

ABCD Human Subject Study

Adolescent Brain Cognitive Development – ABCDSTUDY.org

Release Notes: Adolescent Brain Cognitive Development Study (ABCD) Fix Release 2.0.1

Culture and Environment

<http://dx.doi.org/10.15154/1503209>

March 2019

Change Log

March 2019 – ABCD Data Release 2.0

- Initial release

July 2019 – ABCD Fix Release 2.0.1

- Added notice of Fix Release 2.0.1 and updated text

Data from this module will provide information across nine domains that span the home, school, and neighborhood environment, individual resilience factors, and cultural factors.

List of Instruments

*(Updated in Fix Release 2.0.1)

Name of Instrument	Short Name
Youth Prosocial Behavior Survey	abcd_psb01
ABCD Youth Acculturation Survey Modified from PhenX*	yacc01
ABCD Parental Monitoring Survey	pmq01
ABCD Children's Report of Parental Behavioral Inventory	crpbi01
ABCD Youth Family Environment Scale-Family Conflict Subscale Modified from PhenX	abcd_fes02
ABCD Youth Neighborhood Safety/Crime Survey Modified from PhenX	abcd_nsc01
ABCD School Risk and Protective Factors Survey	srpf01
Parent Prosocial Behavior Survey	psb01

ABCD Parent Acculturation Survey Modified from PhenX*	pacc01
ABCD Parent Family Environment Scale-Family Conflict Subscale Modified from PhenX	fes01
ABCD Parent Neighborhood Safety/Crime Survey Modified from PhenX	abcd_pnsc01
ABCD Parent Vancouver Index of Acculturation-Short Survey*	abcd_via01
ABCD Parent Multi-Group Ethnic Identity-Revised Survey	abcd_meim01
ABCD Parent Mexican American Cultural Values Scale Modified	macv01
Perceived Discrimination Scale	abcd_ydmes01
Wills Problem Solving Scale	abcd_ywpss01
ABCD Sum Scores Culture & Environment Youth	abcd_sscey01
ABCD Sum Scores Culture & Environment Parent	abcd_sscep01

General Information

The following information refers to the Adolescent Brain Cognitive Development (ABCD) Study Data Release 2.0 available from <https://data-archive.nimh.nih.gov/abcd>. An overview of the ABCD Study is at <https://abcdstudy.org> and detailed descriptions of elements of the study are listed in <https://abcdstudy.org/scientists/protocols>.

This document describes the contents of various instruments available for download. To understand the context of this information, see *Release Notes ABCD README FIRST* and *Release Notes ABCD Imaging Instruments*.

To access additional detailed information about the instruments administered in this domain, the constructs they are intended to measure and relevant citations for each measure, please see: <https://www.ncbi.nlm.nih.gov/pubmed/29627333>

July 2019 Fix Release 2.0.1 Please ensure updated instruments contained in Fix Release 2.0.1 replace instruments downloaded from the original Data Release 2.0 as indicated in the above table.

Prosocial Behavior Survey

The Prosocial Behaviors questionnaire is a subscale from the “Strengths and Difficulties Questionnaire” (Goodman et al., 1998). We use a shortened version of the “Prosocial Behavior”

subscale from this instrument. The original subscale has 5 items. We have retained the three items with the highest factor loadings. The Prosocial Behavior subscale assesses tendency to engage in behaviors to help others. This measure is administered to both parent and youth. Parent reports on youth behavior; whereas, youth reports on self.

ABCD Acculturation Survey Modified from PhenX (ACC)

To provide an index of the participant's level of utilization of the traits and values of the culture in which they are embedded, as assessed with a subset of questions from the PhenX Acculturation Protocol (NLAAS: Alegria et al., 2004; Marin, Sabogal, and Marin, 1987).

The Acculturation questionnaire is a subset of questions from the PhenX Acculturation Protocol. These items aim at assessing the level of participant acculturation – that is, the process by which an individual from one cultural group adapts and borrows traits and values from another culture – by assessing proficiency and preferences for speaking a given language in different settings. The PhenX items come from questions used by the National Latino and Asian American Study (NLAAS: Alegria et al., 2004), which were originally derived from the “Short Acculturation Scale for Hispanics” (Marin, Sabogal, and Marin, 1987). These questions are answered independently by youth and parent.

