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Design of a Performance Evaluation Instrument for the Instrumentals Activities of Daily Living: Hernández Neumann

TO. MG Vivian Neumann Collyer
TO. MG Karla Hernández Pérez
Escuela de Terapia Ocupacional
Universidad Santo Tomás
CHILE



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Why we made this research?

- The Lawton and Brody index is one of the most widely used IADL measurement instruments in Chile and Latin America.
- It has limitations, its old , does not consider the AOTA framework, its only for elder people,
Nevertheless.....the instrument has statistical validity.

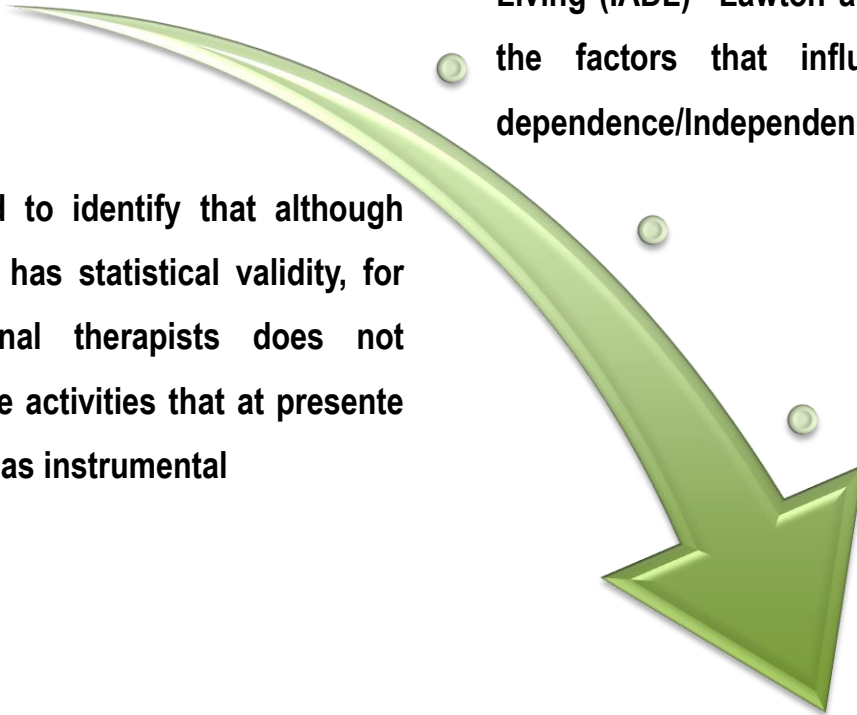


1969 Lawton & Brody

Results, allowed to identify that although the instrument has statistical validity, for the occupational therapists does not contemplate the activities that at present are considered as instrumental

2014, “Analysis of instrumental performance evaluation of Instrumental Activities of Daily Living (IADL) “Lawton and Brody” to determine the factors that influence the results of dependence/Independence of people”

2015, Research Objectives: The design and validation of a performance evaluation tool in the IADL, which is adjusted to the needs and current characteristics of the people, considering the evolution in terminology according to AOTA

