reserva cognitiva. Assim, conforme Stern (2009), essas descobertas dão suporte à possibilidade de intervenções mesmo em indivíduos já idosos com o objetivo de enriquecer a reserva cognitiva, desacelerar o declínio cognitivo e prolongar um envelhecimento saudável.

Para o presente estudo, é especialmente relevante o fato de que tanto a teoria de *scaffolding* quanto a proposta de reserva cognitiva entendem que a plasticidade cerebral está presente no cérebro idoso. No *scaffolding* compensatório, ainda no seu primeiro modelo, são previstas intervenções posteriores aos desafios neurais e à deterioração funcional, como novos aprendizados e treinamento cognitivo em indivíduos já idosos, o que pode aprimorar o processo de *scaffolding* (REUTER-LORENZ; PARK, 2014). De maneira semelhante, a proposta de reserva cognitiva sugere que intervenções ainda que tardias podem aprimorar a construção da reserva e, desse modo, servir como proteção contra o aparecimento de sintomas de patologia cerebral. Tais constatações fundamentam o benefício do aprendizado de uma LA por adultos idosos.

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<sup>6</sup> No original: *Cognitive reserve refers to the ability to make flexible and efficient use of cognitive networks when performing tasks in the presence of brain pathology.*

## 2.2. ASPECTOS SÓCIO-AFETIVOS DO ENVELHECIMENTO TÍPICO

Além de fatores (neuro)cognitivos, o olhar sobre o processo de ensino-aprendizagem de LA por adultos idosos deve levar em conta os aspectos sócio-afetivos característicos da terceira idade. Segundo Singleton (2018) e Ramírez Gómez (2016a), é comum que adultos idosos acreditem que a sua idade – e, portanto, o envelhecimento – vá inevitavelmente ter impacto sobre o seu processo de aprendizado. Isso pode fazer com eles abordem o ensino de LA com um olhar negativo sobre as suas capacidades. Além disso, eles em geral atribuem as suas dificuldades de aprendizado às mudanças cognitivas que enfrentam e talvez não percebam o que Pfenninfer e Polz (2018) chamam de “interface cognição-afeto” (*cognition-affect interface*) (p. 2). Segundo elas, há uma ligação entre os aspectos cognitivos com as quais os adultos idosos devem lidar para aprender uma LA e os aspectos afetivos que são peculiares a esse grupo demográfico, como alterações de estilo de vida, motivação para o aprendizado de língua, histórias de vida e de educação diferentes, condições atuais de vida, habilidades comunicativas, a construção de uma identidade da terceira idade e um sentido de propósito. Todos esses fatores se aliam às condições cognitivas em que se encontra o adulto idoso para agirem em seu processo de ensino-aprendizagem de LA.

Os aspectos sociais característicos da chamada terceira idade são a chave para entendermos como se constrói a identidade do aprendiz adulto idoso e, portanto, suas particularidades afetivas. Em geral, considera-se adulto idoso, ou indivíduo pertencente à terceira idade, aquele que está parcial ou completamente aposentado das suas atividades laborais. O envelhecimento é comumente associado à transição de uma vida profissional ativa à aposentadoria. Essa fase costuma corresponder, conforme Wang e Shi (2016), a dois aspectos: por um lado, menores níveis de atividade física e de produtividade em geral e, por outro, menos estresse e responsabilidades. Segundo os mesmos pesquisadores, o trabalho desempenha um papel importante no funcionamento cognitivo – como acima mencionado, o engajamento profissional é um impulsionador da reserva cognitiva (STERN, 2009) –, no desenvolvimento de habilidades, na construção de valores e nas relações pessoais. Além disso, uma vida profissional ativa pode proporcionar ao

indivíduo um lugar economicamente produtivo na sociedade, o que é especialmente importante em sociedades com um alto nível socioeconômico, onde as percepções sobre o envelhecimento são mais negativas (LOCKENHOFF et al., 2009). Ramírez Gómez (2016a) explica que as sociedades ocidentais valorizam muito o trabalho e consideram indivíduos que não são mais profissionalmente ativos como menos importantes. Isso significa que o adulto idoso se encontra com muitas lacunas a preencher: a do engajamento intelectual, a dos laços sociais, a do tempo e, especialmente, a do sentido de propósito. Wang e Shi (2016) também trazem três fatores que podem contribuir com uma aposentadoria bem-sucedida: bem-estar financeiro, bem-estar físico e bem-estar psicossocial. Entretanto, o estado de isolamento em que a aposentadoria pode submeter o adulto idoso torna a tarefa de suprir as faltas causadas pelo fim da atividade profissional mais difícil.

A aposentadoria não é o único fator que leva o adulto idoso a ter uma maior tendência a se isolar. Adultos idosos sofrem com noções autodepreciativas das suas próprias capacidades, provavelmente influenciados por estereótipos socialmente construídos (SINGLETON, 2018; RAMÍREZ GÓMEZ, 2016a; RAMÍREZ GÓMEZ, 2016b). Segundo Levy (2003), nós iniciamos a internalização de estereótipos de idade já na infância e, quando alcançamos a terceira idade, este se torna um processo de autoestereotipagem. Ainda que tenhamos estereótipos positivos relativos ao envelhecimento – por exemplo, idosos são sábios e gentis –, a maioria deles é negativa – por exemplo, idosos são frágeis, incompetentes e esquecidos (SINGELMAN; RIDER, 2012). Crenças desse tipo explicam a baixa autoestima de adultos idosos, a sua falta de autoconfiança e a sua percepção de que seus esforços estão fadados ao fracasso (GABRYS-BARKER, 2018). As percepções referentes a indivíduos mais velhos são, segundo Andrew (2012), socialmente construídas. Para ela, a idade é mais do que um processo natural, já que as percepções referentes a ela são mediadas por fatores socioculturais. Lockenhoff et al. (2009) pesquisaram as percepções de idade em 26 países e encontraram um consenso entre culturas de que o envelhecimento prejudica a aparência física, a habilidade de desempenhar tarefas do dia a dia e a habilidade de novos aprendizados. Não surpreende que adultos idosos manifestem baixa autoestima. Conforme Sigelman e Rider (2014), a autoestima dos adultos aumenta à medida que eles

aprendem a lidar com os obstáculos da vida adulta, mas diminui com o envelhecimento, quando os indivíduos estão mais suscetíveis a doenças e perdem muitos dos seus papéis na sociedade. Esses construtos sociais que levam à autoestereotipagem podem, inclusive, ter um impacto na saúde física e cognitiva do adulto idoso. Levy et al. (2002) demonstraram que indivíduos com percepções mais positivas sobre eles mesmos são mais longevos e Levy et al. (2009) mostraram que indivíduos mais jovens que manifestam estereótipos de idade mais negativos têm mais chances de apresentarem um evento cardiovascular no futuro.

É a partir dessas construções do seu papel na sociedade que o adulto idoso chega à sala de aula. Tais construções sociais podem levar os professores de LA a adotarem uma postura discriminatória em relação ao aprendiz idoso ao subestimarem as suas capacidades e entenderem que os únicos motivos que levam o adulto idoso à sala de aula de LA são a socialização e o lazer (RAMÍREZ GOMÉZ, 2016a). Ainda que muitos adultos idosos façam proveito da aula de LA para estabelecer novos laços sociais, esse geralmente não é o seu objetivo principal. Além de possivelmente promover benefícios para a saúde cognitiva do indivíduo idoso, a sala de aula de LA tem o poder de promover inclusão – especialmente se considerarmos a língua inglesa com seu status de língua internacional – e pode oferecer ao adulto idoso um sentido de propósito ao propor novos desafios. Conforme Gabrys-Barker (2018), há uma vantagem em se ensinar esse grupo de aprendizes, já que, diferentemente de adultos jovens, eles costumam ser mais intrinsecamente motivados. Enquanto aprendizes mais jovens costumam se sentir pressionados a estudar uma LA por motivos profissionais, adultos idosos se envolvem nessa atividade por questões mais pessoais, como a realização de um desejo antigo de aprender uma LA ou mesmo a comunicação com familiares que residem em outros países, como netos que nasceram no exterior.

Entretanto, concordamos com Ramírez Gómez (2016a) quando ela afirma que se os aprendizes iniciarem uma atividade partindo da ideia de que não serão bem-sucedidos, é possível que eles não tenham de fato um engajamento com ela.

Outro aspecto que concorre como problemático no contexto de ensino de LA para esta faixa é o fato de que, em geral, os materiais didáticos não são

adequados para suprir as necessidades e objetivos desse público. No momento da escolha do material didático a ser usado, é necessário que se leve em consideração os interesses e objetivos do aluno, seu contexto sociocultural e a sua idade (RAMÍREZ GÓMEZ, 2016a). O uso de livros didáticos para ensino de LA é muito comum tanto em contextos de aulas em grupo quanto em contextos de aulas particulares. Se por um lado o livro didático atua como um facilitador para o professor, ao oferecer um plano de curso linear e coerente, por outro lado ele também pode ser um problema quando não se adequa às características sociais, cognitivas e linguísticas dos aprendizes. A maior parte – se não todos – dos livros didáticos de ensino de LA é focada em adultos jovens, com tópicos como vida profissional e universitária, e dirigem-se claramente a essa audiência. Além disso, é importante considerar como o adulto idoso é retratado nesses materiais. De acordo com Ramírez Gómez (2016a), uma revisão de 120 páginas de livros didáticos mostrou que elas continham poucas referências a adultos idosos. Quando apareciam, eles eram associados a alguns contextos positivos de descrição memórias e biografias – geralmente em referência a lembranças relativas a avós – e a contexto negativos, como idosos doentes, fofoqueiros, com dificuldade em lidar com tecnologia e em conexão com a morte, como viúvos. Por isso, Ramírez Gómez sugere que instrutores de LA usem materiais que não apenas estejam adequados aos objetivos linguísticos dos seus aprendizes idosos, mas que também não reproduzam os estereótipos de negativos de idade e possam ter um conteúdo com o qual o aprendiz idoso se identifique.

Pawlak et al. (2018) estudaram as estratégias de aprendizado de aprendizes idosos poloneses de língua inglesa. Nesse estudo, os pesquisadores queriam entender como esses idosos se sentiam no papel de aprendizes de LA. A maioria deles associaava emoções negativas ao estudo de LA por se sentirem desapontados com o seu progresso como aprendizes e por considerarem que o seu empenho não correspondia ao seu esforço. Além disso, eles se sentiam ansiosos antes de entrar na sala de aula pela expectativa de falar a LA em público e pelo medo de cometer erros. Contudo, eles não tinham vontade de desistir, o que foi explicado pela atmosfera acolhedora da sala de aula. Diante desses resultados, Pawlak et al. (2018) concluíram que questões afetivas cumprem um papel importante no processo de aprendizado de LA por adultos idosos. O mesmo é apresentado por Derenowski (2018), para quem questões

afetivas como motivação e autoconfiança são essenciais no processo de aprendizagem de LA por adultos idosos. Para ele, é fundamental que a sala de aula seja um ambiente acolhedor, onde os aprendizes não tenham que se submeter a situações estressantes, como provas ou testes, e onde os alunos tenham espaço para conversar antes e depois da aula como forma de reduzir a ansiedade. Isso porque, segundo ele, o medo de fracassar é mais alto entre esses aprendizes e eles tendem a focar mais em seus erros do que em seus acertos.

Por fim, Sigelman e Rider (2014) sugerem alguns mecanismos e atitudes que podem ajudar o adulto idoso a manter uma autoimagem mais positiva. Elas mencionam que o adulto idoso tende a ter uma distância menor entre o *self* ideal e o *self* real. Enquanto adultos jovens tem visões mais discrepantes entre a vida que tem e a vida que gostariam de ter, no adulto idoso o seu *self* real e o ideal convergem, o que pode ser positivo para a manutenção da autoestima. Isso também pode ser aprimorado se os objetivos e os padrões de autoavaliação forem reajustados. Segundo as autoras, com o passar do tempo nossos critérios de autoavaliação mudam, nos tornamos mais autocompassivos e damos menos importância quando objetivos não realistas ou não tão relevantes não são alcançados. Ademais, resistir aos estereótipos negativos de idade é fundamental. Isso significa que o indivíduo idoso deve estar atento ao processo de autoestereotipagem para que possa descreditar os estereótipos.

### 2.3. O ENSINO DE LÍNGUA ADICIONAL PARA O APRENDIZ IDOSO

Esta seção traz questões pertinentes ao ensino de LA para o aprendiz idoso. Primeiro, se discute a controversa questão do papel da idade no aprendizado de uma LA. Em seguida, são apresentados os princípios gerais da andragogia e da geragogia crítica, uma área da gerontologia educacional. Por fim, se apresentam questões da geragogia crítica aplicada ao ensino de LA, uma proposta feita por Ramírez Gómez (2016a).

#### 2.3.1 A Idade de Aquisição de Língua Adicional

Talvez uma das questões mais controversas dentro dos estudos de aquisição de LA seja o fator da idade de aquisição, entendida aqui como a idade em que se iniciou o contato com a LA. A hipótese de que o ser humano desfrutaria de um período propício para aquisição de linguagem tem suporte no trabalho de Lenneberg (1967). Segundo Ramirez-Gómez (2016a), a proposta de Lennerberg era a seguinte: a puberdade marcaria a culminação da lateralização e da especialização das funções da linguagem no cérebro e o início da perda das capacidades do cérebro de se reorganizar. Ainda que a proposta tenha sido feita visando a aquisição de língua materna, Singleton e Pfenninger explicam que Lennerberg também estendeu sua abordagem para a aquisição de LA e chegou a afirmar que depois da puberdade línguas estrangeiras somente podem ser aprendidas com esforço consciente e elaborado” (LENNEBERG, 1967 *apud* SINGLETON; PFENNINGER, 2018). Além disso, a aparente dificuldade que aprendizes tardios – ou seja, aqueles que iniciam o aprendizado após a puberdade – apresentam na aquisição de L2 se daria pela perda de plasticidade cerebral ao longo da vida (PENFIELD; ROBERTS, 1959; LENNEBERG, 1967).

O que se sabe hoje é que a hipótese do período crítico (HPC) (ou sensível) não se sustenta em seus alicerces originais. Já em 1973, Krashen encontrou evidências de que a lateralização cerebral se completa muito antes da puberdade e não é uma barreira ao aprendizado de uma LA. Ademais, já se sabe também que o cérebro permanece plástico, ou seja, suscetível a novos aprendizados, ao longo da vida. Conforme Singleton e Pfenninger (2018), “a versão de Lenneberg sobre a natureza e o prazo de lateralização não é, na verdade, mais levada a sério por neurocientistas” (*Ibidem*, p. 256). Hernandez (2016) explica que o processo de maturação cerebral e alterações na estrutura cerebral não se restringem à primeira infância: eles seguem durante a adolescência e toda a vida adulta. Logo, pode-se concluir que a relação entre idade e aquisição de LA não se limita a fatores maturacionais. Ainda assim, são observadas diferenças no desempenho de aprendizes mais jovens e aprendizes mais velhos e, conforme Hernandez (2016), as dificuldades que esses aprendizes enfrentam para dominar a fonologia e a gramática de uma nova língua aumentam em função da idade. Como, então, explicar essas diferenças se a capacidade de aprender uma LA permanece ao longo da vida?

A resposta para essa pergunta parece estar presente em aspectos que extrapolam explicações meramente maturacionais para as diferenças entre aprendizes precoces e aprendizes tardios. Em primeiro lugar, faz-se necessário distinguir o ambiente em que se dá o aprendizado da LA. Segundo Ramirez-Gómez (2016a), aprendizes precoces parecem ser mais suscetíveis ao aprendizado de LA do que aprendizes tardios em ambientes de imersão. Além disso, é possível que o uso de habilidades metalingüísticas e a maior consciência linguística de aprendizes adultos seja favorável à aquisição de LA no ambiente da sala de aula. Por fim, uma parte da resposta pode estar no fato de que a idade de aquisição tenha sido considerada isoladamente enquanto diferença individual do aprendiz, juntamente de fatores como gênero, aptidão, motivação e personalidade (PFENNINGER, 2017), quando, na verdade, ela provavelmente conversa com outras variáveis que têm influência tanto no processo de aquisição quanto no seu resultado: segundo Pfenninger (2019), “os efeitos da idade são sensíveis a, e, portanto, mediados por, contextos e situações” (*Ibidem*, p. 23).

Uma das forças que move o debate acerca da HPC é a diferença entre os desempenhos de crianças e adultos no processo de aprendizado e, especialmente, no resultado do seu aprendizado. Entretanto, crianças e adultos diferem em suas estratégias de aprendizagem. Pfenninger (2017) reconhece que um início precoce de exposição à LA em ambiente naturalístico geralmente leva a resultados melhores. Isso porque a criança em processo de aquisição simultânea de duas línguas é capaz de consolidar os dois sistemas de forma mais independente. Hernandez (2016) apresenta dados que confirmam que a aquisição de LA se dá por mecanismos diferentes em aprendizes precoces e aprendizes tardios: o processamento de gênero gramatical de aprendizes precoces de espanhol falantes de inglês é mais semelhante àquele de falantes monolíngues de espanhol, enquanto aprendizes tardios fazem uso de redes associadas à recuperação de significado.

