



**Alexandra Camelo
Magalhães**

Tradução e Validação do *Communicative Activities Checklist*

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Dissertação apresentada à Universidade de Aveiro para cumprimento dos requisitos necessários à obtenção do grau de Mestre em Terapia da Fala - Ramo de Perturbações Neurológicas no Adulto, realizada sob a orientação científica da Professora Doutora Maria da Assunção Coelho de Matos, Professora Adjunta da Escola Superior de Saúde da Universidade de Aveiro e coorientação da Professora Doutora Madeline Cruice, Assistant Professor na City University London, UK.

“I wish it need not have happened in my time”

"So do I... and so do all who live to see such times. But that is not for them to decide. All we have to decide is what to do with the time that is given us."

—Tolkien

Dedico este trabalho às pessoas com afasia, que me inspiram diariamente, através da sua força inigualável.

o júri

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palavras-chave

afasia, CIF, atividades, participação, comunicação, COMACT.

resumo

Enquadramento: O *Communicative Activities Checklist* (COMACT) é uma ferramenta que mede a frequência com que são efetuadas atividades comunicativas, relacionadas com Falar, Ouvir, Ler e Escrever. Esta *Checklist* permite compreender que tipo de atividades é que a pessoa com afasia realiza e que possíveis limitações associadas à afasia influenciam a realização das atividades listadas. O COMACT está entre os instrumentos que os terapeutas da fala portugueses gostariam de ter disponíveis na sua prática clínica.

Objetivos: Traduzir o COMACT para o Português Europeu (PE); investigar a sua validade (validade de conteúdo e concorrente) e fiabilidade (consistência interna e teste-reteste) para uma população portuguesa de pessoas com afasia (PCA) e um grupo de pessoas sem afasia (PSA). **Método:** Estudo metodológico, descritivo correlacional constituído pelas seguintes fases: Tradução e retrotradução; desenvolvimento de instruções para aplicação do COMACT; avaliação das diferentes versões obtidas por um comitê de especialistas (N=6); *cognitive debriefing* e *discussion group* sobre a versão final com um grupo de cinco PCA (validação de conteúdo); aplicação da *Checklist* a uma amostra da população portuguesa com afasia e sem afasia. Realizou-se análise de conteúdo (análise qualitativa dos dados obtidos no *cognitive debriefing* e cálculo do Índice de Validade de Conteúdo-IVC); análise da validade concorrente entre o COMACT e o *Communication Disability Profile (CDP) versão PE* (subescala de atividades) com base na correlação de *Spearman*; consistência interna (alfa de *Cronbach*); estabilidade teste-reteste com 7 dias entre administrações (teste de *Wilcoxon*); comparação entre grupos – variáveis contínuas (*t-test*) e variáveis categóricas (teste Qui-quadrado).

Resultados: O COMACT foi aplicado a 15 PCA (7 homens; 8 mulheres, com idade média de 58.46 ± 14.43) e a 30 PSA (15 homens; 15 mulheres, com idade média de 49.27 ± 15.58). No estudo de validade de conteúdo foram sugeridas várias alterações aos itens, relacionadas com a substituição e/ou inclusão de palavras, assim como a criação de novos itens. No total, 2 itens da categoria Falar e 3 da categoria Escrever sofreram alterações, de forma a torná-los mais fáceis de compreender, mas também mais culturalmente relevantes. O IVC obtido foi excelente. Encontrou-se uma correlação baixa entre o COMACT-PE e o CDP-PE (subescala de atividades). Valores de consistência interna baixos para as categorias Falar, Ouvir e Escrever, para ambos os grupos. A categoria Ler apresentou o valor mais adequado e elevado, com alfa de *Cronbach* igual a 0.812 para as PSA e de 0.806 para as PCA. Foram encontradas diferenças significativas entre grupos em 6 itens, nas categorias Falar, Ouvir e Escrever, que refletem o impacto que a afasia, os interlocutores, a idade e outras comorbilidades podem ter na realização de atividades comunicativas. A análise teste-reteste revelou estabilidade nos resultados após 7 dias, existindo apenas uma questão onde tal não é observado (“Ler mapas e direções”). **Conclusões:** É importante a realização de mais estudos de forma a serem obtidos melhores resultados ao nível da fiabilidade e um maior entendimento sobre os dados apresentados. Para isso é necessário continuar a revisão e reformulação dos itens, incluir uma amostra maior de PCA (com idade equivalente ao grupo de PSA), com maior representatividade étnica, geográfica e cultural, assim como com diferentes tipos de afasia e gravidade associados.

keywords

aphasia, ICF, activities, participation, communication, COMACT.

abstract

Introduction: The Communicative Activities Checklist (COMACT) measures the frequency in which communicative activities are done. These are related to Talking, Listening, Reading and Writing activities. This Checklist reveals the type of activities people with aphasia (PWA) do and how this condition limits their realization. COMACT is one of the assessment tools Portuguese speech language therapists would like to use in clinical practice. **Aims:** To translate the COMACT to European Portuguese (EP); to analyse its validity (content and concurrent validity) and reliability (internal consistency and test-retest) with a sample of Portuguese people with aphasia (PWA) and neurologically healthy people (NHP). **Methods:** This is a methodological, descriptive and correlational study, that included the following phases: Translation and backtranslation; development of instructions for the use the COMACT; evaluation of the different versions obtained by a committee of specialists (N=6); cognitive debriefing and discussion group about the final version of COMACT-EP with five PWA (content validation); use of COMACT-EP version with a sample of the Portuguese PWA and NHP. Content analysis was also contemplated (qualitative analysis of the data obtained in the cognitive debriefing and calculation of the Content Validity Index-CVI); concurrent validity between COMACT and the Communication Disability Profile (CDP) EP version- activity subscale was analysed using Spearman's correlation; internal consistency (IC) was analysed with Cronbach's α ; test-retest stability, with 7 days between administrations, was analysed with the Wilcoxon test; the two groups (PWA and NHP) were compared with T-test (continuous variables) and chi-square test (categorical variables). **Results:** COMACT-EP was used with 15 PWA (7 men; 8 women, with a mean age of 58.46 ± 14.43) and 30 NHP (15 men, 15 women, with a mean age of 49.27 ± 15.58). Various suggestions were made, including the substitution and/or deletion of words and creation of new items. A total of 2 items of the Talk category and 3 items from the Writing category were altered, in order to make them easier to understand and also more culturally relevant. The CVI obtained was excellent. Low correlation values were found between COMACT-EP and CDP-EP versions. Internal consistency for the Talking, Listening and Writing categories of COMACT-EP were low for both groups. The Reading category presented the most adequate and highest Cronbach's α value for both groups (PWA=0.806; NHP=0.812). Significant differences between groups were found in 6 items of the categories Talking, Listening and Writing, which reflects the impact that aphasia, interlocutors, age and other comorbidities may have on the realization of activities. Test-retest results revealed stability after 7 days, with exception of one item ("Read maps and directions"). **Conclusions:** It is important to develop more studies, in order to obtain better results in terms of reliability and to better understand what the observed results represent. Therefore, it is necessary to continue the revision/rewording of the items and to include a larger sample of PWA (with a similar age of the NHP group) with greater ethnic, geographic and cultural representation, as well as with different types of aphasia and associated severity.

abbreviations

A-FROM – Living with Aphasia: Framework for Outcome Measurement
ASHA-FACS – American Speech-Language-Hearing Association Functional Assessment of Communication Skills for adults
BAAL – Bateria de Avaliação de Afasia de Lisboa/ *Lisbon Aphasia Assessment Battery*
CETI – Communicative Effectiveness Index
CDP – Communication Disability Profile
CDP-EP – Communication Disability Profile-European Portuguese version
COMACT – Communicative Activities Checklist
COMACT-EP – Communicative Activities Checklist-European Portuguese
EFA – Escala de Funcionalidade para Afásicos/ *Functionality Scale for Aphasics*
FCTP – Functional Communication Profile-Revised
IPA – Instituto Português da Afasia/ *Portuguese Institute of Aphasia*
ICF – International Classification of Functioning, Disability and Health
LPAA – Life Participation Approach to Aphasia
LMMMSE – Language Modified Mini-Mental State Examination
NHP – Neurologically Healthy People
PALPA – Psycholinguistic Assessments of Language Processing in Aphasia
PALPA-P – Provas de Avaliação da Linguagem e da Afasia em Português
PWA – People with aphasia
SOCACT – Social Communicative Activities Checklist
SD – standard deviation
SLT – Speech and Language Therapist
SLTs – Speech and Language Therapists
SPSS – Statistical Package for the Social Sciences
WHO – World Health Organization

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1. Background

The International Classification of Functioning, Disability and Health (ICF) proposed by the World Health Organization (WHO, 2001) was developed using a biopsychosocial model, with the purpose of creating a unified framework “for the description of health and health-related states” (WHO, 2001; pp. 3). This classification allows a more efficient way of communicating about health on a global scale, across a plethora of disciplines (WHO, 2001). The suggested ICF model’s classification scheme demonstrates the dynamic interactions between its components: Health Conditions, Body Functions and Structures, Activities and Participation, whilst also acknowledging the influence of Environmental and Personal factors (Threats & Worrall, 2004). The ICF is not an assessment tool, but it allows the organisation and transmission of data that was previously obtained through other means of evaluation, such as interviews or standardised tests (Simmons-Mackie and Kagan 1999; Threats 2005; Matos, 2012).

According to the ICF, an Activity is “the execution of a task or action by an individual”, therefore, Activity Limitations are “difficulties an individual may have in executing activities”. It is also essential to note the difference between the definition of Activity and Participation, suggested in the ICF. The latter means “involvement in a life situation”. Consequently, “participation restrictions are problems an individual may experience in involvement in life situations” (WHO, 2001; pp.10). The Activity and Participation component of the ICF consists of eight categories/chapters: Learning and Applying Knowledge, General tasks and demands, Communication, Mobility, Self-care, Domestic Life, Interpersonal Interactions and Relationships, Major life areas and Community, Social, and Civic Life (WHO 2001). Within these many chapters, communication is of uttermost importance, since various activities are at least partially dependent upon communication skills (Threats & Worrall, 2004). This connection is obvious in Interpersonal Interactions and Relationships, but it is also relevant in other areas such as Community, Social, and Civic Life, being then easy to understand how communication is at the basis of many day-to-day activities (Worrall and Hickson 2003).

Defining aphasia is still, to this day, a complex and divisive task. According to Benson and Ardila (1996), aphasia is considered a language impairment,

caused by brain damage, whose intervention is oriented by the speech and language therapist (SLT). People with aphasia (PWA) may experience difficulties in all modalities of language, whether it is hearing comprehension, speech, reading or writing (Lyon 1998; Rogers, Alarcon et al. 1999; Katz 2000). The use of gestures may also be limited (Marshall, 2002). The ICF has influenced the way aphasia is perceived, assessed, and treated (Simmons-Mackie and Kagan 2007, Chapey, 2008).

It is known that aphasia can have a significant impact in daily activities, especially if we bear in mind that communication is necessary for most of these (Simmons-Mackie & Kagan, 2007). For example, activities such as speaking on the phone or having a conversation with a loved one might be compromised, due to the complexity of the deficits resulting from an acquired brain lesion (Ross & Wertz, 2005).

So, if one considers the many consequences of aphasia, definitions that simply mention it as an acquired impairment of language are limiting. According to the definition proposed by Berg et al. (2022), aphasia is a disability that masks competence, which can result in activity limitations and participation restrictions, negatively impacting the quality of life and well-being for the person with aphasia, as well as for their family members and friends. The authors also stress the consequences aphasia may have on life roles, social inclusion, and access to information and services (Berg et al., 2022). The aforementioned definition was agreed upon various members of the Collaboration of Aphasia Trialists, which include, not only speech and language therapists (SLTs), but other professionals from diverse areas of work (e.g., linguists, neuropsychologists, nurses...). This reflects the ever-increasing acceptance of the ICF framework in aphasia research and clinical practice, as it leads to the development of more comprehensive assessments of aphasia and its global consequences on life (Berg et al., 2022).

The ICF stresses that the focus of evaluation and intervention cannot be exclusive to the modalities of language mentioned before. It is necessary to encompass functionality into therapy, henceforth, it is essential to consider the many activities and participation situations that are meaningful for PWA (Chapey, 2008).

The study by Verna et al. (2009) mentions that the ICF allows for a holistic approach to intervention, as the multidimensional consequences of aphasia are

taken into consideration. Furthermore, by using the ICF, the person with aphasia – as well as their family and friends – should have their opinions heard regarding the intervention process (Threats 2005).

Alongside with the ICF, it is also essential to mention the Living with Aphasia: Framework for Outcome Measurement (A-FROM) when addressing how the different dimensions of aphasia are viewed in a biopsychosocial perspective. The A-FROM is a “conceptual approach to outcome measurement that takes account of the impact of aphasia on life areas deemed important by people with aphasia and their families” (Kagan et al, 2008; pp. 259), connecting the ICF categories and quality of life. The A-FROM simplifies the various categories of ICF and focuses on life categories’ dynamic interactions, expanding on what is relevant to PWA and their family/friends, focusing on what is like living with aphasia. A-FROM encompasses the following categories: aphasia severity; participation/life habits; personal factors including identity and emotions; and environment (Kagan et al, 2008).

PWA want to benefit from services that have a positive impact in their lives (Worrall et al., 2011). It is then important to bear in mind that the goals set for therapy should be personal and relevant. Clinicians also need to make sure that therapeutic intervention is significant, by promoting participation in activities that are meaningful to their clients, empowering them to be involved in multiple and diverse social situations (Simmons-Mackie, 2008; Worrall et al., 2011; Yorkston, Baylor, & Britton, 2017; Davenport, Dickson, & Minns Lowe, 2019; Worrall, 2019; Wray, Clarke, & Forster, 2019; Baar, 2021). This aligns with the Life Participation Approach to Aphasia (LPAA) philosophy, where SLTs’ intervention focuses on the real-life goals of PWA, in order to enhance their life participation (Chapey et al, 2000).

For this to happen, the intervention process should not just focus on linguistic deficits. According to Baar (2021) impairment testing alone is insufficient to get a full grasp of the person that seeks/needs Speech and Language Therapy services. Therefore, it is necessary to change the way these services are provided (Aujla et al., 2016).

In order to help SLTs implement an intervention plan that is truly suited to the person with aphasia and their caregivers, assessment tools that indicate the real impact of aphasia must be made available (Simmons-Mackie, Threats &

Kagan, 2005). This means that, during the evaluation process, alongside with the assessment of communication and language deficits, the consequences that these deficits have in a person with aphasia's life should also be measured (Worrall & Hickson, 2003).

In Portugal, there is still a lack of instruments that allow the assessment of all these categories. The majority of Portuguese SLTs are dissatisfied with current assessment tools, because of their focus solely being on language impairment and, for this reason, most SLTs use self-developed assessment tools, resulting in an evaluation process that cannot be considered objective (Leal, 2009). This also applies to reassessments, which are essential to effectively measure the person's evolution since the beginning of the therapeutic process (Leal, 2006; Leal, 2009).

It is important to note that the most frequently used assessment tools in Portugal are the Lisbon Aphasia Assessment Battery/*Bateria de Avaliação de Afasia de Lisboa* – BAAL (Castro-Caldas, 1979; Damásio, 1973; Ferro, 1986), the Functionality Scale for Aphasics/*Escala de Funcionalidade para Afásicos* – EFA (Leal, 2006) and the Psycholinguistic Assessments of Language Processing in Aphasia – PALPA (Kay, Lesser & Coltheart, 1992)/ *Provas de Avaliação da Linguagem e da Afasia em Português* – PALPA-P (Castro, Caló et al. 2003; Gomes 2006; Leal, 2009).

However, based on the review conducted by Matos *et al.* (2014), 10 out of 20 identified aphasia assessment tools in Portugal were created or translated after 2008, which may explain the results obtained by Leal (2009). In the same review, the authors note that “the most recently developed assessment tools are centred in Activity Limitations, Participation Restrictions, Contextual Factors and quality of life” (Matos et al, 2014). Although most of these instruments are not yet available (as they are still being studied), these results demonstrate a change in the focus of the intervention carried out by Portuguese SLTs, as PWA are being assessed in a more holistic perspective, one that includes ICF directives.

In the study by Leal et al (2009), the Communicative Activities Checklist (COMACT) (Cruise, 2001; Worrall & Hickson, 2003) was among the tests that Portuguese SLTs would like to have available, alongside the American Speech-Language-Hearing Association Functional Assessment of Communication Skills for adults (ASHA-FACS) (Frattali, Thompson, Holland, Wohl, & Ferketic, 1995) and the Social Communicative Activities Checklist (SOCACT) (Worrall & Hickson,

2003). This reveals the need for objective and validated protocols that encompass the ICF framework, in order to provide the most appropriate therapeutic response, according to the needs of PWA, their families and friends (Matos, 2012).

Based on the information available, the translation and subsequent validation of COMACT for the EP population is considered to be a very beneficial step in the process of assessing and intervening with PWA and their social network.

The COMACT is a result of extensive research, which covered the areas of aphasia, hearing, and communication, and it allows for the evaluation of limitations associated with the execution of communicative activities (Cruice et al., 2005). The COMACT is an autofill assessment (Aujla et al., 2016), however, it can also be used as an interview, taking approximately 20 minutes to complete (Worrall & Hickson, 2003).

For the elaboration of the COMACT, informal questionnaires were analysed (Aujla et al., 2016), alongside with the review of contents relating to communicative activities from three assessment instruments: the ASHA-FACS (Frattali, Thompson, Holland, Wohl, & Ferketic, 1995), the Communicative Effectiveness Index (CETI) (Lomas et al., 1987) and the Functional Communication Profile-Revised (FCTP) (Worrall, 1999). A list of 45 communicative activities was compiled, divided by the following themes: "Talking" (items 1 – 16), "Listening" (items 7 – 23); "Reading" (items 24 – 37) and "Writing" (items 38 – 45). Main communication partners are also identified within the items, according to the activity: spouse, co-workers, family, neighbours, healthcare professionals and community service workers (Shadden, 1988; Davidson et al., 2003). Items explored measure the frequency with which the person executes communicative activities: daily, weekly, fort-nightly, monthly, rarely (one to six times a year) and even if they do not carry out the activity or if it is not applicable (Worrall & Hickson, 2003; Cruice et al., 2005).

According to Aujla et al (2016), the COMACT can also measure the type of communicative activities that the participants usually engage in. For every activity engaged in, a score of 1 is given, and so, the maximum score is 45. If "not at all" or "not applicable" is selected by the participants, then that item has zero as a score.

A time window was not mentioned for a person to base themselves whilst answering the Checklist, but a 12-month period is used (Cruice et al., 2005).

2. Study aims

This project had the following aims: a) Translation of the original COMACT into EP; b) Creation and validation of its instructions; c) Analysis of validity (content validity; concurrent validity) and reliability (internal consistency; test-retest) of the newly translated Checklist, for a Portuguese sample of PWA and Neurologically Healthy People (NHP).