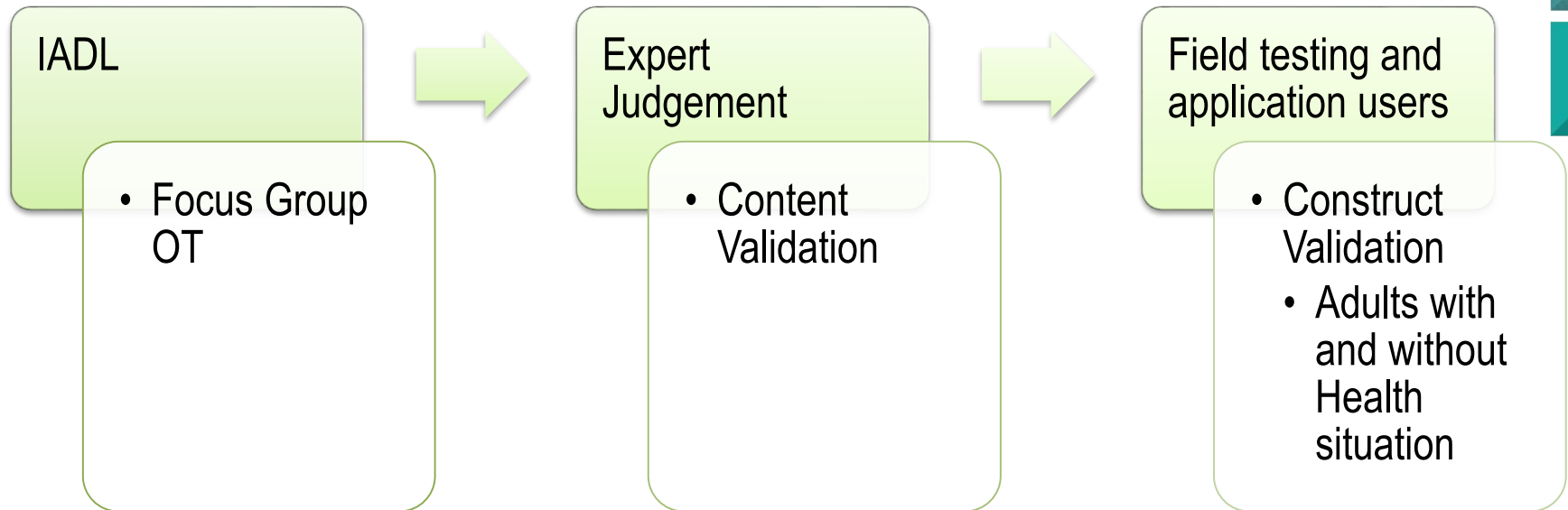


Methodology

The present study was included in a multivariate quantitative research-evaluative study.



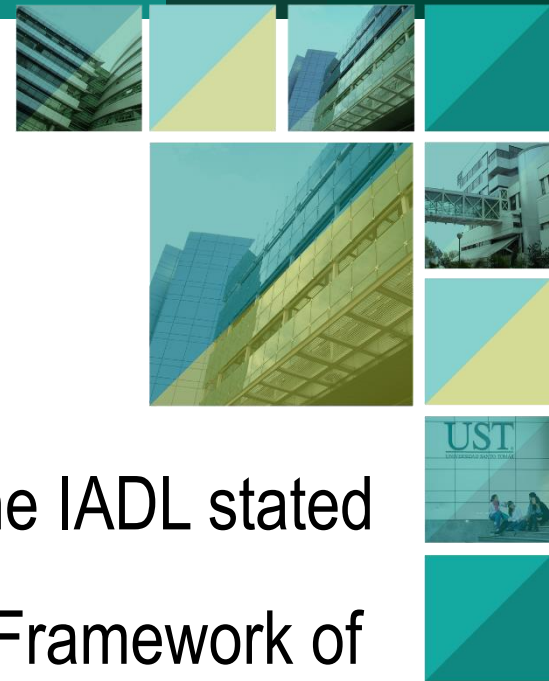
Methodology



Desing of the Instrument



An instrument was designed that evaluates the IADL stated in the Occupational Therapy (O.T.) Practice Framework of the American Association of O.T., considering previous performance of the people, reasons for why they are not performed and the level of importance assigned to each activity.



Instrument Design

Care of others

- It includes monitoring and providing care to others. Raising and supervising children, to promote their natural development.

Communication management

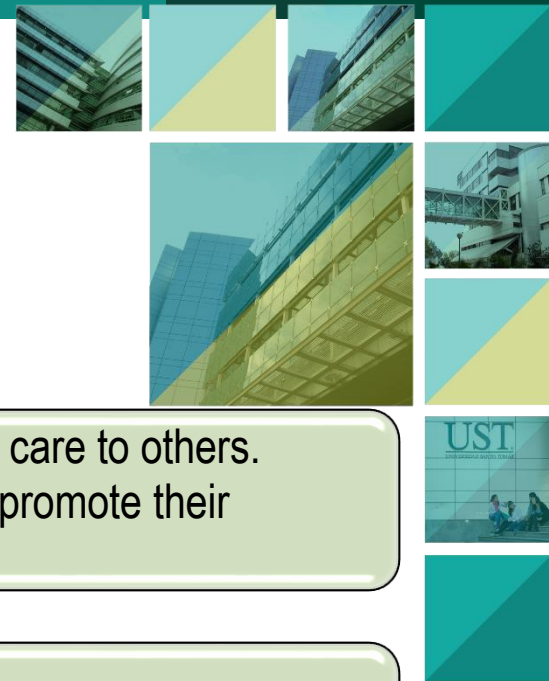
- Use of technology to communicate like smartphones, computers, special communication systems.

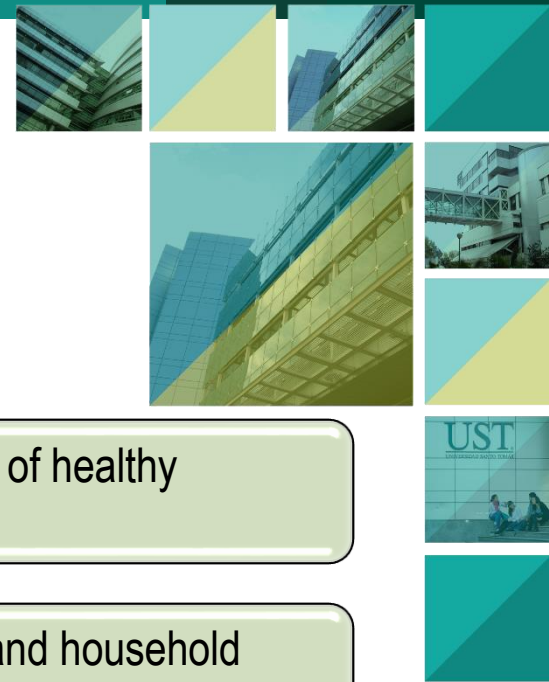
Driving and community mobility

- Know how to use buses, trains, taxis, etc., driving.