A aquisição em ambiente naturalístico pode ser vantajosa para crianças – e quanto mais cedo, melhor – porque elas aprendem de forma implícita e têm à sua disposição enormes quantidades de estímulos de LA (RAMÍREZ GÓMEZ, 2016a). Ou seja, o aprendizado por meio de imersão na LA combina com a forma como crianças aprendem. Já para aprendizes tardios, que fazem uso de habilidades metalingüísticas no aprendizado de LA, estímulos constantes em LA

em ambiente de imersão podem não ser suficientes. De acordo com Ramírez Gómez (2016a) e Pfenninger (2017), o ambiente de instrução formal, que Pfenninger chama de “situação de input mínimo” (*minimal input situation*) (Ibidem, p.22), não oferece a quantidade de estímulos necessários para o aprendizado implícito de LA. Assim, é possível que, em ambiente de sala de aula, aprendizes tardios tenham uma vantagem.

Ramírez Gómez (2016a) propõe um questionamento relevante: será que devemos seguir utilizando as restrições do aprendizado de LA em imersão, e as conclusões de estudos nessa área, ao aprendizado de LA em contextos de sala de aula? O mais provável é que não. A sala de aula conta com variáveis diversas daquelas de ambientes de imersão. Pfenninger (2017) não vê o fator da idade de aquisição como um fator fixo. Para a autora, que prefere falar em idade de exposição, “a idade de exposição não funciona igualmente em ambientes diferentes, ou seja, ela é influenciada pelas características do ambiente”<sup>7</sup> (p. 24).

Sabe-se, então, que o processo de aquisição de LA pode ser bem-sucedido se iniciado na idade adulta (HERNANDEZ, 2016). No entanto, existe um adulto que até recentemente havia sido negligenciado nas pesquisas: o adulto idoso. Essa falta de interesse nos aprendizes adultos idosos pode ter uma base na crença do “quanto mais cedo se aprender uma LA, melhor”, difundida não apenas na esfera acadêmica, como também no conhecimento popular acerca do aprendizado de línguas. Pfenninger (2017) explica que essa visão persiste apesar de já se saber que o fator idade não se limita à maturação cerebral, já que vários fatores sociais, psicológicos e contextuais interagem com ele e podem ter um papel ainda mais relevante que aspectos meramente maturacionais.

Conforme Andrew (2012), a literatura acerca da HPC não faz distinção entre adultos de trinta, quarenta ou cinquenta anos. É à medida que envelhecemos que as diferenças se acentuam. Quando os adultos chegam à terceira idade, possuem um histórico muito distinto no que concerne sua história de vida, seus hábitos, seu engajamento acadêmico e profissional, seu estado psicológico, sua saúde física, seu desempenho cognitivo, entre outros. Portanto, um grupo de adultos idosos, ainda que com idades semelhantes, pode ser um

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<sup>7</sup> No original: *Age of onset does not work similarly across settings, that is, it is influenced by characteristics of the setting.*

grupo muito diverso. Kliesch et al. (2018) investigaram o processo de aprendizado de adultos idosos durante um curso de inglês com duração de três semanas. As autoras buscavam compreender quais fatores poderiam explicar as diferenças individuais entre os aprendizes com o objetivo de mostrar que a idade é só mais um dos preditores de sucesso de aprendizado de LA. Entretanto, elas não puderam explicar as diferenças que persistiram em um grupo de aprendizes com idades semelhantes. As pesquisadoras descobriram, desse modo, que fatores cognitivos e motivação tiveram um papel decisivo no sucesso do processo de aprendizagem desses aprendizes. Isso implica dizer que é fundamental que se conheçam aspectos cognitivos e afetivos de adultos idosos não apenas para que o processo de aprendizado seja bem-sucedido, mas também para que sejam criadas as melhores condições para que isso aconteça.

Andrew (2012) afirma que a idade cronológica pode não ser um indicador confiável do momento da vida em que a pessoa se encontra. Para Kliesch et al. (2018), as diferenças individuais são mais relevantes no contexto de instrução formal porque há muitos fatores de estilo de vida que vão determinar o quanto cognitivamente apto um indivíduo chegará à terceira idade. Além disso, as mesmas autoras enfatizam que há outros aspectos que devem ser considerados por instrutores de língua quando da criação de cursos voltados para essa faixa etária. Ao invés de manter o foco na idade dos aprendizes, é fundamental que ele seja voltado a outros fatores que podem ser mais relevantes tanto para o processo de aquisição quanto para o seu resultado final, como a qualidade do estímulo em LA, a formação do professor, o investimento de tempo e energia por parte do aprendiz, os níveis de motivação, a alocação de recursos e, de uma maneira geral, a garantia de que as condições apropriadas para o aprendizado serão oferecidas.

### **2.3.2 O Aprendiz Adulto**

A educação de adultos pode ser chamada de “andragogia”, que é definida por Knowles et al. (2011) como “a arte e a ciência de ensinar adultos” (p.61). Os autores definem três conjuntos de variáveis que convergem na experiência do aprendiz adulto:

Quadro 1 - Variáveis da andragogia

Princípios centrais de aprendizado do adulto	<p>Integram variáveis básicas no aprendizado de adultos como:</p> <p><i>Necessidade de saber</i> – o aprendiz adulto sente necessidade de saber <i>por que, o que, como</i>;</p> <p><i>Autoconceito</i> – que se relaciona com autopercepção e deve convergir com a capacidade de autodirecionamento e autonomia;</p> <p><i>Experiências prévias</i> – as experiências vistas como fontes para o aprendizado;</p> <p><i>Disposição para aprender</i> – o aprendiz deve estar disposto e receptivo ao aprendizado;</p> <p><i>Orientação para o aprendizado</i> – aprendizado deve ser voltado a solucionar problemas;</p> <p><i>Motivação para aprender</i> – aprendizado deve ter valor intrínseco e proporcionar ganhos pessoais.</p>
Diferenças individuais e situacionais	<p>Incluem diferenças individuais como: personalidade, elementos cognitivos e história pessoal do aprendiz.</p> <p>E questões contextuais como: o que está sendo ensinado/aprendido e o ambiente de sala de aula.</p>
Objetivos e propósito para o aprendizado	<p>São divididos em: <i>crescimento institucional, individual ou social</i>.</p>

Fonte: Adaptado de Knowles et al. (2011)

Para eles, a andragogia é estabelecida em contraposição à pedagogia, cujo foco é a educação para crianças. Os autores consideram que ainda são

verdadeiras as premissas feitas acerca do aprendiz adulto por Lindeman em 1926 (*apud* KNOWLES, 2011), conforme o quadro:

Quadro 2 - Premissas do aprendiz adulto segundo Lindeman (1926)

1. Adultos se sentem motivados a aprender porque têm necessidades e interesses que o aprendizado satisfará.
2. A orientação dos adultos para o aprendizado é focada na vida.
3. A experiência é a fonte mais rica para o aprendizado de adultos.
4. Adultos sentem a necessidade de se sentirem autônomos.
5. As diferenças individuais entre as pessoas aumentam com a idade.

Fonte: Knowles et al. (2011, p. 40)

A partir dessas premissas, é possível compreender o que Findsen e Formosa (2011) explicam acerca da contraposição que a andragogia faz em relação à pedagogia: a andragogia é guiada pelos conceitos de experiência – o aprendiz adulto é influenciado pela sua experiência tanto de vida quanto em relação à educação formal –, utilizando essas experiências como estratégias de aprendizado – e autonomia –, e esperando do aprendiz adulto que ele seja capaz de adotar uma atitude mais independente e autônoma em relação ao seu aprendizado. Essa oposição é alvo de críticas por parte de Findsen e Formosa (2011) porque não leva em consideração estruturas sociais e parte do princípio de que o aprendizado é um processo isolado, que acontece no indivíduo. Ramírez Gómez (2016a) faz crítica semelhante ao afirmar que essa distinção não corresponde à realidade da educação no mundo: a autonomia do aprendiz, segundo ela, não é incentivada em contextos educacionais e o incentivo a um aprendizado mais independente costuma ser encarado com desconfiança pelos aprendizes. Ainda assim, o conceito de autonomia ocupa um lugar importante na andragogia, especialmente se considerarmos que adultos que se encontram em situações de educação formal a procuram, em geral, por sua própria iniciativa.

Para Ramírez Gómez (2016a), o controle dos aprendizes sobre o seu processo de aprendizado exige que eles determinem objetivos e necessidades, desenvolvendo métodos apropriados para atingir esses objetivos e satisfazer

essas necessidades, mas, para isso, eles devem ser direcionados a desenvolver essas habilidades.

Com vistas a um aprendizado que desenvolva a autonomia do aprendiz, Knowles et al. (2011) sugerem um *modelo de processo*. Esse modelo se oporia a um modelo mais tradicional de ensino, chamado pelos autores de *modelo de conteúdo*, em que o professor (ou aquele responsável pelo desenvolvimento de um currículo) decide antecipadamente o conteúdo, os materiais e a forma como esse conteúdo será apresentado. O *modelo de processo*, em contrapartida, incluiria o aprendiz nesse processo. Enquanto no *modelo de conteúdo* a preparação do aprendiz antes de tarefas é mínima, no *modelo de processo* existe uma negociação entre aprendizes e instrutores para que o processo de aprendizado atenda à necessidade de saber do aprendiz adulto e seja direcionado às suas necessidades e objetivos. Segundo Knowles et al. (2011, p. 115), o *modelo de processo* integra oito variáveis:

a preparação do aprendiz, a criação de um ambiente propício ao aprendizado, criação de mecanismos para planejamento conjunto, o diagnóstico de necessidades para o aprendizado, a formulação de um programa (que é o conteúdo) que satisfaça essas necessidades, o desenvolvimento de um padrão de experiências de aprendizado, a condução dessas experiências de aprendizado com os materiais e técnicas adequados e a avaliação dos resultados de aprendizado e rediagnóstico de necessidades.<sup>8</sup>

Sobre essas variáveis, Ramírez Gómez (2016a) explica que a preparação dos aprendizes é necessária para criação de um processo de aprender a aprender. Esse processo destaca a autorreflexão e a autoavaliação, já que o fim é criar aprendizes mais responsáveis pelo seu processo de aprendizado. Esse processo parece ser compatível com um estilo mais reativo de ensino, tendo em vista que o planejamento e a sua condução respondem às necessidades do aprendiz e não o contrário. A autora sugeriu a aplicação do *modelo de processo* para aprendizes idosos da seguinte forma: a) a preparação do aprendiz adulto idoso deve ser feita em diferentes esferas, como na discussão acerca das

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<sup>8</sup> No original: *Preparing the learner, establishing a climate conducive to learning, creating a mechanism for mutual planning, diagnosing the needs for learning, formulating program objectives (which is content) that will satisfy these needs, designing a pattern of learning experiences, conducting these learning experiences with suitable techniques and materials, and evaluating the learning outcomes and rediagnosing learning needs.*

crenças do aprendiz sobre o aprendizado de LA e sobre suas próprias habilidades e na adequação de objetivos e expectativas, b) a criação de um ambiente acolhedor, onde os aprendizes se sintam à vontade para cometer erros e receber *feedback* corretivo, c) o planejamento do curso deve ser negociado com os aprendizes, sem que o instrutor perca autoridade para criação de um currículo baseado em conteúdo crítico, d) o diagnóstico de necessidades deve ser feito em conjunto entre o instrutor e o aprendiz, de modo que o próprio aprendiz esteja atento às áreas do aprendizado que demandam mais atenção, e) a definição de objetivos e planos de aprendizado deve ser realista e feita com base nas habilidades do aprendiz, e f) a avaliação deve ser feita a partir do processo de aprendizado e não dos resultados, sendo essencial que o esforço e o uso eficaz de estratégias sejam reconhecidos.

### **2.3.3 Geragogia Crítica**

A gerontologia educacional é definida por Ramírez Gómez (2016a) como um campo interdisciplinar que une elementos da educação para adultos e da gerontologia social. Uma das suas vertentes é a gerontologia educacional crítica, doravante GEC, cujo objetivo é “levar adultos idosos a níveis mais elevados de empoderamento e emancipação”<sup>9</sup> (FORMOSA, 2002, p. 74). A GEC surgiu, conforme Formosa (2002), pela necessidade de liberar adultos idosos de sistemas opressores e como resposta à gerontologia educacional tradicional, a qual ele considera acrítica e apolítica por não considerar fatores culturais e sociais que dialogam com fatores biológicos, fisiológicos e psicológicos na construção da identidade do indivíduo em processo de envelhecimento. Para Formosa (2011), todos os indivíduos idosos sofrem algum tipo de discriminação e uma educação acrítica não oferece a eles a possibilidade de resistir e reagir a essas estruturas. Os princípios da GEC foram dispostos por Frank Glendenning e David Battersby (1990, apud FORMOSA, 2002, 2011), que, por sua vez, foram influenciados pela filosofia da educação de Paulo Freire (1972 apud FORMOSA, 2011) e envolvem as noções de que a educação para adultos idosos não é neutra – ela é libertadora ou opressora –, e de que a GEC deve examinar as

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<sup>9</sup> No original: *Lead older adults to higher levels of empowerment and emancipation.*

relações entre envelhecimento, Estado e economia e como elas afetam os adultos idosos, cuja educação deve incluir conceitos de emancipação, empoderamento e transformação.

A geragogia crítica, doravante GC, foi proposta em 2002 por Formosa como um conjunto de princípios práticos para a GEC. Para Formosa (2002), a GC exige, em primeiro lugar, um comprometimento com a transformação de estruturas de discriminação etária. Para isso, o autor sugere que, apesar da heterogeneidade entre os indivíduos idosos, se adote uma abordagem comunal, que permite a percepção de que adultos idosos de diferentes grupos sofrem invariavelmente com estruturas sociais discriminatórias. Outro princípio é a desconstrução da ideia de que qualquer educação empodera o adulto idoso. A educação que reproduz e dissemina preconceitos etários não é libertadora. O currículo deve levar em consideração assuntos pertinentes ao universo do idoso e eles devem ser abordados de uma maneira *bottom-up*, que envolva as necessidades dos aprendizes e promova a discussão crítica. Isso também promove o envolvimento do aprendiz na elaboração do currículo em uma constante negociação. Formosa (2011) admite que, ainda que visem à aplicabilidade da GEC, os objetivos da GC não são tão facilmente alcançados. Algumas sugestões para instrutores são feitas por Findsen e Formosa (2011): enfatizar a importância da definição de objetivos – o que pode ser feito no início de um curso por meio de uma afirmação pessoal apresentando o que o aprendiz quer alcançar ao final do curso –, criar uma boa relação com o aprendiz de modo a promover um ambiente inclusivo que gere motivação e entusiasmo, usar a experiência dos aprendizes como recursos valiosos de aprendizado e, por último, utilizar materiais que refletem o mundo real daqueles alunos.

#### **2.3.4 A Geragogia Crítica Aplicada ao Ensino Língua Adicional para Idosos**

Ramírez Gómez (2016b) afirma que perspectivas negativas relativas ao envelhecimento alcançam a área de ensino de LA. A crença de que a idade por si só é um obstáculo ao aprendizado de LA mais a prevalência de um modelo de envelhecimento cognitivo que enfatiza alterações negativas associadas ao envelhecimento têm uma grande influência nas visões sociais sobre a terceira

idade e sobre as atitudes dos aprendizes adultos idosos, conforme discutido anteriormente. Para a autora, as estruturas sociais impactam nas perspectivas científicas e também na autopercepção dos idosos, que assumem atitudes derrotistas. Por isso, ela sugere a aplicação dos princípios da GC ao ensino-aprendizagem de LA – que ela chama de língua estrangeira para esclarecer de que se trata da aplicação dos princípios ao ensino de LA na comunidade da L1 do aprendiz. Ela chama isso de “geragia crítica de língua estrangeira” (*Ibidem*, p.137) e considera que:

A educação de língua estrangeira deve proporcionar um contexto em que aprendizes idosos identifiquem as limitações do seu processo de aprendizado e desenvolvam mecanismos para lidar com elas e melhorar sua experiência de aprendizado (*Ibidem*, p. 137).<sup>10</sup>

Além disso, a missão da GC aplicada ao ensino de LA deve ser transformar as atitudes dos aprendizes em relação às suas habilidades de aprendizado, o que pode resultar em uma melhor autoestima, e empoderá-los para assumir novos papéis na sociedade. Para a GC aplicada ao ensino de LA, o ensino de LA deve ser considerado mais que uma atividade de lazer. Ramírez Gómez (2016a, 2016b) defende que sejam oferecidos programas de ensino de LA exclusivos para adultos idosos, ou seja, com indivíduos na mesma faixa etária. Para isso, programas de ensino de LA devem ser criados por profissionais cientes das particularidades dos aprendizes idosos, com um currículo endossado por evidências e baseado em conteúdo. A GC aplicada ao ensino de LA deve ter um caráter inclusivo e, por isso, a autora não sugere um currículo funcional. Para ela, um currículo funcional limita ao ensino de LA a adultos idosos que têm a oportunidade de se comunicar com a LA fora da comunidade de L1, o que não é possível para todos os aprendizes. Para ela, uma abordagem baseada em conteúdo atende aos requisitos da GC ao levar para a sala de aula de LA conteúdos críticos relevantes à realidade do adulto idoso.