ABCD Parental Monitoring Survey

The Parental Monitoring Survey is a subset of questions that assess a parent's active efforts to keep track of a child's whereabouts, both at home, and when they are not at home (e.g., who they are with; what they are doing). This measure is derived from two other measures (i.e., Karoly, Callahan, Schmiede, & Feldstein Ewing, 2016; Stattin & Kerr 2000).

ABCD Children's Report of Parental Behavioral Inventory

The Acceptance Scale is a subscale of the Child Report of Behavior Inventory (CRPBI; Schaefer, 1965; Schludermann & Schludermann, 1988; see also Barber et al., 1994; Barber & Olsen, 1997). We use a shortened version of the original scale which had 10 items. We kept the 5 items with the highest factor loadings. The acceptance subscale examines children's perceptions of caregiver warmth, acceptance, and responsiveness. The acceptance subscale can be reported on for any significant adult caregiver. First, the scale is answered for the “parent participant”, the adult who completes the parent surveys (variable names are labeled with “mom” below, even if this person is not the mother). Next, the survey should be answered for a second primary caregiver (variable names are labeled with “caregiver” below), a caregiver the child spends a significant amount of time with (e.g., other parent, step-parent, grandparent, aunt, uncle). If there is not a second primary caregiver, the child can skip the second administration of the questions.

ABCD Family Environment Scale-Family Conflict Subscale Modified from PhenX (FES)

The Conflict subscale from the Family Environment Scale (FES; Moos & Moos, 1994) consist of 9 items assessing the amount of openly expressed conflict among family members. These questions are answered independently by youth and parent.

ABCD Neighborhood Safety/Crime Survey Modified from PhenX (NSC)

The Neighborhood Safety/Crime measures consist of one item from the “Neighborhood Safety Protocol” of the PhenX Toolkit. The original PhenX measure consists of three items assessing feelings about safety and presence of crime in the respondent’s neighborhood. Parents report on all three items. For the youth report, we retained the item thought to be most appropriate for our participants’ age range. The PhenX items were derived from “Safety from Crime” items from scales assessing neighborhood characteristics (Echeverria, Diez-Roux, & Link, 2004; Mujahid et al., 2007).

ABCD School Risk and Protective Factors Survey

The School Risk and Protective Factors (SRPF) Survey is from the PhenX School Risk and Protective Factors protocol. These items were derived from the “The Communities That Care (CTC) Youth Survey” (Arthur et al., 2007). Two items were cut due to redundancy across the battery (grade in school and skipping classes), and items were re-worded for age appropriateness. The SRPF examines youth’s perceptions of the school climate and school engagement, and asks youth to report on school grades. Responses are used to derive three subscale scores: School Environment, School Involvement, and School Disengagement.

ABCD Vancouver Index of Acculturation-Short Survey (VIA)

The Vancouver Index of Acculturation (VIA) is a 20-item bi-dimensional measure developed to independently assess adherence to one’s Heritage and Mainstream culture on separate subscales (Ryder, Alden, & Paulhus, 2000). We used the 16-item adaptation of the VIA, which consists of 8 paired items asking the same question for each culture. Heritage culture is solicited from a 96-item drop-down menu that reflects a broad range of ethnic/cultural backgrounds. The drop-down menu was developed based on open-ended responses from the first n=1000 participants. These open-ended responses were aggregated into a list of ethnic, cultural and religious backgrounds that was subsequently used for the remainder of the ABCD Study. Respondents are allowed to choose “other” and fill in a heritage not listed.

ABCD Parent Multi-Group Ethnic Identity-Revised Survey (MEIM)

The Multi-Ethnic Identity Measure - Revised (MEIM-R) is a 6-item short-form that assesses ethnic identity (Phinney and Ong, 2007). It yields two subscales: Commitment and Exploration. Please note that the scale of responses in the original MEIM-R are listed from “Strongly Disagree” to “Strongly Agree.” In contrast, for the ABCD implementation, responses were listed as “Strongly Agree” to “Strongly Disagree.” As such, **lower values** for summary score in the ABCD dataset indicate **greater ethnic identity**.

