Indicators of Family Structure (and Parental Identification)

This memo discusses the family structure indicators. Family structure plays an important role in educational attainment literature, as students from intact (two-parent) families display a distinct educational advantage relative to youth from non-intact families (McLanahan and Astone, 1991, 1994). This memo will review the survey questions used to create the family structure indicators and suggestions for creating family structure indicators.

A host of studies of educational attainment have illustrated that students that live with both biological/adoptive parents are more likely to experience educational success (i.e. finish high school, have increased educational ambitions, attend college) than their peers that live with only one parent. Youth that live with both of their parents have access to greater levels of financial resources (e.g. they are less likely to live in poverty, less likely to experience high levels of residential mobility), and increased levels of social capital both of which are positively associated with increased educational attainment (McLanahan and Perchenski, 2008). Additionally, it is worth noting that students that live with one biological parent and one step-parent do not achieve at the same levels as student that live with both biological parents (McLanahan and Sandefur, 1994).

Family Structure Questions in the UWBHS

The family structure indicators are made out of a series of questions included in the baseline survey. This memo will discuss two different ways in which one can code family structure. The first is a simple binary measure which delineates between students that live with both of their biological/adoptive parents and students that do not.

The second is a measure which makes the basic distinction between students that live with both their biological/adoptive parents and those that do not, however, it also uses information on parental identification to note different types of non-intact family structures. The second measure is only available for the 2002 to 2005 cohorts as questions S121_ and S129_a were only asked in those years.

Questions to make Family Structure as a Binary Indicator (Intact vs Non-Intact)

Question asked in 2002 to 2005

186) Are you living with both your mother and your father (biological or adoptive)?

(CIRCLE ONLY ONE)

Yes .......................................................................................................................... 1

No ........................................................................................................................... 2

Question asked in 2000

186) Are you living with both your mother and your father?

(MARK ONE)

Yes ...................................................................................................................... O

No ....................................................................................................................... O

There is a subtle difference in the questions, as the question in 2000 does not specify mother and father as biological or adoptive. While many students probably assumed that the question was
referring to their biological or adoptive parents it is quite possible that some students included step or other parental figures in responding positively to Q186.

Questions to make Family Structure and Parental Identification Indicator

For the 2002 to 2005 cohorts only

186) Are you living with both your mother and your father (biological or adoptive)?

(CIRCLE ONLY ONE)

Yes ......................................................................................... 1
No ........................................................................................... 2

121) Who is the person in your life who is most like a father to you?

(CIRCLE ONLY ONE)

Biological Father ........................................................................ 1
Adoptive Father ........................................................................... 2
Stepfather ................................................................................... 3
Foster Father ............................................................................... 4
Partner/Friend of parent who lives in household ......................... 5
Brother (including Step/Half/Adopted) ........................................ 6
Grandfather (including Step/Half/Adopted) .................................. 7
Uncle (including Step/Half/Adopted) .............................................. 8
Other Relative, not listed above ................................................. 9

121_a) Who? ____________

Other Non-Relative, not listed above ......................................... 10

121_b) Who? ____________

No one ..................................................................................... 11
Operationalization of Family Structure

This memo discusses two unique ways to operationalize family structure. The first is a binary measure that draws upon question 186 and notes the following groups: 1) students that live with both of their biological/adoptive parents and 2) students that do not live with both of their biological or adoptive parents.

The second measure uses questions 186, 121_ and 129_a to distinguish between not only students that live with both their biological/adoptive parents and those that do not, but also the varying types of parental identification in non-intact family structures. As noted above, this measure is only available for the 2002 to 2005 cohorts, as S121_ and S129_a were only included in the 2002 to 2005 surveys.

Binary Measure:
The logic guiding the binary classification of family structure is rather straightforward—the indicator distinguishes between students that are living with both parents and those that are not. SPSS code for this measure is included below (intact families are coded as ‘1’ and non-intact are coded as ‘0’).

```
compute intact = 999.
if s186 eq 1 intact = 1.
if s186 eq 2 intact = 0.
missing value intact (999).
variable label intact 'intact family, 1 is yes, s186'.
```
intact family, |     Freq.  Percent  Cum.  
1 is yes, s186 |  -----------------  
0    |      3,626  39.30  39.30  
1    |      5,600  60.70 100.00  
Total |      9,226 100.00  

Additionally, one could use information from Question 187 (below) which inquires about whether the parents are married or divorced to further delineate between non-intact family structures. Specifically one can use this information along with that from question 186 to create a 3 category measure of family structure: 1) intact family (lives with both parents), 2) non-intact family in which parents are divorced, and 3) non-intact family in which parents are not living together but not divorced (e.g. separated, never married, parent died) and those cases that completed Q186 but are missing on Q187 (164 cases).

