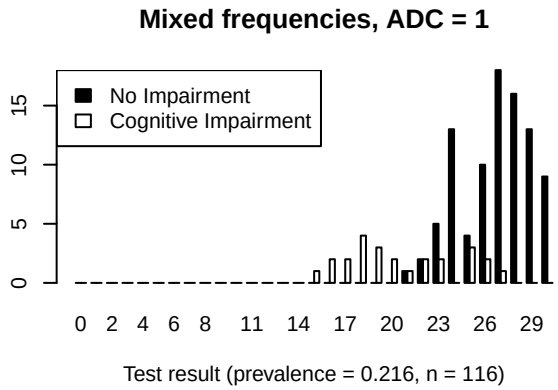
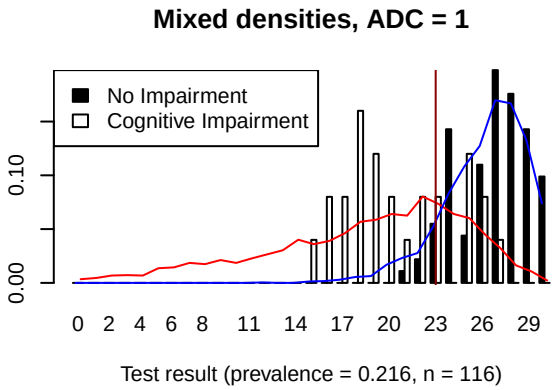
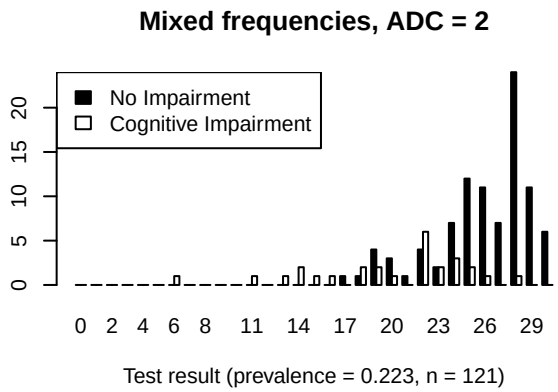
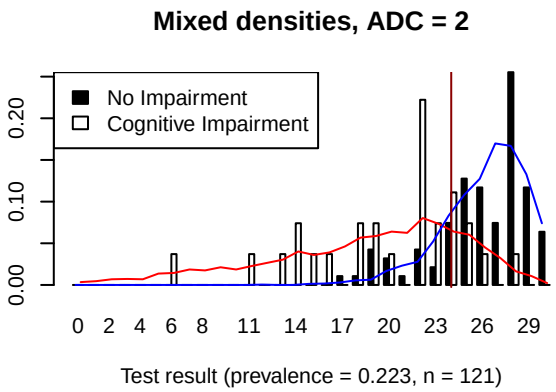
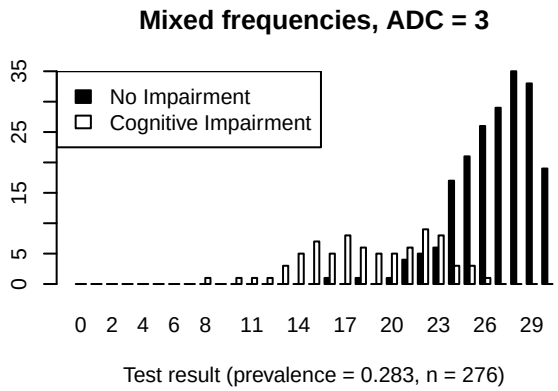
Supplement B: Mixed frequencies and Mixed densities of all 30 ADC's, sorted on prevalence. In the plots of the Mixed densities of each ADC, the overall densities are overlayed as a line, while the threshold associated with the optimal Youden threshold is a vertical dark red line.