Financial management

Using fiscal resources, including alternate methods, planning and using finances





Health management and maintenance

- Development, care and maintenance of healthy habits.

Home establishment and management

- Obtaining and maintaining personal and household possessions and environment.

Meal preparation and cleanup

- Planning, preparing and serving well balanced, nutritious meals and cleaning up.

Safety and emergency maintenance

- Knowledge and development of strategies to maintain a safe environment. Know how to act and have the necessary means in emergency situations.

Shopping

- Plan purchases as well as execute them

Level of Performance

2. Independent: Performs the activity without assistance of a third party even if it uses thecnical aids, orthoses or others.

1. Dependent with supervission/minimal help: Performs the activity but requires a third party to monitor, indicate or stimulate to carry out the activity. Provides minimal physical support.

-1 Dependent but collaborates/constant moderate help: Collaborates and/or participates in the activity executing certain operations of this, realices less than 75%.

-2 Dependent: Does not perform the activity, this is executed by a third party.

0 o N/A not aplicable: Can not be evaluated by the context and/or roles it is currently fulfilling, g deprived of liberty, hospitalized.

Reasons why it does not do it/dependence

1 Skills
2 Gender
3 Socieconomic level
4 Previous performance/because you are not interested

Importance Level:
4 Very Important
3 Important
2 Little important
1 Not important

Activity	Level of performance:					Reasons why it does not do it/dependence				Importance			
	-2	-1	1	2	N/A	1	2	3	4	1	2	3	4
1. Care of others													
2. Communication management													
3. Driving and community mobility													
4. Financial management													
5. Health management and maintenance													
6. Home establishment and management													
7. Mail preparation and cleanup													
8. Safety and emergency maintenance													
9. Shopping													

Score

Total score	Category
-18 - -10	Dependent
-9 - -1	Dependent but collaborates
1 - 9	Dependent with supervision
10 - 18	Independent

Design of a procedure manual for the application of the instrument.

- The manual incorporates guiding questions for each item and for each variable.

- For ex:

Care of others: (including care of pets and child rearing)

Guiding questions: Who cares?, What activities do you do in care? Can you provide all the necessary care?

