Attachment G1 – PLAY Study sample description

In Oklahoma, the five communities that were selected for the PLAY baseline ADHD epidemiological study were varied in geographical setting: one urban, one suburban, two exurban and, one rural. Two of the communities have high Native American populations, one has a larger number of Latino children and one has a larger number of African American children. The teacher screen sample was made up of 25 schools which included 12,623 students. The sample for the teacher screen of the ADHD epidemiology study was a diverse group of children representing all racial, economic and ethnic group characteristic of these areas. The racial/ethnic distribution of the sampled group was 51% Caucasian, 17% African-American, 8% Native American, 16% Hispanic and 1% Asian children.

In South Carolina, all schools in Richland County School District Two were invited to participate. Richland Two School District is characterized by a diverse student body. Students from rural, suburban and some urban neighborhoods combine to form a student population representative of a wide range of cultural and ethnic backgrounds. The overall enrollment for grades K - 8 was 52% African American in Richland District Two. African-American percentages range from a low of 21.3% to a high of 87.7% in the district. A detailed description of both samples in the original PLAY study can be found in Attachment G.

For the original Play study, children were screened using teacher report of symptoms or parent report of ADHD diagnosis and treatment. All parents of children identified as potential ADHD cases were invited to participate in an interview following the screen, as well as a sample of children not identified with ADHD. For control cases, the sample was first stratified by gender and then cases were sampled proportional to the gender distribution of the ADHD high screens (3 boys to 1 girl). Case definitions used to invite children to the interview portion of the study were based on either parent report of an ADHD diagnosis and treatment, or on teacher report of six inattentive or hyperactive symptoms and impairment. Further, in Oklahoma as part of the side study of tic disorders, a sample of children was also invited to the interview portion because the screen data showed them at risk for a tic disorder.

Oklahoma:

1. Study Population

The five communities that were selected for the ADHD epidemiological study were varied in geographical setting: one urban, one suburban, two exurban and, one rural. Two of the communities have high Native American populations, one has a larger number of Latino children and one has a larger number of African American children. The teacher screen sample was made up of 25 schools which included 12,623 students.

a. Urban: The Oklahoma City School District is an urban school district. Oklahoma City is located in Oklahoma County, Oklahoma. Oklahoma County has a population of 660,448, with 931.5 people per square mile (U.S. Census Bureau, 2002). The estimated median household income for 1997 was \$34,513 (U.S. Census Bureau, 2002). The Oklahoma School District contains 65 elementary schools with 22,885 students. We randomly selected 7 schools with approximately 3212 students in early childhood

- education programs to 5th grade (ages 4-10 years). The racial/ethnic breakdown of the students in the Oklahoma City School District sample is: African American 27%, Asian 2%, Hispanic 38%, Native American 5%, and Caucasian 28%.
- **b. Suburban:** The Mid/Del School District is a suburban school district this is 10 miles east of downtown Oklahoma City. Mid West City and Del City are located in Oklahoma County, Oklahoma. Oklahoma County Oklahoma County has a population of 660,448, with 931.5 people per square mile (U.S. Census Bureau, 2002). The estimated median household income for 1997 was \$34,513 (U.S. Census Bureau, 2002). The Mid/Del School District contains 17 elementary schools with 7,649 students. All regular class students in grades PreK-6 (ages 4-11 years) were included. The district has the following racial/ethnic breakdown: African American 5%, Asian 3%, Hispanic 3%, Native American 9%, and Caucasian 81%.
- c. Exurban: The Shawnee School District is a suburban/rural location that is 40 miles east of downtown Oklahoma City and has a higher Native American student population. Shawnee is located in Pottawatomie County, Oklahoma. Pottawatomie County has a population of 65,521, with 83.1 people per square mile (U.S. Census Bureau, 2002). The estimated median household income for 1997 was \$30,409 (U.S. Census Bureau, 2002). The Shawnee School District contains 5 elementary schools with 1752 students. All regular class students in early childhood education programs to 5th grade (ages 4-10 years) were included. The racial/ethnic breakdown of the students in the Shawnee School District follows: African American 8%, Asian 1%, Hispanic 2%, Native American 26%, and Caucasian 62%.
- **d. Exurban:** The El Reno School District is a suburban/rural school district that is 40 miles west of downtown Oklahoma City. El Reno is located in Canadian County, Oklahoma. Canadian County has a population of 86,498 with 110 people per square mile (U.S. Census Bureau, 2002). The estimated median household income for 1999 was \$45,439 (U.S. Census Bureau, 2002). The El Reno School District contains 4 elementary schools with a total of 1,194 students. All regular class students in early childhood education programs to 5th grade (ages 4-10 years) were included. The racial/ethnic breakdown of the students in the El Reno School District follows: African American 6%, Asian 0%, Hispanic 6%, Native American 12%, and Caucasian 76%.
- e. Rural: The Ponca City School District is the rural school district that is 115 miles north of downtown Oklahoma City. Ponca City is located in Kay County, Oklahoma. Kay County has a population of 48,080, with 52.3 people per square mile (U.S. Census Bureau, 2002). The estimated median household income for 1997 was \$31,732 (U.S. Census Bureau, 2002). The Ponca City School District contains 8 elementary schools with approximately 2,815 students in early education childhood programs to 5th grade (ages 4-10 years). All regular class students in grades K-5 were included. The racial/ethnic breakdown of the students in the Ponca City School District follows: African American 4%, Asian 1%, Hispanic 5%, Native American 16%, and Caucasian 74%.

Longitudinal Follow-up of Youth with ADHD Attachment G1 Sample Description

The sample for the teacher screen of the ADHD epidemiology study was a diverse group of children representing all racial, economic and ethnic group characteristic of these areas. The racial/ethnic distribution of the sampled group was 51% Caucasian, 17% African-American, 8% Native American, 16% Hispanic and 1% Asian children. The gender distribution of the teacher screen group was 52% male and 48% female.

Currently, 3239 families have been invited to participate in the interview phase of the PLAY project with 85% of this sample considered "at risk" for ADHD and/or Tic Disorders. The selected sample does include approximately 15% of the children who were selected at random and did not screen "at risk" for ADHD or Tic Disorders. The invited sample for children from the El Reno School District has not been drawn. We expect to invite 500 families from the El Reno School District once the sample has been finalized. The total number of children expected to be included in the interview invited group for the PLAY project is approximately 3700.

Currently 382 interviews have been completed with children from the Oklahoma City, Ponca City and Shawnee School Districts and recruitment from these districts has ceased. There are an additional 76 interviews completed with the selected sample from the Mid/Del School District. Interviews with the El Reno School District will begin this month. By the end of the project (September 2007) we expect to have an additional 200 interviews completed with families from the Mid/Del and El Reno School District samples, bringing the total number of participants in the interview phase of the PLAY study to approximately 650 families from the 5 school districts.

South Carolina:

Richland County School District Two serves the capital city of Columbia, SC. In 2000-2001, the district reported an average daily enrollment of about 7,500 students in grades K through 5, in 13 elementary schools. Richland Two School District is characterized by a diverse student body. Students from rural, suburban and some urban neighborhoods combine to form a student population representative of a wide range of cultural and ethnic backgrounds. The overall enrollment for grades K - 8 was 52% African American in Richland District Two. African-American percentages range from a low of 21.3% to a high of 87.7% in the district. The investigators have experience working in several other school districts in the area. All schools in Richland County School District Two were invited to participate and all district teachers who were willing completed the ADHD screener on all their students. If the number of positive screens remained feasible, all potential cases were invited to participate in the case ascertainment phase as well as a random sample of low-screen youth.