Add Health
The National Longitudinal Study of Adolescent to Adult Health

Contextual Heterosexism Database, Phase 2 User Guide

Report prepared by

Kara Joyner

Wendy D. Manning

Krista K. Westrick_Payne

Lee A. Brady

UNC CAROLINA POPULATION CENTER

CAROLINA POPULATION CENTER | CAROLINA SQUARE - SUITE 210 | 123 WEST FRANKLIN STREET | CHAPEL HILL, NC 27516

https://doi.org/10.17615/Z34P-0180

Acknowledgments

Data collection and dissemination for Wave VI of Add Health was funded by cooperative agreements U01 AG071448 (PI: Robert A. Hummer) and U01 AG071450 (MPIs: Robert A. Hummer and Allison E. Aiello) from the National Institute on Aging to the University of North Carolina at Chapel Hill, with cooperative funding from five other institutes and offices at the National Institutes of Health: the Eunice Kennedy Shriver National Institute of Child Health and Human Development, the National Institute on Minority Health and Health Disparities, the National Institute on Drug Abuse, the Office of Disease Prevention, and the Office of Behavioral and Social Science Research. Waves I-V of Add Health were funded by grant P01 HD31921 from the Eunice Kennedy Shriver National Institute of Child Health and Human Development, with cooperative funding from 23 other federal agencies and foundations. Add Health is currently directed by Robert A. Hummer at the University of North Carolina at Chapel Hill. Add Health was designed by J. Richard Udry, Peter S. Bearman, and Kathleen Mullan Harris at the University of North Carolina at Chapel Hill.

This research was supported by grant R01MD016417 from the National Institute on Minority Health and Health Disparities. Further information may be obtained by contacting Kara Joyner (kara.joyner@utsa.edu) or Wendy Manning (wmanning@bgsu.edu).

Joyner et al. would like to acknowledge the work of this ancillary study's advisory team members Madina Agénor, Christopher Carpenter, Lauren Gaydosh, and Taylor Hargrove as well as project consultants Carolyn T. Halpern and Kathleen Mullan Harris. Their suggestions, guidance, and advice were invaluable.

Citation

Citations of this Add Health User Guide should use the following format:

Joyner, K., Manning, W. D., Westrick-Payne, K. K., Brady, L. A. (2025). The National Longitudinal Study of Adolescent to Adult Health (Add Health), Contextual Heterosexism Database - Phase 2 [machine-readable data file and documentation]. Chapel Hill, NC: Carolina Population Center, University of North Carolina at Chapel Hill. https://doi.org/10.17615/Z34P-0180

Introduction

This contextual database, Contextual Heterosexism Database - Phase 2 (CHD2), further expands the collection of contextual data available to users of The National Longitudinal Study of Adolescent to Adult Health (Add Health) through the provision of state level measures from the Harvard Implicit Associations Test (IAT) database and city-level measures from the Human Rights Campaign's (HRC) Municipal Equality Index. These measures correspond to Waves 4 and 5 of Add Health.

Subject Index

The Subject Index lists the various topics/scales measured by the variables contained in the Contextual Heterosexism Database. A crosswalk of ancillary studies needed to study heterosexism by subtopic and wave can be found in Table 2 (below). To access codebooks and user guides associated with each ancillary study outlined in Table 2, please see the following link (https://addhealth.cpc.unc.edu/documentation/codebooks/) and click on "Contextual Data Files."

1. Policies
    a. Human Rights Campaign - Municipal Equality Index Scores
2. Social Climate
    a. Harvard IAT- Implicit Associations Test for sexual minorities
    b. Harvard IAT - Attitudes toward sexual minorities
    c. Harvard IAT - Approval of same-sex relations, marriage, adoption, and service refusals

TABLE 1: MEASURES OF HETEROSEXISM - ADD HEALTH ANCILLARY STUDY CROSSWALK

SUBTOPICS	ANCILLARY STUDIES NEEDED		
	W3	W4	W5
Policies	• **Contextual Heterosexism Database - Phase 1**	• **Contextual Heterosexism Database - Phase 1** • **Contextual Heterosexism Database - Phase 2**	• **Contextual Heterosexism Database - Phase 1** • **Contextual Heterosexism Database - Phase 2**
Social climate	• **Contextual Heterosexism Database - Phase 1** • Wave III Contextual Data • Wave I, II, III Political Context Data	• **Contextual Heterosexism Database - Phase 1** • **Contextual Heterosexism Database - Phase 2** • Contextual Wave IV Database, • Wave IV Supplemental Tract-Level Contextual Data	• **Contextual Heterosexism Database - Phase 1** • **Contextual Heterosexism Database - Phase 2** • Contextual Wave V Database
Income inequality		• **Contextual Heterosexism Database - Phase 1**	• **Contextual Heterosexism Database - Phase 1**
Confounders	• Wave III Contextual Data	• Contextual Wave IV Database, • Wave IV Supplemental Tract-Level Contextual Data	• **Contextual Heterosexism Database - Phase 1** • Contextual Wave V Database

