

### Participant Samples in Research Studies of Psychometric Properties of ACL Screen

**Background:** Table 1 summarizes the diagnoses, age groups, and settings for participant samples in research studies (1978-2021) of the psychometric properties of the ACL Screen. Thus, this summary also highlights the populations who are assumed to benefit from the evaluation and intervention approach offered by the cognitive disabilities model (CDM). For more information about the selection criteria and the design/findings for these studies, as well as more information about the participant samples, refer to the *Manual for Version 5 of the ACL Screen, Second Edition* (2<sup>nd</sup> ed.; 2022, pp. 17, 67-83) by Earhart, McCraith, and Riska-Williams. The references for the studies in Table 1, as well as references for more information about the CDM and the assessments associated with it, are listed on pages 2-4 below.

**Table 1:** Participant Samples in Research Studies of Psychometric Properties of ACL Screen

Diagnoses	Age Groups	Settings	Psychometric Studies & Publication Date
Acute & persistent psychiatric diagnoses	Adults (18-60 yrs.)	In-patient MH care	Cairns, Hill, et al., 2013; David & Riley, 1990; Katz, 1985; Katz & Perelman, 1993; Mayer, 1988; Moore, 1978 (in Allen, 1985); Penny, Mueser & North, 1995; Scanlan & Still, 2013; Schubmehl, 2018; Secrest, et al., 2000; Stewart, et al., 2019; Velligan, Bow-Thomas, et al., 1998
		✓ Out-patient MH care	Henry, et al., 1998; Ho & Sturges, 1990; Katz & Perelman, 1993; Su, Tsai, et al., 2011
		✓ Long term in-patient care	Keller & Hayes, 1998; Newman, 1987 (in Allen & Blue, 1998); Velligan, True, et al., 1995
		✓ Community-dwelling; alone or with support	Leung & Man, 2007; McAnanama, et al., 1999
Substance abuse diagnoses	✓	Out-patient program	Rojo-Mota, et al., 2017
Homeless & other medical diagnoses	✓	Living in community	Chang, Coster, & Helfrich, 2013
Healthy adult employees	✓	Skilled nursing facility	Chan, et al., 2001
Neurologic & cognitive diagnoses	✓	Rehabilitation facility	Park & Lee, 2020
		Living at home with support	Marom, Jarus, & Josman, 2006
Physical/medical & cognitive diagnoses	Older adults/ elderly (60-91 yrs.)	Rehabilitation facility	Okamura, et al., 2020
Dementia/ Alzheimer's Disease	✓	Community-dwelling	Heying, 1983, 1985; Taylor, Wesson, Sherrington, et al., 2020; Wesson, Clemson, Crawford, et al., 2017
		Long term in-patient geriatric care	Kehrberg, et al., 1992
Depression	✓	Community-dwelling	Ziv, Roitman, & Katz, 1999
Healthy elderly	✓	Community-dwelling	Roitman & Katz, 1996
Mixed diagnoses (depression, DD, TBI)	Young adults (20-30 yrs.)	Community-dwelling	McCraith, Riska-Williams, & Earhart, 2021 (pre-publication)
Mental & behavioral health diagnoses	Children & adolescents	Private school	Lee, et al., 2003 (12-17 years)
		✓ Residential care	Shapiro, 1992 (8-15 years)
		✓ In-patient mental MH	Josman & Katz, 1991 (12-18 years)

*Note.* MH = Mental Health; Developed by D. B McCraith for *Manual for Version 5 of the Allen Cognitive Level Screen - 2<sup>nd</sup> edition*, p.117, by Earhart, C.A., McCraith, D.B, & Riska-Williams, L. (2022). ACLS and LACLs Committee/Allen Cognitive Group. Modified for this document by D. B McCraith, 2023. Copyright 2022, 2023 by the Allen Cognitive Group. Used with permission.

## References

(Note: These references are for studies in Table 1: *Participant Samples in Research Studies of Psychometric Properties of ACL Screen*. References for more information about the cognitive disabilities model and associated assessments are on p. 4.)

