Issue #1)
If we are going to compare children to adults, I believe that we need to have a consistent dependent variable. For the MeanSeverity variable, the current code is clumping the values in different ways for children and adults.

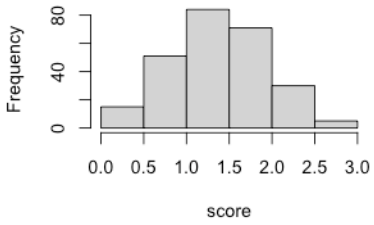
At the top of the page 2 below, in blue and black, is the starting variable distribution. First raw, then rounded. The hand-drawn border (in red) are the cutoffs in the current code that are used for combining.

I believe that these decisions were made because of the output of the original polr() models. But for MeanSeverity, the combining decisions were different for children and adults.

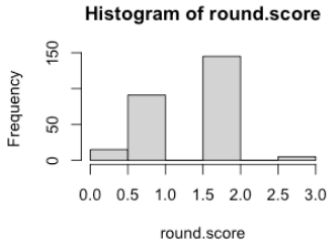
Issue #2)
If we use round() to compress the data from 13 categories into 4, I believe that we a skewing the data. That's because round() rounds 0.5 down to 0 and 1.5 up to 2. You can see at the bottom of page 2 below, the "normalish" distribution of all possible scores for MeanSeverity, becomes distinctly not "normalish" when rounded.

Issue #3)
One of the children had a MeanSeverity score of 2.67, which is not a possible score if we've averaged four scores, each from {0, 1, 2, 3}.

```
> table(children1$MeanSever)

 0.5 0.75    1 1.25  1.5 1.75    2 2.25  2.5 2.67 2.75    3
   2    1    3    2    6    6   17   16   14    1    7   14
> children1$MeanS <- round(children1$MeanSever, digits=0)
> table(children1$MeanS)

 0  1  2  3
 2  6 59 22
> table(adult1$MeanSever)

   0 0.25  0.5 0.75    1 1.25  1.5 1.75    2 2.25  2.5 2.75    3
   1    2    4   17   14   19   16   18   12    7    9    9    5
> adult1$MeanS <- round(adult1$MeanSever, digits=0)
> table(adult1$MeanS)

 0  1  2  3
 7 50 62 14
```




```
> table(score)
score
   0 0.25  0.5 0.75    1 1.25  1.5 1.75    2 2.25  2.5 2.75    3
   1    4   10   20   31   40   44   40   31   20   10    4    1
```




```
> table(round.score)
round.score
  0   1   2   3
 15  91 145   5
```