Data Structure and Form

The data file (**w5htsxsm2.sas7bdat**) contains a total of 14 variables for Add Health respondents who participated in one or both of Waves IV and V. The first variable is the respondent identifier (AID), by which these contextual data can be merged with other Add Health data files. The remaining variables include measures across four subtopics. A list of all variables can be found in the Data Dictionary section.

The contextual variables in the CHD2 measure characteristics associated with specific locations in the U.S. at varying geographic levels, including state and municipality. Add Health participants are linked to these contextual measures based on their residency locations at each conducted interview. To protect participants from identification/disclosure Add Health provides pseudo FIPS codes for respondents' residences at Waves I through V (e.g., Wave V Grouping File, w1_5grp.xpt). These location identifiers are based on 2010 Census geographic boundaries and are longitudinally consistent across all waves.

Source Descriptions

Harvard IAT Database

The Harvard IAT database collects and shares data derived from Project Implicit's Implicit Associations Tests. The implicit associations tests are designed to capture subconscious biases and explicit attitudes about various types of people through online assessments requiring respondents to categorize two sets of category stimuli (i.e., straight people and gay/lesbian people) and two sets of attribute stimuli (i.e., "good" and "bad"). Scores are calculated based on the implicit association test, ranging from –2 to 2.

Following the test, respondents are asked to respond to survey questions assessing explicit attitudes. The responses to the questions are yes or no, and it should be noted that some approvals are for what would be perceived to be less supportive climates (e.g., business right to refuse service) and others more supportive climates (e.g., should be legal for same-sex partners to adopt a child, should be legal for consenting adults to have homosexual relations, should be legal for same-sex partners to marry). We report the percentage of the respondents in each geographic area who provide an affirmative response. The IAT sample is a non-random convenience sample comprised of individuals instructed, such as by their work or school, to visit the study site and those who find it through self-directed searches and word-of-mouth. From their data offerings, we have appended variables derived from Sexuality IAT 2008-1018 data sets, which contain respondents from the 50 states and Washington, DC.

The following table presents an index of the Harvard IAT database variables used in the generation of the contextual variables comprising the CHD2 file.

TABLE 2: INDEX OF 2009 5-YEAR ESTIMATES FROM TABLE B11009: COUPLED HOUSEHOLDS BY TYPE & 2018 5-YEAR ESTIMATES FROM IPUMS-USA

Source Variable Name	Description or Question Wording
year	Year of test
STATE	State of residence
D_biep.Straight_Good_all	Implicit associations test score for sexuality (-2 – 2)
att_7	Explicit attitude toward gays and lesbians
marriagerights_3num	Do you think marriages between same-sex partners should or should not be recognized by the law as valid, with the same rights as traditional marriages?
relationslegal_3num	Do you think homosexual relations between consenting adults should or should not be legal?
adoptchild	Do you think it should be legal for same-sex partners to adopt a child?
serverights	Do you think it should be legal for business owners to refuse to serve same-sex partners?
totalresponses	Total number of respondents per state

HRC Municipal Equality Index

The HRC Municipal Equality Index collects data from 506 cities across the United States. Cities include: the 50 state capitals, the 200 largest cities in the United States, the 5 largest cities or municipalities in each state, the cities containing the state's two largest public universities, 75 cities & municipalities that have high proportions of same-sex couples and 98 cities selected by HRC. Cities are rated based on non-discrimination laws, municipal employment, municipal services, law enforcement, and municipal relationship with the LGBTQ community. Each city is assigned up to 100 standard points and up to an additional 20 "bonus" points (bonus points awarded for items which apply to some but not all states). Potential bonus points are awarded in relevant cities for qualities within the municipal employment, municipal services, and municipal relationship with the LGBTQ community categories. Total scores cannot exceed 100. From their data offerings, we have appended variables reflecting the cities' laws, policies, benefits, and services from 2016-2018.