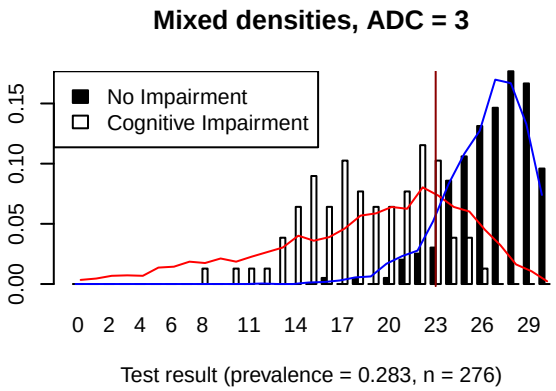

Mixed frequencies, ADC = 1
No Impairment
Cognitive Impairment
0 5 10 15
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.216, n = 116)

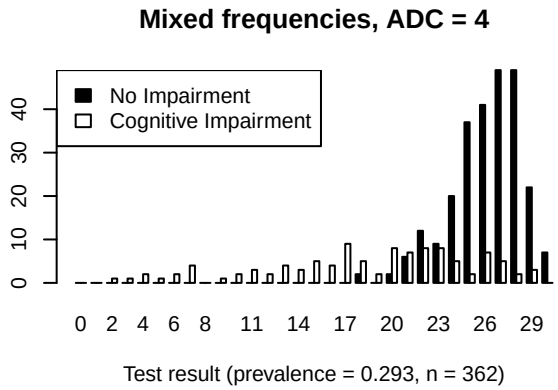

Mixed densities, ADC = 1
No Impairment
Cognitive Impairment
0.00 0.10
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.216, n = 116)

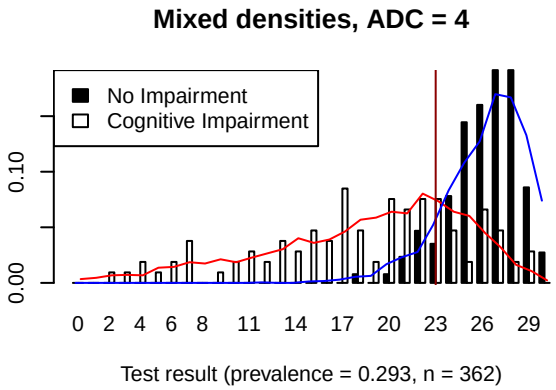

Mixed frequencies, ADC = 2
No Impairment
Cognitive Impairment
0 5 10 15 20
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.223, n = 121)

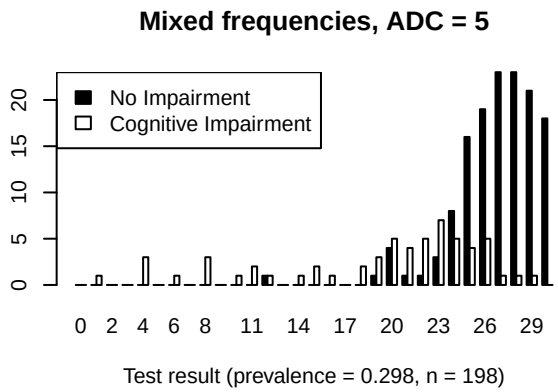

Mixed densities, ADC = 2
No Impairment
Cognitive Impairment
0.00 0.10 0.20
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.223, n = 121)

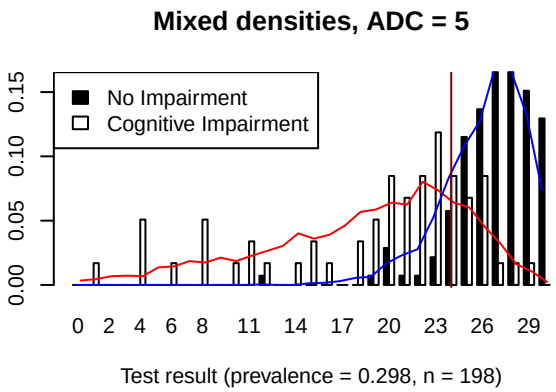

Mixed frequencies, ADC = 3
No Impairment
Cognitive Impairment
0 5 15 25 35
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.283, n = 276)