3. Method

3.1. Study design

This project was developed as part of the M.Sc. in Speech and Language Therapy at the School of Health Sciences, University of Aveiro. It is considered to be a methodological (Mbuagbaw et al, 2020), observational (DiPietro, 2010), descriptive (Aggarwal and Ranganathan, 2019) and correlational (Lau, 2017) study.

In order to achieve the defined aims, the study was developed in two different phases. Phase 1 consisted of the translation procedures of COMACT into EP and its content validation. Phase 2 involved the analysis of the concurrent validity (by comparing its results to the CDP-EP version 2 – activity subscale results) and reliability analysis (internal consistency and test-retest) of the new version of COMACT.

Supported Conversation (Kagan, 1998) and Total Communication (Pound, Parr, Lindsay and Woolf, 2001) strategies were used whenever necessary in the different stages of data collection with PWA. These strategies supported the PWA to communicate their opinion, as well as helped them to understand and answer the questions posed by the M.Sc. student during the whole study.

3.2. Ethical Considerations

The present study was developed under the ethical approval of the Ethics and Deontology Committee of the University of Aveiro (Appendix II) and by the Scientific Council of the Portuguese Institute of Aphasia/ *Instituto Português da Afasia* (IPA) (Appendix III). Authorisation from the author of the original COMACT was also obtained (Appendix IV). PWA signed an aphasia-friendly consent form (Appendix V) developed according to the current international recommendations (Aeligay et al., 2008). NHP's consent form can be consulted in Appendix VI.

3.3. Participants

3.3.1. Inclusion and exclusion criteria

The following inclusion criteria for PWA was defined: People of both sexes; over 18 years of age; EP as their first language; literate; living independently at home or with family members; for at least 3 months post on-set; diagnosis of aphasia according to the Lisbon Aphasia Assessment Battery / Bateria de Avaliação da Afasia de Lisboa (BAAL) (Caldas, 1979; Damásio, 1973; Ferro, 1986); reliable yes/no response with moderate hearing comprehension skills that allow for the understanding of simple phrases, according to the BAAL (minimum scoring of 7 out of 8 on yes/no questions) and good comprehension of written sentences, according to PALPA-P ("Pairing Written Phrase-Image" subcategory), which has a total of 60 items (Castro, Caló & Gomes, 2007); no presumed associated cognitive disorders, according to the EP version of the Language-modified Mini-Mental State Examination (LMMSE) (a minimum scoring of 22 out of 30) (Matos & Jesus, 2011) and also according to the information in the clinical history of the person; no presumed depression, according to the EP version of the Center for Epidemiologic Studies-Depression (CES-D) (a minimum score of 23 for participants with an education inferior to 9 years & a minimum of 20 for individuals with an education higher than 9 years) (Gonçalves & Fagulha, 2004). Participants that were incapable of filling out the COMACT-EP, the CDP-EP, the sociodemographic data sheet or other necessary assessment tools were not included in this study. Participants using a wheelchair were excluded to reduce potential confounding

influence of mobility on emotional health, and difficulties of physical access to communication or social activities.

Regarding the NHP participants, they were identified through the M.Sc. student's personal network and through snowballing sampling (Naderifar et al, 2017). A total of 30 participants were contacted, all of whom participated in the study.

The inclusion criteria were: Both sexes; over 18 years of age; EP as their first language; literate; no self-reported language and/or cognitive disorders; no hearing problems that interfered in the communication process, as reported by the person; living independently at home or with family members. Exclusion criteria included: Incapacity of filling out the COMACT- EP, the sociodemographic data sheet, and concomitant mobility issues.

3.3.2. Phase 1: Translation of the COMACT and its Content validation

For this phase, five PWA were contacted through the IPA, located in the north of Portugal, in Matosinhos, and individually assessed at the Institute facilities. They all fit the aforementioned inclusion criteria in regard to PWA and none were excluded from this phase.

Including participants with aphasia in order to contribute for the translation adaptations and content validity of the COMACT-EP was essential. People living with aphasia have a very deep knowledge of what it is like to manage daily life with this condition. "Taking into consideration the perspectives of PWA, as service users, in all phases of the research, is critical to generating findings that will accelerate translation to real-world clinical practice and promote functional interventions and strategies for living successfully with aphasia" (Charalambous et al, 2020).

3.3.3. Phase 2: Concurrent Validity and Reliability Analysis of the COMACT- EP

A total of 34 individuals with aphasia were contacted. PWA were recruited from the local hospitals, private practices, and community stroke groups. Out of the 34 participants, ten PWA did not want to integrate the study and five PWA were

unable to participate due to health complications. Initially, 19 participants with aphasia took part in the present study, but four individuals were excluded because of their CES-D scores (Gonçalves & Fagulha, 2004).

4. Procedures

4.1. Phase 1: Translation of the COMACT and its Content validation

Regarding the translation procedures, the necessary steps, recommended by the literature were followed (Jesus & Valente, 2016). Firstly, two Portuguese translations were produced by two independent Portuguese native speakers. The translators were fluent in English and knowledgeable of both Portuguese and English cultures (Beaton et al., 1998). By reuniting and comparing the aforementioned translations, a consensus version was synthesized. Following this process, two back-translations of the latest version of the COMACT-EP were completed, but this time by different translators (Geisinger, 1994; Hutchinson, Bentzen, & König-Zahn, 1997), also fluent in both languages. As advised by Geisinger (1994), these translators had no previous knowledge of the Checklist, its intents, or base concepts.

The next stage of the translation phase involved the consolidation of every version of the assessment, from which a prefinal version was created. This process was implemented by an expert committee, responsible for reviewing the original COMACT, the EP translations and corresponding backtranslations to English (Beaton et al., 2000; Geisinger, 1994).

The expert committee consisted of 6 Portuguese individuals, all of them fluent in the English language. Three of them were SLTs working in private practice with PWA, one was a highly specialised SLT in aphasia studies and intervention, another was a University Professor and Researcher, specialised in translation studies, and the last participant was a teacher working with people with communication difficulties, living in Newcastle, UK and with extensive years of formal training in the English language.

The committee were given reports with the decision rationale behind the translations and analysed the following equivalences: Semantic, idiomatic, experiential, and conceptual (Beaton et al., 1998; Guillemin et al., 1993). Following

this, the committee checked if the language used in the COMACT-EP could be understood by a 12-year-old child (Beaton et al., 1998). All versions of the COMACT-EP were also sent to the original author, in order to obtain her feedback.

In the next step, a set of clear instructions, in EP, was developed to ensure the most adequate use of the COMACT-EP (see Appendix VI) (Geisinger, 1994; Wild et al., 2005). The COMACT-EP was then administered to an expert panel of 5 PWA (cognitive debriefing). This very important process helped to ensure that the EP translation targeted what the original English version intended (Wild et al, 2005; Kartsona & Hilari, 2007; Kim et al, 2015; Tse et al, 2020).

The aims and procedures of how to fill the COMACT-EP were explained to every participant before they started, with the help of an experienced SLT in aphasia, who was prepared to answer any questions. After completing the COMACT-EP, the SLT handed out an aphasia-friendly guide (see Appendix VIII), that PWA used to provide feedback regarding the COMACT-EP content. In this guide, a Likert scale was used, which ranged from 1 to 4 (1–Strongly Disagree; 2–Disagree; 3–Agree; 4–Totally Agree). The participants were asked about the clarity, comprehensibility, and relevance of the COMACT-EP items and instructions, as well as about the process of filling it out. PWA were encouraged to comment and provide feedback on their experience, so that their opinions, interpretations and translation suggestions would be considered during the next revision of the COMACT-EP (Beaton et. al, 2000; Wild et al., 2005).

The observations provided by the 5 PWA during the individual assessments were insightful but did not result in any further changes to the COMACT-EP. Therefore, a discussion group (Ochieng et al, 2018) was organised, in order to talk through each one of the items' clarity, comprehensibility and relevance with a deeper degree of specificity. The same individuals were contacted again, but this time, bearing in mind the pandemic context, the fact that they were from different locations and had busy schedules, the discussion group took place online, via the Zoom platform.

Following this phase, the COMACT-EP was ready to be used with a representative sample of the targeted population (Geisinger, 1994; Guillemin et al., 1993; Wild et al., 2005) (see Appendix IX).

4.2. Phase 2: Concurrent Validity and Reliability Analysis of the COMACT-EP

Fifteen (N=15) PWA were assessed individually by an experienced SLT in aphasia. Eleven of them were interviewed in the IPA facilities, four were interviewed in private practices and one was interviewed at home. Thirty (N=30) NHP also filled in the COMACT, autonomously, in their homes, with the presence of an SLT, in order to clear any doubts and help them when difficulties arose.

PWA were assessed with formal batteries that included data related to linguistic competencies, functional communication, cognitive and emotional health in order to guarantee they fulfilled the defined inclusion criteria. Due to the fact that numerous assessment tools were to be used with the involved PWA, the assessment was divided into three sessions to minimise fatigue. Each one of these sessions had a maximum duration of one hour and thirty minutes. For the NHP group, the assessment included the COMACT-EP and the sociodemographic data sheet (which did not contain stroke related information). Since these were quick to fill in, only one session was needed.

During the sessions with both PWA and NHP groups, the COMACT-EP took about 5 to 15 minutes to administer.

4.3. Statistical Analysis

To ensure that the aims of this project were met, the following statistical procedures were accomplished to test for the validity and reliability of the new version of the Checklist:

- Content Validation (qualitative analysis of PWA opinions and suggestions and calculation of the Content Validity Index – CVI) analysis of COMACT-EP and its instructions;
- Concurrent Validity between the COMACT-EP and the Activity subscale of the CDP-EP version 2 (Matos, Serra & Jesus, 2016) analysis using the Spearman's Correlation test;
- Internal consistency analysis based on Cronbach's α for COMACT-EP and CDP-EP version 2 (Activity subscale);

- Test-retest reliability analysis based on the Wilcoxon signed-rank test, with a period of 7 days between administrations (to ensure that PWA were interviewed again, with the same conditions mentioned before).

As previously specified, the CVI was measured according to the results obtained from PWA in the aphasia-friendly Likert-scale guide used during the cognitive debriefing phase. To calculate it for each item, the number of answers with a score of 3 (“Agree”) and 4 (“Totally agree”) were summed up and then divided by the total number of answers given for that particular item (Chalmers et al, 2005). The acceptable values for the index are a minimum of 0.80, but preferably it should be higher than 0.90 (Alexandre & Coluci, 2011).

Concerning Internal consistency calculations, for Cronbach’s α values, the following guide (George and Mallery, 2003) was used for interpretation: if values were greater than 0.9, they were classified as “excellent”; if greater than 0.8, they were classified as “good”; if greater than 0.7, the values were considered “acceptable”; if greater than 0.6, values were “questionable”; if greater than 0.5, they were considered “poor” and finally, if they were lower than 0.5 they were classified as “unacceptable”.

In order to compare the obtained results between the PWA and NHP groups, independent t-tests (if normality assumption verified) and Mann-Whitney tests were used. The Chi-Square was also used to examine the association between two categorical variables and compare the PWA and NHP groups (if assumptions verified and 20% of the cells did not have value lower than 5). Fisher test was used if Chi-Square was not possible to use, meaning that assumptions were not verified.

The categorical variables are presented in the form of absolute frequency (n) and relative frequency (%) (as it is possible to observe in tables 5A through 5D). For continuous variables, their mean and standard deviation (SD) are presented. The median, as well as the 25th and 75th percentiles were also a form of presenting continuous variables.

All statistical analysis ran on the Statistical Package for the Social Sciences (SPSS) v28.

5. Results

5.1. Phase 1: Translation of the COMACT and its Content Validation

According to the necessary procedures mentioned earlier, a pre-final EP version of the COMACT was completed, after the translations and backtranslations were reviewed by the expert committee. The changes through which the Checklist has gone are presented in Table 10.

5.1.1. PWA panel of experts

Out of the 5 participants, four were male and one was a female. Their mean age was 60.80 (SD=5.45, range 53-68 years). The participants went through different education paths: Elementary/middle school (n=2), highschool (n=1), university (n=2). In relation to their professional situation, one participant was working and the other four were retired. Regarding their marital status, one was single, one was divorced and three were married. Participants were from Porto (n=4) and from Aveiro (n=1). Their brain lesion etiology was stroke (n=4) and bacterial meningoencephalitis (n=1), with a mean of 57.80 months post on-set (SD=57.80, range 34-80 months). According to the BAAL, two types of aphasia were identified: Transcortical motor (n=2) and Anomic (n=3). The aphasia quotient (higher values intend less severity), calculated through BAAL results, had a mean of 87,62% (SD=3.97%; range 81.25%-91,65%). As for the scores in other formal assessments, the PALPA-P score mean was 27,80 (SD=1.79; range 26-30), the LMMMSE mean was 29,80 (SD=0.45; range 29-30) and, finally, the CES-D average score was 16 (SD=2.83; range 13-30).

5.1.2. Content Validation

Five PWA completed an aphasia-friendly guide (see Appendix VIII) in order to provide additional feedback on the COMACT-EP (see Table 2).

The participants agreed that the EP version of the COMACT is easy to fill out and that the instructions, which were read out loud by the SLT, whilst simultaneously being silently read by PWA, were also easy to comprehend. This

last strategy was fundamental to assure that participants understood the instructions and should be used by SLTs applying the COMACT-EP in future studies.

Participants agreed that the length of the COMACT-EP was appropriate (“Agree”, n=2; “Totally agree”, n=3). Only one participant felt tired after filling in the COMACT-EP. PWA also agreed that the items were easy to understand (“Agree”, n=1; “Totally agree”, n=4).

One PWA did not consider the COMACT-EP items to be relevant, but the other 4 PWA “agreed” (n=2) or “totally agree” (n=2) that it was a relevant assessment Checklist. PWA were also asked if the items were relevant to Portuguese PWA in general, and the opinions were identical (“Totally disagree”, n=1; “Agree”, n=2; “Totally agree”, n=2). When asked if the items were ambiguous, most PWA disagreed (“Totally disagree”, n=3; “Disagree”, n=1; “Agreed”, n=1). Finally, PWA generally agreed that the COMACT-EP questions were clear (“Agree”, n=2; “Totally agree”, n=3).

CVI values for each item were calculated and the results obtained were equal and/or greater than 0.8, as one can see in Table 2.

5.1.3. Discussion group

As mentioned before, due to the fact that no changes were suggested to the COMACT-EP items after the cognitive debriefing (performed individually), a discussion group was held. As seen in Table 3B the discussion group proved to be more fruitful, as the participants engaged in a discussion that resulted in viable changes to the COMACT-EP’s initial version. Other opinions and suggestions were made (see Table 3A), albeit all these proposed changes were unable to be implemented, due to the aims of the present study and other reasons, explored in the Discussion Section.

5.2. Phase 2: Concurrent Validity and Reliability Analysis of COMACT-EP

5.2.1. Sociodemographic factors

Seven out of the 15 PWA were male and 8 were female, with a mean age of 58.46 years (SD=14.43; range 27-76 years). The participants had different educational backgrounds: Elementary/middle school (n=4), high school (n=2), university (n=6) and other (n=3). One (n=1) person with aphasia had a job, nine (n=9) PWA were retired and five (n=5) were on sick-leave. Only one participant was staying with their family members, as the rest were living in their own homes (n=14). In relation to their marital status, different answers were given: Single (n=4), married (n=7), widowed (n=1) and living with a partner (n=1). The participants with aphasia were from distinct areas of the country: Porto (n=11), Aveiro (n=2) and Coimbra (n=2). Their brain lesion etiology was stroke (n=12), aneurysm (n=1), traumatic brain injury (n=1) and unknown (n=1); with a mean of 89.47 months post onset (SD=117.70; range 5-464 months). Different types of aphasia were identified according to the BAAL: Global (n=1), Broca (n=2), Transcortical Motor (n=3), Transcortical Sensory (n=2) and Anomic (n=8). The Aphasia Quotient had a mean of 76.62% (SD=14.17%; range 34.46-91.65%). As for the scores in other formal assessments, the average PALPA-P score was 20.8 (SD=5.66; range 10-29), the LMMMSE mean was 28.67 (SD=1.54; range 26-30) and the CES-D average score was 8.73 (SD=6.80; range 0 -21).

The mean age of the 30 NHP (15 male; 15 female) participants was 49.27 years (SD=15.58; range 20-82 years). Eleven participants (n=11) completed elementary/middle school, eleven (n=11) went through high school and eight (n=8) had a university degree. Twenty-four (n=24) were working, four (n=4) were retired and two (n=2) were unemployed. Regarding the marital status, eight (n=8) were single, eighteen (n=18) were married, two (n=2) were widowed and the remaining two (n=2) had partners. Every NHP was living in their own home and were from different districts in Portugal: Porto (n=20), Leiria (n=6) and Santarém (n=4).

The statistical analysis results revealed that there were significant differences between the two groups (PWA and NHP) in regards to age ($t(43)=1.912$; $p=0.063$), professional situation (Fisher=28,269; $p<0.001$) and whether participants lived in their own home or their family home ($\chi^2(1)=3.850$; $p=0.070$), as shown in Table 4A. The mean age difference between the two groups was 9.19 years.

5.2.2. Concurrent Validity

Results showed an overall weak correlation between the COMACT-EP and the CDP-EP version 2 (Activity subscale), although some items had a positive correlation. Regarding Spearman's correlations values, the following results were found: In the "Talking" category, the items "Falar com os amigos" (Talk to friends) (-0.694) and "Falar num grupo grande de pessoas" (Talk in a large group of people) (-0.599) correlated to CDP EP version 2 item "Falou através do computador?" (Talked through the computer) which is a part of the instrument's questions about talking, within its Activity subscale. The COMACT-EP category of "Listening" and "Reading" resulted in the most items correlating with CDP-EP (see Table 7). Items "Ver/ouvir notícias" (Listen to TV) and "Ouvir um discurso" (Listen to a speech) correlated positively with the item "Compreendeu algo através do computador" (0.633 and 0.844, respectively). The Checklist items "Ouvir uma conversa" (Listen to a conversation) and "Ouvir um grupo de pessoas a falar" (Listen to a group of people talking) also correlated positively with five CDP-EP items, which are the following: "Compreendeu (use o nome da pessoa mais próxima)" (Understood a person that is close to them) (0.637 and 0.782); "Compreendeu um estranho, alguém que não conhece" (Understood a stranger, somebody you don't know) (0.618 and 0.817); "Compreendeu um grupo" (Understood a group) (0.523 and 0.595); "Compreendeu sob pressão" (Understood something under pressure) (0.741 and 0.783); "Compreendeu algo através do computador" (Understood something through the computer) (0.693 and 0.901).

In the "Writing" category, the item "Escrever listas de compras" (Write shopping lists) (0.649) correlated with CDP's "Escreveu o seu nome" (Wrote your name).

