

# Adaptation and validation of the Erlangen activities of daily living test to the Latin American cultural area

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		<input type="checkbox"/> Protocol
<b>Registration date</b> 02/12/2025	<b>Overall study status</b> Ongoing	<input type="checkbox"/> Statistical analysis plan
		<input type="checkbox"/> Results
<b>Last Edited</b> 22/01/2026	<b>Condition category</b> Nervous System Diseases	<input type="checkbox"/> Individual participant data
		<input checked="" type="checkbox"/> Record updated in last year

## Plain English summary of protocol

### Background and study aims

Dementia is one of the most common causes of health impairments in older people. Impairments in activities of daily living (ADL) are particularly critical, as they sustainably restrict the independence of those affected. Therefore, the reliable and valid assessment of ADL is of outstanding importance for the diagnosis of dementia, but also in the investigation of the effectiveness of new treatment methods for dementia. Often, limitations in ADL are assessed with proxy-rated instruments, completed by relatives of the affected person or caregivers, sometimes also by self-assessment in cases of mild cognitive impairment (MCI) or mild dementia. However, both self-assessments and proxy-rated assessments are biased in their assessment of what ADLs a person is still capable of performing. This is partly because a certain living environment (e.g. independent living or day-care settings) no longer allows participants to perform ADLs spontaneously.

It is therefore very important to be able to measure ADL capabilities with a performance test. Researchers have therefore developed and published the Erlangen Test of Activities of Daily Living (E-ADL), which has proven its validity and reliability, particularly in people with moderate to severe dementia. In the present study, the validity and reliability of a Spanish version adapted to the Mexican context (E-ADL-LAT) are to be evaluated. On the one hand, the performance test items of the E-ADL were culturally adapted to the Mexican culture. On the other hand, two very easy tasks were replaced by culturally adapted tasks from the ETAM to create a test instrument that can be used for people with severe dementia as well as for people with mild to moderate dementia. Thus, it should be possible to assess their degree of independence in everyday life (i.e. their level of impairment in ADL) validly and reliably.

### Who can participate?

People with mild, moderate, and severe dementia or mild cognitive impairment, living independently or attending day-care services, who speak fluent Spanish and do not have severe motor impairments or current psychosis, are eligible to participate. Participants must have a close caregiver who can also provide informed consent.

### What does the study involve?

The study will investigate the validity and reliability of the culturally adapted Spanish version of the Erlangen Test of Activities of Daily Living (E-ADL-LAT) in people with mild cognitive impairment as well as in people with mild to severe dementia in Mexico. Participants will complete the performance test (E-ADL-LAT) either in person or remotely, and caregivers will provide information for the Barthel Index and selected NOSGER subscales. Cognitive abilities will be assessed using the MoCA.

### What are the possible benefits and risks of participating?

All participants may benefit from the structured assessment of their remaining ADL capabilities, which may not be recognized in daily life. Identifying these abilities can support more needs-oriented care and appropriate assistance in daily activities. Based on previous validation studies of the E-ADL and ETAM, no risks are expected during participation.

### Where is the study run from?

1. Centro Mexicano Alzheimer, CDMX, Mexico
2. University Clinic Erlangen, Erlangen, Germany

### When is the study starting and how long is it expected to run for?

October 2025 to December 2026

### Who is funding the study?

There is no external funding. The study is realized with infrastructure and human resources from the Centro Mexicano Alzheimer, the University Clinic Erlangen, and the Universidad Nacional Autónoma de México

### Who is the main contact?

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3. Maestra María Teresa Gutiérrez Alanís, teregut2003@yahoo.com.mx

## Contact information

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## Additional identifiers

**Clinical Trials Information System (CTIS)**

Nil known

**Protocol serial number**

Nil known

## Study information

**Scientific Title**

Objectively and culturally specific assessment of everyday practical skills in people with dementia - adaptation and validation of the Erlangen ADL test (E-ADL) to the Latin American cultural area (E-ADL\_LAT)

**Study objectives**

Primary Objectives:

1. Cultural adaptation of the Erlangen ADL Test (E-ADL) for the Latin American context (E-ADL\_LAT):

To develop a culturally appropriate version of the E-ADL for use with people with dementia in Mexico and Spanish-speaking Latin America, enabling objective assessment of daily living skills through a performance-based test. Expected outcome: Obtain a valid, reliable, and culturally adapted Latin American version of the E-ADL test.

### Secondary Objectives (Validation Hypotheses):

1. Assessment of test administration objectivity: The E-ADL\_LAT will demonstrate high administration objectivity due to a precise test manual.
2. Assessment of scoring objectivity: The E-ADL\_LAT will demonstrate high scoring objectivity due to a detailed scoring guide including anchor examples.
3. Test-retest reliability: The E-ADL\_LAT will show satisfactory test-retest reliability.
4. Interrater reliability: The E-ADL\_LAT will show satisfactory interrater reliability.
5. Internal consistency: The E-ADL\_LAT will demonstrate satisfactory internal consistency, measured via Cronbach's Alpha.
6. Convergent validity: The E-ADL\_LAT will show substantial correlations with related constructs, including cognitive performance and instrumental activities of daily living (IADL).
7. Concurrent validity: The E-ADL\_LAT will show substantial correlations with an established external measure of daily living skills (Barthel Index), indicating it measures the same construct.
8. Discriminant validity: The E-ADL\_LAT will demonstrate low correlations with unrelated constructs (agitation/aggression, depression, social behavior), supporting its discriminant validity.