ABCD Mexican American Cultural Values Scale Modified (MACV)

The Cultural Values Scale is a subset of items derived from the Mexican American Cultural Values Scale (MACVS; Knight et al, 2010). The original measure consists of 50 items across 9 subscales reflecting values associated with Mexican/Mexican American and contemporary mainstream American beliefs, behaviors, and traditions. We have retained 5 of the original subscales (28 items) assessing Familism (Familism referent, Familism support, Familism obligation), Religion, and Independence/self-reliance that are applicable across numerous cultures, races, and ethnicities and are of relevance to substance use trajectories. These questions are answered by the parent.

ABCD Perceived Discrimination Scale (PDS)

In order to assess participant perceptions of experiencing ethnic (and other types of) discrimination, we selected and modified selected items from two existing scales: The 2006 Boston Youth Survey and the Measure of Perceived Discrimination (Phinney, Madden, and Santos, 1998). The first four items are from the 2006 Boston Youth Survey (Garnett, Masyn, Austin, Miller, Williams, and Viswanath, 2014) and query about being discriminated against due to race, ethnicity, color, country of origin, sexual identity, and body type during the past 12 months. The remaining seven items come from the Measure of Perceived Discrimination and query about frequency of being treated unfairly or negatively because of ethnic background by others, as well as general feelings of experiencing ethnic discrimination.

The Wills Problem Solving Scale

This scale was derived from earlier coping measures (Wills, Health Psychology 1986) and has good internal consistency in studies with children and adolescents from a variety of populations (Wills et al., Health Psychology 2013). It taps a systematic behavioral approach to deal with problem situations through gathering information about the problem, considering alternative solutions to the problem, deciding about a plan of action, and implementing an active approach to do something to resolve the problem. Different usages of the scale have had 6-8 items; items with the highest correlation with early substance use were selected for this study.

Summary Scores can be found in the following instruments. Prefixes used in summary score variables are listed at the end of each instrument name.

ABCD Sum Scores Culture & Environment Youth

ABCD Parental Monitoring Survey (PMQ)
Modified from PhenX (FES)
Youth Prosocial Behavior Survey (PSB)
Wills Problem Solving Scale (WPS)
ABCD School Risk and Protective Factors Survey (SRPF)
Perceived Discrimination Scale (DIM)
ABCD Children's Report of Parental Behavioral Inventory (CRPBI)

ABCD Sum Scores Culture & Environment Parent

ABCD Parent Multi-Group Ethnic Identity-Revised Survey (MEIM)
ABCD Parent Vancouver Index of Acculturation-Short Survey (VIA)
ABCD Youth Neighborhood Safety/Crime Survey Modified from PhenX (NSC)
ABCD Parent Family Environment Scale-Family Conflict Subscale Modified from PhenX (FES)
ABCD Parent Mexican American Cultural Values Scale Modified (MACV)
Parent Prosocial Behavior Survey (PSB)

References

- Alegria, M., Takeuchi, D., Canino, G., Duan, N., Shrout, P., Meng, X.-L., Vega, W., Zane, N., Vila, D., Woo, M., Vera, M., Guarnaccia, P., Aguilar-gaxiola, S., Sue, S., Escobar, J., Lin, K.-m. and Gong, F. (2004), Considering context, place and culture: the National Latino and Asian American Study. *Int. J. Methods Psychiatr. Res.*, 13: 208–220. doi:10.1002/mpr.178;
- Arthur, M. W., Briney, J. S., et al. (2007) Measuring risk and protection in communities using the Communities That Care Youth Survey. *Eval Program Plann* 30(2): 197-211.
- Barber, B. K., & Olsen, J. A. (1997). Socialization in context: Connection, regulation, and autonomy in the family, school, and neighborhood, and with peers. *Journal of Adolescent Research*, 12(2), 287-315.
- Barber, B. K., Olsen, J. E., & Shagle, S. C. (1994). Associations between parental psychological and behavioral control and youth internalized and externalized behaviors. *Child development*, 65(4), 1120-1136.
- Echeverria, S. E., Diez-Roux, A. V., et al. (2004) Reliability of self-reported neighborhood characteristics. *J Urban Health* 81(4): 682-701