Outro motivo para a criação de programas de LA com grupos específicos de aprendizes adultos idosos é a sugestão de que a sala de aula de LA deve ser adaptada às características cognitivas, psicológicas e sociais do aprendiz com o

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<sup>10</sup> No original: *FL education should provide a context in which older learners identify limitation of their learning process and develop coping mechanisms to improve their learning experience.*

objetivo de estabelecer metas de aprendizagem que estejam de acordo com a realidade das habilidades do aprendiz. A GC preconiza, assim como a andragogia, um incentivo à autonomia do aprendiz. Por isso, a GC aplicada ao ensino de LA deve guiar o aprendiz adulto idoso a se tornar mais responsável pelo seu aprendizado e mais autônomo na escolha de estratégias de aprendizado. Por fim, Ramírez Gómez (2016a) resume que a GC aplicada ao ensino LA constitui-se em uma abordagem educacional que lida com as muitas questões do aprendiz idoso de LA, o que pode dificultar o aprendizado. Essas questões incluem, por exemplo, muitas das atitudes autodepreciativas dos aprendizes idosos, assim como suas visões sobre o uso de estratégias, sobre a dinâmica da sala de aula e sobre as suas próprias necessidades.

### **3 ESTUDO 1: COGNITIVE AND SOCIO-AFFECTIVE ASPECTS RELATED TO ADDITIONAL LANGUAGE LEARNING BY OLDER ADULTS: A SYSTEMATIC REVIEW**

**Abstract:** The population over 65 is increasing worldwide, and actions to foster well-being and quality of life for these individuals are urgent. Additional language (AL) learning has been considered an efficient measure for improving cognitive reserve and for social engagement of older people. Objective: to investigate the academic production of the last 10 years on cognitive and socio-affective aspects of additional language learning by older learners. Method: following the PRISMA criteria for systematic reviews, descriptors involving cognition, socio-affective and older learners were used in Pubmed, Eric, Scopus, Medline and Embase databases. Results: After excluding articles that did not meet inclusion criteria, two articles from other sources were added. Fifteen articles were read in their entirety and twelve of them were included in the review. The analyses showed that there is no consensus in the literature about the cognitive impact of AL learning by older adults, as most studies acknowledge the need for further research. Even though studies consider socio-affective aspects of AL learning by older adults, this field remains very little explored.

**Keywords:** Cognition. Socio-affective. Additional language. Older adults.

#### **3.1 INTRODUCTION**

The fastest growing population in the world is that of individuals over 65. Data from the Department of Economic and Social Affairs of the United Nations show that there were 703 million people who were 65 or more in 2019. It is expected that by 2050 one in six people in the world will be aged 65 or over. Just as important is that life expectancy is improving almost all over the world, with the expectation that a person aged 65 in the period of 2015 to 2020 is likely to live 17 more years. In addition, according to the World Health Organization, there are 50 million people with dementia worldwide, and this number is projected to reach 82 million in 2050. As the aging population grows, concern has been directed towards improving the quality of life of older adults, ideally in a way that prevents them from becoming demented as pharmacological interventions have not yet had satisfactory results (KLIMOVA, 2018).

It is known that the cognitive performance of older individuals is different from that of young adults. Studies show that there are cognitive declines associated with aging, such as memory problems, deficits in cognitive functions

and decreased processing speed (REUTER-LORENZ; PARK, 2014). Numerous non-pharmacological interventions have been shown to produce positive impact on older people's cognition and general well-being. Aerobic exercise and complex gameplay have been evidenced to produce favorable results in older people's cognition (STERN, 2009). Additionally, there is evidence that the involvement in social and leisure activities may hinder cognitive decline and promote healthy aging (WANG et al. 2002; SCARMEAS et al., 2001).

In line with evidence that suggest that bilingualism and multilingualism may delay the onset of dementia (BIALYSTOK et al., 2007) and that cognitive training may boost older adults' cognitive functions (ANTONIOU et al., 2013), it has been hypothesized that additional language learning may yield similar results (*Ibidem*). Additional language – hereafter AL – learning is a complex cognitive process that entails, but is not limited to, memory processes, a load on executive functions such as inhibition and decision making, and sustained attention (KLIESCH et al., 2018). According to Diamond (2006), the executive functions are comprised by inhibition, working memory and cognitive flexibility, all of which are essential for language learning. In addition, brain networks that are involved in language learning are also the ones mostly affected by cognitive aging (ANTONIOU et al., 2013), requiring from older learners a level of cognitive effort that could enhance cognitive reserve.

Decline in cognitive abilities alone are not, however, the only aspect that concerns researchers when it comes to considering AL learning as a form of cognitive training. In addition to the growing importance of individual factors in the success of AL learning as a person ages – such as hearing quality, cognitive performance, education and socioeconomic status – older adults suffer from self-deprecating notions of their own abilities, probably influenced by socially constructed stereotypes (KLIESCH et al., 2018; LEVY, 2003). The lack of self-confidence and failure-oriented attitudes found in older learners (GABRYSBARKER, 2018) could detract learners from actually taking advantage of the AL learning process. It is, therefore, paramount that both cognitive and socio-affective aspects are regarded when AL programs for older learners are designed so that they could be effective not only as cognitive training, but also as an engaging activity that can foster well-being.

In order to bring these two entities together, this review intends to summarize what research has shown so far in regard to cognitive and socio-affective aspects of AL learning by older adults. In this article, the expression “additional language”, AL, has been used to refer to any language that is not one’s native language. However, when reporting the results brought by the articles found by means of this search, the original phrase used by the authors will be maintained – for example, “foreign language” or “second language”. In addition, there seems to be a discrepancy as to how old the older learner is, with most studies considering old learners the ones that are over 60. For our purposes, this has not been considered an issue as we believe that perception of old age is not only a chronological one, but also social and cultural (OXFORD, 2018).

### 3.2 METHOD

This systematic review has been carried out according to the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) (MOHER et al., 2015), that is, a 27-item checklist has been observed and a four-phase flow diagram is included. The main goal of this review was to analyze findings brought from studies on cognitive and socio-affective aspects associated to the process of AL learning by older learners and to identify which cognitive and socio-affective aspects have been highlighted in the studies.

The research was carried out in May 2020 and included cognition, socio-affective, older adult, second language, and learner as main descriptors. Boolean operators “OR” and “AND” were used and derivative descriptors were added to narrow down results and improve accuracy, e.g., cognitive, social, elderly, foreign language and teaching. In order to be considered for this review, the studies had to match the following eligibility criteria: a) only articles with empirical studies were included (literature reviews, systematic reviews, dissertations, thesis, book chapters, and editorials were discarded); b) studies published before 2010 were discarded; c) studies which dealt with older individuals with cognitive impairment were also discarded; and d) there should be a relation between either cognition and older learners of ALs, or socio-affective aspects and older leaners of ALs, in the form of motivation and emotions or feelings towards AL learning, or

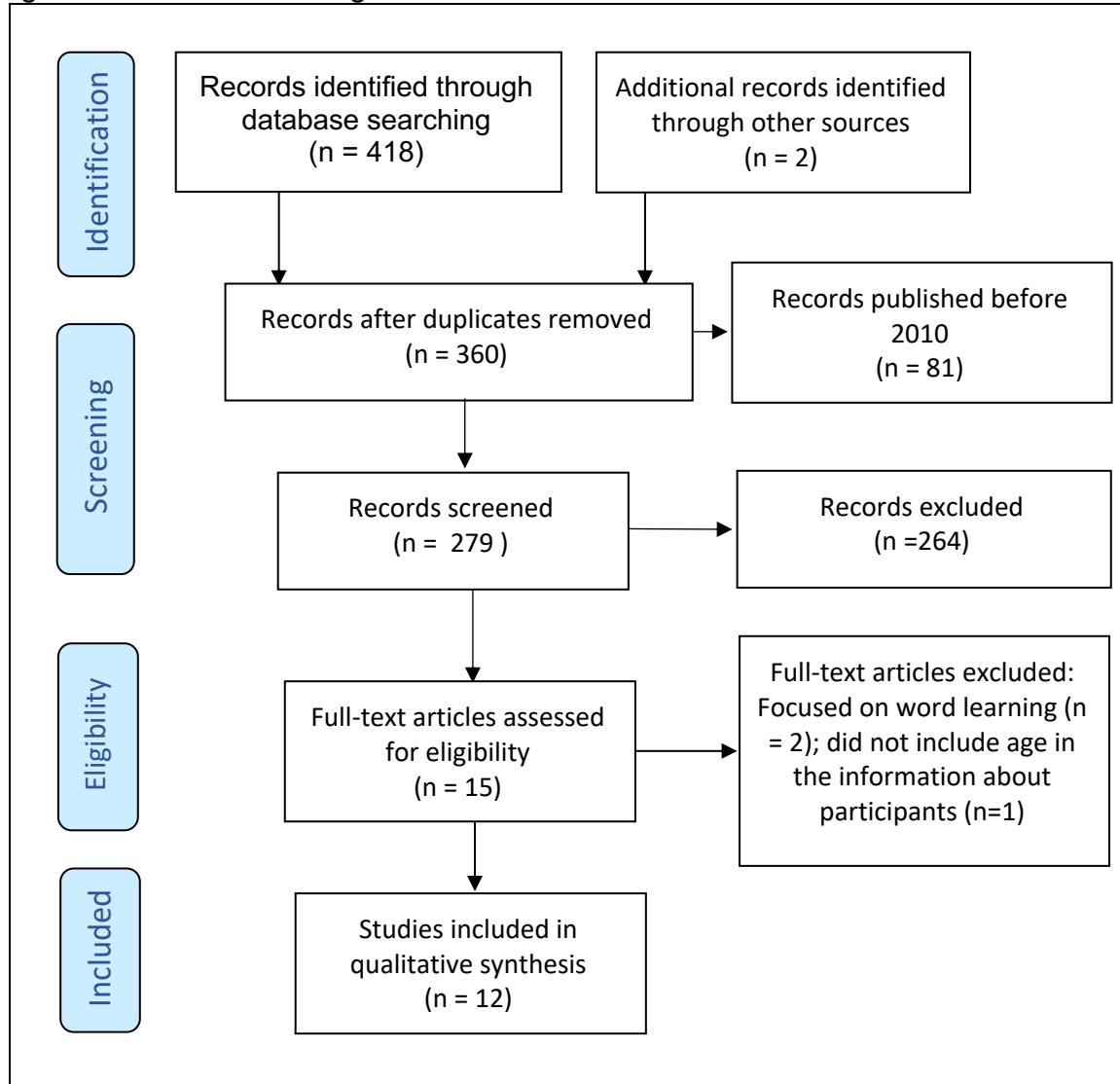
socialization and interaction opportunities in the AL learning environment. These criteria were established so that the focus remained on current research conducted in the field of AL learning and acquisition by older learners.

The review showed that the articles found could be better discussed if grouped in categories as follows: 1) articles about the cognitive impact of AL learning on older adults that found positive cognitive effects of AL learning on older learners; 2) articles whose findings pointed to little or no effects of AL learning on the cognition of the older learners; 3) articles that approached the socio-affective aspects of AL learning for older adults; and 4) articles that examined the relation of internal variables, such as previous bilingualism and working memory, and external variables, such as explicit instruction and interactional feedback, in AL learning by older adults.

### 3.3 RESULTS

The articles were retrieved from five databases: Scopus, PubMed, Medline, Embase and Eric. The number of articles found in each database was: Scopus – 94; PubMed – 89; Medline – 17, Embase – 42; and Eric – 176. After that, these results were imported to EndNote Web, a reference manager that was used to organize the results. From the staggering number of 418 articles, 60 duplicates were found and then excluded. The resulting 358 articles were then screened for inclusion according to the eligibility criteria. Firstly, 81 articles were excluded for being published before 2010. From the 277 articles left, 264 were excluded for not matching one or more of the other eligibility criteria by the analysis of title and abstract. Finally, the 13 articles left were read thoroughly. Three of these were then excluded for not fitting in appropriately: two of them were excluded because, in spite of focusing on older learners, they concentrated on AL word learning and relearning, and one article was excluded for not including participants' age information. In addition to the 10 eligible articles, two articles from other sources were included in this review. The steps taken to the selection of the 12 articles are summarized in Figure 1.

Figure 1 - Article screening and selection



Source: The author.

The analysis of results will follow the categorization mentioned above. The first two categories present studies focused on the impact of AL learning on older learner's cognition. They all stem from the hypothesis that AL learning could be beneficial for older learners as it could boost cognitive reserve by using the same brain networks that are known to decline with aging (ANTONIOU et al., 2013). As Stern (2009) stated, it is known that lifestyle variables, even later in life, could act as a protecting mechanism against cognitive decline and researchers are interested in finding out if AL learning could be used as cognitive training. This is especially noticeable in Wong et al. (2019), where AL training is compared to cognitive training through games. It is also worth mentioning that all studies in

these categories tested the effects of AL learning by means of short-length language courses.

The third category, namely, the one comprising articles that deal with socio-affective aspects of AL learning for older learners, consists of a more heterogeneous group of studies. Two of the studies are also based on short-length AL programs and their outcomes (WARE et al.; 2017; PFENNINGER; POLZ; 2018). The others, however, are grounded on various theoretical approaches. Pfenninger and Polz (2018) and Ware et al. (2017) are presented in two categories of this review as the studies encompass both cognitive and socio-affective aspects. Studies in this category are concerned with how aspects such as motivation and feelings towards AL learning may hinder or promote learning.

The final category included in this review comprises two studies, which adopt different perspectives. Both aim at examining how internal and external variables interact during the process of older learners' AL learning. Mackey and Sachs (2012) look at working memory and interactional feedback and Cox (2017) addresses bilingualism and explicit instruction.

### **3.3.1 Additional language learning as cognitive enhancement: positive results on cognitive functions**

Studies in this section, summarized in Table 1, aimed to investigate whether AL learning could be cognitively beneficial for older leaners. They all proposed an intensive English as AL learning program as cognitive training for healthy older adults. Participants in all three studies were leveled as beginners. Two of the studies were randomized controlled studies whose participants were monolingual, BUBBICO et al., 2019 and WONG et al., 2019, while the other was a longitudinal pilot study, which, in addition to monolingual participants, included a group of German-Slovenian bilinguals, PFENNINGER; POLZ, 2018. Participants' ages ranged from 59 to 90 across studies. The AL learning programs varied in duration, with interventions lasting one month, PFENNINGER; POLZ, 2018, four months, BUBBICO et al., 2019, and six months, WONG et al., 2019. Two studies had active control groups, PFENNINGER; POLZ, 2018 and WONG et al., 2019 – meaning there were groups that suffered other types of intervention

–, while one had a passive control group, BUBBICO et al., 2019, that is, there was a group that did not engage in any kind of intervention.

As for the learning settings, two of the learning programs were held face-to-face, BUBBICO et al., 2019 and PFENNINGER; POLZ, 2018, and one was computer-based but offered in centers for older adults, where learners also gathered approximately twice a month for social activities as part of the training, WONG et al., 2019. All studies relied on a battery of cognitive tests performed before and after intervention. Results were as follows: improvements on global cognition levels (BUBBICO et al., 2019), executive tasks (PFENNINGER; POLZ, 2018) and overall cognitive abilities (WONG et al., 2019).

Quadro 3 - Studies that found cognitive benefits from AL learning for older learners.

<b>Study</b>	<b>Objectives</b>	<b>Characteristics of Participants (number, age, groups, sample size)</b>	<b>Language Intervention</b>	<b>Outcome Measures</b>	<b>Results</b>
<b>Bubbico et al. (2018)</b>	To analyze how an ESL learning program for older learners can improve cognition and lead to functional changes in the brain.	- 26 Italian speakers aged between 59 and 79; - 14 people in the intervention group; - 12 in the passive control group.	Four-month ESL program for beginners, 16 2-hour sessions. Group lesson taught by a native speaker. All language skills were part of the program.	Battery of neuropsychological tests; MRI scanning.	A 4-month long ESL learning intervention improves global cognitive performance and reorganizes functional connectivity in the brain.
<b>Pfenninger and Polz (2018)</b>	To investigate if older EFL learners would show FL gains, cognitive benefits and increased well-being after a four-week EFL training and if these could be related to previous bilingualism.	- 12 German speakers aged between 63 and 90; - 6 were monolingual in an active control group and 6 were German-Slovenian bilinguals in the intervention group.	Four-week EFL program for beginners, 3 2-hour lessons/week. The same instructor taught both groups. Focus on comprehension and use of everyday language.	FL proficiency tasks. Cognitive tasks Questionnaire to measure socio-affective dimension.	Language training led to measurable improvements on inhibition, but not on focus and concentration. Positive effect on self-confidence, autonomy and well-being irrespective of age and prior bilingualism.
<b>Study</b>	<b>Objectives</b>	<b>Characteristics of Participants (number, age, groups, sample size)</b>	<b>Language Intervention</b>	<b>Outcome Measures</b>	<b>Results</b>

<b>Wong et al. (2019)</b>	To test the potential cognitive enhancing effect of FL learning in older adults.	- 153 Chinese speakers aged between 60 and 85. - Three groups: FL – 53, games – 51, music appreciation (passive control group) – 49.	Six-month, 5h/ week for all groups. Programs were all computer-based and participants met 2x a month for social activities. EFL training group use the Rosetta Stone method.	Battery of cognitive tests.	Participants in EFL and games groups showed improvement in overall cognitive abilities. Improved scores in working memory in EFL group.
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Source: The author.