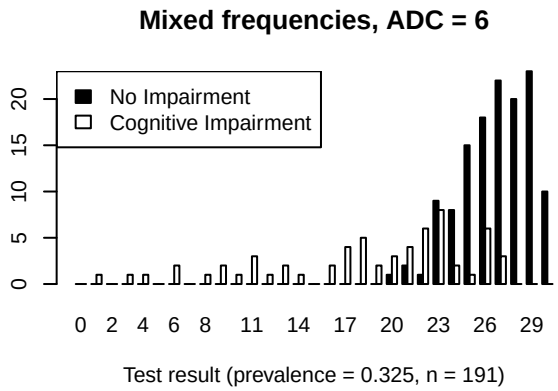

Mixed densities, ADC = 3
No Impairment
Cognitive Impairment
0.00 0.05 0.10 0.15
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.283, n = 276)

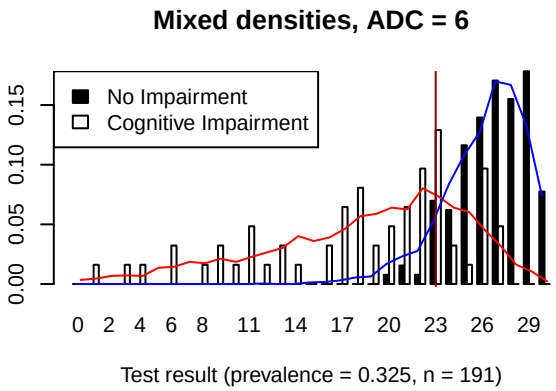

Mixed frequencies, ADC = 4
No Impairment
Cognitive Impairment
0 10 20 30 40
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.293, n = 362)

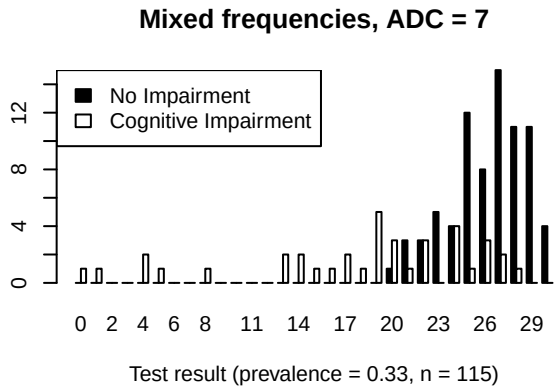

Mixed densities, ADC = 4
No Impairment
Cognitive Impairment
0.00 0.10
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.293, n = 362)

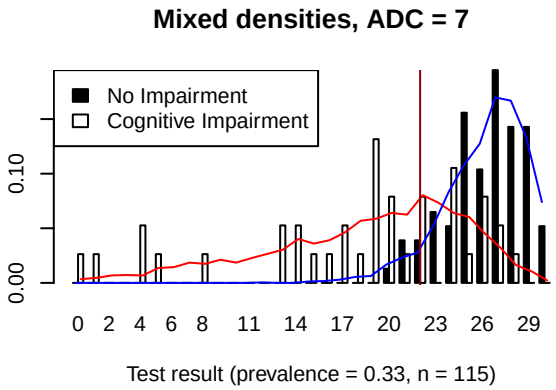

Mixed frequencies, ADC = 5
No Impairment
Cognitive Impairment
0 5 10 15 20
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.298, n = 198)

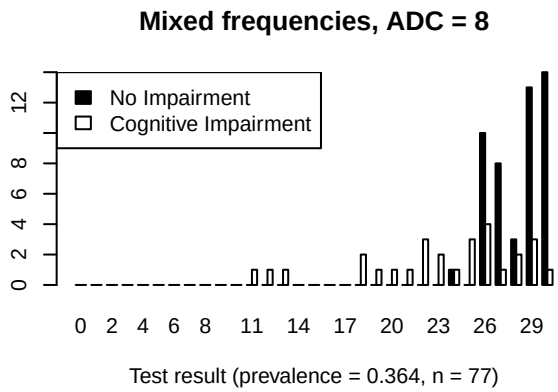

Mixed densities, ADC = 5
No Impairment
Cognitive Impairment
0.00 0.05 0.10 0.15
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.298, n = 198)