- Cairns, A., Hill, C., Dark, F., McPhail, S., & Gray, M. (2013). The Large Allen Cognitive Level Screen as an indicator for medication adherence among adults accessing community mental health services. *British Journal of Occupational Therapy*, 76(3), 137-143. <https://doi.org/10.4276/030802213X13627524435180>
- Chan, C., Ray, S., & Trudeau, S. (2001). The development and reliability of the Cantonese version of the Allen Cognitive Level Screen. *Occupation Therapy International*, 8(4), 287-300. <https://doi.org/10.1002/oti.152>
- Chang, F. H., Helfrich, C. A., & Coster, W. J. (2013). Psychometric properties of the Practical Skills Test (PST). *American Journal of Occupational Therapy*, 67(2), 246-253. <http://dx.doi.org/10.5014/ajot.2013.006627>
- David, S. K., & Riley, W. T. (1990). The relationship of the Allen Cognitive Level Test to cognitive abilities and psychopathology. *American Journal of Occupational Therapy*, 44(6), 493-497. <https://doi.org/10.5014/ajot.44.6.493>
- Henry, A. D., Moore, K., Quinlivan, M., & Triggs, M. (1998). The relationship of the Allen Cognitive Level Test to demographics, diagnosis, and disposition among psychiatric inpatients. *American Journal of Occupational Therapy*, 52, 638-643. <https://doi.org/10.5014/ajot.52.8.638>
- Heying, L. M. (1983). Cognitive disability and activities of daily living in persons with senile dementia. [Unpublished Master's Thesis]. University of Southern California. (See Heying, 1985, pp. 339-365.)
- Heying, L. M. (1985). Research with subjects having senile dementia. In C. K. Allen, *Occupational therapy for psychiatric diseases: Measurement and management of cognitive disabilities* (pp. 339-365). Little, Brown, and Company.
- Ho, S. F., & Sturgess, J. (1990). Cognition and functional performance of adults in short-stay psychiatry units. *Australian Occupational Therapy Journal*, 37(4), 191-197. <https://doi.org/10.1111/j.1440-1630.1990.tb01267.x>
- Josman, N., & Bar-Tal, Y. (1997). The introduction of a temporal variable to the Allen Cognitive Level (ACL) Test in adult psychosocial patients. *Occupational Therapy in Mental Health*, 13(2), 25-34. [https://doi.org/10.1300/J004v13n02\\_02](https://doi.org/10.1300/J004v13n02_02)
- Katz, N. (1985). Research on major depression. In C. K. Allen, *Occupational therapy for psychiatric diseases: Measurement and management of cognitive disabilities* (pp. 299-313). Little, Brown, and Company.
- Katz, N., & Perelman, N. (1993). Cognitive levels and work recommendations: A study of chronic psychiatric patients in the community. *Work: A Journal of Prevention, Assessment and Rehabilitation*, 3(1), 64-68. <https://doi.org/10.3233/WOR-1993-3111>
- Kehrberg, K. L., Kuskowski, M. A., Mortimer, J. A., & Shoberg, T. D. (1992). Validating the use of an enlarged, easier-to-see Allen Cognitive Level Test in geriatrics. *Physical and Occupational Therapy in Geriatrics*, 10(3), 1-14. [https://doi.org/10.1080/J148v10n03\\_01](https://doi.org/10.1080/J148v10n03_01)
- Keller, S., & Hayes, R. (1998). The relationship between the Allen Cognitive Level Test and the Life Skills Profile. *American Journal of Occupational Therapy*, 52(10), 851-856. <https://doi.org/10.5014/ajot.52.10.851>
- Lee, S. N., Gargiullo, A., Brayman, S., Kinsey, J. C., Jones, H. C., & Shotwell, M. (2003). Adolescent performance on the Allen Cognitive Levels Screen. *American Journal of Occupational Therapy*, 57(3), 342-346. <https://doi.org/10.5014/ajot.57.3.342>
- Leung, S. B., & Man, D. W. K. (2007). Validity of the Chinese version of the Allen Cognitive Level Screen assessment for individuals with schizophrenia. *Occupational Therapy Journal of Research: Occupation, Participation and Health*, 27(1), 31-40. <https://doi.org/10.1177/153944920702700105>
- Marom, B., Jarus, T., & Josman, N. (2006). The relationship between the Assessment of Motor and Process Skills (AMPS) and the Large Allen Cognitive Level (LACL) test in clients with stroke. *Physical & Occupational Therapy in Geriatrics*, 24(4), 33-50. [https://doi.org/10.1080/J148v24n04\\_03](https://doi.org/10.1080/J148v24n04_03)
- Mayer, M. A. (1988). Analysis of information processing and cognitive disability theory. *American Journal of Occupational Therapy*, 42(3), 176-183. <https://doi.org/10.5014/ajot.42.3.176>
- McAnanama, E. P., Rogosin-Rose, M. L., Scott, E. A., Joffe, R. T., & Kelner, M. (1999). Discharge planning in mental health: The relevance of cognition to community living. *American Journal of Occupational Therapy*, 53(2), 129-135. <https://doi.org/10.5014/ajot.53.2.129>