Notes: ESL = English as a Second Language, EFL = English as a Foreign Language

### **3.3.2 Additional language learning as cognitive enhancement: little or no impact on cognitive functions**

Quadro 4 (Table 4) presents a summary of the results presented in this section.

Three of these studies tested the hypothesis that AL learning could have a beneficial impact on older learners' cognition (BEGGREN et al., 2020; RAMOS et al., 2016; VALIS et al., 2019), while one aimed to determine whether a technology-based AL learning program was feasible for older leaners (WARE et al., 2017). They all proposed an AL learning program as cognitive training for healthy older adults. The ALs taught were Italian (BERGGREN et al., 2020), Basque (RAMOS et al., 2016) and English (VALIS et al., 2019; WARE et al., 2017). One was a randomized controlled study with an active control group (BERGGREN et al., 2020), one was a longitudinal study with a passive control group (RAMOS et al., 2016), one was an experimental study with a passive control group (VALIS et al., 2019) and the other was an experimental study without a control group (WARE et al., 2017). Participants in these studies had ages ranging from 55 to 80. In Valis et al. (2019), the experimental group was divided into two groups of beginner and low-intermediate learners, in Ware et al. (2017) participants were beginners and intermediate learners who were placed in the same group, while in Berggren et al. (2020) and in Ramos et al. (201) all participants were beginners at the AL being learned during training. It is noteworthy that in Berggren et al. (2020), all participants, who were Swedish speakers, had a working knowledge of English, making Italian their second AL. Two of the AL learning programs lasted approximately the same, namely, 11 and 12 weeks (BERGGREN et al., 2020 and VALIS et al., 2019, respectively), one lasted four months (WARE et al., 2017), whereas one was an eight-month program (RAMOS et al., 2016). All language programs were held face-to-face, even though one of them was technology-based, meaning they had group sessions with the aid of technological resources. Three studies administered a battery of cognitive tests to assess various cognitive functions before and after intervention (BERGGREN et al., 2020; VALIS et al., 2019, WARE et al., 2017). One study (RAMOS et al., 2016) aimed to assess switching ability and used a color-shape switching task.

Results showed that 1) a short-length AL learning program does not affect general cognitive abilities (BERGGREN et al., 2020), 2) participants' switching ability was not improved after AL training (RAMOS et al. 2016), 3) cognitive functions were not enhanced after the AL learning program (VALIS et al., 2019) and 4) UCLA (University of California Loneliness Assessment, DE GRÂCE et al., 1993) and MoCa (Montreal Cognitive Assessment, NASREDDINE et al., 2005) measures did not show significant improvements (WARE et al., 2017). Ware et al. (2017) will be present in the next category as it also assessed socio-affective elements of the AL learning program.

Quadro 4 - Studies that found little or no impact of AL learning on cognitive functions for older adults.

Study	Objectives	Characteristics of Participants (number, age, groups, sample size)	Language Intervention	Outcome Measures	Results
<b>Bergreen et al. (2020)</b>	To test the hypothesis that FL training may be more effective in improving cognitive abilities in older learners than a relaxation training would be.	<ul style="list-style-type: none"> <li>- 160 Swedish-speakers aged between 65 and 75;</li> <li>- 90 participants in the language group;</li> <li>- 70 participants in a relaxation group.</li> <li>- Participants had working knowledge of English.</li> </ul>	<ul style="list-style-type: none"> <li>- 11-week Italian program for beginners, 2,5-hour session, 2x/week;</li> <li>- Participants were taught basic grammar information and vocabulary related to leisure and tourism;</li> <li>- They were asked to learn a list of words from one session to the other.</li> </ul>	<ul style="list-style-type: none"> <li>- Cognitive test battery;</li> <li>- Vocabulary test after each session.</li> </ul>	There was no evidence that FL learning improved cognitive functions relative to the relaxation training.
<b>Ramos et al. (2016)</b>	To explore the relation between FL learning and switching ability in older learners.	<ul style="list-style-type: none"> <li>- 43 Spanish speakers with no experience in a FL aged between 60 and 80;</li> <li>- 26 participants in language group;</li> <li>- 17 in passive control group.</li> </ul>	<ul style="list-style-type: none"> <li>- 8-month Basque language lessons, 330min/week;</li> <li>- Program carried out by professional language trainers.</li> </ul>	<ul style="list-style-type: none"> <li>- Color-shape switching task.</li> </ul>	Switching ability measured by switching cost did not improve after FL learning.
<b>Valis et al. (2019)</b>	To investigate if FL learning can enhance cognitive functions in healthy older adults.	<ul style="list-style-type: none"> <li>- 42 Czech speakers aged between 69 and 72;</li> <li>- 20 subjects in language group;</li> <li>- 22 in passive control group.</li> </ul>	<ul style="list-style-type: none"> <li>- 12-week EFL program, 3 45-min lessons/week;</li> <li>- Subjects in language group were divided into beginners (9) and lower-intermediate (11);</li> <li>- All language skills were taught using different methods.</li> </ul>	<ul style="list-style-type: none"> <li>- Cognitive assessments using standardized tests.</li> </ul>	Scores of intervention group and control group did not differ significantly.

<b>Study</b>	<b>Objectives</b>	<b>Characteristics of Participants (number, age, groups, sample size)</b>	<b>Language Intervention</b>	<b>Outcome Measures</b>	<b>Results</b>
<b>Ware et al. (2017)</b>	To determine if a technology-based FL program is feasible for older learners.	- 14 French speakers, mean age of 75, at different proficiency levels.	- Four-month pilot study, EFL, 2-hour sessions, 1x/week - Onsite program guided by language instructor	- MoCA; - Semi-structured interview; - UCLA	- MoCa and UCLA scores did not differ, but program was deemed enjoyable and stimulating.

Source: The author.

Notes: FL = foreign language, MoCa = Montreal Cognitive Assessment; UCLA = University of California Loneliness Assessment.

### **3.3.3 Socio-affective aspects of additional language learning for older learners**

Quadro 5 (Table 5) summarizes this section's findings. This category presents the most heterogeneous set of studies as they stem from different theoretical approaches.

Two of these studies offered AL training (PFENNINGER; POLZ, 2018; WARE et al. 2017), considered socio-affective aspects amid cognitive outcome measures and were also included in the previous sections. The other three studies assessed socio-affective elements of AL learning by older adults as their main purpose (CÁRDENAS ESPITIA, 2010; KIM; KIM, 2015; SMITHERS; GRAY, 2018). Sample sizes were small in all but one study (KIM; KIM, 2015), which had 420 participants. Three of these studies relied on questionnaires (CÁRDENAS ESPITIA, 2010; KIM; KIM, 2015; PFENNINGER; POLZ, 2018), while one conducted a semi-structured interview (WARE et al. 2017) and the other used learning journals (SMITHERS; GRAY, 2018). Cárdenas Espitia (2010) also used a reflective language portfolio, and Ware et al. (2017) administered the University of California Loneliness Assessment (UCLA) scale. Two were experimental studies (PFENNINGER; POLZ, 2018; WARE et al. 2017), one reported an action research (CÁRDENAS ESPITIA, 2010) and one used the Exploratory Practice framework (SMITHERS; GRAY, 2018).

As for the socio-affective aspects analyzed, Kim and Kim (2015), aimed at analyzing motivational and demotivational factors in AL learning by older adults based on the *L2 Motivational Self System* by Dornyei (2009); Smithers and Gray (2018) investigated how a meaning-order approach to pedagogical grammar (an approach to teaching grammar that has been gaining momentum in Japan) could benefit older learners' quality of life; Cárdenas Espitia (2010) wanted to know how the language portfolio could help students plan the course they were enrolled in and then foster their autonomy; Pfenninger and Polz (2018) included, but were not limited to, motivation, overall well-being, autonomy, learning atmosphere, and importance of language instructor; and Ware et al. (2017) conducted an interview which brought about learners' feelings about AL instruction, motivation for

learning, attitudes towards English as AL and about the technology-based program itself.

Cárdenas Espitia (2010) used both a questionnaire to survey past AL learning experiences and a language portfolio that would help students decide what they would study based on their own needs. The results were that learners had never been encouraged to take on an active role in their learning process and that, with the guidance of the language portfolio, they could become more engaged in their own language learning process. In Kim and Kim (2015), the most relevant motivational factor for the older leaners was self-actualization, that is, “feeling of satisfaction and delight they get from knowing English” (*Ibidem*, p.125) and the most striking demotivational factor was the pressure to do an equivalency exam, as participants in this study were adults who had not finished secondary education and had resumed studies later in life. For Smithers and Gray (2018), the meaning-order approach to grammar enhanced students’ moods, motivation and self-efficacy. As for Pfenninger and Polz (2018), the conclusion was that AL learning promoted overall well-being and that learners felt confident and content with the way their effort to learn an AL had been recognized by family members. Finally, in Ware et al. (2017), the UCLA was administered pre- and post-intervention as a means of assessing feelings of loneliness and social isolation. No changes were observed, but participants found the technology-based program enjoyable and expressed that the AL learning environment was an opportunity for them to socialize.

Quadro 5 - Studies that focus on socio-affective aspects of AL learning by older learners.

Study	Objectives	Participants	Outcome Measures	Results
<b>Cárdenas Espitia (2010)</b>	To describe an action research project in which older learners of ESL used a language portfolio to plan the course and foster learner's autonomy.	- 15 subjects aged between 48 and 74 enrolled in an English course for beginners.	<ul style="list-style-type: none"> <li>- Questionnaire to survey past experiences to understand learner's attitudes towards English learning.</li> <li>- Language portfolio as designed by the Council of Europe (2010) where students made suggestions as to what they wanted to study and kept a diary of their learning process.</li> </ul>	The questionnaire showed that students had a background of teacher-centered ESL experience. The language portfolio assisted students in the selection of contents and proved students can take on an active role in the classroom.
<b>Kim &amp; Kim (2015)</b>	To explore motivational and demotivational factors among older ESL learners in an adult education program in Seoul, South Korea, based on the L2 Motivational Self System.	- 420 subjects aged between 43 to 78.	<ul style="list-style-type: none"> <li>- Likert-scale questionnaire with 47 items covering motivational and demotivational aspects of ESL learning.</li> </ul>	The most influential motivational factor was self-actualization and the most demotivating factor was pressure to succeed in the Graduation Equivalency Examination (GEE).

Study	Objectives	Participants	Outcome Measures	Results
<b>Pfenninger and Polz (2018)</b>	To Investigate if older EFL learners would show FL gains, cognitive benefits and increased well-being after four-week EFL training and if these may be related to previous bilingualism.	<ul style="list-style-type: none"> <li>- 12 German speakers aged between 63 and 90;</li> <li>- 6 were monolingual in an active control group and 6 were German-Slovenian bilinguals in the intervention group.</li> </ul>	<ul style="list-style-type: none"> <li>- Four-week EFL program for beginners, 3 2-hour lessons/week. The same instructor taught both groups. Focus on comprehension and use of everyday language.</li> <li>- FL proficiency tasks.</li> <li>- Cognitive tasks</li> <li>- Questionnaire to measure socio-affective dimension.</li> </ul>	Language training led to measurable improvements on inhibition, but not on focus and concentration. Positive effect on self-confidence, autonomy and well-being irrespective of age and prior bilingualism.
<b>Smithers &amp; Gray (2018)</b>	To investigate if the quality of life of older Japanese ESL learners could be improved through grammar instruction via meaning-order approach (MAP grammar).	<ul style="list-style-type: none"> <li>- 11 Japanese ESL learners aged between 56 and 78.</li> </ul>	<ul style="list-style-type: none"> <li>- Exploratory practice;</li> <li>- Over a 6-week period, learners studied grammar via MAP Grammar and kept a learning journal with 5 open-ended questions;</li> <li>- Learners wrote about their mood before and after instruction.</li> </ul>	Quality of life was enhanced because students developed self-efficacy beliefs and showed increased motivation.

<b>Study</b>	<b>Objectives</b>	<b>Participants</b>	<b>Outcome Measures</b>	<b>Results</b>
<b>Ware et al. (2017)</b>	To determine if a technology-based FL program is feasible for older FL learners.	- 14 French speakers, mean age of 75, at different proficiency levels.	- Four-month pilot study, EFL, 2-hour sessions, 1x/week; - Onsite program guided by language instructor; - MoCA; - Semi-structured interview; - UCLA.	A technology-based FL program is feasible for older adults. No changes were observed in MoCA and UCLA results. The main themes expressed in the interviews were: school memories, English perceived as fun, difficult and essential, FL learning as a means of socialization, among others.

Source: The author.

EFL = English as a Foreign Language; ESL = English as a Second Language; MoCa = Montreal Cognitive Assessment; UCLA = University of California Loneliness Assessment.

### **3.3.4 The relation between internal and external variables in AL learning by older adults**

Quadro 6 (Table 6) summarizes the findings of this section. Both studies presented in this category deal with how internal variables, namely, bilingualism and working memory, interact with external variables, namely, explicit instruction and interactional feedback (COX, 2017; MACKEY; SACHS, 2012, respectively).

Cox (2017) examined how AL learning by older learners could be affected by previous bilingualism and explicit instruction. Forty-three older adults aged from 62 to 80 years old were divided into a group of monolinguals and a group of bilinguals. Each group was then divided again into a group that received explicit instruction prior to AL practice and a group that did not. Interestingly, the language taught in this program was Latin with a focus on its morphosyntax. The learning program consisted on a one-week computer-based instruction program. The study of Mackey and Sachs (2012) had a small sample size of nine older adults aged 65 to 89 years old and did not include a control group. The aim was to explore how working memory combined with interactional feedback can trigger AL development. This was the only study in this review that did not offer the participants a formal language learning setting. Instead, older learners met once a week for five weeks with a native speaker of English who provided them with feedback when non target-like language structures were produced. Feedback was mostly provided in the form of recasts.

In both studies, results confirmed that these variables interacted. Explicit instruction had little or no effect for older learners, but when an effect was observed, it was in the bilingual group (COX, 2017), while participants with higher scores in working memory presented better language development after interactional feedback (MACKEY; SACHS, 2012).

Quadro 6 - Articles that deal with internal and external variables in AL learning by older adults.

<b>Study</b>	<b>Objectives</b>	<b>Participants</b>	<b>Method</b>	<b>Results</b>
<b>Cox (2017)</b>	To investigate SL learning by older adults through of internal and external variables, specifically late SL learning (bilingualism) and provision of explicit instruction.	- 43 subjects aged between 60 and 82; - 2 groups: Spanish monolinguals or Spanish-English bilinguals.	Bilingual and monolingual older learners studied Latin morphosyntax using a computer program with or without explicit instructions.	Explicit instruction had little overall effect; when it did, it was found in bilinguals.
<b>Machey &amp; Sachs (2012)</b>	To explore if older ESL learners would show L2 development after interaction with feedback and if this might be related to their working memory.	- 9 Spanish speakers aged between 65 and 89.	- Learners met individually 5 times over a 5-week period with native speakers who provided them with feedback whenever they produced non target-like language. - Working memory measures.	- Low incidence of L2 development after interactions with feedback. - Participants with better performance in the listening-span test (WM measure) showed higher L2 development.

Source: The author.

Notes: SL = second language; ESL = English as a Second Language

### 3.4 DISCUSSION

According to the results brought by this systematic review, there seems to be evidence in favor of AL learning as an effective cognitive training resource in aging. Both Bubbico et al. (2019) and Wong et al. (2019) have found that a short period of AL training has boosted general cognitive abilities of older leaners. In addition to finding that there was improvement in global cognition, Bubbico el at. (2019) found that this enhancement was accompanied by functional changes in language networks in the brain. The demonstration that older people's brains are capable of learning is especially relevant in the SLA field because the age factor is highly regarded as a predictor of AL attainment. If one believes that AL learning ability is reduced or absent after a certain age, engaging in this activity would be meaningless. However, based on evidence that the brain maintains its plasticity and is therefore open to new learning opportunities (HEJAZI et al, 2019; BIRDSONG; 2018; SINGLETON; PFENNINGER; 2018), the challenges involved in learning an AL are likely to result in benefits. Not only is the brain still plastic enough to acquire new language, as it is plastic enough to compensate cognitive decline and create different strategies for learning and maintaining cognitive fitness (REUTER-LORENZ; PARK, 2014).