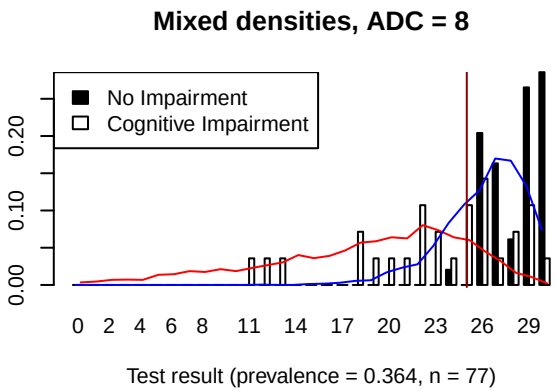

Mixed frequencies, ADC = 6
No Impairment
Cognitive Impairment
0 5 10 15 20
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.325, n = 191)

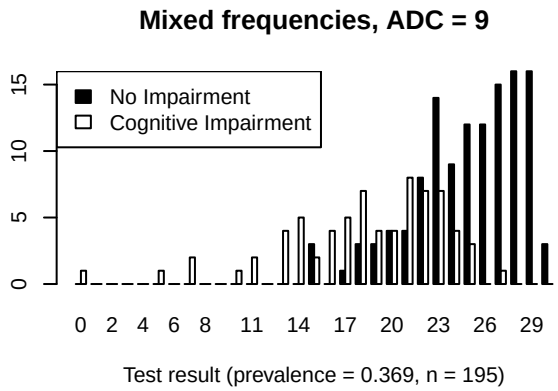

Mixed densities, ADC = 6
No Impairment
Cognitive Impairment
0.00 0.05 0.10 0.15
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.325, n = 191)

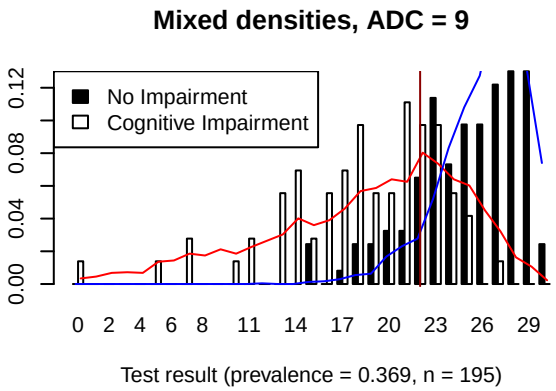

Mixed frequencies, ADC = 7
No Impairment
Cognitive Impairment
0 4 8 12
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.33, n = 115)

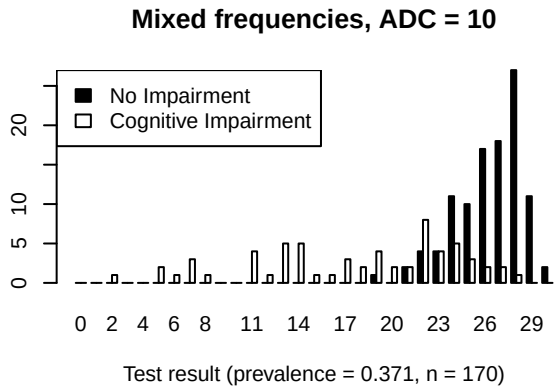

Mixed densities, ADC = 7
No Impairment
Cognitive Impairment
0.00 0.10
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.33, n = 115)

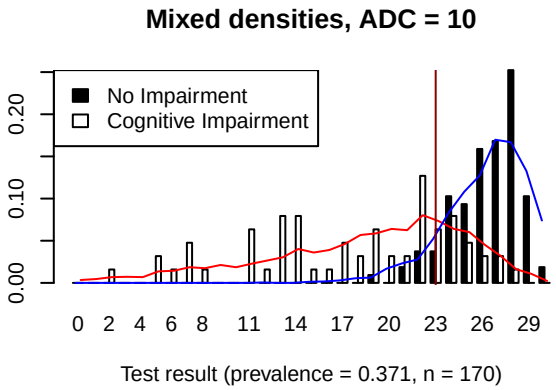

Mixed frequencies, ADC = 8
No Impairment
Cognitive Impairment
0 2 4 6 8 12
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.364, n = 77)