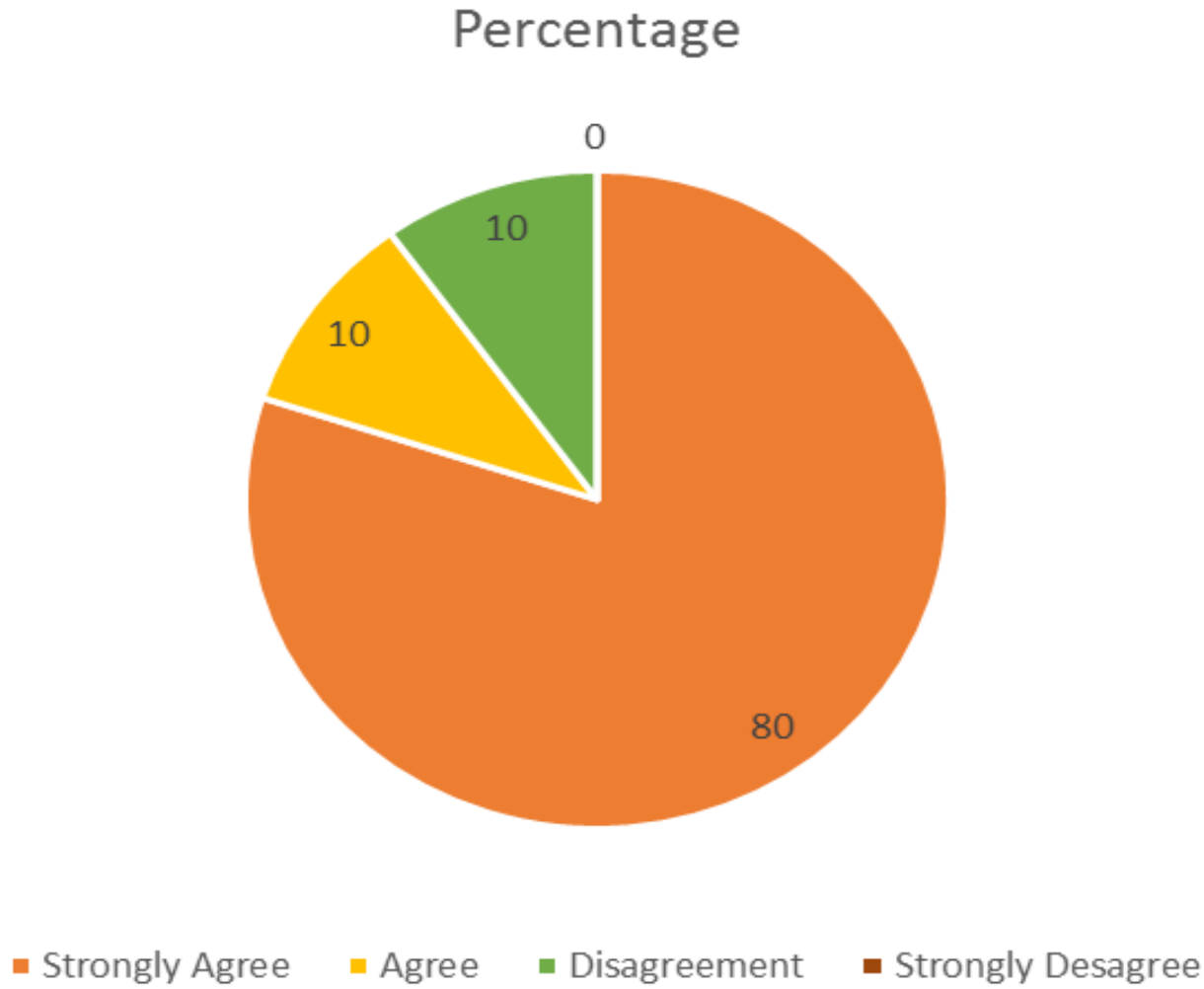


RESULTS





In Content Validation, the results obtained indicate that 80% of the experts agree strongly with the characteristics of the instrument.



Validation of the construct

Three dimensions
are evaluated:

a) Evaluation of
the level of
independence.

b) The reasons
why the activity
does not develop.

c) The level
Importance of the
performance of
said activity.



Through a reliability analysis, a high level of this was obtained in all three dimensions of the instrument

	Cronbach's alpha if the element has been deleted. Level independence	Cronbach's alpha if the element has been deleted. Reasons why it does not do it	Cronbach's alpha if the element has been deleted. Importance level.
Question 1	0,902	0,781	0,817
Question 2	0,918	0,776	0,791
Question 3	0,901	0,785	0,793
Question 4	0,900	0,762	0,783
Question 5	0,902	0,770	0,805
Question 6	0,898	0,724	0,793
Question 7	0,893	0,721	0,801
Question 8	0,896	0,765	0,791
Question 9	0,892	0,785	0,800

Alpha values greater than 0.7



		Total score reasons why it does not do	Score Independence Level	Total Importance
Total score reasons why it does not do it	Correlation by Pearson Sig. (Bilateral) N	1 89	-,668** 89	-,492** 89
Score Independence Level	Correlation by Pearson Sig. (Bilateral) N	-,668** 89	1 89	,523** 89
Total Importance	Correlation by Pearson Sig. (Bilateral) N	-,492** 89	,523** 89	1 89

There is a significant correlation between the dimensions.

Meaning:

- As the levels of independence increase, the importance of performance increases.
- The greater independence, lower vouchers in the indicators associated with the reasons why it does not do.
- When the level of importance increases, the values of why it does not decrease.



Multiple Linear Regression Model

Model	R	R squared	R squared adjusted	Standard error of estimation	Change statistics				
					Change of square of R	Change of F	df1	df2	Sig. Cambio en F
1	,822 ^a	,676	,673	4,044	,676	181,759	1	87	,000
2	,919 ^b	,844	,841	2,820	,168	92,913	1	86	,000
3	1,000 ^c	1,000	1,000	,000	,156	.	1	85	.

- a. Predictors: (Constant), Score Independence Level
- b. Predictors: (Constant), Score Level Independence, Total score reasons why it does not do it
- c. Predictors: (Constant), Scoring Level Independence, Total score reasons why it does not do it , Total Importance
- d. Dependent variable: Total General

Can conclude that the greatest explanatory weight is due to the level of independence.

CONCLUSIONS



Conclusions

The Performance Evaluation instrument in IADLs Hernández-Neumann values functionality as an indicator of health and dependence.



The activities considered ensure updating of the terms used.



The instrument obtained a positive result in the factor analysis, which denotes the validity of the instrument.



Implications for Occupational Therapy



Gracias

Dankie

Thanks

Mercy

Danke

ありがとう

谢谢





UST
UNIVERSIDAD SANTO TOMÁS

- vivianneumann@santotomas.cl
- kahernandez@santotomas.cl