### Ethics approval required

Ethics approval required

### Ethics approval(s)

approved 03/12/2025, Ethical Commission of the Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU) (Krankenhausstr. 12, Erlangen, 91054, Germany; +49 (0)9131 85-22270; +49 (0) 9131 85-26210; ethikkommission@fau.de), ref: 25-478-ANF

### Study design

Observational validation study

### Primary study design

Observational

### Study type(s)

Other

### Health condition(s) or problem(s) studied

Dementia and Mild Cognitive Impairment

### Interventions

The E-ADL-LAT is a standardized performance test consisting of six tasks:

Task 1: Making a Bean Taco

(i.e. spreading one spoonful of beans onto a tortilla and rolling the tortilla as if preparing it to be eaten as a taco)

Task 2: Pouring a Beverage

(i.e. opening the bottle and filling the glass up to the marked line)

Task 3: Putting on a T-shirt

(i.e. taking the t-shirt, turning it to the correct side, and putting it on as if getting dressed to go out)

Task 4: Hand Washing

(i.e. washing hands with soap and then drying them afterwards)

Task 5: Making a Phone Call

(i.e. looking up Dr. Orozco's number in a phone list, dialing the number, and listening to the voicemail to find out the office hours on Tuesdays)

#### **Task 6: Handling Finances**

(i.e. choosing the cheapest price for eggs from three flyers, calculating the total amount required for all the products, and taking the necessary amount from a wallet)

Each task is rated by the tester according to a standardized scale from 0 to 6 points. The total score of the E-ADL-LAT ranges from 0 to 36 points, with a higher score indicating a better capability in performing ADL.

### **Intervention Type**

Behavioural

### **Primary outcome(s)**

Activities of Daily Living measured with the culturally adapted Latin American version of the Erlangen Test of Activities in Daily Living (E-ADL-LAT) at baseline.

### **Key secondary outcome(s)**

Measured at baseline:

1. Cognition measured by the Montreal Cognitive Assessment (MoCA).
2. Behavioral and psychological symptoms (agitation and aggression) measured by the subscale "Disturbing behavior" of the NOSGER-scale
3. Depression measured by the subscale "Mood" of the NOSGER scale.
4. Social behavior measured by the subscale "Social Behavior" of the NOSGER scale.
5. Instrumental Activities of Daily Living (IADL) measured by the NOSGER scale, subscale "IADL".
6. Activities of Daily Living (ADL) measured by the Barthel-Index.
7. Sociodemographic data: age, gender, education, socio-economic status, former employment, living situation, urban vs. rural place of living, offspring, family status

### **Completion date**

31/12/2026

## **Eligibility**

### **Key inclusion criteria**

1. Community-dwelling people living with cognitive impairments
2. Symptoms of dementia (any type except Parkinson's disease dementia) or mild cognitive impairment (MoCA score < 26)
3. Sufficient vision and hearing (use of supporting devices included)
4. No paralysis of upper extremities
5. Fluent oral Spanish sufficient to understand and follow test instructions
6. Availability of a close caregiving relative who provides consent, agrees to participate in the study-related survey and answers the peer-rating scales, supports the participant's involvement.
7. Provision of informed consent by the participant; if lacking capacity, consent must be obtained from the legally authorized representative

### **Participant type(s)**

Patient

### **Healthy volunteers allowed**

No

**Age group**

Mixed

**Lower age limit**

55 years

**Upper age limit**

100 years

**Sex**

All

**Total final enrolment**

0

**Key exclusion criteria**

1. Parkinson's disease dementia
2. Severe motor impairments of the upper extremities (paralysis or comparable)
3. Insufficient vision or hearing that cannot be adequately corrected with aids (e.g. glasses, hearing devices)
4. Psychotic disorder
5. Severe depressive episode

**Date of first enrolment**

01/12/2025

**Date of final enrolment**

31/12/2026

**Locations****Countries of recruitment**

Germany

Mexico

**Study participating centre****Study Recruitment Center: Centro Mexicano Alzheimer**

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**Study participating centre****Study Coordination Center: University Clinic Erlangen, Psychiatric and Psychotherapeutic Clinic**

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## Sponsor information

### Organisation

Universitätsklinikum Erlangen

### ROR

<https://ror.org/0030f2a11>

### Organisation

Centro Mexicano Alzheimer

### Organisation

Universidad Nacional Autónoma de México

### ROR

<https://ror.org/01tmp8f25>

## Funder(s)

### Funder type

Hospital/treatment centre

### Funder Name

Universitätsklinikum Erlangen

### Alternative Name(s)

Erlangen University Hospital

### Funding Body Type

Government organisation

### Funding Body Subtype

Other non-profit organizations

### Location

Germany

**Funder Name**

Centro Mexicano Alzheimer

**Funder Name**

Universidad Nacional Autónoma de México

**Alternative Name(s)**

National Autonomous University of Mexico, UNAM

**Funding Body Type**

Government organisation

**Funding Body Subtype**

Local government

**Location**

Mexico

## Results and Publications

**Individual participant data (IPD) sharing plan****IPD sharing plan summary**

Not expected to be made available