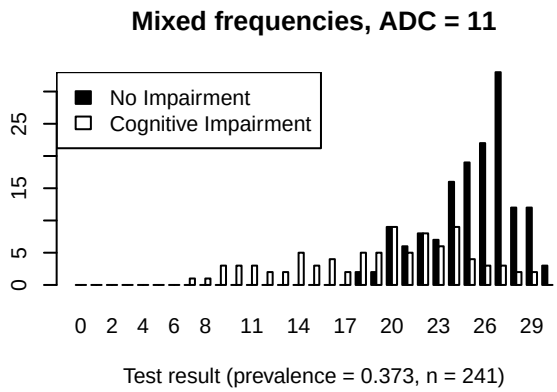

Mixed densities, ADC = 8
No Impairment
Cognitive Impairment
0.00 0.10 0.20
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.364, n = 77)

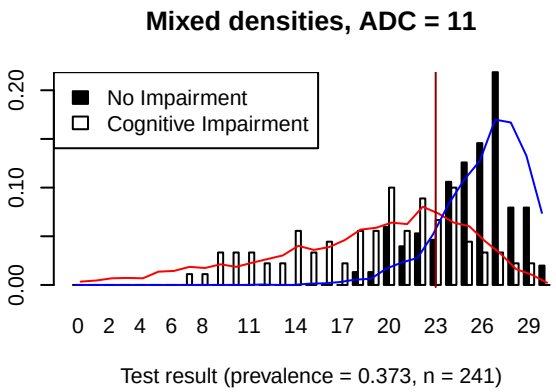

Mixed frequencies, ADC = 9
No Impairment
Cognitive Impairment
0 5 10 15
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.369, n = 195)

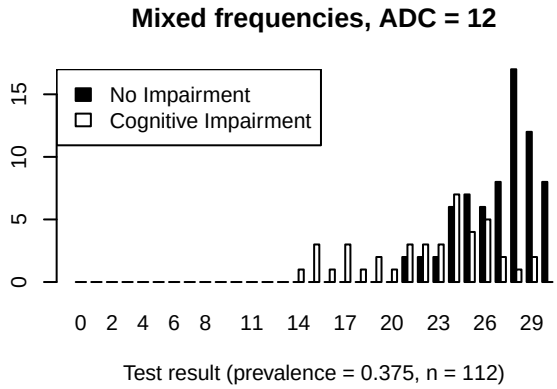

Mixed densities, ADC = 9
No Impairment
Cognitive Impairment
0.00 0.04 0.08 0.12
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.369, n = 195)

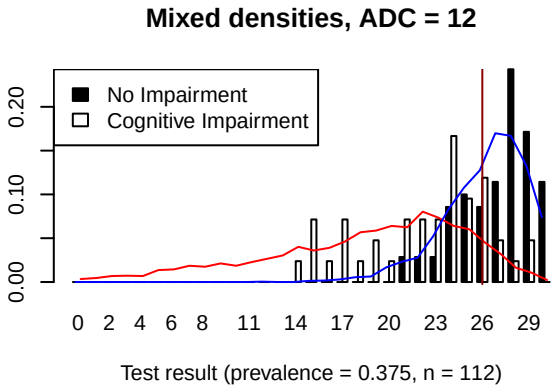

Mixed frequencies, ADC = 10
No Impairment
Cognitive Impairment
0 5 10 20
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.371, n = 170)