187) a) Are they married to each other?

(CIRCLE ONLY ONE)

Yes..............................................................................................................1
No..............................................................................................................2

b) IF YOUR MOTHER AND FATHER ARE NOT CURRENTLY MARRIED, please tell us why.

(CIRCLE ONLY ONE)

They were divorced..............................................................................1
They are separated. .............................................................................2
My biological father has died...............................................................3
My biological mother has died..............................................................4
They were never married.................................................................5
I do not know my biological parents...............................................6
I do not know the reason.................................................................7

Note: The question in 2000 asks “Are your mother and father married to each other?”, as with question 186 in 2000 it does not distinguish between biological/adoptive and other types of parental figures (e.g. step).

if s186 eq 1                intact = 1.
if s186 eq 2                intact = 0.
if missing(intact ) intact = s186 .
variable label intact 'intact family, 1 is yes, s186'.
add value labels intact
   -99797 'No more valid answers (possibly incomplete student survey)'
   -999 'Missing for some other reason (DK/Refused/Skipped Question)'
      0 'Intact'
      1 'Not intact'.
if s187b = 1     pardiv = 1.
if s187a = 1     pardiv = 0.
if s187b gt 1     pardiv = 0.
if missing(pardiv ) pardiv = s187b.
variable label pardiv 'Parents divorced, S187b'.
value labels pardiv
    -99797 'No more valid answers (possibly incomplete student survey)'
    -999 'Missing for some other reason (DK/Refused/Skipped Question)'
    1 'Parents are divorced'
    0 'Parents are not married for some other reason'.

if intact = 1                  intctord = 1.
if intact = 0  and pardiv = 1 intctord = 2.
if intact = 0  and pardiv = 0 intctord = 3.
variable label intctord 'q186,187b-combined for fam structure'.
if missing(intctord ) intctord = s187a.
value labels intctord
    1 'intact'
    2 'non-intact:parents divorced'
    3 'non-intact:par not togeth for some other reason'
    -99797 'No more valid answers (possibly incomplete student survey)'
    -999 'Missing for some other reason (DK/Refused/Skipped Question)'.

**Family Structure and Parental Identification**

The logic guiding the family structure and parental identification measure is more complex than the binary classification. The distinction between students that live both parents and those that do not, which was noted in the binary measure, is still a major component of this variable. However, the additional component of this measure is that, for students in non-intact families, it notes whom the student identifies with as mother or father figures (information contained in questions S121_ or S129_a). The variable is created by combining information on family structure from question 186 with the various parental figures noted by students in questions 121_ and 129_a. The SPSS syntax used to create this variable, as it is rather long, is included at the end of the memo. **PLEASE NOTE this measure is only available for the 2002 to 2005 cohorts.**

The benefit of this measure is that it is possible to distinguish between students that do not live with both parents but still have both parents playing a role in their lives versus students that do not live with both parents and do not identify their mother and father as their maternal and paternal figures. The added value of this additional distinction is that levels of college ambitions, plans, and attendance vary slightly across the groups of students from non-intact families with differing configurations of maternal and paternal figures. However, one should be careful in their interpretation of this variable as it does not note whether the parental figures—beyond the biological/adoptive parents—actually live with the student. It is possible that a student can identify with a parental figure, but not live with them.

Specifically, this measure notes the following groups:
1) Students that live with both of their biological/adoptive parents (intact families). 
2) Non-intact families in which the student identifies both biological parents as his/her mother and father figures.
3) Non-intact families in which the student identifies one biological parent as his/her mother/father figure and the other mother/father figure is another adult (mainly extended family, though it may also be a foster parent, or parent’s partner, for example).
4) Non-intact families in which the student identifies one biological parent as his/her mother/father figure and the other mother/father figure is a step parent.
5) Non-intact families in which the student is missing one of the parental figures and the other is a biological parent, step parent or other adult. 91% of these cases (n=510) are those in which the student has one biological adoptive parent as a parental figure and is missing the other. (79%, or 464 cases, note their biological mother as their mother figure and report no father figure.)

6) Non-intact families in which the student did not respond to the either question S121_ or S129_a, so missing data for one of the two questions.

The logic guiding the creation of the various non-intact family configurations was based upon a desire to note the most common configurations of parental identification amongst non-intact families. Specifically, some of the groups that were of *a priori* interest are: student with both biological/adoptive parents noted as parental figures, students with only one parent noted as parental figure and the other parental figure is missing, and students with one biological parent as a parental figure and a non-parent as the other parental figure. When groups were too small to have a unique category we combined them with a group that we thought to be conceptually similar. For example the 11 students that noted a step parent and an other adult as their parental figures, were included in the step-parent and biological parent as the parental figures group as it seemed conceptually the most proximate.