5.2.3. Internal Consistency

Internal Consistency was analysed for each one of COMACT-EP's categories and participant groups. For the PWA group, the Cronbach's α values were as follows: "Talking"=0.398; "Listening"=0.275; "Reading"=0.806; "Writing"=0.654. For the NHP group, Cronbach's α values were: "Talking"=0.456; "Listening"=0.378;

“Reading”=0.812; “Writing”=0.521. According to the results analysis, item deletion would positively influence Cronbach’s α values. For example, if the item “Falar com os animais de estimação” (Talk to pets) was deleted, the “Talking” category’s Internal Consistency would be considered acceptable for PWA (Cronbach’s α =0.710) and questionable for NHP (Cronbach’s α =0.655). In the “Listening” category, Cronbach’s α values would also increase, for both PWA (Cronbach’s α =0.522) and NHP (Cronbach’s α =0,479), if the item “Ver/ouvir programas de desporto” (Listen to sports programs) was eliminated. Cronbach’s α was also calculated for all the COMACT-EP items, which resulted in higher values for both groups (PWA: Cronbach’s α =0.889; NHP: Cronbach’s α =0.788).

CDP-EP version 2 (Activity subscale) Cronbach’s α was also calculated, to further verify if it was feasible to proceed with statistical comparisons between COMACT-EP and CDP-EP (Activity subscale). The Internal Consistency analysis resulted in high Cronbach’s α values for this instrument: “Talking”=0.889; “Communication”=0.823; “Comprehension”=0.822; “Reading”=0.930; “Writing”=0.829.

5.2.4. Differences between groups

To analyse possible differences between groups, the Mann Whitney test was used (see Tables 5A through 5D). Significant differences were found in the “Talking” category, in the items: “Falar num grupo pequeno de pessoas” (Talk in a large group of people) (U=126.000; p=0.013); “Contar histórias e anedotas” (Tell stories and jokes) (U=144.000; p=0.044); “Fazer apostas (ex: futebol, raspadinhas, lotaria)” (Place bets) (U=120.500; p=0.019). Differences were also found in the “Listening” category, in two of the items: “Ouvir uma conversa” (Listen to a conversation) (U=108.500; p=0.002) e “Ouvir um grupo de pessoas a falar” (Listen to a group of people talking) (U=122.000; p=0.019). No significant differences were found in the “Reading” category. Regarding the last category of COMACT-EP version, “Writing”, one item was found to have significative differences between the PWA and NHP groups: “Escrever mensagens e/ou e-mails” (Write messages and/or e-mails) (U=135.000; p=0.006). Total scores were calculated for each category and the Mann-Whitney test was used again. Results indicated that

there were no significant differences between the participant groups, regarding the total number of activities done by the PWA and NHP (see Table 6).

5.2.5. Test-retest reliability

Test-retest reliability was analysed using the Wilcoxon signed-rank test, with only one significant difference observed, in the “Reading” category, more specifically the item “Ler mapas e direções” (Read maps and directions) ($Z=-2.200$; $p=0.039$). As observed, the Z value is negative, indicating that the retest has greater values than the first round of testing. This can also be observed in the difference between percentile results (initial test – 2.00 (P25); 4.00; 5.00 (P75); retest – 4.00 (P25); 5.00; 6.00 (P75)). Stability was found in the rest of the COMACT-EP items.

6. Discussion

6.1. Phase 1: Translation of the COMACT and its Content Validation

6.1.1. Cognitive Debriefing

During the Cognitive Debriefing, only one participant felt tired. This might be justified because of all the assessments previously conducted before filling in the COMACT-EP. To ensure that this would not happen, the assessment of these participants should have been separated from the COMACT-EP discussion and guide, to minimise fatigue.

6.1.2. Discussion group

As seen in Tables 3A and 3B, the discussion group that followed the cognitive debriefing (performed individually), was more effective in providing feedback/suggestions that resulted in changes of the Portuguese version of the COMACT. It also provided suggestions for future studies regarding the Checklist. For example, PWA agreed that the following items were unclear and irrelevant: “Ouvir uma conversa” (Listen to a conversation) and “Ouvir um grupo de pessoas a falar” (Listen to a group of people talking). This suggests that they did not

interpret these items as being successful in understanding or comprehending a conversation. PWA assumed that “listen” simply meant “hearing”. Further adaptation is needed in order to make them clearer in what they actually mean and intend to evaluate. Interestingly, the same phenomenon occurred in the Aujla et al (2016) study.

Some PWA suggestions involved the creation and/ or addition of different items to the COMACT-EP, that could not be followed through in this project. Some of the proposed items were: “Falar com a família” (Talk to family); “Falar com os vizinhos” (Talk to neighbours); “Contar histórias e anedotas” (Tell stories and jokes). Participants also suggested that the item “Falar com os empregados de loja/diferentes profissionais” (Talk to shopkeepers/ different professionals) should’ve included examples. However, in order to keep the items as simple and clear as possible, it was decided that the examples would be given during the interviews, if necessary, for communication support and thus make the item easier to understand. And so, in this item, the interviewer could mention store clerks, pharmacists, butchers, doctors and other professionals as examples. Concerning the item “Fazer apostas” (Place bets), examples were added as suggested, as it would make the item easier to understand and suppress possible cultural differences within the English and Portuguese language when referring to placing bets, gambling and luck games. Thus, examples of typical Portuguese betting/luck games were added. The items “Ler cartas e postais” (Read letters and cards), “Ler listas telefónicas” (Read the phone book) were also considered to be irrelevant, possibly because these are not popular or prominent activities nowadays (especially reading the phone book), as they once were, bearing in mind that the original COMACT was created almost twenty years ago (Worrall, L., and Hickson, L., 2003). Therefore, it is necessary to review and update items like these, that do not reflect the modern-day society. The activities “Escrever no diário” (Write in a diary) and “Passar cheques” (Write cheques) were, too, viewed as unimportant, but most likely due to the fact that these are not activities that are usually done by this group of participants (possibly due to linguistic deficits), and not because of their relevancy.

6.2. Phase 2: Concurrent Validity and Reliability Analysis of the COMACT-EP

6.2.1. Differences between groups

In the second phase of the study, statistical analysis results showed that there were significant differences between the PWA and NHP groups, when considering age, as well as professional and living situations.

In Table 4A it is possible to note differences in the professional situation, as most PWA are retired (n=9) and most NHP are currently working (n=24), which reflects how language and communication limitations impact work opportunities, as companies are ill-equipped to embrace workers with aphasia, or adapt their job posts after a brain injury (Chapey, 2008; Morris et al, 2011). In the same Table, it is also observed that more NHP (n=9) are living with family members than the PWA (n=1) participants. The probable reason for this is the age gap noted earlier between the groups. As the NHP group consists of younger people, most of them are still living with their relatives. PWA consist of an older group, where the brain injury occurred in a later stage in life, and therefore, most of them are living in their own home. One also needs to consider the aphasia quotient of the participants, where the mean is quite high, indicating less linguistic deficits and, therefore, less limitations, and less need of support from family members (Patrício et al, 2013). Also, most of PWA are married (n=7) and have a close person that is, most likely, helping them with, at least, some activities (Michallet et al, 2003).

Concerning the differences between PWA and NHP groups, in relation to COMACT-EP and its activities, it is possible to see a few items where significant values were obtained (see Tables 5A through 5D).

In the "Talking" category, for the activity "Falar num grupo pequeno de pessoas" (Talking in a small group of people), it was possible to conclude that 50% of NHP (n=15) engage in this activity daily, whereas most PWA (53%) just do it weekly, as no participant in this group did it in a daily basis. This suggests that PWA are less likely to participate in a small group conversation, as this activity might present a lot of communicational barriers. For example, individuals might not be giving enough time for PWA to respond, or they may not have the appropriate tools to facilitate expression, making this activity difficult to do (King et al, 2017).

PWA also tend to isolate themselves and have a more limited social network, thus, group activities are less frequent (Matos, 2012).

The activity “Contar histórias e anedotas” (Tell stories & jokes) had significant results as well. But this item had an uneven distribution across frequency options for the NHP group. It was observed that 33% (n=13) of the NHP rarely did this activity, but some participants do it daily (23%; n=7). Nevertheless, when comparing groups, it is possible to note that NHP engage in this activity at more frequent rates than PWA. This can be justified because of the implied difficulties that PWA have in expressing their ideas and thoughts, due to language impairment (Chapey, 2008). Additionally, it is important to bear in mind that conversational partners might lack the necessary training and strategies to help PWA tell their own stories and jokes, which might contribute to these low frequency rates (King et al, 2017)

The item “Fazer apostas (ex: futebol, raspadinhas, lotaria...)” (Place bets) revealed significant differences between groups, with 33% (n=10) of NHP rarely doing this activity, 40% (n=12) doing it weekly and 23% (n=7) never doing it. As for the PWA, 64% (n=9) never did this activity. These results could be attributed to personal preference of individuals and whether they enjoy placing bets or not, although further studies exploring this subject need to be developed to test this idea. Nevertheless, one might also consider that to place bets and use scratch cards, communicative interactions must take place: People need to ask for a certain type of scratch card or to express in which team / number sequence they want to bet in and how much. This all might be more difficult for a person who has aphasia, depending on their limitations, effective use of compensatory strategies and context barriers (King et al, 2017). Some participants in this study had mobility alterations (more commonly, hemiparesis) and it is important to note that this too can have an impact on the realization of communicative activities. The act of going to a shop to buy and use a scratch card could be compromised as Ahn and Hwang (2018) noted in their study: “participation restrictions are affected by upper limb function, balance function, and the level of independence in individuals with hemiparetic stroke”.

In the “Listening” category, two items revealed relevant differences: “Ouvir uma conversa” (Listen to a conversation) and “Ouvir um grupo de pessoas a falar” (Listen to a group of people talking). A great majority of NHP do both of these

activities on a daily basis (n=20 and n=15, respectively), but when considering PWA, the frequency distribution is uneven, with big percentages in the weekly option (n=6; n=5) and with some participants rarely (n=4; n=3) or never doing (n=1; n=3) this activity. When examining “Listening” activities, it is important to bear in mind oral comprehension difficulties presented by PWA, as these limit the number of activities PWA do. “Listening” to a conversation or a group of people talking may be very demanding, as the individuals involved could be talking rapidly and/or at the same time, they also could be giving a lot of information. All of this aggravates comprehension limitations and so it is understandable that PWA opt out of these situations (Chapey, 2008).

Finally, in the “Writing” category, regarding the item “Escrever mensagens e/ou e-mails” (Write messages and/or e-mails), most NHP (N=25) and PWA (N=7) did this activity daily. However, 20% of PWA never did this activity. These results might be related to writing difficulties associated with aphasia and/or because of differences noted in age, as older participants might not be able to use technology as efficiently (Menger et al, 2020). It could also be explained by: motor limitations (Ahn and Hwang, 2018), as using the phone and/or the computer might be more challenging; by family members/friends/other interlocutors not using the necessary strategies when messaging the person with aphasia, by simplifying the texts, for example (Kagan, 1998).

6.2.2. Concurrent Validity

A generally weak correlation between COMACT-EP and the Activity subscale of CDP-EP version 2 was observed, with only a few items presenting strong positive correlations, whilst others showed negative correlations. For example, the items regarding “Talking to friends” or “Talking in large groups of people” correlated negatively with the item “Falar através de um computador” (Talking through a computer). This could suggest that the more time spending talking to friends or in groups, the less time spent in the computer, doing conversational/talking based-activities. However, in order to understand this subject and corroborate these findings, more studies need to be developed.

The “Listening” category was where a stronger positive correlation was found, possibly due to some similarity of the items and what they assess, which

involves hearing comprehension activities. The COMACT-EP version 2 item “Ver/ouvir notícias” (Listen to news) had a positive correlation with the CDP-EP version 2 item “Compreendeu algo através do computador” (Understood something through the computer), which might indicate that PWA usually use their computers to watch the news, but further research is needed to corroborate this.

In the “Reading” category, “Ler livros” (Read books) correlated positively with “Leu e compreendeu um livro” (Read and understood a book) as expected, as they are also similarly worded. Furthermore, the COMACT-EP item “Ler formulários e contas/faturas” (Read forms and bills/invoices) correlated negatively with two CDP-EP items: “Leu e compreendeu uma notícia completa num jornal” (Read and understood a complete article on a newspaper); “Leu e compreendeu uma carta de um amigo” (Read and understood a letter from a friend). Concerning these negative correlations in this category, further testing is necessary to extrapolate more reliable conclusions from these results. But it is important to consider that reading impairments in PWA are common and can vary in degree and severity, as difficulties in written comprehension “can occur at every level: single words, sentences, paragraphs and the text as a whole” (Cistola et al, 2020). Typically, PWA have less difficulty comprehending simpler texts, a letter from a friend could then be easier to understand than a newspaper article, which might be inherently more complex.

Finally, in the “Writing” category, “Escrever a lista de compras” (Writing the shopping list) had a positive correlation with “Escreveu o seu nome” (Wrote their name). PWA who are capable of writing a shopping list, with pen and paper, are most likely to be able to write their own name. Nevertheless, it is necessary to bear in mind that writing a shopping list can also be accomplished in a smartphone note’s app, or other devices with autocomplete functions, as well as voice recording options that translate into written text (Dietz et al, 2011).

6.2.3. Internal Consistency

Overall, Internal Consistency was fairly low for each Checklist category, when considering both groups. “Talking” and “Listening” categories had unacceptable Cronbach’s α values. “Writing” category had poor values for the NHP group, but questionable values for the PWA group. The “Reading” category revealed good

Internal Consistency for both groups indicating that response values across this category were consistent (George and Mallery, 2003).

6.2.4. Test-retest reliability

General results revealed stability throughout the scores of both the assessments. However, one item did not present stability: “Ler mapas e direções” (Read maps and directions). In the retest, the frequency in which people do this activity changed, as more individuals chose the options related to lower frequencies. It is possible that this item was not fully understood. The fact that the sample of PWA is small is also unhelpful to draw more solid conclusions in relation to this item. Nonetheless, it should be revised and reworded to fit into today’s lexicon concerning technology, as it is now much more common to use a smartphone app (such as Google Maps) instead of a map (Dietz et al, 2011).

7. Study strengths and limitations

The present study presents some strengths and limitations. Concerning the strengths, including PWA in the validation process of the Checklist was, not only important, but necessary, as mentioned previously. As this study focuses on making COMACT available in EP and aims to make use of its potential in bettering the evaluation and intervention for PWA, having their own personal feedback regarding the Checklist was indispensable. What also constitutes as a strength is the fact that the statistical analysis focused on the categories of COMACT instead of the Checklist as a whole, which resulted in more specific and reliable outcomes.

In regard to the limitations, when noting the comparisons between NHP and PWA groups, more significant differences between both groups were expected, as several factors could be influencing the results obtained. One has to bear in mind that most of the PWA integrated in this study are clients of IPA, therefore, they partake in therapy sessions and conversational groups that focus on communication training and promoting functionality within the community (see <https://ipafasia.pt/>), meaning that communicational barriers imposed by society are, most likely, easier for them to overcome (Chapey et al, 2000). Besides this, most participants have moderate to mild aphasia, with many months post on-set,

which can indicate that they have less limitations and are now more adapted to their condition (Chapey, 2008).

It is pivotal to guarantee that participants belong to the same age group, so as to obtain more reliable outcomes. The age gap in the present study has definitely influenced results, especially when comparing groups. More so, the participant sample is not very culturally different and ethnically diverse.

Finally, it is important to note that some participants have had aphasia for less than a year, so using COMACT, which originally was designed for participants with more than 12-months post brain injury, is quite complicated (Cruice et al., 2005). It would be interesting to explore, in future studies, if this is detrimental to results obtained with COMACT-EP and in what way.

8. Conclusions

This study aimed to translate the COMACT into EP, as well as to analyse the validity and reliability of the newly translated Checklist.

When considering the CVI, its values were found to be excellent, as they all were equal or higher than 0.8 (Alexandre and Coluci, 2011). When it comes to COMACT-EP and its translated content, 5 items were changed following the input from PWA in the discussion group, so as to make them more culturally relevant and easier to understand.

Regarding Concurrent Validity, although some items did in fact present statistical significance, in general, correlation values proved to be fairly low. Only 9 out of 45 COMACT-EP items correlated with a few CDP-EP version 2 items.

As for Internal Consistency calculations, Cronbach's α was unacceptable for "Talking" and "Listening" COMACT-EP categories. The "Reading" category results were quite good for both groups. The "Writing" category presented questionable results in the PWA group and poor results for the NHP group. Concerning differences between groups, significant results were found in 6 COMACT-EP items from "Talking", "Listening" and "Writing". Significant differences between total scores were not found. Finally, test-retest results revealed stability in all items but one.

In view of these results, it is essential to move forward to additional testing and other study developments. For instance, it is most definitely necessary to

culturally adapt the items, revise and reword some of them, so as to make them easier to understand and more relevant for the EP PWA. Thus, it is also important to gather opinions and feedback from a more diverse pool sample of PWA, from different regions of the country, because of other possible cultural dissimilarities. Overall, results for Concurrent Validity and Internal Consistency show the necessity for continued testing, not only to achieve better outcomes, but also to have a more profound understanding of the results presented. Therefore, a much larger sample of PWA is necessary, with more diverse degrees of severity and aphasia diagnoses. It would also be interesting to perceive the influence that the time post onset factor has in the number of activities a person with aphasia does, but not only that, how and what activities change over time.

Due the paradigm shifts of the provision of health care services to PWA, as aforementioned in this study, for future research it will also be important to adapt the COMACT-EP in order to make it aphasia-friendly, and thus more accessible to people with varying degrees of communication and linguistic limitations.