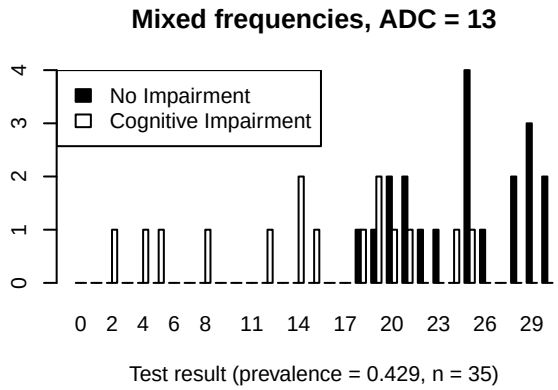

Mixed densities, ADC = 10
No Impairment
Cognitive Impairment
0.00 0.10 0.20
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.371, n = 170)

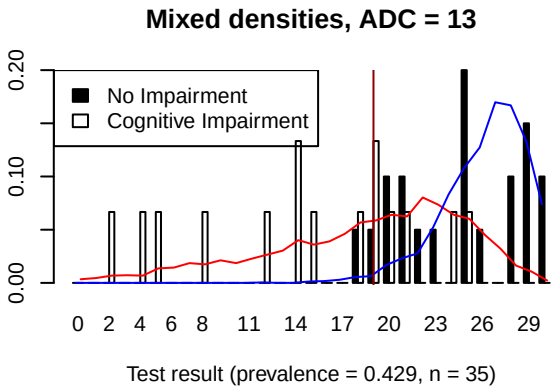

Mixed frequencies, ADC = 11
No Impairment
Cognitive Impairment
0 5 15 25
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.373, n = 241)

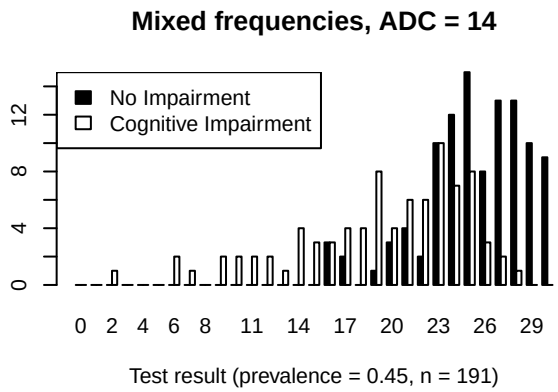

Mixed densities, ADC = 11
No Impairment
Cognitive Impairment
0.00 0.10 0.20
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.373, n = 241)

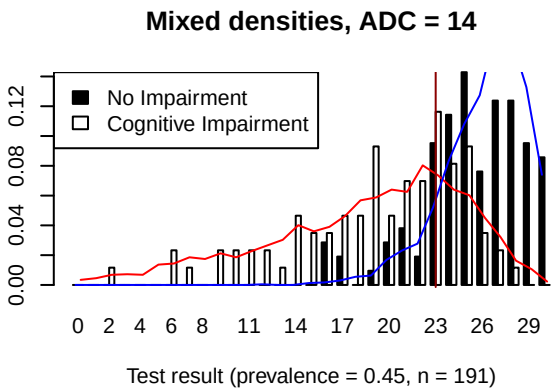

Mixed frequencies, ADC = 12
No Impairment
Cognitive Impairment
0 5 10 15
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.375, n = 112)

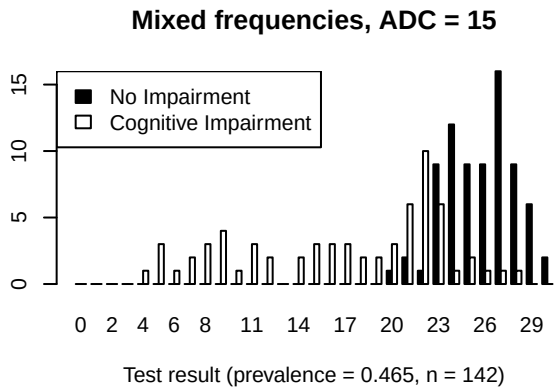

Mixed densities, ADC = 12
No Impairment
Cognitive Impairment
0.00 0.10 0.20
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.375, n = 112)

