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| **Dominance - (42 Months and Older)** | |
| **Protocol Id** | 020601 |
| **Description of Protocol** | Questions to determine which hand the participant uses for a series of activities, adult assisting children beginning at 42 months. |
| **Specific Instructions** | Mother or an adult proxy for the child beginning at 42 months of age is asked a series of questions about the activities of the child and whether he/she performs these activities using one or both hands. |
| **Protocol Text** | The following protocol is part of a personal interview in which the parent reports about the child.  Child handedness is assessed by parental report about the child beginning at the age of 42 months. Parents report on whether the child uses his/her left hand, right hand, or both for the following four items: 1) drawing; 2) throwing a ball; 3) coloring; 4) holding a toothbrush. If the parent indicates "either" for all four activities, the child is classified as mixed-handed. Children who use the same hand for three or four activities are classified according to that hand. Children who use the right hand for two activities and the left hand for the other two activities are recorded as mixed-handed.  The protocol also assigned mixed-handedness to children with the following patterns, respectively (from list above): eerl, rrel, ller (where r = right, l = left, e = either). Children with the patterns rree and llee are classified as right-handed and left-handed, respectively. The protocol also classifies children for whom one activity is missing: children with the patterns rrr, rrl, rre are classified as right-handed; children with the patterns lll, llr, lle are classified as left-handed; and children with the patterns eee, eel, eer, rle are classified as mixed-handed.  ***Note:****The child question was modified from being asked of the mother to being asked of either parent.* |
| **Selection Rationale** | The Avon Longitudinal Study of Parents and Children Protocol (ALSPAC) protocol was selected because of the age-appropriate activities described. |
| **Source** | Glover, V., O’Connor, T., Heron, J., & Golding, J. (2004). Avon Longitudinal Study of Parents and Children (ALSPAC) Protocol Edinburgh Handedness Inventory Scoring Method. *Early Human Development, 79,* 107-118. |
| **Language** | English |
| **Participant** | This measure includes two protocols, each relating to a specific age of the participant. Consistent hand dominance starts to develop between 2 and 3 years of age and is usually completed by 6 years of age. Hand preference that appears before the age of 18 months may signal impaired neurological control of the other hand.  **Avon Longitudinal Study of Parents and Children Protocol (ALSPAC)** Child beginning at 42 months of age  **Edinburgh Handedness Inventory** Participant aged 12 years and older |
| **Personnel and Training Required** | The trained interviewer should be able to administer a questionnaire and have the ability to probe for information as necessary. |
| **Equipment Needs** | None |
| **Standards** | |  |  |  |  | | --- | --- | --- | --- | | **Standard** | **Name** | **ID** | **Source** | | Common Data Elements (CDE) | Child reported Preference Hand Laterality | 2793506 | [CDE Browser](https://cdebrowser.nci.nih.gov/CDEBrowser/search?elementDetails=9&FirstTimer=0&PageId=ElementDetailsGroup&publicId=2793506&version=1.0) | | Logical Observation Identifiers Names and Codes (LOINC) | Hand dom- 42Mos proto ALSPAC | 56096-1 | [LOINC](http://s.details.loinc.org/LOINC/56096-1.html?sections=Web) | |
| **General References** | Porac, C, and Coren, S. (1981) *Lateral preferences and human behavior.* New York: Springer-Verlag. |
| **Protocol Type** | Question |
| **Derived Variables** | None |
| **Requirements** | |  |  | | --- | --- | | **Requirement Category** | **Required** | | Average time of greater than 15 minutes in an unaffected individual  Average time of greater than 15 minutes in an unaffected individual | No | | Major equipment  This measure requires a specialized measurement device that may not be readily available in every setting where genome wide association studies are being conducted. Examples of specialized equipment are DEXA, Echocardiography, and Spirometry | No | | Specialized requirements for biospecimen collection  This protocol requires that blood, urine, etc. be collected from the study participants. | No | | Specialized training  This measure requires staff training in the protocol methodology and/or in the conduct of the data analysis. | No | |