9. References

- Alexandre, N. and Coluci, M. (2011). Validade de conteúdo nos processos de construção e adaptação de instrumentos de medidas. *Ciência & Saúde Coletiva* v. 16, n. 7, pp. 3061-3068.
- Ahn, S., and Hwang, S. (2018). An investigation of factors influencing the participation of stroke survivors in social and leisure activities. *Physical Therapy Rehabilitation Science*.
- Aggarwal, R. and Ranganathan, P. (2019). Study designs: Part 2 - Descriptive studies. *Perspectives in clinical research*, 10(1), 34–36. https://doi.org/10.4103/picr.PICR_154_18
- Aleligay, A., Worrall, L. and Rose, T. A. (2008). Readability of written health information provided to people with aphasia. *Aphasiology*, 22, 383–407. doi:10.1080/02687030701415872.
- Aujla, S., Botting, N., Worrall, L., Hickson, L. and Cruice, M. (2016). Preliminary psychometric analyses of two assessment measures quantifying communicative and social activities: the COMACT and SOCACT. *Aphasiology*, 30(8), 898-921.
- Baar, S. (2020) Neurogenic communication disorders and the life participation approach: the social imperative in supporting individuals and families, In A. L. Holland, and R. J. Elman (1st Ed) *Discovering Functional Needs in Speech-Language Therapy* (pp. 65-89) Plural Publishing, Inc.
- Beaton, D., Bombardier, C., Guillemin, F. and Ferraz, M. (1998). *Recommendations for the Cross-Cultural Adaptation of Health Status Measures*. Rosemont: American Academy of Orthopedic Surgeons and Institute for Work & Health.
- Beaton, D., Bombardier, C., Guillemin, F. and Ferraz, M. (2000). Guidelines for the process of cross-cultural adaptation of self-report measures. *Spine*, 25(24), 3186–3191. <https://doi.org/10.1097/00007632-200012150-00014>

- Benson, D. and Ardila, A. (1996). *Aphasia – A Clinical Perspective*. New York, Oxford University Press.
- Berg, K., Isaksen, J., Wallace, S., Cruice, M., Simmons-Mackie, M. and Worrall, L. (2022). Establishing consensus on a definition of aphasia: an e-Delphi study of international aphasia researchers, *Aphasiology*, 36:4, 385-400, DOI: [10.1080/02687038.2020.1852003](https://doi.org/10.1080/02687038.2020.1852003)
- Castro, S., Caló, S. and Gomes, I. (2007) *Manual – PALPA-P – Provas de Avaliação da Linguagem e da Afasia em Português*, CEGOC: Lisboa.
- Castro-Caldas, A (1979). *Diagnóstico e evolução das afasias de causa vascular*. Tese de Doutoramento. Lisboa: Faculdade de Medicina de Lisboa.
- Chalmers, J.M., King, P.L., Spencer, A.J., Wright, F.A., & Carter, K.D. (2005). The oral health assessment tool: validity and reliability. *Australian Dental Journal*. 50(3): 191-99
- Chapey, R., Duchan, J., Elman, R., Garcia, L., Kagan, A. Lyon, J. and Simmons-Mackie, N. (2000). Life Participation Approach to Aphasia: A Statement of Values for the Future. *ASHA Leader*. 5. 4-6. [10.1044/leader.FTR.05032000.4](https://doi.org/10.1044/leader.FTR.05032000.4).
- Chapey, R. (2008). *Language Intervention Strategies in Aphasia and Related Neurogenic Communication Disorders (5th Ed)*. Baltimore, MD, Williams&Wilkins.
- Charalambous, M., Kambanaros, M. and Annoni, J. (2020). Are People with Aphasia (PWA) Involved in the Creation of Quality of Life and Aphasia Impact-Related Questionnaires? A Scoping Review. *Brain Sciences*. 10. [10.3390/brainsci10100688](https://doi.org/10.3390/brainsci10100688).
- Chue, W., Rose, M. and Swinburn, K. (2010). The reliability of the Communication Disability Profile: A patient-reported outcome measure for aphasia. *Aphasiology*. 24. 940-956. [10.1080/02687030903490541](https://doi.org/10.1080/02687030903490541).

- Cistola, G., Farrús, M. and Meulen, I. (2020). Aphasia and acquired reading impairments: What are the high-tech alternatives to compensate for reading deficits? *International Journal of Language & Communication Disorders*. doi:10.1111/1460-6984.12569
- Cruice, M. (2001) Communication and quality of life in older people with aphasia and healthy older people. Unpublished Doctoral thesis completed within Department of Speech Pathology and Audiology, University of Queensland, Australia.
- Cruice, M., Worrall, L. and Hickson, L. (2005). Personal factors, communication and vision predict social participation in older adults. *Advances in Speech Language Pathology*, 7(4), 220-232.
- Damásio, A. (1973). *Neurologia da linguagem*. Faculdade de Medicina de Lisboa. Lisboa: Livraria BuchHolz.
- Davenport, S., Dickinson, A. and Minns Lowe, C. (2019). Therapy-based exercise from the perspective of adult patients: A qualitative systematic review conducted using an ethnographic approach. *Clinical Rehabilitation*, 33(12), 1963–1977.
- Davidson B., Worrall L. and Hickson L. (2003). Identifying the communication activities of older people with aphasia: Evidence from naturalistic observation. *Aphasiology*, 17, 243-26
- Dietz, A., Ball, A. and Griffith, J. (2011). Reading and Writing with Aphasia in the 21st Century: Technological Applications of Supported Reading Comprehension and Written Expression. *Topics in stroke rehabilitation*. 18. 758-69. 10.1310/tsr1806-758.
- DiPietro, N. (2010), *Methods in Epidemiology: Observational Study Designs*. *Pharmacotherapy: The Journal of Human Pharmacology and Drug Therapy*, 30: 973-984. <https://doi.org/10.1592/phco.30.10.973>

- Ferro, J. (1986). Neurologia do comportamento. Estudo de correlação com a tomografia axial computadorizada. Tese de Doutoramento. Lisboa: Faculdade de Medicina de Lisboa.
- Frattali, C., Thompson, C., Holland, A., Wohl A. and Ferketic M. (1995). American Speech and Language Therapy Association Functional assessment of communication skills for adults (ASHA-FACS). Rockville MD: American Speech Language Hearing Association.
- Geisinger, K. (1994). Cross-cultural normative assessment: Translation and adaptation issues influencing the normative interpretation of assessment instruments. *Psychological Assessment* 6(4), 304-312.
- George, D. and Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference.* (4th ed.) Boston: Allyn & Bacon.
- Gonçalves, B. and Fagulha, T. (2004). The Portuguese Version of the Center for Epidemiologic Studies Depression Scale (CES-D). *European Journal of Psychological Assessment*, 20(4), 339-348.
- Guillemin, F., Bombardier, C. and Beaton, D. (1993). Cross-cultural adaptation of health-related quality of life measures: literature review and proposed guidelines. *Journal of Clinical Epidemiology* 46(12), 1417-1432.
- Hutchinson, A., Bentzen, N. and König-Zahn, C. (Eds.) (1997). *Cross Cultural Health Outcome Assessment: A User's Guide.* Ruinen: European Research Group on Health Outcomes.
- International Classification of Functioning, Disability and Health (ICF). Geneva: World Health Organization; 2001.
- Jesus, L. and Valente, A. (2016). Cross-cultural Adaptation of Health Assessment Instruments.
- Kagan, A. (1998) Supported conversation for adults with aphasia: methods and resources for training conversation partners, *Aphasiology*, 12:9, 816-830, DOI: 10.1080/02687039808249575

- Kagan, A., Simmons-Mackie, N., Rowland, A., Huijbregts, M., Shumway, E., McEwen, S., Threats, T. and Sharp, S. (2008). Counting what counts: A framework for capturing real-life outcomes of aphasia intervention, *Aphasiology*, 22(3), 258-280, DOI: 10.1080/026870307012825954
- Kay, J., Lesser, R. and Coltheart, M. (1992) Psycholinguistic assessment of language processing in Aphasia. Lawrence Erlbaum, Hove.
- Kartsona, A. and Hilari, K. (2007). Quality of life in aphasia: Greek adaptation of the stroke and aphasia quality of life scale- 39 item (SAQOL-39). *Europa medicophysica*. 43. 27-35
- Katz, R. (2000). A multinational comparison of aphasia management practices. *Int. J. Lang. Comm. Dis.* 35: 303-314.
- Kim, D., Pyun, S., Kim, E., Ryu, B., Choi, T. and Pulvermüller, F. (2015). Reliability and validity of the Korean version of the Communicative Activity Log (CAL). *Aphasiology*. 30. 1-10. 10.1080/02687038.
- King, J. and Simmons-Mackie, N. (2017). Communication Supports and Best Practices. *Topics in Language Disorders*, 37(4), 348–360. DOI:10.1097/tld.000000000000135.
- Lau F. (2017) Chapter 12 – Methods for Correlational Studies. In: Lau F, Kuziemyk C, editors. *Handbook of eHealth Evaluation: An Evidence-based Approach [Internet]*. Victoria (BC): University of Victoria. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK481614/>
- Leal, G. (2006). Avaliação Funcional da pessoa com Afasia - Construção de uma escala. *Re(habilitar) - Revista da ESSA* 3: 7-24.
- Leal, A. (2009). Avaliação da afasia pelos terapeutas da fala em Portugal. Aveiro, Universidade de Aveiro, Portugal.
- Lomas J., Pickard, L. and Mohinde, A., (1987). Patient versus clinical item generation for quality of life measures: The case of language-disabled adults. *Medical Care*, 25, 764-769.

- Luck, A. and Rose, M. (2007). Interviewing people with aphasia: Insights into method adjustments from a pilot study. *Aphasiology*, 21, 208–224. doi:10.1080/02687030601065470
- Lyon, J. (1998). *Coping With Aphasia—Coping With Aging Series*. San Diego, Singular
- Marshall, R. (2002). Having the courage to be competent: persons and families living with aphasia. *Journal of Communication Disorders* 35: 139-152.
- Matos, A. (2012). Níveis de actividade e participação das pessoas com afasia: desenvolvimento de instrumentos de avaliação portugueses. *Universidade de Aveiro*, 429. <https://ria.ua.pt/handle/10773/9065>
- Matos, A., Serra, A. and Jesus, L. (2016). Content validation of the Communication Disability Profile (CDP) - Portuguese Version. *BMC Health Services Research* 16 (Suppl 3), p. 70.
- Matos, A. and Jesus, L.(2011). Mini-Mental State Modificado (MMSM)—INPI Registration Number 483183 and IGAC Registration Number 3303/2011: Available from Advanced Communication and Swallowing Assessment (ACSA) acsa.web.ua.pt.
- Matos, A., Jesus, L. and Cruice, M. (2014). Assessment of Aphasia in Portugal: Past, present and future.
- Matos, A., Jesus, L. and Cruice, M. (2014): Consequences of stroke and aphasia according to the ICF categories: Views of Portuguese people with aphasia, family members and professionals, *Aphasiology*, DOI: 10.1080/02687038.2014.906561.
- Menger, F., Morris, J. and Salis, C. (2020) The impact of aphasia on Internet and technology use, *Disability and Rehabilitation*, 42:21, 2986-2996, DOI: 10.1080/09638288.2019.1580320

- Michallet, B., Tétreault, S. and Dorze, G. (2003). The consequences of severe aphasia on the spouses of aphasic people: A description of the adaptation process. *Aphasiology*, 17(9), 835 – 859.
- Mbuagbaw, L., Lawson, D., Puljak, L., Allison, D. and Thabane, L. (2020). A tutorial on methodological studies: the what, when, how and why. *BMC Med Res Methodol* 20, 226 <https://doi.org/10.1186/s12874-020-01107-7>
- Morris, J., Franklin, S. and Menger, F. (2011). Returning to work with aphasia: A case study. *Aphasiology*, 25(8), 890–907. DOI:10.1080/02687038.2010.549568
- Naderifar, M., Goli, H. and Ghaljaei, F. (2017). Snowball Sampling: A Purposeful Method of Sampling in Qualitative Research. *Strides in Development of Medical Education*. In Press. 10.5812/sdme.67670.
- Ochieng, N., Wilson, K., Derrick, C. and Mukherjee, N. (2018) The use of focus group discussion methodology: Insights from two decades of application in conservation. *Methods Ecol Evol.*; 9, 20– 32. <https://doi.org/10.1111/2041-210X.12860>
- Patrício, B., Jesus, L. and Cruice, M. (2013). Quality of life of the caregivers of people with aphasia. A systematic review.
- Pound, C., Parr, S., Lindsay, J. and Woolf, C. (2000). *Beyond aphasia: therapies for living with communication disability*. Bicester: Winslow Press.
- Rogers, M. (1999). Aphasia Management Considered In the Context of the World Health Organization Model of Disablements. *Physical Medicine and Rehabilitation Clinics of North America* 10(4): 907-923.
- Ross, K. and R. Wertz (2005). Forum: Advancing Appraisal: Aphasia and the WHO. *Aphasiology* 19 (9) 860-900.
- Shadden, B. (1988). *Communication behaviour and aging: A sourcebook for clinicians* Baltimore, MD: Williams and Wilkins.

- Simmons-Mackie, N. and A. Kagan (1999). Communication strategies used by "good" versus "poor" speaking partners of individuals with aphasia. *Aphasiology* 13(9-11): 807-820.
- Simmons-Mackie, N. and A. Kagan (2007). Application of the ICF in Aphasia. *Seminars in Speech and Language* 28(4): 244 - 253.
- Simmons-Mackie, N. (2008). Social approaches to aphasia intervention. In R Chapey (Ed.) *Language intervention strategies in aphasia and related neurogenic communication disorders* (5th ed., pp 290-318) Philadelphia, PA: Lippincott Williams & Wilkins.
- Simmons-Mackie, N., Threats, T. and Kagan, A. (2005). Outcome assessment in aphasia: A survey. *Journal of communication disorders*, 38(1), 1-27.
- Swinburn, K., and Byng, S. (2006). *The Communication Disability Profile*. London: Connect Press.
- Threats, T. and Worrall, L. (2004). Classifying communication disability using the ICF. *International Journal of Speech-Language Pathology*, 6(1), 53–62. <https://doi.org/10.1080/14417040410001669426>
- Threats, T. (2005). Exploring all aspects of the ICF framework with aphasia: A commentary on Ross and Wertz, *Advancing appraisal: Aphasia and the WHO*. *Aphasiology* 19(9): 879-885.
- Tse, E., Lam, C., Wong, C., Chin, W., Etz, R., Zyzanski, S. and Stange, K. (2020). Cultural adaptation and content validity of a Chinese translation of the "Person-Centered Primary Care Measure": findings from Cognitive Debriefing. *Family Medicine and Community Health*, 8(4), doi:10.1136/fmch-2020-000621
- Verna, A., Davidson, B. and Rose, T. (2009). Speech-language pathology services for people with aphasia: A survey of current practice in Australia. *International Journal of Speech-Language Pathology*, 11(3), 191-205.

- Wild, D., Grove, A., Martin, M., Eremenco, S., McElroy, S., Verjee-Lorenz, A. and Erikson, P. (2005). Principles of Good Practice for the Translation and Cultural Adaptation Process for Patient-Reported Outcomes (PRO) Measures: Report of the ISPOR Task Force for Translation and Cultural Adaptation. *Value in Health* 8(2), 94-104.
- Worrall, L. (1999) FCTP: Functional Communication Therapy Planner. Bicester: Winslow
- Worrall, L. (2019). The seven habits of highly effective aphasia therapists: The perspective of people living with aphasia. *International Journal of Speech–Language Pathology*, 21(5), 438–447.
- Worrall, L., Sherratt, S., Rogers, P., Howe, T., Hersh, D., Ferguson, A. and Davidson, B. (2011) What people with aphasia want: Their goals according to the ICF, *Aphasiology*, 25, 309-322.
- Worrall, L. and Hickson, L. (2003). *Communication disability in aging: From prevention to intervention*. Clifton Park, NY: Delmar Learning.
- Wray, F., Clarke, D. and Forster, A. (2019). How do stroke survivors with communication difficulties manage life after stroke in the first year? A qualitative study. *International Journal of Language & Communication Disorders*, 54(5), 814–827.
- Yorkston, K., Baylor, C. and Britton, D. (2017). Speech vs speaking: The experiences of people with Parkinson’s Disease and implications for intervention. *American Journal of Speech-Language Pathology*, 26, 561–568.

Tables

Table 1A – Cognitive Debriefing/Discussion group participants Characterization

Variables	PWA (N=5)
Sex	
Male	4 (80.0%)
Female	1 (20.0%)
Age	
Mean±SD	60.80 ± 5.45
Min - Max	53-68
Schooling	
Elementary/Middle School	2 (40.0%)
High School	1 (20.0%)
University	2 (40.0%)
Other	0 (0.0%)
Professional Situation	
Working	1 (20.0%)
On leave	0 (0.0%)
Retired	4 (80.0%)
Unemployed	0 (0.0%)
Marital Status	
Single	1 (20.0%)
Married	3 (60.0%)
Divorced	1 (20.0%)
Widowed	0 (0.0%)
De facto union	0 (0.0%)
Location	
Porto	4 (80.0%)
Aveiro	1 (20.0%)
Own home/family home	
Own home	5 (100%)
Family home	0 (0.0%)

Table 1B – Cognitive Debriefing/Discussion group participants Clinical Characterization

Variables	PWA (N=5)
Etiology	
Stroke	4 (80.0%)
Bacterial meningoencephalitis	1 (20.0%)
Time post onset (months)	
Mean±SD	57.80±18.23
Min - Max	34.00 – 80.00
Type of aphasia (BAAL)	
Transcortical motor	2 (40.0%)
Anomic	3 (60.0%)
Aphasia Quotient	
Mean±SD	87.02 ± 3.97
Min - Max	81.25 - 91.65
LMMSM	
Mean±SD	29.80±0.45
Min - Max	29.00– 30.00
CES-D	
Mean±SD	16.00±2.83
Min - Max	13.00 – 19.00
PALPA-P	
Mean±SD	27.80±1.79
Min - Max	26.00 – 30.00

Table 2 – Cognitive Debriefing questionnaire results and Content Validity Index

	<i>Discordo totalmente</i> (Totally disagree)	<i>Discordo</i> (Disagree)	<i>Concordo</i> (Agree)	<i>Concordo totalmente</i> (Totally agree)	Statistical results for CVI
1.1. As instruções são fáceis de compreender? (Are the instructions easy to follow?)	0 (0.0%)	0 (0.0%)	2 (40.0%)	3 (60.0%)	1
2.1. É fácil preencher o questionário? (Is it easy to fill in the questionnaire?)	0 (0.0%)	0 (0.0%)	2 (40.0%)	3 (60.0%)	1
2.2. O questionário tem o comprimento adequado? (Is the questionnaire the right size?)	0 (0.0%)	0 (0.0%)	2 (40.0%)	3 (60.0%)	1
2.3. Como se sentiu depois de preencher o questionário? (How did you feel after filling the questionnaire?)					
2.3.1. Bem (Well)	0 (0.0%)	0 (0.0%)	1 (20.0%)	4 (80.0%)	1
2.3.2. Cansado (Tired)*	4 (80.0%)	0 (0.0%)	0 (0.0%)	1 (20.0%)	1
2.3.3. Triste (Sad)*	5 (100%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0
2.3.4. Irritado (Annoyed)*	5 (100%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0
3.1. As perguntas são fáceis de compreender? (Are the questions easy to understand?)	0 (0.0%)	0 (0.0%)	1 (20.0%)	4 (80.0%)	1
3.2. As perguntas são pertinentes para si? (Are the questions relevant?)	1 (20.0%)	0 (0.0%)	2 (40.0%)	2 (40.0%)	0.8
3.3. As perguntas relevantes para as pessoas com afasia no geral? (Are the questions relevant for PWA in general?)	1 (20.0%)	0 (0.0%)	2 (40.0%)	2 (40.0%)	0.8
3.4. As perguntas são ambíguas? (Are the questions ambiguous?)*	3 (60.0%)	1 (20.0%)	1 (20.0%)	0 (0.0%)	1
3.5. As perguntas são claras? (Are the questions clear?)	0 (0.0%)	0 (0.0%)	2 (40.0%)	3 (60.0%)	1

*these are reversed items, therefore calculations for Content Validity Index were also reversed.