**References, continued**

- McCraith, D. B, Riska-Williams, L., & Earhart, C. A. (2021). *Inter-rater Reliability and Form-Equivalence Reliability for the Three Forms of Version 5 of the ACL Screen*. [Pre-publication]. Copyright by ACLS and LACLS Committee. Request a copy of study's design and findings at [www.allencognitive.com/contact](http://www.allencognitive.com/contact).
- Moore, D.S. (1978). *An occupational therapy evaluation of sensorimotor cognition: Initial reliability, validity, and descriptive data for hospitalized schizophrenic adults*. [Unpublished Master's Thesis]. University of Southern California (See Allen, 1985, pp. 279-396).
- Newman, M. (1987). *Cognitive disability and functional performance in individuals with chronic schizophrenic disorders*. [Unpublished Master's Thesis]. University of Southern California. (See Allen & Blue, 1998, pp. 230-231).
- Okamura, T., Miyamoto, A., Narita, Y., Sakata, S., Matsuo, S., & Sato, D. (2020). Is the Allen Cognitive Level Screen-5 (ACLS-5) suitable for clinical use in Japan – Correlations between ACLS-5 and other measurement systems. *Bull CPUHS*, 11(1), 3-10. (For a copy, email Dr. Taro Okamura at [taro.okamura@cpuhs.ac.jp](mailto:taro.okamura@cpuhs.ac.jp)).
- Park, M-O, & Lee, S-H (2020). Relationship between basic neurological cognition and social cognition among Allen cognitive disability levels of acquired brain injury. *Healthcare*, 8(4), 412.  
<https://doi.org/10.3390/healthcare8040412>
- Penny, N., Mueser, K., & North, C. (1995). The Allen Cognitive Level Test and social competence in adult psychiatric patients. *American Journal of Occupational Therapy*, 49(5), 420-427.  
<https://doi.org/10.5014/ajot.49.5.420>
- Roitman, D. M., & Katz, N. (1996). Predictive validity of the Large Allen Cognitive Levels Test (LACL) using the Allen Diagnostic Module (ADM) in an aged, non-disabled population. *Physical and Occupational Therapy in Geriatrics*, 14(4), 43-59. [https://doi.org/10.1080/J148v14n04\\_03](https://doi.org/10.1080/J148v14n04_03)
- Rojo-Mota, G., Pedrero-Perez, E. J., Huertas-Hoyas, E., Merritt, B., & MacKenzie, D. (2017). Allen Cognitive Level Screen for the classification of subjects treated for addiction. *Scandinavian Journal of Occupational Therapy*, 24(4), 290-298. <https://doi.org/10.3109/11038128.2016.1161071>
- Scanlan, J. N. & Still, M. (2013). Functional profile of mental health consumers assessed by occupational therapists: Level of independence and associations with functional cognition. *Psychiatry Research*, 208, 29-32.  
<https://doi.org/10.1016/j.psychres.2013.02.032>
- Schubmehl, S., Barkin, S. H., & Cort, D. (2018). The role of executive functions and psychiatric symptom severity in the Allen cognitive levels. *Psychiatry Research*, 259, 169-175.  
<https://doi.org/10.1016/j.psychres.2017.10.023>
- Secret, L., Wood, A. E., & Tapp, A. (2000). A comparison of the Allen Cognitive Level Test and the Wisconsin Card Sorting Test in adults with schizophrenia. *American Journal of Occupational Therapy*, 54(2), 129-133.  
<https://doi.org/10.5014/ajot.46.6.514>
- Shapiro, M.E. (1992). Application of the Allen Cognitive Level Test in assessing cognitive level functioning of emotionally disturbed boys. *American Journal of Occupational Therapy*, 46(6): 514-20.  
<https://doi.org/10.5014/ajot.46.6.514>
- Stewart, K., Hancock, N., & Stancliffe, R. J. (2019). Factors related to hospital utilisation for people living with schizophrenia: Examining Allen's Cognitive Level Scores, recommended supports, and routinely collected variables. *Australian Occupational Therapy Journal*, 66(5), 591-602.  
<https://doi.org/10.1111/1440-1630.12597>
- Su, C. Y., Tsai, P. C., Su, W. L., Tang, T. C., & Tsai, A. Y. J. (2011). Cognitive profile difference between Allen cognitive levels 4 and 5 in schizophrenia. *American Journal of Occupational Therapy*, 65, 453-61.  
<https://doi.org/10.5014/ajot.2011.000711>
- Taylor M. E., Wesson, J., Sherrington, C., Hill, K. D., Kurrle, S., Lord, S. R., Brodaty, H., Howard, K., O'Rourke, S. D., Clemson, L., Payne, N., Toson, B., Webster, L., Savage, R., Zelma, G., Koch, C., John, B., Lockwood, K., & Close, J. C. T. (2020). Tailored exercise and home hazard reduction program for fall prevention in older people with cognitive impairment: The i-FOCIS randomized controlled trial. *Journals of Gerontology: Series A, Biological Sciences and Medical Sciences*, pp. 1-11. Advance Access (online) Publication.  
<http://doi.org/10.1093/gerona/glaa241>