- Garnet, B.R., Masyn, K.E., Austin, S.B., Miller, M., Williams, D.R., Viswanath, K. (2014). The intersectionality of discrimination attributes and bullying among youth: an applied latent class analysis. *J Youth Adolescence* (43): 1225-1239.
- Goodman, R. (1997) The Strengths and Difficulties Questionnaire: a research note. *J Child Psychol Psychiatry* 38(5):581-6
- Goodman, R., Meltzer, H., & Bailey V. (1998) The Strengths and Difficulties Questionnaire: A pilot study of the validity of the self-report version. *European Child and Adolescent Psychiatry* 7: 125-13.
- Karoly, H. C., Callahan, T., Schmiede, S. J., & Feldstein Ewing, S. W. (2015). Evaluating the Hispanic Paradox in the context of adolescent risky sexual behavior: the role of parent monitoring. *Journal of pediatric psychology*, 41(4), 429-440.
- Knight, G. P., Gonzales N. A., et al. (2010) The Mexican American Cultural Values scales for Adolescents and Adults. *J Early Adolesc* 30(3): 444-481.
- Marin, G., Sabogal, F., Marin, B. V., Otero-Sabogal, R., & Perez-Stable, E. J. (1987). Development of a short acculturation scale for Hispanics. *Hispanic Journal of Behavioral Sciences*, 9(2), 183-205.
- Moos, R. H., and Moos, B. S. (1994) *Family Environment Scale manual* (3rd ed.). Palo Alto, CA: Consulting Psychologists Press.
- Moos, R.H., & Moos, B.S. (2009). *Family Environment Scale Manual: Development, applications and research* (4th Ed.). Menlo Park, CA: Mind Garden, Inc.
- Mujahid, M. S., et al. (2007) Assessing the measurement properties of neighborhood scales: from psychometrics to econometrics. *Am J Epidemiol* 165(8): 858-67.
- Phinney, J. S., Madden, T., Santos, L.J. (1999). Psychological variables as predictors of perceived ethnic discrimination among minority and immigrant adolescents. *J Appl Soc Psych* 28(11): 937-953.
- Phinney, J. S., & Ong, A. D. (2007). Conceptualization and measurement of ethnic identity: Current status and future directions. *Journal of Counseling Psychology*, 54(3), 271.
- Ryder, A.G., Alden, L. E., et al (2000) Is acculturation unidimensional or bidimensional? A head-to-head comparison in the prediction of personality, self-identity, and adjustment. *J Pers Soc Psychol* 79(1): 49-65.
- Schaefer, E. S. (1965). A configurational analysis of children's reports of parent behavior. *Journal of consulting psychology*, 29(6), 552.
- Schludermann, E. H., & Schludermann, S. M. (1988). *Children's Report on Parent Behavior (CRPBI-108, CRPBI-30)* for older children and adolescents. Winnipeg, MB, Canada: University of Manitoba.
- Wills, T. A. (1986). Stress and coping in early adolescence: Relationships to substance use in urban school samples. *Health Psychology*, 5(6), 503-529.
-

Wills, T. A., Bantum, E. O., Pokhrel, P., Maddock, J. E., Ainette, M. G., Morehouse, E., & Fenster, B. (2013). A dual-process model of early substance use: Tests in two diverse populations of adolescents. *Health Psychology, 32*(5), 533-542.

Zucker, R. A., Gonzalez, R., Feldstein Ewing, S. W., Paulus, M. P., Arroyo, J., Fuligni, A., Morris, A. S., Sanchez, M., Wills, T. (2018) Assessment of culture and environment in the Adolescent Brain and Cognitive Development Study: Rationale, description of measures, and early data. *Dev Cogn Neurosci, 32*, 107-120.