Table 3A – Discussion group feedback results

COMACT categories	COMACT Items	Participant suggestions and opinions
Talking	2. <i>Falar com a família</i> (Talk to family)	“Different items should be added, in order to include different family members.”
	4. <i>Falar com os vizinhos</i> (Talk to neighbours)	“There should be different items for saying hello and actually talking to your neighbour.”
	5. <i>Falar com os empregados de loja/diferentes profissionais</i> (Talk to shopkeepers/ different professionals)	“There should be examples for different professionals”
	13. <i>Contar histórias e anedotas</i> (Tell stories and jokes)	“Telling stories and telling jokes should be in different items”
	14. <i>Fazer apostas</i> (Place bets)	“There should be given examples... scratchcards, EuroMillions...”
	15. <i>Pedir bebida</i> (Order drinks)	“You should include food as well.”
Listening	21. <i>Ouvir uma conversa</i> (Listen to a conversation)	The participants generally agreed that these questions were unclear not relevant.
	22. <i>Ouvir um grupo de pessoas a falar</i> (Listen to a group of people talking)	
Reading	24. <i>Ler cartas e postais</i> (Read letters and cards)	The participants generally agreed that these questions were not relevant.
	30. <i>Ler listas telefónicas</i> (Read the phone book)	
Writing	38. <i>Escrever cartas e postais</i> (Write letters and cards)	“You should include instead texts and/or e-mails.”
	39. <i>Escrever histórias e notícias de jornais</i> (Write stories and newspaper articles)	“You should include and/or in this item.”
	40. <i>Escrever no diário</i> (Write in a diary)	The participants generally agreed that these questions were not relevant.
	42. <i>Passar cheques</i> (Write cheques)	
	43. <i>Escrever mensagens</i> (Write messages)	This question was adapted based on the suggestion made for item 38.

Table 3B – Discussion group feedback results – changes made in COMACT

Before	Suggestions made by participants	After
14. <i>Fazer apostas</i> (Place bets)	“There should be given examples... scratch cards, EuroMillions...”	<i>Fazer apostas (ex: futebol, raspadinhas, lotaria...)</i>
15. <i>Pedir bebidas</i> (Order drinks)	“You should include food as well.”	<i>Pedir bebidas e/ou comida</i>
39. <i>Escrever histórias e notícias de jornais</i> (Write stories and newspaper articles)	“You should include and/or in this item.”	<i>Escrever histórias e/ou notícias de jornais</i>
38. <i>Escrever cartas e postais</i> (Write letters and cards)	“You should include instead texts and/or e-mails.”	<i>Escrever cartas e postais</i>
43. <i>Escrever mensagens</i> (Write messages)	The aforementioned suggestion was included in this item.	<i>Escrever mensagens e/ou e-mails</i>

Table 4A – Sample characterization (PWA; NHP)

Variables	Groups		Statistical results	Total Sample (N=45)
	PWA (n=15)	NHP (n=30)		
Sex				
Male	7 (46.7%)	15 (50.0%)	$\chi^2(1)=0.044$ $p=1.00$	22 (48.9%)
Female	8 (53.3%)	15 (50.0%)		23 (51.1%)
Age (years) M\pmSD				
Mean \pm SD	58.46 \pm 14.43	49.27 (\pm 15.58)	$t(43)=1.912$ $p= 0.063$	52.33 (\pm 15.67)
Min - Max	27-76	20-82		20-82
Education				
Elementary/ Middle School	4 (26.7%)	11 (36.7%)	Fisher=4.082 $p= 0.238$	13 (28.9%)
High School	2 (13.3%)	11 (36.7%)		13 (28.9%)
University	6 (40.0%)	8 (26.7%)		14 (31.1%)
Other	3 (20.0%)	0 (0.0%)		5 (11.1%)
Professional situation				
Working	1 (6.7%)	24 (80.0%)	Fisher=28.269 $p < 0.001$	25 (55.6%)
On leave	5 (33.3%)	0 (0.0%)		5 (11.1%)
Retired	9 (60.0%)	4 (13.3%)		13 (28.9%)
Unemployed	0 (0.0%)	2 (6.7%)		2 (4.4%)
Marital Status				
Single	4 (26.7%)	8 (26.7%)	Fisher=4.041 $p=0.351$	12 (26.7%)
Married	7 (46.7%)	18 (60.0%)		25 (55.6%)
Divorced	2 (13.3%)	0 (0.0%)		2 (4.4%)
Widowed	1 (6.7%)	2 (6.7%)		3 (6.7%)
De facto union	1 (6.7%)	2 (6.7%)		3 (6.7%)
District				
Porto	11 (73.3%)	20 (66.7%)	N/A	31 (68.9%)
Aveiro	2 (13.3%)	0 (0.0%)		2 (4.4%)
Coimbra	2 (13.3%)	0 (0.0%)		2 (4.4%)
Leiria	0 (0.0%)	6 (20%)		6 (13.3%)
Santarém	0 (0.0%)	4 (13.3%)		4 (8.9%)
Own home/family home				
Own home	14 (93.3%)	11 (36.7%)	$\chi^2(1)=3.850$ $p=0.070$	34 (75.6%)
Family home	1 (6.7%)	9 (30.0%)		11 (24.4%)

Table 4B – PWA’s Clinical Characterization

Variables	PWA = 15
Etiology	
Stroke	12 (80.8%)
Aneurysm	1 (6.7%)
Traumatic Brain Injury	1 (6.7%)
Unknown	1 (6.7%)
Time Post onset (months)	
Mean±SD	89.47±117.70
Min - Max	5 – 464.00
Type of aphasia (BAAL)	
Global	1 (6.7%)
Broca	2 (13.3%)
Transcortical motor	3 (20.0%)
Transcortical sensory	1 (6.7%)
Anomic	8 (53.3%)
Aphasia Quotient	
Mean±SD	76.62 ± 14.17
Min – Max	34.46 - 91.65
LMMSM	
Mean±SD	28.67 ± 1.54
Min – Max	26.00– 30.00
CES-D	
Mean±SD	8.73 ± 6.80
Min – Max	0.00 – 21.00
PALPA-P	
Mean±SD	20.80 ± 5.66
Min-Max	10.00 – 29.00

Table 5A – COMACT EP Characterization (Talking / Falar category)

(Cronbach's α (PWA) = 0.398; Cronbach's α (NHP) = 0.456)

	Group	<i>Diário</i>	<i>Semanal</i>	<i>2/2 semanas fortnightly</i>	<i>Mensal</i>	<i>Raramente</i>	<i>Nunca</i>	Statistic results	Missings
1. Falar com a/o esposa/marido	PWA	8 (88.9)	1 (11.1%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	U= 97.000 P= 1.000	6 (40.0%)
	NHP	22 (95.7%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (4.3%)		7 (23.3%)
2. Falar com a família	PWA	12 (80.0%)	3 (20.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	U= 217.500 P=1.000	0 (0.0%)
	NHP	25 (83.3%)	5 (16.7%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)		0 (0.0%)
3. Falar com os amigos	PWA	4 (26.7%)	7 (46.7%)	2(13.3%)	1(6.7%)	1 (6.7%)	0 (0.0%)	U= 187.500 P= 0.360	0 (0.0%)
	NHP	14 (46.7%)	9 (30.0%)	3 (10.0%)	2 (6.7%)	2 (6.7%)	0 (0.0%)		0 (0.0%)
4. Falar com os vizinhos	PWA	3 (20.0%)	4 (26.7%)	2 (13.3%)	2 (13.3%)	3 (20.0%)	1 (6.7%)	U=200.500 P=0.549	0 (0.0%)
	NHP	8 (26.7%)	10 (33.3%)	2 (6.7%)	1 (3.3%)	9 (30.0%)	0 (0.0%)		0 (0.0%)
5. Falar com os empregados de loja/diferentes profissionais	PWA	3 (20.0%)	3 (20.0%)	2 (13.3%)	0 (0.0%)	5 (33.3%)	2 (13.3%)	U=148.000 P=0.053	0 (0.0%)
	NHP	10 (33.3%)	13 (43.3%)	0 (0.0%)	1 (3.3%)	5 (16.7%)	1 (3.3%)		0 (0.0%)
6. Falar com os animais de estimação	PWA	7 (53.8%)	1 (7.7%)	0 (0.0%)	0 (0.0%)	2 (15.4%)	3 (23.1%)	U= 149.00 P= 0.053	2 (13.3%)
	NHP	17 (65.4.7%)	2 (7.7%)	1 (3.8%)	0 (0.0%)	1 (3.8%)	5 (19.2%)		4 (13.3%)
7. Falar ao telefone	PWA	11 (73.3%)	3 (20.%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (6.7%)	U= 194.500 P= 0.323	0 (0.0%)
	NHP	26 (86.7%)	3 (10.0%)	0 (0.0%)	0 (0.0%)	1 (3.3%)	0 (0.0%)		0 (0.0%)
8. Falar num grupo pequeno de pessoas	PWA	0 (0.0%)	8 (53.3%)	0 (0.0%)	2 (13.3%)	2 (13.3%)	1 (6.7%)	U= 126.000 P= 0.013	0 (0.0%)
	NHP	15 (50.0%)	7 (23.3%)	0 (0.0%)	3 (10.0%)	0 (0.0%)	5 (16.7%)		0 (0.0%)
9. Falar num grupo grande de pessoas	PWA	0 (0.0%)	2 (13.3%)	0 (0.0%)	1 (6.7%)	8 (53.3%)	4 (26.7%)	U= 168.000 P=0.135	0 (0.0%)
	NHP	3 (10.0%)	5 (16.7%)	0 (0.0%)	2 (6.7%)	17 (56.7%)	3 (10.0%)		0 (0.0%)
10. Fazer um discurso para um grupo informal	PWA	0 (0.0%)	1 (7.1%)	1 (7.1%)	0 (0.0%)	6 (42.9%)	6 (42.9%)	U= 162.000 P= 0.200	1 (6.7%)
	NHP	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (3.4%)	11 (37.9%)	17 (58.6%)		1 (3.3%)

11. Fazer um discurso para um grupo formal	PWA	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (7.1%)	5 (35.7%)	8 (57.1%)	U= 191.000 P= 0.773	1 (6.7%)
	NHP	1 (3.4%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	10 (34.5%)	18 (62.1%)		1 (3.3%)
12. Falar sobre fotografias	PWA	2 (13.%)	2 (13.%)	2 (13.%)	2 (13.%)	5 (33.3%)	2 (13.%)	U= 176.000 P= 0.377	0 (0.0%)
	NHP	3 (10.7%)	4 (14.3%)	1 (3.6%)	2 (7.1%)	12 (42.9%)	6 (21.4%)		2 (6.7%)
13. Contar histórias e anedotas	PWA	0 (0.0%)	3 (20.0%)	1 (6.7%)	0 (0.0%)	4 (26.7%)	7 (46.7%)	U= 144.000 P= 0.044	0 (0.0%)
	NHP	7 (23.3%)	2 (6.7%)	1 (3.3%)	5 (16.7%)	10 (33.3%)	5 (16.7%)		0 (0.0%)
14. Fazer apostas (ex: futebol. raspadinhas. lotaria...)	PWA	1 (7.1%)	0 (0.0%)	0 (0.0%)	2 (14.3%)	2 (14.3%)	9 (64.3%)	U= 120.500 P= 0.019	1 (6.7%)
	NHP	0 (0.0%)	12 (40.0%)	0 (0.0%)	1 (3.3%)	10 (33.3%)	7 (23.3%)		0 (0.0%)
15. Pedir bebida e/ou comida	PWA	4 (26.7%)	6 (40.0%)	1 (6.7%)	0 (0.0%)	3 (20.0%)	1 (6.7%)	U= 203.50 P=0.732	0 (0.0%)
	NHP	7 (24.1%)	11 (37.9%)	1 (3.4%)	2 (6.9%)	4 (13.8%)	4 (13.8%)		1 (3.3%)
16. Rezar	PWA	5 (38.5%)	2 (15.4%)	0 (0.0%)	0 (0.0%)	1 (7.7%)	5 (38.5%)	U=146.500 P=0.178	2 (13.3%)
	NHP	4 (13.3%)	2 (6.7%)	1 (3.3%)	0 (0.0%)	9 (30.0%)	14 (46.7%)		0 (0.0%)

Table 5B – COMACT EP Characterization (Listening / Ouvir category)

(Cronbach's α (PWA) = 0.257; Cronbach's α (NHP) = 0.378)

	Group	Diário	Semanal	2/2 semanas	Mensal	Raramente	Nunca	Statistic results	Missings
17. Ouvir rádio	PWA	7 (46.7%)	1 (6.7%)	1 (6.7%)	0 (0.0%)	4 (26.7%)	2 (13.3%)	U= 172.000 P= 0.152	0 (0.0%)
	NHP	20 (66.7%)	4 (13.3%)	0 (0.0%)	0 (0.0%)	4 (13.3%)	2 (6.7%)		0 (0.0%)
18. Ver televisão	PWA	15 (100%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	U=217.500 P= 1.000	0 (0.0%)
	NHP	29 (96.7%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (3.3%)	0 (0.0%)		0 (0.0%)
19. Ver/ouvir notícias	PWA	13 (86.7%)	2 (13.3%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	U= 212.000 P= 0.591	0 (0.0%)
	NHP	28 (93.3%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (6.7%)	0 (0.0%)		0 (0.0%)
20. Ver/ouvir programas de desporto	PWA	7 (46.7%)	1 (6.7%)	0 (0.0%)	0 (0.0%)	4 (26.7%)	3 (20.0%)	U= 217.500 P= 0.857	0 (0.0%)
	NHP	8 (26.7%)	11 (36.7%)	0 (0.0%)	1 (3.3%)	6 (20.0%)	4 (13.3%)		0 (0.0%)
21. Ouvir uma conversa	PWA	3 (20.0%)	6 (40.0%)	0 (0.0%)	1 (6.7%)	4 (26.7%)	1 (6.7%)	U= 108.500 P= 0.002	0 (0.0%)
	NHP	20 (66.7%)	6 (20.0%)	1 (3.3%)	1 (3.3%)	2 (6.7%)	0 (0.0%)		0 (0.0%)
22. Ouvir um grupo de pessoas a falar	PWA	2 (14.3%)	5 (35.7%)	1 (7.1%)	0 (0.0%)	3 (21.4%)	3 (21.4%)	U= 122.000 P= 0.019	1 (6.7%)
	NHP	15 (50.0%)	8 (26.7%)	0 (0.0%)	1 (3.3%)	4 (13.3%)	2 (6.7%)		0 (0.0%)
23. Ouvir um discurso	PWA	0 (0.0%)	2 (15.4%)	1 (7.7%)	2 (15.4%)	5 (38.5%)	3 (23.1)	U= 174.000 P= 0.567	2 (13.3%)
	NHP	6 (20.0%)	4 (13.3%)	0 (0.0%)	0 (0.0%)	15 (50.0%)	5 (16.7%)		0 (0.0%)

Table 5C – COMACT EP Characterization (Reading / Ler category)(Cronbach's α (PWA) = 0.806; Cronbach's α (NHP) = 0.812)

	Group	Diário	Semanal	2/2 semanas	Mensal	Raramente	Nunca	Statistic results	Missings
24. Ler cartas e postais	PWA	0 (0.0%)	1 (7.1%)	1 (7.1%)	1 (7.1%)	7 (50.0%)	4 (28.6%)	U=191.000 P=0.616	1 (6.7%)
	NHP	2 (6.7%)	4 (13.3%)	0 (0.0%)	0 (0.0%)	18 (60.0%)	6 (20.0%)		0 (0.0%)
25. Ler catálogos	PWA	1 (7.1%)	3 (21.4%)	0 (0.0%)	1 (7.1%)	5 (35.7%)	4 (28.6%)	U= 142.500 P=0.073	1 (6.7%)
	NHP	3 (10.0%)	12 (40.0%)	0 (0.0%)	2 (6.7%)	12 (40.0%)	1 (3.3%)		0 (0.0%)
26. Ler panfletos/ folhetos	PWA	1 (7.1%)	3 (21.4%)	3 (21.4%)	2 (14.3%)	3 (21.4%)	2 (14.3%)	U= 148.500 P=0.113	1 (6.7%)
	NHP	5 (16.7%)	13 (43.3%)	2 (6.7%)	2 (6.7%)	7 (23.3%)	1 (3.3%)		0 (0.0%)
27. Ler revistas	PWA	4 (26.7%)	2 (13.3%)	0 (0.0%)	2 (13.3%)	4 (26.7%)	3 (20.0%)	U= 189.500 P=0.377	0 (0.0%)
	NHP	0 (0.0%)	6 (20.0%)	2 (6.7%)	4 (13.3%)	15 (50.0%)	3 (10.0%)		0 (0.0%)
28. Ler jornais	PWA	6 (40.0%)	3 (20.0%)	1 (6.7%)	0 (0.0%)	1 (6.7%)	4 (26.7%)	U= 174.000 P= 0.278	0 (0.0%)
	NHP	5 (17.2%)	4 (13.8%)	0 (0.0%)	3 (10.3%)	14 (48.3%)	3 (10.3%)		1 (3.3%)
29. Ler livros	PWA	2 (14.3%)	2 (14.3%)	2 (14.3%)	3 (21.4%)	1 (7.1%)	4 (28.6%)	U= 155.000 P= 0.162	1 (6.7%)
	NHP	1 (3.3%)	3 (10.0%)	0 (0.0%)	5 (16.7%)	14 (46.7%)	7 (23.3%)		0 (0.0%)
30. Ler listas telefônicas	PWA	0 (0.0%)	1 (10.0)	0 (0.0%)	0 (0.0%)	2 (20.0%)	7 (70.0%)	U= 144.000 P=0.899	5 (33.3%)
	NHP	2 (6.9%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	7 (24.1%)	20 (69.9%)		1 (3.3%)
31. Ler formulários e contas/faturas	PWA	2 (14.3%)	2 (14.3%)	1 (7.1%)	2 (14.3%)	2 (14.3%)	5 (35.7%)	U=154.000 P=0.152	1 (6.7%)
	NHP	5 (16.7%)	5 (16.7%)	2 (6.7%)	13 (43.3%)	3 (10.0%)	2 (6.7%)		0 (0.0%)
32. Ler extratos bancários	PWA	2 (13.3%)	2 (13.3%)	3 (20.0%)	5 (33.3%)	1 (6.7%)	2 (13.3%)	U= 186.500 P=0.347	0 (0.0%)
	NHP	4 (13.3%)	13 (43.3%)	1 (3.3%)	5 (16.7%)	5 (16.7%)	2 (6.7%)		0 (0.0%)
33. Ler boletins informativos	PWA	2 (14.3%)	0 (0.0%)	3 (21.4%)	3 (21.4%)	3 (21.4%)	3 (21.4%)	U=180.000 P=0.451	1 (6.7%)
	NHP	3 (10.0%)	9 (30.0%)	2 (6.7%)	2 (6.7%)	12 (40.0%)	2 (6.7%)		0 (0.0%)
34. Fazer palavras cruzadas	PWA	2 (14.3%)	1 (7.1%)	3 (21.4%)	0 (0.0%)	5 (35.7%)	3 (21.4%)	U=140.000 P=0.570	1 (6.7%)
	NHP	1 (3.3%)	0 (0.0%)	1 (3.3%)	3 (10.0%)	14 (46.7%)	11 (36.7%)		0 (0.0%)
35. Ler instruções e rótulos/etiquetas	PWA	2 (14.3%)	1 (7.1%)	1 (7.1%)	3 (21.4%)	4(28.6%)	3 (21.4%)	U=175.000 P=0.388	1 (6.7%)
	NHP	5 (16.7%)	4 (13.3%)	4 (13.3%)	4 (13.3%)	11 (36.7%)	2 (6.7%)		0 (0.0%)