Along similar lines, Wong et al. (2019) have found that learning an AL can provide cognitive benefits to older learners. Their study has found that overall cognitive abilities can undergo improvement after a short-length AL intervention, and it is hypothesized that global cognition is more likely to suffer improvement than specific cognitive abilities as the network involved in language learning is so broad. Another aspect in this study that deserves attention is that it is the only one to compare AL learning to another cognitive training, namely, computer-based games. The efficacy of cognitive stimulating activities has been evidenced in several studies (see review in ANTONIOU et al., 2013). The question that remains, however, is whether AL learning could be regarded as an advantageous cognitive training form over other types of cognitive training, as it has also been found that older people benefit from training which target specific cognitive abilities (BALL et al., 2002). In addition to enhancement in general cognition, Wong et al. (2019) and Pfenninger and Polz (2018) have found an improvement in, respectively, working memory and executive functions. Such results are

relevant because it is known that both working memory and executive functions are subject to changes during the aging process (HEJAZI et al, 2019; TAUSSIK; WAGNER, 2006; DRAG; BIELISKAUS, 2010) and are crucial for AL acquisition (MACHEY; SACHS, 2012; ORTEGA, 2013).

Unlike the previous studies, Ramos et al. (2016) failed to come across cognitive benefits to AL learning by older adults when investigating whether it could enhance the learners' switching ability as measured by switching cost. The study brings evidence for the so-called bilingual advantage, which, despite its many advocates (e.g. BIALYSTOK et al., 2004; BIALYSTOK et al., 2007; CRAIK et al., 2010), has become debatable since several studies have failed to reproduce it (e.g. SANDERS et al., 2012; BILLIG; SCHOLL, 2011, LAWTON et al. 2015; PAAP et al., 2018). Nevertheless, when discussing their findings, the authors acknowledge that lifelong bilingualism and AL learning later in life may not be comparable entities. The same has been argued by Antoniou and colleagues (2013), who stated that while studies on bilingualism concern individuals who spoke more than one language during a lifetime, starting an AL learning process at a later age may entail different cognitive and affective processes. Berggren et al. (2020), when addressing the reason why their study was not framed in terms of the bilingual advantage, contribute to this debate by stating that lifelong bilingualism and late AL learning could bring about different benefits to older people as the former can be considered in terms of cognitive control (i.e., inhibition) while the latter is more likely to have observable advantages in memory tasks. Nonetheless, participants in Berggren et al. (2020) did not show any improvements in verbal intelligence, spatial intelligence, associative memory, item memory or working memory. Following a different perspective, Pfenninger and Polz (2018) and Cox (2017) added bilingual groups to their studies and found opposite results – while Pfenninger and Polz (2018) found that older learners benefited from AL training irrespective of previous bilingualism, Cox (2017) found that only the bilingual group gained from explicit instruction, making a case for the bilingual advantage.

Valis et al. (2019) did not find any cognitive benefits to AL learning for older adults. However, they acknowledge that cognitive functions have been maintained through AL learning as test scores have remained stable across tests. Interestingly, both Valis et al. (2019) and Berggren et al. (2020) mention the fact

that their participants' high level of education could have had an impact on their findings. Educational engagement has been evidenced as a means for building cognitive reserve and enhancing compensatory scaffolding (STERN, 2009; REUTER-LORENZ, 2014). It could be argued that highly educated people might not benefit as greatly from AL learning as they have already created compensatory measures against age-related cognitive decline; or, at least, it could be argued that the impact of AL learning would not be so easily observable in such individuals. Despite not recommending AL learning as cognitive training for older adults, Valis et al. (2019) highlighted how positive and pleasant the atmosphere of the AL intervention was. The authors observed how participants took the chance to socialize, which made the AL learning environment a place where the learners could overcome feelings of loneliness and isolation, states in which older people often find themselves (GABRYS-BARKER, 2018).

The number of studies relating AL learning by older people to socio-affective aspects of aging is still scarce. Ortega (2013) includes motivation, affect and social dimensions as paramount to understanding AL acquisition. As such, these elements become essential when teaching AL to older learners. Although this group is unique under a socio-affective perspective, it has not received the attention it deserves in the field of AL teaching and learning. Kliesch et al. (2018) understand that this is a consequence of overrating age as a predictor of AL attainment at the expense of other factors, such as classroom atmosphere and motivation. Pfenninger and Polz (2018) did not find any improvements in the Multidimensional Mood State Questionnaire in their study, but they found in the open-ended questionnaire that learners perceived AL learning as a social and cognitively stimulating activity that could strengthen social ties. In Ware et al.'s study (2017), results were similar. Even though no significant changes in the scores of the UCLA were observed, the semi-structured interview shed a light upon older learners' feelings towards AL learning. All of the participants mentioned school memories in their answers, and these are experiences that become part of them as AL learners. According to Gabrys-Barker (2018) and Ramírez Gómez (2016a), previous learning experiences and strategies become resources for older learners, which can create both very resourceful learners and very diverse classrooms.

Kim and Kim (2015) found that the most influential motivational factor for the older learners in their study was self-actualization, which is described by them as motivation driven by enrichment, enjoyment, self-satisfaction and sense of accomplishment. That means to say that these learners were more driven by intrinsic motivation, leading the authors to conclude that “a sense of enjoyment, satisfaction, and achievement is crucial for their learning process” (p.131). It is relevant to stress that learner’s profile in Kim and Kim’s study was quite different from that of the other studies: these were older adults that had not had access to education previously and were enrolled in a course that would grant them with a conclusion certificate provided they passed an exam. That is why the pressure to pass this exam was the most influential demotivational factor in this study. Accordingly, Smithers and Gray (2018) found that work-oriented learning may be demotivational for older learners. Finally, both Cárdenas Espitia (2010) and Smithers and Gray (2018) discovered that older learners can take an active role in the classroom, which can be crucial for these learners as they constitute a very heterogeneous group within itself.

One aspect that could be deemed controversial in all studies is the length of intervention. Results regarding the most efficient duration of language training were inconclusive in terms of frequency, number of days and hours per session. They all varied greatly, but most could be considered short-term language interventions, ranging from as little as a week to eight months. Intervention intensity could also be argued as unrealistic, as it is unlikely that language schools or even lifelong educational programs will offer more than two hours a week of language classes. Berggren et al. (2020) stated that their training was at least three times more intense than ordinary courses. That said, it can be argued that the amount of exposure to AL that could bring about benefits, be them cognitive or socio-affective, is still open to debate. It may be the case that only lengthy longitudinal studies might be able to address this matter. That same could be said about sample sizes, which varied greatly. According to Kliesch et al. (2018), individual differences increase with age, what makes creating generalizations about older learners’ AL learning processing even more challenging. That could account for the lack of research in this field.

Finally, the ages of the older learners varied across studies. For instance, while in Kim and Kim’s (2015) study participants’ ages ranged from 43 to 78

years, subjects in Pfenninger and Polz's (2018) study could be as old as 90. As Carr and Komp (2011) state, the third age is "the period of healthy retirement later in life" (p. 04). Thus, when dealing with older adults, it seems to be necessary that cultural, contextual and social factors are taken into account.

This article aimed to discuss current research about cognitive and socio-affective aspects of aging related to AL learning. Although research in the field is still incipient, it is noticeable that there is effort towards understanding how beneficial AL learning can be for older adults. These studies attempted to prove by means of various cognitive tests that older learner's cognition can be improved after what can be considered short exposure to AL learning: while some have found improvement in cognitive functions (e.g. WONG et al., 2018), others have failed to encounter any cognitive advantage to AL learning by older adults (e.g. BERGGREN et al., 2020). One study deserves special attention, as it has considered both aspects, cognitive and socio-affective, experimentally (PFENNINGER; POLZ, 2018). Two studies deserved special attention as they aimed to investigate how intrinsic variables, namely previous bilingualism and working memory, and extrinsic, explicit instruction and interactional feedback, interacted during older people's AL learning process (COX, 2017; MACHEY; SACHS, 2012).

Further studies should investigate which cognitive constructs – for example, which type of memory or executive functions subcomponents – could mostly benefit and interact with AL learning programs, which could be of interest for researchers in the field of AL acquisition and bilingualism, with an interface with neuropsychology.

Studies examining socio-affective aspects alone fell into the applied linguistics field and tended to analyze older learner's attitudes and feelings towards AL learning (e.g. KIM; KIM, 2015). These findings take on special importance as they show what motivates this specific group of learners and how they feel as AL learners. This bears special relevance for AL instructors and designers of teaching materials. The results in this review may shed light on the importance of better knowing older adults' profiles as AL learners and the interaction between AL learning and cognitive and socio-affective aspects.

As the number of older people in the world is bound to rise, further studies should be developed. That should encourage lawmakers, educators, researchers

and family members of those older people to make AL learning an alternative when it comes to the well-being of older people. Older adults are aware of the benefits of learning an additional language, may they be cognitive or social. It is worth mentioning that the number of studies that relate socio-affective aspects of aging to AL learning is still scarce. Ramirez Gómez (2016a) has found that AL instructors may take on a patronizing attitude towards older learners based on aging stereotypes and the general assumption that older learners engage in learning with the sole purpose of socializing. Thus, understanding their motivations, feelings and attitudes is paramount so that educators can make informed decisions. There is, in addition, rising evidence favoring AL learning for older learners and, therefore, the need for research to be done in this area.

## **4 ESTUDO 2: WHO IS THE OLDER LEARNER OF ADDITIONAL LANGUAGES? A LEARNER PROFILE**

**Abstract:** Little is known about the way older learners approach additional language learning, which is a cognitively demanding activity believed to boost older adults' cognition and well-being. The present study aimed to contribute with theoretical and empirical evidence on who the older learners of additional languages are, based on cognitive and affective aspects. Eighteen older adult learners of additional languages (AL) (ages 61 to 75, mean 66,9, schooling 16 to 24, mean 18,5) answered three questionnaires aimed at gathering information on their socioeconomic status, additional language learner profile and linguistic profile. Results showed that the older learners had a high socioeconomic status and level of education, in addition to having English as the preferred additional language. Participants declared having difficulty learning new vocabulary and devising independent study strategies. Moreover, they believed their age was a negative factor in their additional language learning process. It can be stated that learners need to have a better understanding of the relation between age and language learning and be taught how to develop effective learning strategies to meet their needs and goals. The results provide language instructors, teaching material developers and researchers with information that can help them cater for these learners' needs, while portraying their affective and cognitive profiles.

**Keywords:** Older adult. Language learning. Learner profile.

### **4.1 INTRODUCTION**

A report by the United Nations (2019) has stated that the world is experiencing a “longevity revolution” (*Ibidem*, p. 5). According to the same report, the growth in the aging population is a global phenomenon: global projections show that the population aged 65 or more will account for 16 percent of the world's population by 2050. In order to adjust to this scenario, it is paramount that societies get prepared to guarantee that their older population is properly assisted and that they have the greatest quality of life possible. It is known that the aging process entails changes in cognitive and physical abilities. The former could lead to symptoms associated with dementia, and the World Health Organization projects that there will be 82 million people suffering from dementia in 2030 and 152 in 2050 (2019). This calls for actions that can enhance older people's quality of life and consequently avoid or delay age-related diseases such as dementia.

It has been demonstrated that non-pharmacological interventions such as physical activity, good nutrition, social engagement and cognitive training can yield beneficial effects on the cognitive health of older people (ANTONIOU et al., 2013; KLIMOVA; PIKHART, 2020; REUTER-LORENZ; PARK, 2014; STERN,

2009). The learning of an additional language, hereafter AL, has been proposed as form of cognitive training that could boost older people's cognitive reserve as the learning of an AL engages the brain network that is also known to be affected by negative age-related cognitive changes (ANTONIOU; WRIGHT, 2017). In fact, a few studies, albeit pioneering, have shown that studying an AL at an older age can indeed improve learner's cognitive abilities (BUBBICO et al., 2018; PFENNINGER; POLZ, 2018; WONG et al., 2019). In addition, as stated by Kliesch et al. (2018), language learning is a cognitively demanding process that encompasses memorization, sustainment of attention, inhibition of one's mother tongue, rule learning and application, among others. It does not come as a surprise that engaging in AL learning can prove to be beneficial for older learners. In fact, there is a widespread belief that language learning can delay the aging process and benefit cognitive functions. The present study aims at better understanding who the older learners of AL are and how they view their learning process and abilities.

Not only does language learning promote the practice of these various cognitive functions, but it also promotes opportunities for socialization and interaction that older learners may not have otherwise. The positive socio-affective effects of AL learning on older learners have been demonstrated by Pfenninger and Polz (2018). They have shown that a four-week language program had positive effects on older learners' self-confidence, autonomy and well-being. In addition, language learning has also been associated to increased self-efficacy and motivation (SMITHERS; GRAY, 2018). Considering that older people often express age-related defeatism (SINGLETON, 2018) and manifest aging self-stereotypes (LEVY, 2003), these results show that the AL learning environment can provide benefits that surpass the cognitive dimension.

However, embarking on AL teaching to older adults is not an easy task. In addition to the particular cognitive and socio-affective aspects of these learners, there are other aspects that make this a pedagogically challenging endeavor. Firstly, it seems to be difficult to define what turns an adult learner into an older adult learner. Ramírez Gómez (2016a) defines older learners as individuals aged 60 or over who are completely or partially retired and are not in need of full-time nursing care. According to Findsen and Formosa (2011), the beginning of later life is conventionally defined by a certain chronological age, such as 60, which

can be quite problematic considering that the manifestation of biological and cognitive aging can emerge at different times for different people. That is why Oxford (2018) explains that the third age is strongly determined by social, cultural and economic powers. To add to that debate, and narrowing down to AL learning, it can be argued that groups of third age learners can be rather diverse as individual differences are prone to accentuate as one ages (GABRYS-BARKER, 2018). That means saying that the language instructor is likely to encounter a same-age group that is very diverse in its life experiences, linguistic background, educational and professional attainment and cognitive performance. Finally, language instructors have to challenge their own beliefs – and that of their older learners – about age and learning. Despite ample evidence that language learning is possible at all ages – as the brain remains plastic and open to learning throughout life (PFENNINGER, 2017; SINGLETON; PFENNINGER, 2018, RAMÍREZ GÓMEZ, 2016a; KLIESCH et al., 2018), there is a widespread belief that, when it comes to language learning, “the earlier, the better”. That can lead to instructors adopting a patronizing attitude and to learners reinforcing their own deprecating beliefs about their learning abilities.

A few researchers have been undertaking the task of better understanding who older learners of AL are. Pawlak et al. (2018) aimed at investigating the use of indirect language learning strategies by older learners – who they considered those aged 50 or over – in a university for the third age in Poland. They used Oxford's (1990) framework of learning strategies and also investigated how older adults dealt with their successes and failures when learning an AL. They found that these learners were not able to identify specific goals for language learning and to devise strategies for learning. In addition, they concluded the learners were susceptible to negative emotions, such as anxiety and disappointment. Piechurska-Kuciel and Szymka (2018) sought to examine the compensatory strategies older learners used during their learning process. They stemmed from Baltes's model of successful aging (1987), according to which individuals develop compensatory mechanisms to deal with age-related losses. The researchers wanted to know whether the older learners used Oxford's (1990) compensation strategies to manage challenges during AL learning. Piechurska-Kuciel and Szymka (2018), found that the learners were able to use a wide range of compensation strategies to deal with their language learning shortcomings.

Grotek (2108) investigated what were the older learners' expectations concerning language instructors. Drawing upon learners' personal narratives, the results showed that learners expected language instructors to be able to cater for learner's needs, to incentivize interpersonal relations within the language class, to select materials suitable to match learners' needs, to help learners develop memorization strategies and provide feedback on learners' performance. Despite the small scale of all these studies, they present a valuable grasp on who older learners truly are and what they expect from their AL learning.

This study is also an attempt to contribute to this emerging field of research. In order to better understand the profile of older learners of ALs, a small-scale qualitative research was conducted among AL older learners from a metropolitan area in Rio Grande do Sul, the southernmost state in Brazil. In addition to using measures to establish participants' socioeconomic status and linguistic background profile, a questionnaire to determine the AL learner's profile of older adults was created and used to interview eighteen older adults who were engaged in AL learning. Results from these interviews are believed to shed light on who these older learners are as languages users and learners, so that they can be better catered for during their AL learning process, as well as support pedagogical material design tailored for aging populations.

## 4.2 METHOD

This study was approved by the Ethics Committee of the Pontifical Catholic University of Rio Grande do Sul under the protocol number 4042144.