<table>
<thead>
<tr>
<th>family structure using 121 129 and</th>
<th>Freq.</th>
<th>Percent</th>
<th>Cum.</th>
</tr>
</thead>
<tbody>
<tr>
<td>intact</td>
<td>4,996</td>
<td>58.77</td>
<td>58.77</td>
</tr>
<tr>
<td>not intct: both parents bio-adopt</td>
<td>1,544</td>
<td>18.16</td>
<td>76.93</td>
</tr>
<tr>
<td>not intct:1 prnt bio-adopt, 1 is other</td>
<td>689</td>
<td>8.10</td>
<td>85.04</td>
</tr>
<tr>
<td>not intct: step w a bio-adopt, 1l w step</td>
<td>426</td>
<td>5.01</td>
<td>90.05</td>
</tr>
<tr>
<td>not intct: 1 parent absent &amp; other is bio</td>
<td>563</td>
<td>6.62</td>
<td>96.67</td>
</tr>
<tr>
<td>not intct: missing answer on q121 or129</td>
<td>283</td>
<td>3.33</td>
<td>100.00</td>
</tr>
<tr>
<td>Total</td>
<td>8,501</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

*Again, note that this measure is only available for the 2002 to 2005 cohorts.*

**Citations:**


**SPSS Syntax to Create the Family Structure and Parental Identification Measure**

```spss
***family structure and parental identification***.

RECODE S121_ s129_a
   (1=1) (2=1) (11=3) (missing=4) (-9=4) (3 =2.5) (4 thru 10 =2)
   INTO fathfiga mothfiga .
EXECUTE.
```
if $S121_1 = -8888$ $fathfiga = 3$.
if $s129_a = -8888$ $mothfiga = 3$.

value labels $mothfiga$ $fathfiga$ 1 'bio or adptv' 2 'other adult' 2.5 'step-family' 3 'none' 4 'missing'.
execute.

*if student identifies both/adoptive parents as parental figures.
if $mothfiga = 1$ and $fathfiga = 1$ $strct2129 = 2$.

*if student identifies one parent as bio/adoptive and one as
an other adult--ie extended family member, foster parent, parents partner.
if $mothfiga = 1$ and $fathfiga = 2$ $strct2129 = 3$.
if $mothfiga = 2$ and $fathfiga = 1$ $strct2129 = 3$.
if $mothfiga = 2$ and $fathfiga = 2$ $strct2129 = 3$.

*if student identifies with one bio/adoptive parent and one step parent.
***11 of these are configurations with one step-parent and one other adult.
if $mothfiga = 2.5$ and $fathfiga = 2.5$ $strct2129 = 4$.
if $mothfiga = 1.0$ and $fathfiga = 2.5$ $strct2129 = 4$.
if $mothfiga = 2.5$ and $fathfiga = 1.0$ $strct2129 = 4$.
***11 of these are configurations with one step-parent and one other adult.
if $mothfiga = 2.0$ and $fathfiga = 2.5$ $strct2129 = 4$.
if $mothfiga = 2.5$ and $fathfiga = 2.0$ $strct2129 = 4$.

*student is missing one parental figure, other figure is bio/adptive, step, or
other adult.
if $mothfiga = 3$ and $fathfiga = 1$ $strct2129 = 5$.
if $mothfiga = 3$ and $fathfiga = 2$ $strct2129 = 5$.
if $mothfiga = 1$ and $fathfiga = 3$ $strct2129 = 5$.
if $mothfiga = 2$ and $fathfiga = 3$ $strct2129 = 5$.
if $mothfiga = 2.5$ and $fathfiga = 3$ $strct2129 = 5$.
if $fathfiga = 2.5$ and $mothfiga = 3$ $strct2129 = 5$.

if missing($strct2129$) and $s186 = 2$ $strct2129 = 6$.
if missing($strct2129$) and ($s186 lt 0$) $strct2129 = s186$.

*This step must be last! .
* if intact family we overwrite prior codes to consider them intact,
* making all of the codes above refer to students from non-intact families.
if $s186 = 1$ $strct2129 = 1$.

variable label $strct2129$ 'family structure using 121 129 and 186-max dk'.
value labels $strct2129$
-99797 'No more valid answers (possibly incomplete student survey)'
-2002 'Questions asked in only 2002 to 2005'
-999 'Missing for some other reason (DK/Refused/Skipped Question)'
1 'intact'
2 'not intact:both parents bio--adoptive'
3 'not intact:one parent bio--adopt, one is other adult, mainly extend family'
4 'not intact:one step w-- a bio--adopt, 11 w-- step & other other adult'
5 'not intact:one parent not present & other is bio--adopt, step or other'
6 'not intact:for unknown reason (based on $s186$)'.