36. Ler horários de comboios e autocarros	PWA	1 (8.3%)	1 (8.3%)	2 (16.7%)	0 (0.0%)	2 (16.7%)	6 (50.0%)	U=169.500 P=0.747	3 (20.0%)
	NHP	0 (0.0%)	1 (3.3%)	0 (0.0%)	4 (13.3%)	13.3 (43.3%)	12 (40.0%)		0 (0.0%)
37. Ler mapas e direções	PWA	2 (13.3%)	3 (20.0%)	1 (6.7%)	2 (13.3%)	5 (33.3%)	2 (13.3%)	U=176.500 P=0.235	0 (0.0%)
	NHP	2 (6.7%)	3 (10.0%)	1 (3.3%)	5 (16.7%)	13 (43.3%)	6 (20.0%)		0 (0.0%)

Table 5D – COMACT EP Characterization (Writing / Escrever category)

(Cronbach's α (PWA) = 0.654; Cronbach's α (NHP) = 0.521)

	Group	Diário	Semanal	2/2 semanas	Mensal	Raramente	Nunca	Statistic results	Missings
38. Escrever cartas e postais	PWA	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	3 (23.1%)	10 (76.9%)	U=168.500 P=0.491	2 (13.3%)
	NHP	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	11 (36.7%)	19 (63.3%)		0 (0.0%)
39. Escrever histórias e notícias de jornais	PWA	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (6.7%)	4 (26.7%)	10 (66.7%)	U=188.000 P=0.233	0 (0.0%)
	NHP	0 (0.0%)	0 (0.0%)	1 (3.3%)	0 (0.0%)	4 (13.3%)	25 (83.3%)		0 (0.0%)
40. Escrever listas de compras	PWA	3 (21.4%)	5 (35.7%)	1 (7.1%)	0 (0.0%)	1 (7.1%)	4 (28.6%)	U=198.000 P=0.775	1 (6.7%)
	NHP	2 (6.7%)	12 (40.0%)	4 (13.3%)	5 (16.7%)	4 (13.3%)	3 (10.0%)		0 (0.0%)
41. Escrever no diário	PWA	1 (8.3%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	11 (91.7%)	U=148.500 P=0.778	3 (20.0%)
	NHP	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (3.8%)	25 (96.2%)		4 (13.3%)
42. Passar cheques	PWA	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	3 (23.1%)	10 (76.9%)	U=158.000 P=0.302	2 (13.3%)
	NHP	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	2 (6.9%)	27 (93.1%)		1 (3.3%)
43. Preencher formulários	PWA	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (7.7%)	11 (84.6%)	1 (7.7%)	U=190.500 P= 0.937	2 (13.3%)
	NHP	1 (3.3%)	0 (0.0%)	2 (6.7%)	3 (10.0%)	17 (56.7%)	7 (23.3%)		0 (0.0%)
44. Escrever mensagens e/ou e-mails	PWA	7 (46.7%)	3 (20.0%)	0 (0.0%)	1 (6.7%)	1 (6.7%)	3 (20.0%)	U=135.000 P=0.006	0 (0.0%)
	NHP	25 (83.3%)	4 (13.3%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (3.3%)		0 (0.0%)
45. Fazer jogos de palavras	PWA	2 (14.3%)	3 (21.4%)	1 (7.1%)	1 (7.1%)	2 (14.3%)	5 (35.7%)	U=182.000 P=0.469	1 (6.7%)
	NHP	4 (13.3%)	2 (6.7%)	0 (0.0%)	0 (0.0%)	14 (46.7%)	10 (33.3%)		0 (0.0%)

Table 6 – Total score obtained within each COMACT EP category

COMACT categories	PWA (n=15)		NHP (n=30)		Statistical results
	M±SD	Range	M±SD	Range	Mann-whitney
Talking	11.80±2.78	7-15	12.76±1.81	8-15	U=185.500 P=0.342
Listening	6.00±1.07	4-7	6.57±0.73	4-7	U= 160.000 P=0.075
Reading	9.47±3.67	3-14	11.33±2.56	4-14	U= 155.000 P=0.090
Writing	3.67±1.88	0-7	3.93±1.37	1-6	U=215.500 P=0.823
Total	30.93±8.39	18-40	34.60±5.34	17-42	U=191.000 P=0.419

Table 7 – Concurrent Validity COMACT EP/CDP-EP

(correlation values) (Spearman test) (P<0.05;**P<0.01;***P<0.001)

		PWA	CDP										
		COMACT - Items	6	12	13	14	15	16	17	19	21	26	27
Talking	3. Falar com os amigos	-0.694*	---	---	---	---	---	---	---	---	---	---	---
	4. Falar num grupo grande de pessoas	-0.599*	---	---	---	---	---	---	---	---	---	---	---
Listening	19. Ver/ouvir notícias	---	---	---	---	---	0.633*	---	---	---	---	---	---
	21. Ouvir uma conversa	---	0.637*	0.618*	0.523*	0.741*	0.693*	---	---	---	---	---	---
	22. Ouvir um grupo de pessoas a falar	---	0.782*	0.817*	0.595*	0.783*	0.901**	---	---	---	---	---	---
	23. Ouvir um discurso	---	---	---	---	---	0.844*	---	---	---	---	---	---
Reading	29. Ler livros	---	---	---	---	---	---	0.541*	---	---	0.707*	---	---
	31. Ler formulários & contas/faturas	---	---	---	---	---	---	---	-0.625*	-0.652*	---	---	---
Writing	40. Escrever listas de compras	---	---	---	---	---	---	---	---	---	---	0.649	---
6. Falou através do computador?; 12. Compreendeu (use o nome da pessoa mais próxima); 13. Compreendeu um estranho. alguém que não conhece; 14. Compreendeu num grupo; 15. Compreendeu sob pressão; 16. Compreendeu algo através do computador; 17. Leu e compreendeu uma palavra; 19. Leu e compreendeu uma notícia completa num jornal; 21. Leu e compreendeu uma carta de um amigo; 26. Leu e compreendeu um livro; 27. Escreveu o seu nome.													

Table 8A – Test-retest COMACT EP (Talking / Falar category)

(intra-evaluator reliability) (n=15)

COMACT - Items	Test	Retest	Statistical results
	P25;med;P75	P25;med;P75	
1. <i>Falar com a/o esposa/marido</i>	1.00; 1.00; 1.00	1.00; 1.00; 1.00	Z= 0.0 P= 1.000
2. <i>Falar com a família</i>	1.00; 1.00; 1.00	1.00; 1.00; 2.00	Z= -1.342 P= 0.500
3. <i>Falar com os amigos</i>	1.00; 2.00; 3.00	2.00; 2.00; 3.00	Z= -1.622 P= 0.500
4. <i>Falar com os vizinhos</i>	2.00; 3.00; 5.00	2.00; 3.00; 4.00	Z= - 0.184 P= 0.824
5. <i>Falar com os empregados de loja/diferentes profissionais</i>	2.00; 3.00; 5.00	1.00; 2.00; 5.00	Z= - 0.981 P=.391
6. <i>Falar com os animais de estimação</i>	1.00; 1.00; 5.00	1.00; 1.50; 5.00	Z= 0.000 P= 1.000
7. <i>Falar ao telefone</i>	1.00; 1.00; 2.00	1.00; 1.00; 2.00	Z= - 0.378 P= 1.000
8. <i>Falar num grupo pequeno de pessoas</i>	2.00; 2.00; 4.00	2.00; 2.00; 4.00	Z= - 0.905 P= 0.430
9. <i>Falar num grupo grande de pessoas</i>	5.00; 5.00; 6.00	3.00; 5.00; 5.00	Z= - 0.949 P= 0.469
10. <i>Fazer um discurso para um grupo informal</i>	5.00; 5.00; 6.00	5.00; 5.00; 6.00	Z= 0.000 P= 1.000
11. <i>Fazer um discurso para um grupo formal</i>	5.00; 6.00; 6.00	5.00; 6.00; 6.00	Z= - 0.378 P= 1.000
12. <i>Falar sobre fotografias</i>	2.00; 4.00; 5.00	2.00; 5.00; 6.00	Z= - 0.343 P= 0.844
13. <i>Contar histórias e anedotas</i>	3.00; 5.00; 6.00	4.00; 6.00; 6.00	Z= - 0.647 P= 0.656
14. <i>Fazer apostas (ex: futebol. raspadinhas. lotaria...)</i>	4.50; .6.00; 6.00	4.50; .6.00; 6.00	Z= - 0.816 P= 0.750
15. <i>Pedir bebidas</i>	1.00; 2.00; 5.00	1.00; 2.00; 3.00	Z= - 0.853 P= 0.394
16. <i>Rezar</i>	1.00; 3.50; 6.00	1.00; 4.00; 6.00	Z= - 1.000 P= 1.000

Table 8B – Test-retest COMACT EP (Listening / Ouvir category)

(intra-evaluator reliability) (n=15)

COMACT - Items	Test	Retest	Statistical results
	P25;med;P75	P25;med;P75	
17. Ouvir rádio	1.00; 2.00; 5.00	1.00; 2.00; 4.00	Z= - 1.100 P= 0.344
18. Ver televisão	1.00; 1.00; 1.00	1.00; 1.00; 1.00	Z= 0.000 P= 1.000
19. Ver/ouvir notícias	1.00; 1.00; 1.00	1.00; 1.00; 1.00	Z= 0.000 P= 1.000
20. Ver/ouvir programas de desporto	1.00; 1.50; 5.00	1.00; 5.00; 5.25	Z= - 1.604 P= 0.250
21. Ouvir uma conversa	1.75; 2.00; 5.00	1.00; 2.00; 4.00	Z= - 1.414 P= 0.312
22. Ouvir um grupo de pessoas a falar	2.00; 2.50; 5.25	2.00; 2.50; 5.00	Z= - 0.647 P= 0.656
23. Ouvir um discurso	3.50; 5.00; 5.50	2.00; 5.00; 5.50	Z= - 1.841 P= 0.125

Table 8C – Test-retest COMACT EP (Reading / Ler category)

(intra-evaluator reliability) (n=15)

COMACT - Items	Test	Retest	Statistical results
	P25;med;P75	P25;med;P75	
24. Ler cartas e postais	4.75; 5.00; 6.00	5.00; 5.00; 6.00	Z= - 1.890 P= 0.059
25. Ler catálogos	2.00; 5.00; 6.00	2.75; 5.00; 5.25	Z= - 0.412 P= 0.813
26. Ler panfletos/folhetos	2.00; 3.50; 5.00	2.00; 2.50 4.50	Z= - 1.276 P= 0.281
27. Ler revistas	1.00; 4.00; 5.00	2.00; 3.00; 6.00	Z= - 0.171 P= 0.922
28. Ler jornais	1.00; 2.00; 6.00	1.00; 2.00; 5.00	Z= 0.000 P= 1.000
29. Ler livros	2.00; 4.00; 6.00	2.00; 4.00; 5.00	Z= - 1.106 P= 1.000
30. Ler listas telefónicas	5.00; 6.00; 6.00	5.75; 6.00; 6.00	Z= - 1.000 P= 1.000
31. Ler formulários & contas/faturas	2.50; 5.00; 6.00	3.50; 4.00; 6.00	Z= - 0.539 P= 0.750
32. Ler extratos bancários	2.00; 4.00; 4.00	2.00; 4.00; 6.00	Z= - 0.641 P= 0.586
33. Ler boletins informativos	3.00; 4.00; 5.25	3.00; 4.50; 6.00	Z= -0.466 P= 0.730
34. Fazer palavras cruzadas	2.75; 5.00; 5.25	2.00; 5.50; 6.00	Z= - 1.027 P= 0.438
35. Ler instruções e rótulos/etiquetas	3.50; 5.00; 5.50	2.50; 4.00; 5.00	Z= - 0.730 P= 0.551
36. Ler horários de comboios e autocarros	3.00; 5.00; 6.00	4.00; 5.00; 6.00	Z= -1.069 P= 0.500
37. Ler mapas e direções	2.00; 4.00; 5.00	4.00; 5.00; 6.00	Z= -2.200 P= 0.039

Table 8D – Test-retest COMACT EP (Writing / Escrever category)

(intra-evaluator reliability) (n=15)

COMACT - Items	Test	Retest	Statistical results
	P25;med;P75	P25;med;P75	
38. <i>Escrever cartas e postais</i>	6.00; 6.00; 6.00	5.00; 5.50; 6.00	Z= - 1.890 P= 0.125
39. <i>Escrever histórias e notícias de jornais.</i>	5.00; 6.00; 6.00	5.00; 6.00; 6.00	Z= - 0.707 P= 0.750
40. <i>Escrever listas de compras</i>	1.75; 2.00; 6.00	2.00; 2.50; 6.00	Z= - 1.000 P= 0.531
41. <i>Escrever no diário</i>	6.00; 6.00; 6.00	5.50; 6.00; 6.00	Z=0.000 P= 1.000
42. <i>Passar cheques</i>	5.75; 6.00; 6.00	5.00; 6.00; 6.00	Z=-1.000 P= 1.000
43. <i>Preencher formulários</i>	5.00; 5.00; 5.00	4.00; 5.00; 5.00	Z= - 1.276 P= 0.281
44. <i>Escrever mensagens e/ou e-mails</i>	1.00; 2.00; 5.00	1.00; 2.00; 5.00	Z= - 0.107 P= 1.000
45. <i>Fazer jogos de palavras</i>	2.00; 4.50; 6.00	1.00; 3.50; 5.25	Z= -1.098 P= 0.391

The following Tables are the results obtained after using the CDP with the PWA that integrated this study. Each table represents a subscale, within the Activities section of the CDP – EP version.

Table 9A – Characterization of the CDP – EP (Activities section: Talking / *Falar* subscale)

(Cronbach's $\alpha = 0.889$)

Questions	<i>Impossível</i>	<i>Difícil</i>	<i>Mais ou menos</i>	<i>Fácil</i>	<i>Muito fácil</i>	Missings
<i>Durante a última semana, com que facilidade...</i>						
1. <i>Falou com (nome da pessoa mais próxima)</i>	0 (0.0%)	0 (0.0%)	2 (13.3%)	8 (53.3%)	5 (33.3%)	0 (0.0%)
2. <i>Falou com um grupo de amigos?</i>	0 (0.0%)	1 (6.7%)	5 (33.3%)	9 (60%)	0 (0.0%)	0 (0.0%)
3. <i>Falou com um estranho. alguém que não conhece?</i>	1 (7.7%)	1 (7.7%)	3 (23.1%)	8 (61.5%)	0 (0.0%)	2 (13.3%)
4. <i>Falou sob pressão?</i>	1 (7.7%)	4 (30.8%)	4 (30.8%)	2 (15.4%)	2 (15.4%)	2 (13.3%)
5. <i>Falou ao telemóvel?</i>	3 (20.0%)	0 (0.0%)	5 (33.3%)	6 (40.0%)	1 (6.7%)	0 (0.0%)
6. <i>Falou através do computador?</i>	2 (16.7%)	1 (8.3%)	2 (16.7%)	4 (33.3%)	3 (25.0%)	3 (20.0%)
Total (Mean \pmSD): 8.53\pm4.26; (Range) 3-19						

Table 9B – Characterization of the CDP – EP (Activities section: Communication / *Comunicar* subscale)

(Cronbach's $\alpha = 0.823$)

Questions	<i>Impossível</i>	<i>Difícil</i>	<i>Mais ou menos</i>	<i>Fácil</i>	<i>Muito fácil</i>	Missings
<i>Durante a última semana, com que facilidade...</i>						
7. <i>Comunicou com (nome da pessoa mais próxima)</i>	0 (0.0%)	0 (0.0%)	0 (0.0%)	9 (60.0%)	6 (40.0%)	0 (0.0%)
8. <i>Comunicou com um grupo de amigos</i>	1 (6.7%)	1 (6.7%)	5 (33.3%)	8 (53.3%)	0 (0.0%)	0 (0.0%)
9. <i>Comunicou com um estranho. alguém que não conhece?</i>	1 (7.7%)	2 (15.4%)	3 (23.1%)	7 (53.8%)	0 (0.0%)	2 (13.3%)
10. <i>Comunicou sob pressão</i>	2 (15.4%)	5 (38.5%)	3 (23.1%)	2 (15.4%)	1 (7.7%)	2 (13.3%)
11. <i>Comunicou através do computador</i>	2 (16.7%)	1 (8.3%)	2 (16.7%)	6 (50.0%)	1 (8.3%)	3 (20.0%)
Total (Mean \pmSD): 7.23\pm3.45; (Range) 3-17						

**Table 9C – Characterization of the CDP – EP (Activities section:
Comprehension / *Compreensão* subscale)**

(Cronbach's $\alpha = 0.822$)

Questions	<i>Impossível</i>	<i>Difícil</i>	<i>Mais ou menos</i>	<i>Fácil</i>	<i>Muito fácil</i>	Missings
<i>Durante a última semana, com que facilidade...</i>						
12. <i>Compreende (nome da pessoa mais próxima)</i>	0 (0.0%)	0 (0.0%)	2 (13.3%)	5 (33.3%)	8 (53.3%)	0 (0.0%)
13. <i>Compreendeu um estranho. alguém que não conhece</i>	1 (7.7%)	1 (7.7%)	4 (30.8%)	3 (23.1%)	4 (30.8%)	2 (13.3%)
14. <i>Compreendeu num grupo</i>	0 (0.0%)	1 (6.7%)	5 (33.3%)	5 (33.3%)	4 (26.7%)	0 (0.0%)
15. <i>Compreendeu sob pressão</i>	1 (7.7%)	6 (46.2%)	1 (7.7%)	2 (15.4%)	3 (23.1%)	2 (13.3%)
16. <i>Compreendeu algo através do computador</i>	1 (8.3%)	2 (16.7%)	3 (25.0%)	4 (33.3%)	2 (16.7%)	3 (20.0%)
Total (Mean \pmSD): 6.07\pm4.74; (Range) 0-13						

Table 9D – Characterization of the CDP – EP (Activities section: Reading / Ler subscale)

(Cronbach's $\alpha = 0.930$)