### 4.2.1 Participants

Healthy older adults aged 60 or over were recruited by convenience in the community. They were either students in language schools in a metropolitan area in the state of Rio Grande do Sul or took classes with a private AL teacher. To be eligible, participants had to be at least 60 years old, in accordance with the Brazilian Statute of Senior Citizens, and had to be actively taking AL classes. The older adults' contact information was gathered from schools and teachers, and those who fit the criteria were invited by e-mail or text message. Eighteen people agreed to participate in the study.

#### **4.2.2 Instruments**

Three instruments were used in this study: a questionnaire for socioeconomic classification, a questionnaire to establish participants' linguistic profile and an interview whose purpose was to define the AL learner profile of participants.

The Brazilian Economic Classification Criteria (ABEP, 2019) is a questionnaire designed by the Brazilian Association of Research Companies. It is comprised of several questions about the respondents' purchasing power, access to public utility services and the level of education of the head of the household. This instrument estimates socioeconomic distribution within a group by using a system of points, which correspond to categories from A – individuals with the greatest number of points, that is, at the top of the socioeconomic classification – to E – individuals with the smallest number of points and, therefore, at the bottom of the socioeconomic classification. Intermediary categories were B1, B2, C and D. Its administration showed the socioeconomic characterization of the sample.

The questionnaire aimed at understanding the participants' language background with ALs (see Apêndice 1<sup>11</sup>) was adapted from Scholl and Finger's (2013) language background questionnaire for bilingual research and from the Language Experience and Proficiency Questionnaire (LEAP-Q) by Marian, Blumefeld and Kaushanskaya (2007). Although there is a preference for using the term *additional language* in this study, the term *second language (L2)*, *third language (L3)* and *fourth language (L4)* were kept in order to facilitate participants' understanding of which languages were being addressed. The linguistic profile questionnaire was composed of questions about context of learning, the number of hours in which each AL was used for certain activities, a self-assessment grid of language proficiency and the number of years of contact with the ALs reported.

The third instrument was an interview composed of 35 mostly open-ended questions that could portrait the learner profile of older adults who engaged in AL

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<sup>11</sup> Appendix 1.

learning (see Apêndice 2<sup>12</sup>). The questions were designed taking into consideration the current literature about cognitive and socio-affective aging.

#### **4.2.3 Procedure**

Once participants had read the formal consent and had agreed to take part in the study, they were contacted, and an online meeting was scheduled. Participants were free to choose a conference platform with which they felt comfortable, since the coronavirus pandemic did not allow for face-to-face meetings to be held. The platforms used were Zoom Meetings, Skype, Google Meet and Whereby. It is worth mentioning that participants had been taking online lessons prior to the interview and were, therefore, used to dealing with conference platforms.

Firstly, participants were read the questionnaire for socioeconomic classification and for linguistic profiling, which were then filled out by the researcher with participants' responses. After that, the researcher used the AL learner profile instrument to conduct a structured interview. Participants were asked all the questions but had the freedom to digress. Each meeting lasted for about 50 minutes and was recorded. The questionnaires and interview were all written in Brazilian Portuguese, and interviews were conducted in PT-BR as well.

#### **4.2.4 Data Analysis**

The recordings were thoroughly listened to and answers were transferred to a Microsoft Excel spreadsheet. Due to the nature of the study, a descriptive and inferential qualitative analysis was carried out, and results are presented qualitatively and through percentual analysis.

### **4.3 RESULTS**

#### **4.3.1 Socioeconomic Characterization**

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<sup>12</sup> Appendix 2.

Participants' ages ranged from 61 to 75 years, and most participants were women – 16 out of 18. Due to the coronavirus pandemic, it was only possible to recruit 18 participants. All participants had university level education, reaching an average of 18,5 years of overall formal education. Twelve out of the 18 participants reported being retired at the time of the interview, while the other eight remained professionally active. The results for the socioeconomic classification questionnaires showed that the interviewees belonged to the highest category, namely, categories A, B1 and B2. Tabelas (Tables) 1 and 2 present the participants' general socio-demographic characteristics.

Tabela 1 - Characteristics of age and formal education of participants

	<b>Range</b>	<b>Average</b>
<b>Age</b>	61-75	66,9
<b>Years of formal educations</b>	16-24	18,5

Source: The author.

Tabela 2 - Gender and socioeconomic classification of participants

	<b>Number</b>	<b>%</b>
<b>Gender</b>	16 women	88,8
	2 men	11,1
<b>Socioeconomic classification</b>	A – 9	50
	B1 – 5	27,7
	B2 – 4	22,2

Source: The author.

#### 4.3.2 Language Background

The language profile questionnaire showed that the most common second language, or first AL, was English, followed by German, French, Italian and Spanish. Sixteen participants reported having more than one AL. Tabela (Table) 3 shows the general linguistic profile of participants. For the sake of clarity, languages in this questionnaire were referred to as second language (L2), third language (L3) and fourth language (L4), according to the sequence of acquisition.

Tabela 3 - General linguistic profile of participants

	<b>Number of participants</b>	<b>%</b>	<b>Languages</b>	<b>Number of participants</b>	<b>%</b>
<b>L2</b>	18	100	English	11	61,1%
			German	3	16,6%
			French	2	11,1%
			Italian	1	5,5%
			Spanish	1	5,5%
<b>L3</b>	13	72	Spanish	6	46,1%
			English	5	38,4%
			French	2	15,3%
<b>L4</b>	3	16	Spanish	2	66,6%
			English	1	33,3%

Source: The author.

Eight participants (44,4%) reported that they had learned their first additional language at school, five stated they had learned it in a language school (27,7%), four claimed that their L2 had been learned at home (22,2%) and one claimed that she had first learned it by herself (5,5%). It is worth mentioning that when the L2 was English, which was reported by 11 participants, the most common learning context was regular school (66%) followed by language school. Interestingly, all participants had their first contact with English at school. However, the ones who claimed their context of learning had been a language school did not deem their contact with English at school relevant. The four participants whose L2 was German or Italian learned these languages within the household because the language was spoken by their parents and other relatives. This is a common trait of older people who were born in the countryside of Rio Grande do Sul and whose parents were either immigrants or children of immigrants from European countries. All four participants grew up speaking both Brazilian Portuguese and German or Italian. Nonetheless, as the use of either German or Italian was frowned upon in the community, they used these languages very little outside the household and eventually stopped using them altogether after their parents and older relatives passed away. In the self-assessment segment of the questionnaire, they assess their proficiency in German or Italian

as very poor, with comprehension rather preserved, but very reduced oral expression. As common in the communities, heritage languages were used in oral contexts (speaking and oral comprehension), but not in written ones (reading or writing).

Nine participants reported Spanish as an AL – L2, L3 or L4. Six of these individuals reported that they were self-taught, which is a rather remarkable result in comparison to the other languages – when English and French were reported, only once was it stated that the language had been self-taught, when one participant claimed she had learned English by herself. This could be due to the similarity of Portuguese and Spanish and the usual sensation that one is able to speak Spanish because of it, and also as a result of the proximity of countries such as Argentina and Uruguay, which are frequent travel destinations for residents of Rio Grande do Sul.

Participants were asked about the amount of time they spent doing activities in the ALs weekly. They were asked about how long they spent watching movies, television series or videos, listening to music, reading, writing and speaking. The most popular activity among participants was watching movies or videos. They reported spending an average of 3,8 hours a day watching movies, television series or YouTube videos in their L2. This could be explained by the fact that, for most participants (61,1%), their L2 is also the language that they are currently studying. Interestingly, one of the least popular activities was listening to music in any AL, with as many as 13 participants reporting that they never listened to music in their L2. Fourteen participants also claimed that they never wrote in their L2 and eleven stated they never spoke their L2 outside the classroom. These numbers may have been influenced by the fact that for eight participants their L2 is not the language they are currently studying. Out of the 13 participants who reported having an L3, seven reported that their L3 is the language for which they are currently taking classes. Table 4 shows the results for the languages that are currently being studied by participants, regardless of order of acquisition.

Tabela 4 - Time spent in different activities in the AL participants are currently studying

<b>Activity</b>	<b>Average in hours per week</b>
<b>Watching TV, movies or videos</b>	5,2
<b>Listening to music</b>	1,3
<b>Reading</b>	2,2
<b>Writing</b>	0,3
<b>Speaking</b>	0,9

Source: The author.

Participants were asked to rate their proficiency from 1 – low proficiency – to 6 – high proficiency - in all ALs in reading, writing, listening and speaking. The highest rates were reported in reading, with 9 participants rating themselves at a 5 in L2, L3 or L4. In the opposite direction, the lowest scores are found in writing, category for which 11 participants reported having the lowest level of proficiency – 1. That is not surprising as writing was one of the skills practiced the least by participants, and, as it will be discussed later on, writing is the skill that is also practiced the least in the classroom.

Participants started learning their L2 at the average of 13,1 years of age. This result aligns with the fact that most of them reported learning English – the most common L2 among participants – in school, even though a few of them did not consider this as their first significant contact with the language. As for the L3, the average age of exposure was 28,6, demonstrating a significantly later start. Only four participants reported a very late first contact with an AL – after they were 40 years old, and that was reported only in L3.

#### **4.3.3 Additional Language Learner Profile of Older Adults**

During the administration of the AL learner profile instrument, participants were asked questions about their motivations and objectives, how they assessed themselves as learners, what their opinion about the classes was, how they studied outside the classroom, if they thought their age influenced their performance and about their emotions and feelings related to AL learning. Their responses have been categorized as current AL learning conditions, motivations and goals, self-assessment as AL learners, the older learner in the AL classroom,

learning AL outside the classroom, memory and AL learning and affective aspects of AL learning.

#### *4.3.3.1 Current Additional Language Learning Conditions*

Most participants were engaged in English classes, but two of the interviewees were studying French. All participants but one reported they had already studied the language before. This one participant, a student of English, claimed she had studied it in school about 50 years prior; however, as she did not remain in contact with the language, she believed this should be disregarded. Participants had been studying the AL for an average of 2,8 years, with three participants reporting they had been studying it for 6 years and two for only two months. As already mentioned, all participants had been forced to migrate from face-to-face lessons to online lessons due to the coronavirus pandemic. There were nine learners who were enrolled in language schools – in same-age groups - while the other nine were taking lessons with a private tutor. The majority of learners – six - stated they were intermediate proficiency students, four said they were basic learners, whereas the remaining declared they were advanced learners – these were enrolled in conversation lessons for advanced learners. They had an average of 1,8 hours of classes a week. Learners who were studying in groups tended to have longer lessons – an average of two hours a week, once a week – while those who took private lessons had an average of one hour of class a week.

#### *4.3.3.2 Motivations and Goals*

Despite the structured character of the interview, questions were mostly open-ended, which led to participants giving long answers and to digression. With motivation being considered what led participants to pursue additional language learning, Table 5 shows the motivations that were expressed by the older learners. It should be noted that each participant was allowed to provide more than one motivation:

Tabela 5 - Motivations

Motivation	Number of participants	%
<b>Tourism</b>	10	55.5
<b>Professional purposes</b>	5	27.7
<b>Cognitive training</b>	4	22.2
<b>Offspring living abroad</b>	4	22.2
<b>Fulfilling an old desire</b>	4	22.2
<b>External motivation</b>	4	22.2

Source: The author.

Unsurprisingly, the most popular motivation among the older learners was tourism – this is likely connected to the high socioeconomic status of participants. Although most participants were retired, they still mentioned that studying English was helpful for them professionally as they attended international congresses and did technical readings. As a matter of fact, two out of the five people who mentioned this were already retired, which reflects a high professional engagement. Other reasons that led these learners to pursue language learning were believing that it could be cognitively beneficial, as in “people always say that studying a foreign language is important to keep older people’s brain active”<sup>13</sup>, having children and grandchildren living in English-speaking countries, fulfilling an old desire to study an AL, as in “I always felt like studying languages”, and an external motivation, such as in “I have realized that words in English are everywhere”, “everything on my smartphone is in English”, and “one has to be able to speak English nowadays”. External motivations for the purpose of this categorization are those that are not regulated by personal desire, but, instead, by external forces. These are the ones that do not seem to stem from any kind of inner motivation.

Goals were explained to participants as to what they expected to achieve by learning an AL. Most participants did not express the desire to become highly proficient speakers of the language they were studying. Thirteen of them declared

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<sup>13</sup> The instruments for data collection were administered and answered in Brazilian Portuguese. Participants’ answers are reported in their translated version to English.

they wished to communicate minimally while traveling. The most important result of their learning process, according to them, would be getting their message across without difficulty. Only three people mentioned they would like to reach a high level of proficiency – and these were the ones who were part of conversation groups. That means saying that out of the eight learners who were in advanced levels, only three of them wanted to become highly proficient language users.

#### *4.3.3.3 Self-assessment as Additional Language Learners*

Participants were asked to assess what the most difficult and the easiest part of learning were, how they assessed themselves in terms of ability and performance, and how they evaluated their evolution as learners. As for difficulty, they were asked open-endedly what their major difficulty was and then to rank the four skills – listening, reading, writing and speaking - from 1 (the most difficult) to 4 (the least difficult). The two difficulties mentioned the most were listening activities and memorizing vocabulary, which were followed by pronunciation, speaking activities and grammar. Ten participants rated listening as the most difficult skill, while the least difficult skill was considered to be reading. Participants struggled more to answer what the easiest part of their learning process was. Even though reading was considered the easiest skill when they were asked to rank skills, speaking was the skill they mentioned the most when asked open-endedly what the easiest part of learning for them was. Nonetheless, they explained that they did not truly believe speaking was easy, but they are not afraid of trying, especially in the classroom environment.

When asked about their ability to learn an AL, 13 participants answered that language learning was difficult for them and it required a lot of effort. For those who reported that language learning was not especially difficult, any difficulties that were experienced were accounted for as a result of a lack of dedication. Participants were also asked to assess their performance as learners. Eight participants reported that their performance was average because they felt they should be working harder – they all declared they lacked discipline. The other ten participants assessed their performance as good because they always did homework, never missed a class and always tried to study on their own. It is possible that participants considered performance as their view on what a good

student does. Participants also answered whether they felt the evolution of their learning process matched the amount of effort they devoted. All of them but one answered that it did – but in a negative way. They said their performance was not as good as it should be because they were not as committed to their learning as they should. Therefore, their performance matched their effort negatively. One student only – who belonged to a conversation group – mentioned his evolution did not corresponded to the effort he invested.

#### *4.3.3.4 The Older Learner in the Additional Language Classroom*

Participants were also inquired about their AL lessons: what they liked or disliked, what their opinions about the teaching materials were, how they felt about the use of technology and what traits they deemed desirable in AL teachers. As previously mentioned, they were all taking AL lessons at the time of the interview either in same-age groups or with a private language teacher. When asked about what they liked the most about their lessons, fourteen learners responded it was the interaction with the teacher and/or classmates. Other responses were listening to music, getting feedback from the teacher and learning new vocabulary. When asked the opposite, seven people answered there was nothing they did not enjoy, while six learners responded they were not keen on doing grammar exercises. Other answers worth mentioning were “when the teacher does not use any other material but the coursebook” and “when the teacher speaks too fast”.

Ten participants declared they used a coursebook. Six of them were satisfied and said the coursebooks met their needs and objectives. The other four learners were not as happy as they did not think the coursebooks were suitable for their needs. Some of their comments were that “the book does not reflect our reality” and “the book does not have relevant vocabulary”. The other participants did not use coursebooks. Instead, their teacher selected materials for each class. This was true for eight learners, most of whom were advanced learners in lessons focused on developing conversation skills. These learners felt the teacher was able to choose materials that arose their interest and taught according to the difficulties that emerged from tasks. One learner said that the material was

“emergent”, and therefore, responded to her needs, and another said that “a coursebook limits what can be done in the lesson”.

Participants were also asked what characteristics defined a good AL teacher. Being aware of the students’ needs and difficulties was mentioned by eight participants. Some of their comments were that the teacher should be able to “identify what the student’s needs are and what is difficult or easy for the student”, “propose activities that are within the students’ abilities” and “identify whenever a student feels stuck in an activity or topic”. Participants also mentioned that – the numbers of mentions is in parenthesis - teachers should have a high level of proficiency in the language they are teaching (5), that they should make the effort to speak the AL as much as possible (4), that they should be patient (4), that they should offer a rich variety of activities and resources to make classes more interesting and fun (3), that they should speak clearly (2), that they should be demanding (2), that they should give all students the chance to participate in class (1) and that they should be qualified (1).

Interviewees demonstrated a rather positive attitude towards the use of technology in class. Most of them had started taking online lessons due to the coronavirus pandemic, but one of them had already been an online student for four years, and another took face-to-face lessons at home because her teacher was her daughter. Four participants declared they did not like the online lessons, while the others felt they had been positively surprised by their efficacy. Three people mentioned that dealing with technology was a challenge for them, as in “I get frustrated when using technology because I don’t feel comfortable with it” and “technology is a really big problem for me because I can’t use it very well”. Despite these comments, most participants felt that the online lessons had been a positive change for them because it forced them to take up a new challenge. One interesting answer was “I didn’t like watching videos in face-to-face classes because my hearing isn’t very good. Now I can put on earphones, and it got better”.