**References, continued**

- Velligan, D. I., Bow-Thomas, C. C., Mahurin, R., Miller, A., Dassori, A., & Erdely, F. (1998). Concurrent and predictive validity of the Allen Cognitive Levels Assessment. *Psychiatry Research*, *80*(3), 287-298. [https://doi.org/10.1016/S0165-1781\(98\)00078-X](https://doi.org/10.1016/S0165-1781(98)00078-X)
- Velligan, D. I., True, J. E., Lefton, R. S., Moore, T. C., & Flores, C. V. (1995). Validity of the Allen Cognitive Levels Assessment: A tri-ethnic comparison. *Psychiatry Research*, *56*(2), 101-109. <https://doi.org/10.1097/00013614-200401000-00008>
- Wesson, J., Clemson, L., Crawford, J. D., Kochan, N. A., Brodaty, H., & Reppermund, S. (2017). Measurement of functional cognition and complex everyday activities in older adults with mild cognitive impairment and mild dementia: Validity of the Large Allen's Cognitive Level Screen. *The American Journal of Geriatric Psychiatry*, *25*(5), 471-482. <http://doi.org/10.1016/j.jagp.2016.11.021>
- Ziv, N., Roitman, D. M., & Katz, N. (1999). Problem solving, sense of coherence and instrumental ADL of elderly people with depression and normal control group. *Occupational Therapy International*, *6*(4), 243-256. <https://doi.org/10.1002/oti.100>

**For more information about the cognitive disabilities model and associated assessments, refer to:**

- Allen, C. K., Earhart, C. A., & Blue, T. (1992). *Occupational therapy treatment goals for the physically and cognitively disabled*. AOTA Press.
- Earhart, C. A., & McCraith (2020). Cognitive Disabilities Model: Allen Cognitive Level Screen-5 and Allen Diagnostic Module (2<sup>nd</sup> edition) Assessments. In B.J. Hemphill and C.K. Urish, *Assessments in Occupational Therapy Mental Health: An Integrative Approach*. Slack, Incorporated.
- Earhart, C. A., McCraith, D. B., & Riska-Williams, L. (2022). *Manual for Version 5 of the Allen Cognitive Level Screen* (2<sup>nd</sup> ed.). ACLS and LACLS Committee/Allen Cognitive Group.
- McCraith, D. B., & Earhart, C.A. (2018). *Cognitive Disabilities Model: Creating fit between functional cognitive abilities and cognitive activity demands*. In N. Katz and J. Togli (Eds.), *Cognition, occupation, and participation across the lifespan: Neuroscience, neurorehabilitation, and models of intervention in occupational therapy* (4<sup>th</sup> ed., pp. 469-497). AOTA Press.

**NOTE:** For more information about Research related to the cognitive disabilities model and associated assessments, go to the Research tab and to PDF Downloads under the Resources tab on the Allen Cognitive Group's website:

[www.allencognitive.com](http://www.allencognitive.com).