Questions	<i>Impossível</i>	<i>Difícil</i>	<i>Mais ou menos</i>	<i>Fácil</i>	<i>Muito fácil</i>	<i>Missings</i>
<i>Durante a última semana, com que facilidade...</i>						
17. <i>Leu e compreendeu uma palavra</i>	0 (0.0%)	1 (6.7%)	2 (13.3%)	6 (40.0%)	6 (40.0%)	0 (0.0%)
18. <i>Leu e compreendeu uma frase</i>	0 (0.0%)	1 (6.7%)	5 (33.3%)	5 (33.3%)	4 (26.7%)	0 (0.0%)
19. <i>Leu e compreendeu uma notícia completa num jornal</i>	0 (0.0%)	2 (13.3%)	6 (40.0%)	3 (20.0%)	4 (26.7%)	0 (0.0%)
20. <i>Leu e compreendeu um postal</i>	0 (0.0%)	0 (0.0%)	4 (26.7%)	6 (40.0%)	5 (33.3%)	0 (0.0%)
21. <i>Leu e compreendeu uma carta de um amigo</i>	0 (0.0%)	3 (23.1%)	3 (23.1%)	3 (23.1%)	4 (30.8%)	2 (13.3%)
22. <i>Leu e compreendeu uma carta formal</i>	1 (7.1%)	2 (14.3%)	5 (35.7%)	5 (35.7%)	1 (7.1%)	1 (6.7%)
23. <i>Leu e compreendeu algo (mensagem) no telemóvel</i>	0 (0.0%)	0 (0.0%)	5 (35.7%)	3 (21.4%)	6 (42.9%)	1 (6.7%)
24. <i>Leu e compreendeu algo (mensagem) no computador</i>	0 (0.0%)	0 (0.0%)	5 (38.5%)	3 (23.1%)	5 (38.5%)	2 (13.3%)
25. <i>Leu e compreendeu uma revista</i>	0 (0.0%)	2 (13.3%)	7 (46.7%)	3 (20.0%)	3 (20.0%)	0 (0.0%)
26. <i>Leu e compreendeu um livro</i>	2 (15.4%)	1 (7.7%)	6 (46.2%)	2 (15.4%)	2 (15.4%)	2 (13.3%)
Total (Mean \pmSD): 12.20\pm7.34; (Range) 0-22						

Table 9E – Characterization of the CDP – EP (Activities section: Writing subscale)

(Cronbach's $\alpha = 0.829$)

PWA (=30)	<i>Impossível</i>	<i>Difícil</i>	<i>Mais ou menos</i>	<i>Fácil</i>	<i>Muito fácil</i>	<i>Missings</i>
<i>Durante a última semana, com que facilidade...</i>						
27. <i>Escreveu o seu nome</i>						
28. <i>Escreveu outras palavras isoladas, como numa lista</i>						
29. <i>Escreveu uma carta a um amigo</i>	1 (12.5%)	3 (37.5%)	1 (12.5%)	3 (37.5%)	0 (0.0%)	7 (46.7%)
30. <i>Escreveu uma carta formal</i>	3 (33.3%)	3 (33.3%)	2 (22.2%)	1 (11.1%)	0 (0.0%)	6 (40.0%)
31. <i>Escreveu algo (mensagem) no telemóvel</i>	1 (7.1%)	4 (28.6%)	2 (14.3%)	4 (28.6%)	3 (21.4%)	1 (6.7%)
32. <i>Escreveu algo (mensagem) no computador</i>	1 (7.7%)	3 (23.1%)	3 (23.1%)	4 (30.8%)	2 (15.4%)	2 (13.3%)
Total (Mean \pmSD): 7.47\pm4.07; (Range) 3-19						

Table 10 – Translations Tables

Original Version	Translation #1 (Prof. Assunção)	Translation #2 (Alexandra Magalhães)	First Consensus (Translations #1 & #2)	Back translation #1 (Diana Moreira)	Back translation #2 (Prof. Luis Jesus)	Final consensus
How OFTEN do you do these activities? Please select (✓) ONE box per line.	Com que frequência é que realiza estas atividades? Por favor, seleccione (✓) apenas UMA opção de resposta	Com que frequência realiza estas atividades? Por favor, seleccione (v) apenas uma caixa por linha	Com que frequência é que realiza estas atividades? Por favor, seleccione (✓) apenas UMA opção de resposta.	How often do you engage in these activities? Please tick (✓) only ONE option	How often do you engage in these activities? Please select (✓) only ONE option	Com que FREQUÊNCIA é que realiza estas atividades? Por favor, seleccione (✓) apenas UMA opção de resposta.
Daily	Diário	Diário	Diário	Daily	Daily	Diário
Weekly	Semanal	Semanal	Semanal	Weekly	Weekly	Semanal
Every 2 weeks	De 2/2 semanas	De 2/2 semanas	De 2/2 semanas	Fortnightly	Every 2 weeks	De 2/2 semanas
Monthly	Mensal	Mensalmente	Mensal	Monthly	Monthly	Mensal
Rarely	Raramente	Raramente	Raramente	Rarely	Rarely	Raramente
Not at all	Não faço	Não é realizada	Não faço / Nunca	Never	I don't do it	Nunca
N/A	N/A	N/A	N/A	N/A	N/A	N/A
Talk to spouse	Falar com a esposa/marido	Falar com a/o esposa/marido	Falar com a/o esposa/marido	Talking to husband/wife	Speak with wife/husband	Falar com a/o esposa/marido
Talk to family	Falar com familiares	Falar com a família	Falar com a família	Talking to family	Speak with family	Falar com a família
Talk to friends	Falar com amigos	Falar com os amigos	Falar com os amigos	Talking to friends	Speak with friends	Falar com os amigos
Talk to neighbours	Falar com vizinhos	Falar com os vizinhos	Falar com os vizinhos	Talking to neighbours	Speak with neighbours	Falar com os vizinhos
Talk to shopkeepers/trades people	Falar com empregados de lojas/comerciantes	Falar com os empregados de loja/comerciantes	Falar com os empregados de loja/comerciantes	Talking to shop staff/waiters	Speak with store employees / sellers	Falar com os empregados de loja/diferentes profissionais

Original Version	Translation #1 (Prof. Assunção)	Translation #2 (Alexandra Magalhães)	First Consensus (Translations #1 & #2)	Back translation #1 (Diana Moreira)	Back translation #2 (Prof. Luís Jesus)	Final consensus
Talk to pets	Falar com animais de estimação	Falar com os animais de estimação	Falar com os animais de estimação	Talking to pets	Speak with pets	Falar com os animais de estimação
Talk on phone	Falar ao telefone	Falar ao telefone	Falar ao telefone	Speaking on the phone	Speak on the phone	Falar ao telefone
Talk in a small group of people	Falar num grupo de pessoas pequeno	Falar num grupo pequeno de pessoas	Falar num grupo pequeno de pessoas	Talking to people in a small group	Speak in a small group of people	Falar num grupo pequeno de pessoas
Talk in a large group of people	Falar num grupo de pessoas grande	Falar num grupo grande de pessoas	Falar num grupo grande de pessoas	Talking to people in a large group	Speak in a large group of people	Falar num grupo grande de pessoas
Give a speech at an informal group	Discursar num grupo informal	Fazer um discurso informal	Fazer um discurso informal	Deliver an informal speech to a group	Deliver a speech to an informal group	Fazer um discurso para um grupo informal
Give a speech at a formal group	Discursar num grupo formal	Fazer um discurso para um grupo formal	Fazer um discurso para um grupo formal	Deliver a formal speech to a group	Deliver a speech to a formal group	Fazer um discurso para um grupo formal
Talk about photos	Falar sobre fotografias	Falar sobre fotografias	Falar sobre fotografias	Talk about photos	Talk about pictures	Falar sobre fotografias
Tell stories & jokes	Contar histórias & Anedotas	Contar histórias e anedotas	Contar histórias e anedotas	Tell stories and jokes	Tell stories and jokes	Contar histórias e anedotas
Place bets	Fazer apostas	Fazer apostas	Fazer apostas	Make bets	Place bets	Fazer apostas
Order drinks	Pedir uma bebida	Pedir bebidas	Pedir bebidas	Order drinks	Order drinks	Pedir bebidas
Say prayers	Rezar/dizer orações	Rezar	Rezar	Say prayers	Say prayers	Rezar
Listen to radio	Ouvir rádio	Ouvir rádio	Ouvir rádio	Listen to the radio	Listen to the radio	Ouvir rádio
Listen to TV	Ouvir/ver a TV	Ver/ouvir TV	Ver/ouvir TV	Watch TV/Listen to the TV	Watch TV/Listen to the TV	Ver televisão
Listen to news	Ouvir as notícias	Ver/ouvir notícias	Ver/ouvir notícias	Watch the news/Listen to the news	See/listen to the news	Ver/ouvir notícias

Original Version	Translation #1 (Prof. Assunção)	Translation #2 (Alexandra Magalhães)	First Consensus (Translations #1 & #2)	Back translation #1 (Diana Moreira)	Back translation #2 (Prof. Luis Jesus)	Final consensus
Listen to sports programs	Ouvir/ver programas de desporto	Ver/ouvir programas de desporto	Ver/ouvir programas de desporto	Watch sports shows/Listen to sports shows	Watch/listen to sports programs	Ver/ouvir programas de desporto
Listen to a conversation	Ouvir uma conversa	Ouvir uma conversa	Ouvir uma conversa	Listen to a conversation	Listen to a conversation	Ouvir uma conversa
Listen to a group of people talking	Ouvir um grupo de pessoas a falar	Ouvir um grupo de pessoas a falar	Ouvir um grupo de pessoas a falar	Listen to a group of people who are talking	Listen to a group of people talking	Ouvir um grupo de pessoas a falar
Listen to a speech	Ouvir um discurso	Ouvir um discurso	Ouvir um discurso	Listen to a speech	Listen to a speech	Ouvir um discurso
Read letters and cards	Ler cartas e postais	Ler cartas e postais	Ler cartas e postais	Read letters and cards	Read letters and postcards	Ler cartas e postais
Read mail catalogues	Ler catálogos	Ler catálogos	Ler catálogos	Read catalogs	Read catalogues	Ler catálogos
Read pamphlets	Ler panfletos	Ler panfletos/folhetos	Ler panfletos/folhetos	Read leaflets	Read pamphlet's	Ler panfletos/folhetos
Read magazines	Ler revistas	Ler revistas	Ler revistas	Read magazines	Read magazines	Ler revistas
Read newspapers	Ler jornais	Ler jornais	Ler jornais	Read newspapers	Read newspapers	Ler jornais
Read novels/ books	Ler novelas/livros	Ler livros	Ler livros	Read books	Read books	Ler livros
Read the phone book	Ler listas telefónicas	Ler listas telefónicas	Ler listas telefónicas	Read phone books	Read phone directories	Ler listas telefónicas
Read forms & bills	Ler faturas/contas para pagar	Ler faturas e contas	Ler faturas e contas	Read bills	Read invoices and bills	Ler formulários & contas/faturas
Read bank statements	Ler extratos bancários	Ler extratos bancários	Ler extratos bancários	Read bank statements	Read bank statements	Ler extratos bancários
Read newsletters	Ler boletins informativos	Ler boletins informativos	Ler boletins informativos	Read informative bulletins	Read newsletters	Ler boletins informativos

Original Version	Translation #1 (Prof. Assunção)	Translation #2 (Alexandra Magalhães)	First Consensus (Translations #1 & #2)	Back translation #1 (Diana Moreira)	Back translation #2 (Prof. Luis Jesus)	Final consensus
Do crosswords	Fazer palavras cruzadas	Fazer palavras cruzadas	Fazer palavras cruzadas	Do crosswords	Do crosswords	Fazer palavras cruzadas
Read instructions and labels	Ler instruções/etiquetas	Ler instruções e rótulos/etiquetas	Ler instruções e rótulos/etiquetas	Read instructions and labels	Read instructions and labels	Ler instruções e rótulos/etiquetas
Read bus and train timetables	Ler horários de autocarro e comboio	Ler horários de comboios e autocarros	Ler horários de comboios e autocarros	Read train and bus timetables	Read train and bus timetables	Ler horários de comboios e autocarros
Read map and directions	Ler mapas e moradas/direções	Ler mapas e direções	Ler mapas e direções	Read maps and directions	Read maps and directions	Ler mapas e direções
Write letters and cards	Escrever cartas e postais	Escrever cartas e postais	Escrever cartas e postais	Write letters and cards	Write letters and postcards	Escrever cartas e postais
Write stories and newspaper articles	Escrever histórias e notícias de jornais	Escrever histórias e notícias de jornais.	Escrever histórias e notícias de jornais.	Write stories and news	Write stories and newspaper pieces.	Escrever histórias e notícias de jornais.
Write shopping lists	Escrever listas de compras	Escrever listas de compras	Escrever listas de compras	Write shopping lists	Write shopping lists	Escrever listas de compras
Write diary	Escrever num diário	Escrever no diário	Escrever no diário	Journal	Write a diary	Escrever no diário
Write cheques	Passar cheques	Passar cheques	Passar cheques	Write a bank cheque	Write cheques	Passar cheques
Fill in forms	Preencher formulários	Preencher formulários	Preencher formulários	Fill in forms	Fill in forms	Preencher formulários
Write messages	Escrever mensagens	Escrever mensagens	Escrever mensagens	Write texts	Write messages	Escrever mensagens
Do word puzzles and games	Fazer puzzles & jogos	Fazer jogos de palavras	Fazer jogos de palavras	Play word games	Do word games	Fazer jogos de palavras
THANK YOU for filling in this form	OBRIGADA por preencher este formulário.	OBRIGADA por preencher este formulário.	OBRIGADA por preencher este formulário.	THANK YOU for filling in this form	THANK YOU for filling out the questionnaire.	OBRIGADA por preencher este formulário.

Appendixes

Appendix I – Characterization of the CDP

The CDP (Swinburn & Byng, 2006) is a patient-reported outcome tool, that facilitates PWA in expressing the impact aphasia has in their lives and aims “to quantify aspects of living with aphasia; to support joint-planning and therapy goal setting; and to explore and validate the individual’s identity as someone living with aphasia” (cit. in Chue et al, 2010). The CDP is composed of four sections: Activities, Participation, External influences, and Emotions. Within the EP version of CDP (Matos, Serra & Jesus, 2016), the Activities section is divided in items related to “Falar” (“Talking”), “Comunicar” (“Expression”), “Compreender” (“Understanding”), “Ler” (“Reading”) and “Escrever” (“Writing”). For every question, individuals indicate a self-rating on a 5-point pictorial rating scale (minimum score of 0, and a maximum score of 4), with the following options, regarding the difficulty of the task: “Impossível” (impossible), “Difícil” (difficult), “Mais ou menos”(more or less), “Fácil” (easy), “Muito fácil” (very easy). However, if the use of this scale is to challenging, PWA can use a simple 2-point scale. Therefore, the total score can either be 64 or 80. Higher scores represent more negative impacts of aphasia.

Appendix II – Ethics and Deontology Committee of the University of Aveiro authorization

2. A possibilidade de desistência do estudo em qualquer altura, sem que para isso tenha que ser dada qualquer justificação;
3. Que os riscos associados à participação no estudo não são desproporcionais aos riscos associados ao dia-a-dia do participante;
4. Que os dados recolhidos no projeto são analisados apenas pela equipa de investigação, sendo sempre garantida a sua segurança e confidencialidade, sob a responsabilidade da investigadora responsável.

b. Recomendações

1. Deverá sempre ser respeitada a Declaração de Helsínquia (e respetivas Emendas), bem como o Regulamento Geral de Proteção de Dados (RGPD) e a legislação Europeia relacionada com a investigação em seres humanos.
2. A recolha de dados deverá ser efetuada com a colaboração do Instituto Português da Afasia, única instituição que aceitou participar no estudo.

c. Conclusão

De acordo com o anteriormente referido e com os princípios seguidos por este Conselho, é emitido o seguinte parecer:

1. A Comissão Permanente do Conselho de Ética, constituída pelos Relatores acima indicados, após apreciação da documentação recebida e atendendo a que os procedimentos descritos no projeto de investigação:
 - 1.1 Admitem uma ponderação risco-benefício previsivelmente não desfavorável aos participantes;
 - 1.2 Garantem que os participantes são previamente informados e esclarecidos sobre o estudo;
 - 1.3 Preveem a obtenção do consentimento esclarecido e livre dos participantes;
 - 1.4 Garantem a confidencialidade dos dados recolhidos.
2. Considera que merece parecer favorável a realização do projeto “*Tradução e Validação do Communicative Activities Checklist (COMACT)*”.

A Presidente da CPAI

Assinado por: **ANA ISABEL DE OLIVEIRA ANDRADE**
Num. de Identificação: 07103259
Data: 2022.04.14 15:25:29+01'00'

- Indicação da orientadora e da coorientadora do estudante de mestrado;
- Enquadramento institucional e científico (Escola Superior de Saúde da Universidade de Aveiro; e *Division of Language and Communication Science, School of Health Sciences, City University London*).

Apêndices e Anexos:

- Tabela de questões éticas associadas ao projeto;
- Declarações de consentimento informado, esclarecido e livre adaptado para facilitar a compreensão do mesmo pelas pessoas com afasia;
- Declaração da orientadora e da coorientadora da dissertação;
- Instrumentos a utilizar na recolha de dados;
- Declaração do encarregado de proteção de dados da Universidade de Aveiro e Formulário DPIA;
- Declaração (cópia de email) do Instituto Português da Afasia.

II. Parecer

a. Fundamentação

1. O pedido de parecer relativo ao projeto em causa apresenta-se bem elaborado e fundamentado, assinalando as questões éticas associadas ao seu desenvolvimento.
2. Os objetivos do estudo são apresentados e justificados.
3. Os dados serão armazenados em dossiers, guardados num armário fechado à chave, na Escola Superior de Saúde da Universidade de Aveiro, devidamente preparado para garantir a sua segurança, e os dados digitais serão guardados numa pasta zipada com palavra-passe no computador e acessíveis unicamente à equipa do projeto.
4. Os participantes no estudo serão voluntários, dando o seu consentimento informado, esclarecido e livre por escrito.
4. Os riscos associados à participação neste estudo não são superiores aos associados ao normal quotidiano dos intervenientes.
5. É garantido que os participantes podem aceder aos dados, editá-los e pedir para que sejam retirados do estudo, assim como desistirem da participação na investigação

De acordo com o exposto, julga-se que o projeto em análise respeita os princípios de ética neste tipo de estudos, assegurando:

1. O consentimento informado, esclarecido e livre dos participantes, em momento anterior à recolha de dados;

2. A possibilidade de desistência do estudo em qualquer altura, sem que para isso tenha que ser dada qualquer justificação;
3. Que os riscos associados à participação no estudo não são desproporcionais aos riscos associados ao dia-a-dia do participante;
4. Que os dados recolhidos no projeto são analisados apenas pela equipa de investigação, sendo sempre garantida a sua segurança e confidencialidade, sob a responsabilidade da investigadora responsável.

b. Recomendações

1. Deverá sempre ser respeitada a Declaração de Helsínquia (e respetivas Emendas), bem como o Regulamento Geral de Proteção de Dados (RGPD) e a legislação Europeia relacionada com a investigação em seres humanos.
2. A recolha de dados deverá ser efetuada com a colaboração do Instituto Português da Afasia, única instituição que aceitou participar no estudo.

c. Conclusão

De acordo com o anteriormente referido e com os princípios seguidos por este Conselho, é emitido o seguinte parecer:

1. A Comissão Permanente do Conselho de Ética, constituída pelos Relatores acima indicados, após apreciação da documentação recebida e atendendo a que os procedimentos descritos no projeto de investigação:
 - 1.1 Admitem uma ponderação risco-benefício previsivelmente não desfavorável aos participantes;
 - 1.2 Garantem que os participantes são previamente informados e esclarecidos sobre o estudo;
 - 1.3 Preveem a obtenção do consentimento esclarecido e livre dos participantes;
 - 1.4 Garantem a confidencialidade dos dados recolhidos.
2. Considera que merece parecer favorável a realização do projeto "*Tradução e Validação do Communicative Activities Checklist (COMACT)*".