#### *4.3.3.5 Learning Additional Language Outside the Classroom*

The older learners were inquired about they study habits. The purpose was to discover how much time they spent learning on their own, without the aid of

the language instructor. Moreover, they were asked about how they studied, what they felt was the best way to learn the AL and how they used technology when on their own. The researcher emphasized that the focus was on the moments they consciously decided to study the AL rather than when they watched movies or listened to music without the explicit purpose of learning.

Only three participants mentioned they did not study at all. Most of the other fifteen learners claimed they studied from one to two hours a week, with only two people saying they studied more than that. They said they did the homework assigned by the teacher, which consisted of watching YouTube videos or doing grammar and vocabulary exercises. Nevertheless, rewriting vocabulary and grammar studied in class was the activity they mentioned the most. Most of them stated they have a notebook where they copy the vocabulary studied in class. After copying it, they either rewrite or re-read it several times. One of them said she created lists and took them with her everywhere in order to read them whenever she had spare time. Another participant mentioned she copied vocabulary onto sticky notes and spread them around her apartment so she could revise vocabulary throughout the day. A few examples of answers were “I copy everything we studied in class onto a notebook”, “I take notes in class and then rewrite them on a notebook”, “I rewrite words and think about sentences I could say using these words”, and “I make a list of vocabulary right after the class and spend the whole week re-reading this list so I can remember it in my next class”.

These results reflect the difficulty most participants expressed regarding learning vocabulary. They all appeared to be quite concerned about memorizing lexical items and most of the self-directed study time seemed to be dedicated to that. Other strategies used to study the AL were: watching series or movies and writing down new vocabulary, getting ahead of what would be studied in the following class by reading the coursebook in advance and reading the lyrics of songs they liked and trying to translate them.

Participants were then asked what their favorite way to learn was. Seven learners answered they thought that they learned more when they tried speaking in the AL. They felt they could not only get feedback from the teacher, but also check if they could express what they wanted to say. Following speaking, participants mentioned reading, watching videos to practice listening skills or listening to music. Although most learners mentioned they studied by coping and

rewriting what had been studied in class, only one mentioned that this was her favorite way to learn the language. When asked about how they preferred reading in the AL, either on print material or on a computer or tablet screen, eleven learners responded they still prefer paper-based material, despite the online lessons. They said they either had the paper coursebook or printed materials the teacher sent them.

Finally, when asked about using technology to study the AL on their own and to get in contact with the AL they are studying, only one learner said she did not use any technological tool. The other seventeen participants declared they used at least a dictionary application. Among the tools they mentioned were YouTube, Netflix, Ted Talks and applications such as Duolingo and Cake. However, YouTube was the only one that had been previously mentioned as a tool used to actively study de AL.

#### *4.3.3.6 Age, Memory and Additional Language Learning*

As subjective memory loss complaints are common in the third age, participants were asked whether they felt they struggled to remember what they learned. Fifteen participants said they did, especially with vocabulary learning, which can explain the effort devoted to revising vocabulary. Two responses were “I feel really forgetful”, “now I need more repetition until I finally learn something” and “I often forget what I learn, and I feel that it didn’t use to be like that”. Three people responded that they struggled with maintaining attention and concentration while studying and blamed that for memorization problems. There is a relation between the older learners’ perception of their memory and what they consider to be the influence of their age on their learning process. Five people answered they did not believe their age had any influence on their learning. They responded, for instance: “I don’t know if I would memorize more easily if I was younger”, “I’d never studied French before, so I don’t know if my performance would be any different”, and “my age does not have any influence on my learning because I was professionally active until recently”. The other thirteen participants had a very different view of the influence of their age on their learning process, as shown in the following responses: “my memory is not as good as it was twenty or thirty years ago”, “these lessons would have had very different results thirty

years ago". One participant said her hearing is not as good, and another mentioned that memorizing vocabulary was much easier for her in the past. One interesting answer was that the age had both a positive and a negative effect on the learning process: "even though the age interferes with my memory, I now have more discipline, experience, persistence, and I'm able to make a realistic self-evaluation; I feel like I can compensate for the memory difficulties with a realistic self-evaluation".

When asked if they were familiar with memorization strategies that could help them deal with any memory issues that arose during AL learning, ten participants said they were not. The ones that said they did mentioned word association, writing sentences with new vocabulary, writing and rewriting vocabulary several times after being in contact with it for the first time, having a vocabulary notebook where words and sentences are written and rewritten and using sticky notes so that new words are easily visible.

#### *4.3.3.7 Affective Aspects of Additional Language Learning*

The participants were asked about the emotions they felt when learning the AL. All participants associated positive emotions to their learning process, and only one of them declared she felt impatient because of the group with whom she studied. She had the feeling that they were stuck in a lower level because her classmates were not as dedicated and that made her feel a little frustrated. Apart from that, the learners expressed they felt that AL learning was pleasurable, and rewarding, and associated AL learning with satisfaction and positive emotions in general. Some of the responses were: "studying English makes me feel very good and reduces my anxiety", "I feel like new doors are opening", "I feel a sense of purpose", "I feel that I'm doing something I've always wanted to do", "learning a new language is delightful", "it gives me pleasure, joy, motivation, it is something I have to look forward to in my life", "I feel that I'm part of the world when I study English" and "I feel very proud of myself".

When asked about how they felt right before the class starts, only two participants mentioned feeling anxious as they anticipated they would be speaking the AL in front of other people. The other participants declared they felt quite enthusiastic and excited before the class. One of them mentioned she felt

a childlike enthusiasm before the lesson, and another mentioned she felt excited because the lesson was one more challenge she was about to embrace. They all reported feeling satisfied at the end of the class and that the overall feeling was that of contentment.

Participants were also asked about what specifically made them feel happy about their learning and if there was anything that made them feel frustrated. The most usual answer was that they felt happy when they could make themselves understood by the teacher or classmates, which was mentioned by eleven participants. Other aspects that brought about happiness were “the feeling that I’m always learning something new”, “when I feel I have really incorporated new vocabulary”, “when I master a new grammar topic”, “when I watch a movie without subtitles”, “when I communicate successfully in travels”, and “when I can read a text without checking the dictionary all the time”. The most common cause of frustration for them was the opposite: feeling they cannot get their message across. Additionally, they mentioned they get frustrated when studying grammar, “when I do not understand the coursebook instructions”, “when I forget vocabulary”, “when I watch videos without subtitles and do not understand what is being said”, “when I make the same mistake several times”, “when I have the feeling I should be able to say something but I can’t”, “when I realize I should have started earlier” and “when I have to use a dictionary too many times when I’m reading”.

#### 4.4 DISCUSSION

The results demonstrated that the sample had a high socioeconomic status, in addition to being highly educated. That could be explained by the fact that participants were either enrolled in language institutes or taking private language lessons, both of which can be quite costly. Both the high socioeconomic status and the high level of education of the interviewees struck the researcher as relevant. It can be argued that, even though language learning seems to be widely regarded as a positive cognitive and social intervention for older people, it may be an activity that pertains to the reality of few. Furthermore, the male/female ratio was also remarkable, with only two men out of 18 people. It could be the case that women are more involved in activities that can benefit their quality of

life. As a matter of fact, a report about the aging of the world population by the United Nations (2019) showed that, today, women outlive men by 4,8 years, but there is a projection that this difference will narrow. In addition, it was noted that participants showed high professional engagement, in well-paid professions, which can be accounted for the high socioeconomic status of the sample.

Older people are likely to adopt a pessimist attitude towards their AL learning abilities. According to Singleton (2018), these learners seem to believe that the changes they experience during aging will inevitably have a negative impact on their AL learning and progress. That can be explained by a kind of internalized ageism that is built throughout one's life (ANDREW, 2012; LEVY, 2003). As members of society, we internalize ageist stereotypes at an early age, reproduce them throughout life and turn them into self-stereotypes when we reach old age (LEVY, 2002; LEVY et al., 2003). Even though aging may be associated with positive stereotypes, such as older people are kind and wise, it is usually the decline discourse that prevails (ANDREW, 2012) – older people are incompetent, forgetful and fragile (SIGELMAN; RIDER, 2018). Participants in this study expressed some of these negative views about aging, especially related to their ability to learn new vocabulary. However, overall, participants felt quite enthusiastic and confident about their AL learning process, contradicting Pawlak et al.'s results (2018) with 13 Polish older learners of English in a university for the third age. In their study, leaners associated mostly negative emotions to AL learning and were dissatisfied with their progress as language learners. They mentioned fear of loss of face and embarrassment and did not feel like their performance matched their effort. Despite the more relaxed attitude of participants in the present study, they too felt frustrated when they felt their memory had failed them and when they realized they were not as committed to their learning as they thought they should be. It is then possible to agree with Pawlak et al. (2018) when they argue that affective factors seem to play a major role in AL learning for older adults. Therefore, one of the main challenges when teaching older learners may be finding out whether their difficulties arise from age-related changes *per se* or from self-deprecating views of themselves as learners.

One major difficulty that participants expressed was memorizing new vocabulary. According to Ramírez Gómez (2016a), many older learners

experience difficulties when attempting to memorize words within a lesson and from lesson to lesson. It has been evidenced that episodic memory – the one associated with autobiographical memory –, processing speed, short-term memory and working memory suffer from age-related decline, whereas semantic memory – associated with world knowledge, including lexical knowledge – can even increase with age (PARK et. al, 2002; VAN DER HOEVEN; DE BOT, 2012). It can be argued that difficulties in learning new vocabulary are associated with decline in working memory. Working memory is a cognitive function that stores, processes and manipulates information necessary for the execution of complex tasks, including language learning, and it helps strengthen the connection between new information and old information stored in the long-term memory (HEJAZI et al., 2019; RAMÍREZ GÓMEZ, 2016a). In addition, the decrease in processing speed may hinder the fast activation of acquired lexical items, and it has been demonstrated that older individuals experience more word finding failures (BURKE; SHAFTO, 2010). In a study about the learning and relearning of lexical items, Der Hoeven and de Bot (2012) found “an age-related decline in the ability to learn new lexical information, which seems to be related to a decreased ability in older adults to form new associations between concepts”. They compared younger adults and older adults and concluded that the latter were worse at learning new words. Therefore, participants’ complaints may find backing in these results. Ramírez Gómez (2016a) suggests that increasing the semantic load of the information – by making information more personal and relatable – may help older learner encode new lexical items.

Faced with difficulties for learning new vocabulary, the older leaners invested most of their independent study time on it. However, it may the case that older learners are relying on learning strategies that used to be effective in the past, but are not anymore (RAMÍREZ GÓMEZ, 2016a). Most of them felt they did not have good results from their strategies and blamed lack of discipline and commitment for that. If older learners really experience challenges when learning new words, it is likely that they will need better tools to cope with them. Most participants reported they usually copied new words onto a piece of paper and relied on a cycle of rewriting and re-reading to memorize the words. This may not be an effective strategy inasmuch it does not engage learners in manipulating the information (RAMÍREZ GÓMEZ, 2016a), which means that repetition alone may

not lead to learning. Unsurprisingly, learners did not claim that this was their favorite way to learn. Instead, they declared that speaking the AL was what they enjoyed the most – thus, their favorite way to learn involved using what they already knew and trying it out in real communication. That is, after all, the goal of the communicative classroom. In a study that aimed at investigating the role of experience in vocabulary learning strategy use among Japanese older learners of Spanish, Ramírez Gómez (2016a) concluded that learner's previous learning experiences were fundamental in their evaluation of the validity of a certain learning strategy. In addition, she concluded that, in the case of older learners, experience may play a bigger role than it does with younger learners. It could mean that previous AL learning strategies are interfering with learning. Accordingly, the author suggests that teaching approaches should be customized, and that learners should be taught about how to better approach their learning process as the strategies they are used to may not be as effective as they used to be. That should be a process of reassessment of previous learning strategies and beliefs about AL learning so that each individual finds the learning strategies that fit their needs and learning profiles. In that case, it can be suggested that older learners should be taught how to learn before they engage in language lessons – and during the language learning process as well. That means providing them with learning strategies they could use and helping them organize and incorporate the strategies into their routine.

The present study bears resemblance to that of Pawlak et al. (2018). Their study has demonstrated that older learners are not familiar with the indirect learning strategies (OXFORD, 1990) that could enhance their learning process. According to Oxford (1990), indirect learning strategies “support and manage language learning without (in many instances) directly involving the target language” (OXFORD, 1990, p. 135). They are divided into metacognitive – related to the learner's ability to coordinate and plan their own learning process, including goal setting, affective – related to emotions, motivations and attitudes towards language learning, – and social – related to the interaction with others. As for the metacognitive strategies, participants in this study were very similar to those of Pawlak et al.'s (2018). They were not able to establish clear goals for their AL learning and did not seem to be able to, as described by Oxford (1990), center, arrange, plan and evaluate their learning. Instead, they set very general

goals, such as better communication while traveling abroad or warding off the effects of aging. It is possible that establishing more clear and specific goals can make learning more visible and attainable. On the other hand, results in the affective dimension were quite different. Subjects in this study associated very positive emotions to AL learning, while the Polish older learners in Pawlak et al.'s study expressed negative feelings towards AL despite having engaged in AL learning of their own accord. It may be the case that learners in this study did not completely hold aging accountable for their lack of progress – they mostly mentioned lack of commitment and discipline, two things that can be changed at any age if one possesses the right tools.

Considering the crucial role that AL learning experience plays in language learning by older adults, Ramírez Gómez (2016a) introduces the notion of *learner re-training*. The concept builds on the notion that older learners should be taught how to assess their learning strategies and study habits, which have been developed throughout life, and make informed decisions as to whether these strategies are still valid. In addition, learner re-training aims at developing learners' self-directedness. This notion aligns with the results presented here: it does seem that students have difficulty devising their own strategies for learning and independent study and may be relying on old strategies that may not fit their current learning circumstances. For Ramírez Gómez, in leaner re-training, the instructor needs to offer opportunities for learners to discuss their beliefs about AL learning, debunk the ones that are not evidence-based and help them to set realistic and tangible goals for learning. It is likely that creating space in the classroom for such debate and helping the learners to develop strategies and organize the time they have for independent study may lower learner's anxiety and frustration, making room for more challenging goals.

The linguistic profile questionnaire showed that as many as 13 participants had been in contact with more than one AL throughout life, with seven of them stating that their current AL learning endeavor was in their second AL. That shows participants have wide experience in language learning, more specifically in being late language learners. That may be something positive in that the language learning environment is familiar for them and, considering the lack of self-confidence that is perceived in this age group, it becomes one less challenge for them to rise to. However, it may also mean that participants reach old age with

their identities as language learners fully developed, and these identities may be ingrained with self-defeating beliefs. That is a critical stance favoring the adoption of learner retraining moments, when learners' beliefs and actions towards language learning can be questioned, discussed and reconstructed.

Participants' opinions about the teaching materials used in class were mostly positive. It is noteworthy that the learners who did not use a coursebook were the most content. They mentioned that the selection of materials and activities made by the teacher met their needs and goals. Coursebooks are terrific teaching materials, but it is crucial to keep in mind that they are not targeted at such a specific audience. In addition, it may be possible that a coursebook comes across as prescriptive, outdated and limited to few points of view (TÍLIO, 2008). The older learners in this study also emphasized that a desirable trait in AL teachers is the ability to plan and deliver lessons according to their students' needs and difficulties. It is, therefore, paramount that materials and lessons suffer the proper adjustments to meet older learners' needs, especially if one considers the lack of teaching materials aimed at this population. While young adults can choose from a broad array of coursebooks, the same cannot be said for older adults. Even though adult learners may benefit from classroom instruction due to their reliance on explicit mechanisms for language learning (RAMÍREZ GÓMEZ, 2016a), older adult's decline in vocabulary learning and processing speed may hinder this advantage. That calls for the development of learning strategies and for attention to be given to vocabulary learning. Moreover, the physical dimension should be considered when selecting materials: Ramírez Gómez (2016a) mentions hearing impairment – which can influence learners' performance in listening tasks, visual impairment – therefore, font size of materials should be modified if necessary, and handgrip – the loss of strength in handgrip may make it difficult for learners to write on materials with little space between lines.

Two other aspects from the results are worth discussing. First, a few participants mentioned that they had engaged in AL learning because it was something that they had always wanted to do, as if they wanted to compensate for the time they spent getting involved with work or family. It can be said that the third age is the age of compensations: compensatory mechanisms take place in the brain so that cognitive functions can be maintained, compensatory learning strategies need to put into practice in order to adapt learning, and it is a phase

when, ideally, older adults have the time and energy to engage in activities that they did not have time for in the past. Last but not least, it is worth mentioning that, apart from motivations related to tourism and mental exercise, some participants also acknowledged that AL learning was making them feel more included. That is, perhaps, one of the most remarkable benefits of AL learning: it opens doors to a world that would not be available otherwise. These learners often feel overwhelmed with the number of words in English with which they come across on a daily basis, especially when using electronic devices. The world that they become able to access is, therefore, enormous.