The following table presents an index of the HRC MEI variables used in the generation of the contextual variables comprising the CHD2 file.

TABLE 3: INDEX OF 2000 DECENNIAL CENSUS ESTIMATES FROM TABLE PCT001: UNMARRIED-PARTNER HOUSEHOLDS BY SEX OF PARTNERS

Source Variable Name	Description or Question Wording
STATE	State
CITY	City (or census-designated place)
Regular Points	Points available to be awarded to all states (0 - 100)
Bonus Points	Points available to be award to some, but not all, states (0 - 20)
Final Score	Sum of regular and bonus points (0 - 100)

Variable Naming Conventions

First character–Geographic level of the variable

Refers to the geographic area to which the variable corresponds. Geographic levels include:

R Respondent
S State

Please note, administrative boundaries may have changed between 2000 and 2010. When doing longitudinal analyses, observed change may be, in part, artifacts of changes in boundary delineation. Contextual variables associated with Wave IV are based on 2000 boundaries, and Wave V are based on 2010 boundaries.

Second and third characters – Add Health wave and topic

The second character indicates the Add Health wave. The third character, H, indicates the Heterosexism topic.

Next 3-6 Characters – Subject

The next set of characters of variable length refer to the subject as defined in the Data Dictionary:

PROLGB Population Approving LGB Policies
EQLTY Equality Index

Final 3 Characters – Sequential numbering

Each unique variable (e.g., Proportion approving of same-sex relations) is enumerated from 1 to N (left padded with zeroes to 3 characters) where N is the number of geography/wave combinations for that particular measure. In the case of the PROLGB variables, enumeration began where the Phase 1 data left off, hence the first variable is 014.

TABLE 4: VARIABLE NAMING STRUCTURE

Geographic level *1st character*	Add Health Wave *2nd character*	Topic *3rd character*	Data source *3-6 characters*	Variable number *Final 3 characters*
R = Respondent **S = State**	4 = Wave IV 5 = Wave V	H	PROLGB = Population Approving LGB Policies EQLTY = Equality Index	001 – 019

Data Dictionary

The tables below list all the variables comprising this Add Health Contextual Heterosexism Database - Phase 2 (CHD2) organized by data source.

Refer to the Variable Naming Conventions section for more information on what the different components of the variable names in the tables below indicate.

Harvard IAT Database

Name	Description	Wave	Formula*
Implicit Associations Test Results			
S4HPROLGB014	Average sexuality implicit associations test result	4	sum(D_biep.Straight_Good_all)/ totalresponses if year == 2008/2009
S5HPROLGB014		5	sum(D_biep.Straight_Good_all)/ totalresponses if year == 2016/2018
S4HPROLGB015	Average self-reported attitude toward gays and lesbians	4	sum(att_7)/totalresponses if year == 2008/2009
S5HPROLGB015		5	sum(att_7)/totalresponses if year == 2016/2018
S4HPROLGB016	Proportion approving of same-sex relations	4	sum(marriagerights_3num)/ totalresponses if year == 2008/2009
S5HPROLGB016		5	sum(marriagerights_3num)/ totalresponses if year == 2016/2018
S4HPROLGB017	Proportion approving of same-sex marriage	4	sum(relationslegal_3num)/ totalresponses if year == 2008/2009
S5HPROLGB017		5	sum(relationslegal_3num)/ totalresponses if year == 2016/2018
S5HPROLGB018	Proportion approving of same-sex adoption	5	sum(adoptchild)/totalresponses if year == 2016/2018
S5HPROLGB019	Proportion approving of refusals to serve same-sex couples	5	sum(serverights)/totalresponses if year == 2016/2018

*Consistent with other Add Health User's Guides we present the code we employed to generate referenced variables. Our code is reflective of the Stata coding language and may differ depending on the statistical package one uses.

HRC Municipal Equality Index

Name	Description
Human Rights Campaign's Municipal Equality Index Scores	
R5HEQLTY001	Distance (miles) from respondent's geocoded residence to nearest MEI-scored city
R5HEQLTY002	MEI Regular Score (without bonus points)
R5HEQLTY003	MEI Final Score (with bonus points)

Missing codes

This dataset has two different codes that indicate the source of missing data.

- -9991 Respondent was not interviewed in that wave
- -9990 Respondent lacks the geocode necessary for merging the source data