A Presidente da CPAI

Assinado por: **ANA ISABEL DE OLIVEIRA ANDRADE**
Num. de Identificação: 07103259
Data: 2022.04.14 15:25:29+01'00'

I. Plenário CED

Submetido ao CED o respetivo parecer da sua Comissão Permanente, este Conselho, em sua reunião plenária de 6 de abril de 2022, por entender que ficam salvaguardadas as exigências éticas inerentes à investigação em seres humanos, aí atentos os princípios da justiça e da autonomia e segurança dos participantes, concorda por unanimidade com o mesmo, em razão do que o ratifica e dá **parecer favorável** à realização do projeto intitulado: “*Tradução e Validação do Communicative Activities Checklist (COMACT)*”.

O Presidente do CED

Assinado por: **António Costa Dias de Figueiredo**
Num. de Identificação: 01589648
Data: 2022.04.17 16:09:26 +0100

Appendix III – Authorization from the Scientific Council of the Portuguese Institute of Aphasia



Alexandra Magalhães <alex.cmags@gmail.com>

Parecer sobre estudo científico

Paula Valente <paulavalente@ipafasia.pt>

Mon, Dec 6, 2021 at 3:24 PM

To: Alexandra Magalhães <alex.cmags@gmail.com>, Maria Matos <tfmaria@gmail.com>, teofilobgranjo@ua.pt

Caros Colegas,

Após análise do vosso pedido, o concelho científico aprovou a realização do seu estudo nas condições que referiram. Peço imensa desculpa pelo atraso no envio deste parecer.

Estamos ao dispor para o que precisar, quando quiser.

Atentamente,
Paula Valente
Diretora Executiva / CEO
Terapeuta da Fala / Speech and Language Therapist
Telm. 0035 91 056 21 89
www.ipafasia.pt
Siga-nos no facebook

Sem vírus. www.avg.com

Appendix IV – Authorization from the author of the original COMACT

Dear Assuncao,

Hello there! It was sooooo nice to see you in Sept. I can't believe it's 2 months already gone. Basically, we have spent 2 months trying to get Joshua settled into nursery - he is fine with going there, loves everything and everyone, EXCEPT eating food or drinking his bottles....

Anyway. We are good.

I would love to work with you on this. I don't know anything really about validation so I will be lead by yourself and Luis in what needs to be done. What activities need to be undertaken and how much time do you think it is going to take?

I am very happy for the COMACT and the SOCACT to be translated and validated. The COMACT is a good tool with basic reliability and validity. The SOCACT has known groups validity only ie the scores basically differentiate a group of people who are aphasic, from the group of similarly aged and educated peers who were healthy. It does not have reliability and is thus not a reliable tool of social activities (in psychometrics sense). Clinically, one can still use it for information gathering, but clinicians need to know this. Some people might choose not to translate it.

That's a bit of a shame about the TAPP. Do you think you have exhausted all different options though about trying to work out how to reliably reduce the number of constructs?

Cheers Madeline

Dr Madeline Cruice BSpPath(Hons I), PhD, MRCSLT, FHEA
Reader/ Associate Professor
Division of Language and Communication Science, School of Health Sciences
City University London, Northampton Square, London EC1V 0HB, UK
Ph: +44 020 7040 8290
Email: m.cruice@city.ac.uk
@MadelineCruice
<http://www.city.ac.uk>

Appendix V – Aphasia-friendly consent form

Consentimento Informado e Esclarecido



Por favor, **leia com atenção** esta informação.

O meu **nome** é **Alexandra Camelo Magalhães**.

Sou **estudante de Mestrado** da **Universidade de Aveiro**.



universidade de aveiro

A **recolha** e o **tratamento de dados** serão da **minha responsabilidade**, como investigadora principal.

O estudo está a ser **orientado** pelas professoras **Assunção Matos** e **Madeline Cruice**.



Objetivo do estudo:

Traduzir e validar uma lista de atividades comunicativas, o “**Communicative Activities Checklist**” (**COMACT**) para o **Português Europeu**.

Cópia para o participante.



Precisamos de **recolher** alguns **dados sobre si**:

idade, género, escolaridade, saúde emocional, cognição, tipo e consequências da afasia e atividades que realiza.



Queremos a **sua opinião** sobre o **COMACT!**

Queremos **sugestões!**



Não há qualquer **perigo** para si.



Não tem que **pagar nada**.

Não recebe **dinheiro** por colaborar connosco.

Não ganhamos **dinheiro** por fazer este trabalho.

Cópia para o participante.



Serão asseguradas todas as condições técnicas e organizativas para **garantir a privacidade e confidencialidade** da sua **informação pessoal**.

Os dados serão **codificados e anonimizados**.



Poderá **ver e editar os dados pessoais não anonimizados**.

Pode **pedir para esquecer os dados pessoais não anonimizados**.



Os **dados físicos** serão **guardados** na **Universidade de Aveiro** e **apenas eu** terei acesso.

Os **dados digitais** serão e **guardados** no **computador**, numa **pasta zipada** com **palavra-passe**.



Os **dados pessoais não anonimizados** (em formato **digital** e de **papel**) serão **guardados** durante **1 mês**, sendo após isto **destruídos**.

Cópia para o participante.



Se **concordar** em **participar**.



Poderá **desistir**



Dúvidas?

Contacte a sua **instituição** e eles **chamam-me**.

Aceita **participar**?

SIM

NÃO

Aceita que os seus **dados sejam tratados**?

SIM

NÃO

Cópia para o participante.

Declaro que o estudo de investigação **me foi explicado**.

Compreendi tudo o que me foi **dito** e foram **respondidas** todas as **questões que coloquei**. Sinto-me **esclarecido** sobre os objetivos do estudo, em que **aceito participar**.

Autorizo, a utilização dos dados obtidos, **apenas para efeitos científicos ou educacionais**, **salvaguardando** sempre a minha **identidade** e a **confidencialidade** de todos os dados.

Nome: _____

Assinatura: _____

Data: ____ / ____ / _____

Investigador: _____

Cópia para o participante.

Appendix VI – NHP consent form

DECLARAÇÃO DE CONSENTIMENTO INFORMADO

Designação do Estudo:

Tradução e Validação do “Communicative Activities Checklist” (COMACT) para o Português Europeu

O presente estudo intitulado “Tradução e Validação do Communicative Activities Checklist (COMACT) para o Português Europeu” insere-se no âmbito do Mestrado em Terapia da Fala – Ramo de Perturbações Neurológicas no Adulto, da Universidade de Aveiro. De referir que o projeto se encontra aprovado pelo Conselho de Ética e Deontologia desta Universidade.

Os principais objetivos deste projeto são: a tradução do COMACT para português europeu; verificar a sua validade e fiabilidade; caracterizar as limitações às atividades de um grupo de pessoas com afasia e explorar os fatores pessoais que podem influenciar a frequência com que a pessoa realiza atividades comunicativas.

De modo a concretizar os objetivos delineados, será realizada pelo investigador responsável pelo projeto, Alexandra Camelo Magalhães, a recolha dos dados sociodemográficos, assim como de informações relativas à saúde emocional e a questões relacionadas com a cognição, a afasia e as suas consequências, através de instrumentos específicos. Os dados serão recolhidos e alojados de uma forma segura. Os dados físicos serão armazenados em dossiers, guardados num armário fechado à chave, na ESSUA, devidamente preparado para garantir a sua segurança, ao qual apenas o investigador principal (IP) terá acesso. Após a codificação e digitalização dos dados, estes ficarão guardados numa pasta (zipada com palavra-passe) no computador do IP, onde só mesmo terá acesso. Os dados serão processados, codificados e anonimizados de forma a garantir a salvaguarda e proteção dos direitos legítimos dos seus proprietários.

A responsabilidade do tratamento dos dados é da IP, sendo todo o desenvolvimento do projeto orientado pelas Prof. Doutora Assunção Matos e Prof. Madeline Cruice.

Foi ouvida a equipa RGPD da Universidade de Aveiro, sendo garantido ao participante, durante todo o período em que os dados não estejam anonimizados, o exercício do direito de acesso, de retificação ou esquecimento dos seus dados.

Cópia para o participante.

1

O prazo de conservação dos dados recolhidos, na forma não anonimizada, será de **1** mês após a sua recolha.

Se tiver dúvidas, por favor contacte a instituição onde se encontra a ter apoio. A mesma entrará em contacto com o IP e este entrará em contacto consigo o mais brevemente possível.

1. Eu confirmo que percebi a informação que me foi dada e tive a oportunidade de questionar e de me esclarecer.
2. Eu percebo que a minha participação é voluntária e que sou livre de desistir, em qualquer altura, sem dar nenhuma explicação, sem que isso afete qualquer serviço que me é prestado.
3. Eu compreendo que os dados recolhidos durante a investigação são confidenciais e que só os investigadores do projeto da Universidade de Aveiro a eles têm acesso. Portanto, dou autorização para que os mesmos tenham acesso a esses dados.
4. Eu compreendo que os resultados do estudo, após anonimização, podem ser publicados em Revistas Científicas e usados noutras investigações (p.e., dissertações de mestrado ou teses de doutoramento), sem que haja qualquer quebra de confidencialidade. Portanto, dou autorização para a utilização dos dados para esses fins.

Aceita **participar**? SIM | NÃO

Aceita que os seus **dados sejam tratados**? SIM | NÃO

Cópia para o participante.

2

Data: ____ / ____ / ____

Nome completo do voluntário:

Assinaturas

Voluntário: _____

Investigador: _____

Cópia para o participante.

Manual de Instruções COMACT

Material necessário: caneta, uma cópia do COMACT impresso.

Nota: Caso seja difícil para o participante utilizar a caneta e preencher autonomamente a *checklist*, o entrevistador ficará responsável por assinalar com um “X” a opção escolhida pelo entrevistado.

1 - O entrevistador deve explicar ao entrevistado que:

- Irão ser feitas questões sobre a frequência com que realiza as atividades comunicativas listadas;
- É necessário assinalar com um “X” a frequência com que realiza a atividade (ou se não realiza de todo), indicando o sítio adequado para tal.

2 - O entrevistador deve ler (em voz alta, para o entrevistado) as várias opções respeitantes à frequência de realização das atividades, antes de indicar que irá iniciar o questionário.

3 - Durante o questionário, o entrevistador:

- Deverá ler as opções referentes às atividades comunicativas, uma de cada vez, permitindo ao entrevistado responder antes de passar para a próxima;
- Deverá repetir o nome da atividade comunicativa em questão (se necessário - caso o participante solicite ou o entrevistador se aperceba que o entrevistado possa não ter compreendido);
- Deverá repetir as opções relativas à frequência com que se realiza a atividade (se necessário para o entrevistado);
- Deverá garantir que a *checklist* esteja visível para o entrevistado (e não virada para o entrevistador).

Appendix VIII – Cognitive Debriefing Questionnaire

Guia – Cognitive Debriefing **Communicative Activities Checklist (COMACT)**

Procedimentos: Explicação do que vai ser feito.

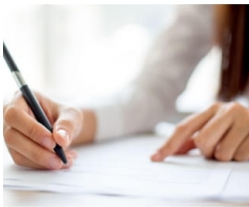
Vamos preencher um questionário sobre atividades comunicativas: falar, escrever, ouvir e ler – e sobre quando costumamos fazer essas atividades: todos os dias, 15/15 dias, todos os meses, nunca... Responda aquilo que achar ser melhor para si. Não existem respostas certas ou erradas. No final do questionário, queremos saber a sua opinião sobre as perguntas e se teve alguma dificuldade a preencher o mesmo.

Guia – Cognitive Debriefing
Communicative Activities Checklist (COMACT)

Vai responder a **perguntas** sobre o **questionário** que **preencheu**.



Queremos saber a **sua opinião**.



Tem que **assinalar** o **número** que acha **melhor para si**.

PERGUNTAS SOBRE O COMACT

1. Instruções sobre o questionário.

1.1. As instruções são fáceis de compreender?			
1 Discordo Totalmente	2 Discordo	3 Concordo	4 Concordo Totalmente
Obs.:			

Guia – Cognitive Debriefing
Communicative Activities Checklist (COMACT)

2. Preenchimento do questionário

2.1. É fácil preencher o questionário?			
1 Discordo Totalmente	2 Discordo	3 Concordo	4 Concordo Totalmente
Obs.: (explorar o porquê; se for difícil explorar também quais as questões difíceis)			

2.2. O questionário tem o comprimento adequado?			
1 Discordo Totalmente	2 Discordo	3 Concordo	4 Concordo Totalmente
Obs.:			

Guia – Cognitive Debriefing
Communicative Activities Checklist (COMACT)

2.3. Como se sentiu depois de preencher o questionário?				
	1 Discordo Totalmente	2 Discordo	3 Concordo	4 Concordo Totalmente
Bem				
Cansado				
Triste				
Irritado				
Outro? Indique.				
Outro? Indique.				
Outro. Qual? _____ (incluir escala de likert no futuro)				
Inverter a primeira questão.				
Obs.: (explorar emoções e causas)				

Guia – Cognitive Debriefing
Communicative Activities Checklist (COMACT)

3. Perguntas do questionário

3.1. As perguntas são fáceis de compreender?			
1 Discordo Totalmente	2 Discordo	3 Concordo	4 Concordo Totalmente
Obs.:			

3.2. As perguntas são pertinentes para si?			
1 Discordo Totalmente	2 Discordo	3 Concordo	4 Concordo Totalmente
Obs.:			

3.3. As perguntas são pertinentes para pessoas com afasia no geral?			
1 Discordo Totalmente	2 Discordo	3 Concordo	4 Concordo Totalmente
Obs.:			

Guia – Cognitive Debriefing
Communicative Activities Checklist (COMACT)

3.4. As perguntas são ambíguas?			
1 Discordo Totalmente	2 Discordo	3 Concordo	4 Concordo Totalmente
Obs.:			

3.5. As perguntas são claras?			
1 Discordo Totalmente	2 Discordo	3 Concordo	4 Concordo Totalmente
Obs.:			

4. Outras opiniões e sugestões

4.1. O que gostou mais no questionário?
Obs.:

Guia – Cognitive Debriefing
Communicative Activities Checklist (COMACT)

4.2. O que gostou menos no questionário?
Obs.:

4.3. Tem alguma sugestão para melhorar o questionário?
Obs.:

Appendix IX – The COMACT (EP version)

COMACT - Checklist de Atividades Comunicativas

Com que **FREQUÊNCIA** é que realiza estas atividades?

Por favor, selecione (✓) apenas **UMA** opção de resposta.

Atividade	Diário	Semanal	De 2/2 semanas	Mensal	Raramente	Nunca	N/a
Falar com a/o esposa/marido							
Falar com a família							
Falar com os amigos							
Falar com os vizinhos							
Falar com os empregados de loja/diferentes profissionais							
Falar com os animais de estimação							
Falar ao telefone							
Falar num grupo pequeno de pessoas							

Atividade	Diário	Semanal	De 2/2 semanas	Mensal	Raramente	Nunca	N/a
Falar num grupo grande de pessoas							
Fazer um discurso para um grupo informal							
Fazer um discurso para um grupo formal							
Falar sobre fotografias							
Contar histórias e anedotas							
Fazer apostas (ex: futebol, raspadinhas, lotaria...)							
Pedir bebidas e/ou comida							
Rezar							
Ouvir rádio							
Ver TV							
Ver/ouvir notícias							

Atividade	Diário	Semanal	De 2/2 semanas	Mensal	Raramente	Nunca	N/a
Ver/ouvir programas de desporto							
Ouvir uma conversa							
Ouvir um grupo de pessoas a falar							
Ouvir um discurso							
Ler cartas e postais							
Ler catálogos							
Ler panfletos/folhetos							
Ler revistas							
Ler jornais							
Ler livros							
Ler listas telefónicas							
Ler formulários e contas/faturas							
Ler extratos bancários							

Atividade	Diário	Semanal	De 2/2 semanas	Mensal	Raramente	Nunca	N/a
Ler boletins informativos							
Fazer palavras cruzadas							
Ler instruções e rótulos/etiquetas							
Ler horários de comboios e autocarros							
Ler mapas e direções							
Escrever cartas e postais							
Escrever histórias e/ou notícias de jornais							
Escrever listas de compras							
Escrever no diário							
Passar cheques							
Preencher formulários							

Atividade	Diário	Semanal	De 2/2 semanas	Mensal	Raramente	Nunca	N/a
Escrever mensagens e/ou e-mails							
Fazer jogos de palavras							

OBRIGADA por preencher este formulário.

Appendix X – The COMACT (original version)

(Aujla et al, 2016)

How OFTEN do you do these activities? Please tick (✓) ONE box only.

Activity	Daily	Weekly	Fort-nightly	Monthly	Rarely	Not at all	N/A
Talk to spouse							
Talk for family							
Talk to friends							
Talk to neighbours							
Talk to shopkeepers/ trades people							
Talk to pets							
Talk on phone							
Talk in a small group of people							
Talk in a large group of people							
Give a speech at an informal group							
Give a speech at a formal group							
Talk about photos							
Tell stories & jokes							
Place bets							
Order drinks							
Say prayers							

Activity	Daily	Week-ly	Fort-nightly	Month-ly	Rarely	Not at all	N/A
Listen to radio							
Listen to TV							
Listen to news							
Listen to sports programs							
Listen to a conversation							
Listen to a group of people talking							
Listen to a speech							
Read letters and cards							
Read mail catalogues							
Read pamphlets							
Read magazines							
Read newspapers							
Read novels/ books							
Read the phone book							
Read forms & bills							
Read bank statements							
Read newsletters							
Do crosswords							

Activity	Daily	Week-ly	Fort-nightly	Month-ly	Rarely	Not at all	N/A
Read instructions and labels							
Read bus and train timetables							
Read map and directions							
Write letters and cards							
Write stories and newspaper articles							
Write shopping lists							
Write diary							
Write cheques							
Fill in forms							
Write messages							
Do word puzzles and games							

THANK YOU for filling in this form