#### 4.5 CONCLUSIONS

This study aimed at investigating the profile of older learners of ALs. In order to do so, eighteen older leaners of ALs were interviewed. They responded to a questionnaire for socioeconomic classification, a questionnaire about their linguistic background and an interview for determining their profile as AL learners. All participants were aged 60 or more and were currently engaged in AL learning at the time of the interviews, which were conducted remotely due to the coronavirus pandemic. The older learners who participated in this study were all based in a metropolitan area in the state of Rio Grande do Sul, in the south of Brazil.

It was identified that these older learners all pertained to a high socioeconomic demographic and had a high level of education, both of which can be identified as characteristics of these learners. It was then suggested that AL learning is an activity that may not be available for all. In addition, most participants were women, which, despite the small sample, can be a representation of the majority of older learners who engage in AL learning.

As for the linguistic background, English was the most usual AL, followed by German, French, Italian and French. Thirteen participants declared having two ALs and three participants declared they had three ALs. The most striking results stemming from the language background questionnaire were that when German and Italian were reported, they had been learned simultaneously with Brazilian Portuguese, but due to lack of use, participants declared a very low level of proficiency in these languages; participants who reported Spanish as an AL

declared having learned it by themselves, which is likely a result specific to the region where participants are based; writing was reported as the least practiced activity, which was also the skill that was rated the lowest in the assessment of proficiency; and the highest rate of proficiency was reported in reading. In describing their AL learner profile, participants declared that copying vocabulary and rewriting what they learned in class was the most usual strategy for independent study. It can be suggested that engaging in more meaningful writing tasks could bring about better results for learners, especially if the difficulties in learning new vocabulary are considered. Learners do not usually report writing as a goal for AL learning, what could explain the lack of attention devoted to it. However, it is possible that, as writing involves the manipulation and elaboration of lexical and grammar items, it could prove to be beneficial for these learners. It may also prove to be soothing for learners who are used to copying and writing as a study habit.

The interview aimed at defining a profile of AL older learners resulted in a great deal of interesting results. First of all, the most remarkable was the fact that learners seem to lack strategies for approaching their learning process. The lack of learning progress was mostly attributed to lack of discipline or commitment to their AL lessons. As much as this could indeed be a factor in their language learning progress, it seems that they have yet to develop strategies that work better for them. It has been, then, suggested that language instructors could offer a *learner re-training* (RAMÍREZ GÓMEZ, 2016a). This could help learners to learn more about what learning strategies better work for them and to become more self-directed, especially if one considers that older leaners have developed study habits throughout life that may not be the most effective one for their current learning situation. From the results presented, it can be argued that learners should be taught how to better plan their learning and set realistic attainable goals. Nevertheless, this requires that some of the lesson time be invested in learner re-training.

The answers about what an AL teacher should be like and about teaching materials presented a picture that aligns with the literature. It has been shown that for older learners, affective factors play a big role in AL learning (ANDREW, 2012; RAMÍREZ GÓMEZ, 2016a; PAWLAK et al., 2018; SINGLETON, 2018). Participants declared that the most desired trait in an AL teacher was his or her

ability to address students' needs, and the same was said about teaching materials: the ones who were satisfied, reported that the materials had been selected in order to meet students' needs and difficulties. Therefore, older learners need to know that their needs are being catered for, in addition to having a clear knowledge as to why they are learning what they are learning. This is in accordance with Knowles et al.'s (2011) view about adult learning: the need to know why. The lack of teaching materials that match these learners' needs could then suggest that the language instructor adopt a more content-based approach (RAMÍREZ GOMÉZ, 2016a) that aims at tackling more appropriate topics in the AL classroom. In addition, it may be the case that the adopt of more reactive styles of teaching methods are more suitable. That could guarantee that students' needs are addressed – it was reported by a few participants that a customized selection of materials made them feel that the lesson was appropriate for their needs and goals.

This study has resulted in valuable information about older adult AL learners. Despite its small scale and specific circumstances – learners were atypically taking online lessons – it is considered that the information contained here can shed some light on who AL older leaners are. The AL learner interview questions dealt with a wide array of questions related to the AL learning process, and it is likely that a shorter instrument could prove to be more fruitful in that the discussion of the results could be made in more depth. The older learners in this study were all very open to discussing their learning process and most of them, and contrary to their own belief – seemed to be quite committed to their AL learning, in addition to being extremely enthusiastic. It is now in the hands of researchers to make this information available for language materials designers and instructors so that the older learners can benefit the most about their AL learning process. Moreover, the debate on the importance AL lessons in old age for cognitive or affective purposes should be taken seriously, so as to motivate older people to engage in AL learning whether in online or face-to-face courses, individually or in groups.

Results from the combination of the adapted linguistic profile questionnaire and the interview for identification of AL learners' profile hold validity in tracing AL learner's profile, especially when such a varied group as that of older learners is considered. The combined use of these instruments may be useful for

researchers, course developers and teaching material designers interested in gaining better insight of who the specific group of older learners they are addressing is.

## **5 CONSIDERAÇÕES FINAIS**

O presente estudo teve como objetivo traçar um perfil do aprendiz adulto idoso de línguas adicionais. A partir da literatura acerca do envelhecimento cognitivo e sócio-afetivo típico, um questionário de perfil de aprendiz de LA foi criado e um questionário de perfil linguístico foi adaptado a partir dos questionários direcionados para as pesquisas com bilíngues de Scholl e Finger (2013) e para o estudo de proficiência e experiência linguística de Marian, Blumemfeld e Kaushanskaya (2007). Além disso, realizou-se uma revisão sistemática de literatura com a finalidade de averiguar qual é o estado da arte no que concerne ao estudo de aprendizes adultos idosos de LAs. A partir dessa revisão e da aplicação dos questionários em um estudo com 18 aprendizes idosos de LAs de uma região metropolitana no Estado do Rio Grande do Sul, foi possível perceber como a literatura e a experiência prática do aprendiz adulto idoso da amostra dialogam.

Percebeu-se, por exemplo, que há uma crença popular de que o aprendizado de uma LA pode ser benéfico para o cérebro do adulto idoso. Isso foi descrito por muitos participantes quando questionados acerca dos seus motivos para o engajamento em aulas de LA. É certo que esse benefício não é de fato bem compreendido, mas há uma crença de que ele existe. Talvez causasse surpresa na população geral o fato de que não há consenso quanto a quais seriam as vantagens do estudo de uma LA para o cérebro idoso. Enquanto existem estudos demonstrando benefícios cognitivos do aprendizado de LA (BUBBICO et al., 2018; PFENNINGER; POLZ, 2019; WONG et al., 2019), há também estudos que não conseguiram encontrar tais vantagens (RAMOS et al. 2016; WARE et al., 2017; VALIS et al., 2019; BERGREEN et al., 2020). É verdade que esses estudos reconheceram suas limitações, dentre os quais dois são os mais aparentes e polêmicos. Em primeiro lugar, todos esses estudos averiguaram a eficácia do aprendizado de LA por meio de cursos de curta duração, em geral com carga semanal de aprendizado maior que aquela a que os aprendizes em geral estão expostos quando aprendem uma LA no país da sua língua materna, caso em que se encontram os participantes do presente estudo. Alguns desses participantes já estudava uma LA há mais de cinco anos, o que abre portas para pesquisas que se dediquem a averiguar os efeitos do

aprendizado de LA iniciado na terceira idade e mantido por um período mais longo. A outra questão é relativa à confusão entre instrução e bilinguismo ao longo da vida. Alguns estudos abordaram essa questão (ANTONIOU et al., 2013; RAMOS et al., 2016; BERGREEN et al., 2020), já que se busca, muitas vezes, compreender os benefícios do aprendizado de LA por adultos idosos a partir de premissas aplicáveis somente ao bilinguismo desenvolvido ao longo da vida, nos termos da vantagem bilíngue (BIALYSTOK et al., 2004; BIALYSTOK et al., 2007). É possível que o aprendizado de uma LA iniciado em uma idade avançada, aqui considerada a partir dos 60 anos, seja um novo objeto de estudo, característico da nova formatação da população mundial.

Para além da dimensão cognitiva, já que Ramírez Gómez (2016a) considera que há outras dimensões fundamentais quando se considera o ensino de LA para aprendizes idosos, como a dimensão física e a psicológica, foi possível observar a atitude positiva adotada pelos aprendizes participantes da pesquisa. Corroborando resultados da literatura, que mostraram que há benefícios sócio-afetivos associados ao estudo de uma LA (PFENNINGER; POLZ, 2018; SMITHER; GRAY, 2018; WARE et al., 2017), os participantes relataram a associação de emoções positivas, como o entusiasmo e a satisfação pessoal ao aprendizado de LA. Além disso, os participantes observaram em seu cotidiano benefícios associados ao aprendizado de LA, como ampliação do acesso a informações e a promoção da sua autonomia e independência. Pode-se também dizer que os relatos de que o envolvimento em uma atividade desafiadora como o aprendizado de uma LA traz satisfação. Engajar-se em atividades cognitivamente exigentes pode dar ao aprendiz idoso um importante senso de propósito, muitas vezes perdido com o esvaziamento de papéis sociais que não cumprem mais – como o de trabalhador(a), de mãe/pai etc.

Bergreen et al. (2020), Valis et al. (2019) e Ware et al. (2017), apesar de não terem encontrado benefícios cognitivos associados ao aprendizado de LA por adultos idosos, reconheceram que os programas de ensino de LA de curta duração oferecidos em seus estudos promoveram um ambiente agradável de socialização e integração entre aprendizes e entre aprendizes e instrutores. Consideradas as questões sócio-afetivas trazidas aqui, como a tendência ao isolamento a que está submetido o adulto idoso, é possível postular que isso por si só já é suficiente para incentivar que adultos idosos se matriculem em cursos

de LAs. Entretanto, concorda-se com Ramírez Gómez (2016a) e sua aplicação da geragogia crítica ao ensino de LA, para quem o aprendizado de LA não deve ser vislumbrado apenas como uma oportunidade de socialização para adultos idosos. Segundo ela, na verdade, não se deve presumir que adultos idosos estejam envolvidos com o aprendizado de LA para que possam simplesmente encontrar outras pessoas e socializar, o que faz parte de um estereótipo associado ao aprendiz adulto idoso. Deve-se levar em conta que esse aprendiz também tem necessidades e objetivos linguísticos e comunicativos que devem ser atendidos. Conforme a geragogia crítica, a sala de aula de LA deve ser considerada como uma oportunidade para discutir com os adultos idosos as suas crenças acerca do aprendizado de LA e promover a adoção de estratégias efetivas de estudo. Além disso, a educação para idosos, como já diz o nome, deve ser crítica, com a finalidade de questionar estereótipos de idade e expor a discriminação etária.

Apesar da validade de um delineamento de um perfil do aprendiz adulto idoso de LA a partir do questionário de perfil de aprendiz e de perfil linguístico e sócio-demográfico, como demonstrado na presente pesquisa, uma das principais limitações está em seu alcance como generalização de dados. Conforme apresentado na literatura, as diferenças individuais se acentuam com os anos, tornando os aprendizes idosos um grupo particularmente heterogêneo. Por isso, há de se ter cautela ao generalizar os resultados aqui apresentados, pois definem um adulto idoso aprendiz de LA de uma região metropolitana no Estado do Rio Grande do Sul, sul do Brasil. Recomenda-se, portanto, sua administração em outras regiões do país, tanto metropolitanas quanto interioranas. No que tange a presente dissertação, o instrumento adaptado de perfil linguístico e o questionário de perfil de aprendiz cumpriram a sua finalidade e puderam apresentar informações valiosas acerca do aprendiz adulto idoso nesse contexto específico.

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## APÊNDICE 1

### QUESTIONÁRIO DE PERFIL LINGUÍSTICO

Data:

Participante:

Idade:

Data de Nascimento:

Sexo: ( ) F ( ) M

1. Quantos anos de educação formal você tem desde o primeiro ano de estudos? Qual é o seu nível de escolaridade mais alto?
2. Liste todas as línguas que você fala em ordem de aquisição:

Língua 1	
Língua 2	
Língua 3	
Língua 4	

3. Indique onde você aprendeu as suas línguas

	Casa	Escola	Curso de Idiomas	Outros
Língua 1				
Língua 2				
Língua 3				
Língua 4				

4. Estime o número de horas em que você usa cada língua para as seguintes atividades . semanalmente

	Língua 1	Língua 2	Língua 3	Língua 4
Ver TV/filmes				
Ouvir música				

Ler				
Escrever				
Falar				

5. Marque em uma escala de 1 a 6 seu nível de proficiência na língua que sabe (1 = muito baixo; 2 = baixo; 3 = razoável; 4 = bom; 5 = muito bom; 6 = proficiente) -

Língua 1						
Leitura	1	2	3	4	5	6
Escrita	1	2	3	4	5	6
Compreensão auditiva	1	2	3	4	5	6
Fala	1	2	3	4	5	6
Língua 2						
Leitura	1	2	3	4	5	6
Escrita	1	2	3	4	5	6
Compreensão auditiva	1	2	3	4	5	6
Fala	1	2	3	4	5	6

6. Em relação às línguas que não são o português, há quanto tempo você tem contato com ela (s) em meses?

Língua 2	
Língua 3	
Língua 4	

## APÊNDICE 2

### QUESTIONÁRIO DE PERFIL DE APRENDIZ DE LÍNGUA ADICIONAL

1. Qual é a sua profissão?
  
2. Você já tinha estudado essa língua antes? Se sim, por quanto tempo?
  
3. Há quanto tempo você está estudando agora?
  
4. Em qual nível de inglês você está?
  
5. Como você está estudando inglês agora?  
 aula particular  
 aula particular com um colega  
 aula em curso de língua
  
6. O que levou você a estudar essa língua?
  
7. Qual é o seu principal objetivo com o estudo dessa língua? Ou seja, o que você deseja alcançar?
  
8. Qual a sua maior dificuldade durante a aula de língua adicional?  
Enumere de 1 a 4 (1= Mais difícil)  
 Leitura  
 Escrita  
 Compreensão Oral  
 Produção Oral
  
9. Qual a sua maior facilidade durante a aula? Enumere de 1 a 4 (1=mais fácil)  
 Leitura  
 Escrita  
 Compreensão Oral  
 Produção Oral
  
10. Quantas horas semanais você tem de aula?  
 1h  
 1,5h  
 2h  
 Mais de 2h – Quantas? \_\_\_\_\_

11. Como você se sente em relação ao material didático utilizado em aula? Você sente que ele é adequado?
12. O que você mais gosta durante a aula?
13. O que você menos gosta?
14. Além da aula, você dedica algum tempo a mais para estudar inglês? Por exemplo, retomando conteúdos, fazendo temas, buscando materiais em outras fontes. Se sim, quanto tempo você dedica a isso?
15. Se estuda sozinho, como você estuda sozinho?
16. Qual é a sua forma favorita de aprender essa língua?
17. Você sente que faz uso de estratégias de aprendizado que aprendeu ao longo da vida acadêmica ou escolar?
18. Você sente dificuldade em lembrar o que aprendeu em aula?
19. Você conhece estratégias de memorização? Como faz uso de estratégias de memorização?
20. Você faz uso da sua primeira língua no aprendizado da língua adicional?
21. Quais são as características de um bom professor de língua adicional, na sua opinião?
22. Como você julga ser o seu desempenho como aprendiz dessa língua?
23. Como você se sente em termos de habilidade para aprender essa língua? Sente dificuldade? Facilidade?
24. Você acha que a sua idade tem alguma influência no seu processo de aprendizado?

25. Quais emoções você sente quando está estudando esta língua? Como você lida com elas?
26. Como você se sente quando está prestes a entrar em aula? E ao final da aula?
27. Que partes do aprendizado fazem você sentir alegria ou felicidade? Há partes que o deixam frustrado? Se sim, quais?
28. Você sente que a sua evolução como aprendiz corresponde ao seu esforço?
29. Como você se sente em relação ao uso de tecnologia (aulas on-line, uso recursos digitais, uso de dispositivos eletrônicos como smartphone durante a aula)? Você gosta de usar? Acha importante?
30. Fora da sala de aula, você usa a tecnologia como um auxiliar no seu processo de aprendizado? Ex. leitura de artigos em sites, vídeos no youtube, serviços de streaming (Netflix), etc.
31. Você tem o hábito de ler na sua língua materna? Como?  
 Digital  Papel
32. Se você tiver material de leitura em inglês, como você prefere ler?  
 papel - livro, revista, cópias etc.  
 digital - computador, tablet, ereader etc.  
 tanto faz
33. Você ouve músicas nessa língua?  
 Sim – Como?  Rádio  On-line  
 Não
34. Você escreve nessa língua?  
 Sim – O que?  E-mails  Mensagens de texto  Publicações Acadêmicas  
 Não
35. Você percebe algum benefício do estudo dessa língua no seu cotidiano?

Sim – Qual?  
 Não