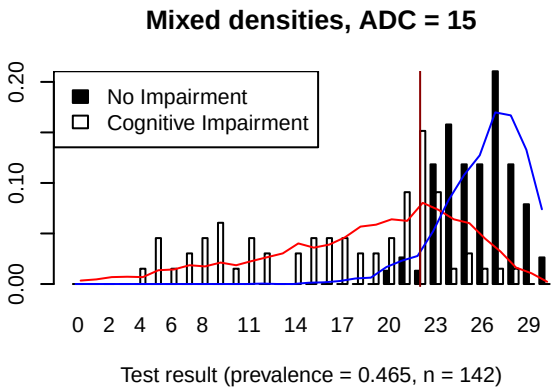

Mixed frequencies, ADC = 13
No Impairment
Cognitive Impairment
0 1 2 3 4
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.429, n = 35)

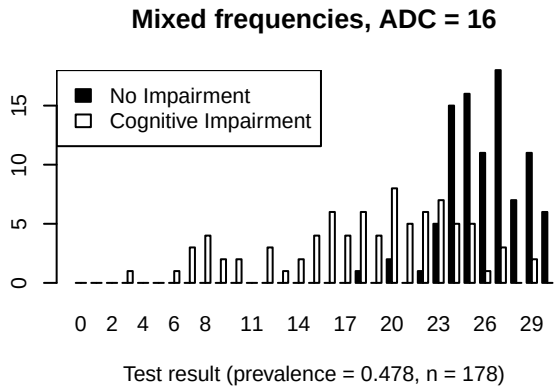

Mixed densities, ADC = 13
No Impairment
Cognitive Impairment
0.00 0.10 0.20
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.429, n = 35)

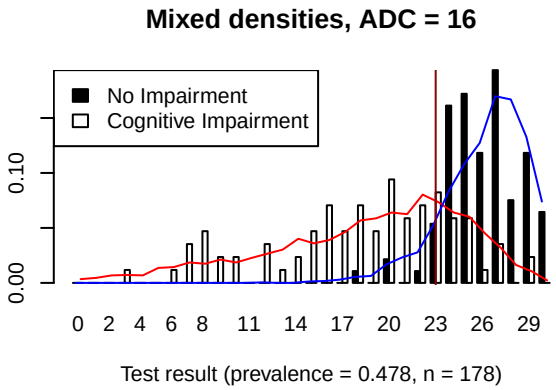

Mixed frequencies, ADC = 14
No Impairment
Cognitive Impairment
0 4 8 12
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.45, n = 191)

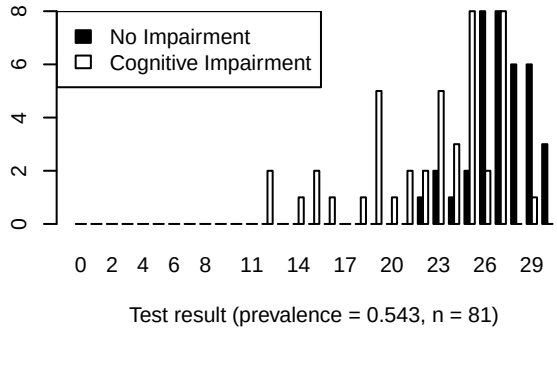

Mixed densities, ADC = 14
No Impairment
Cognitive Impairment
0.00 0.04 0.08 0.12
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.45, n = 191)

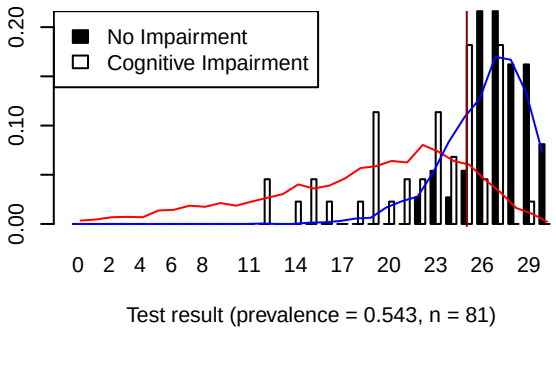

Mixed frequencies, ADC = 15
No Impairment
Cognitive Impairment
0 5 10 15
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.465, n = 142)

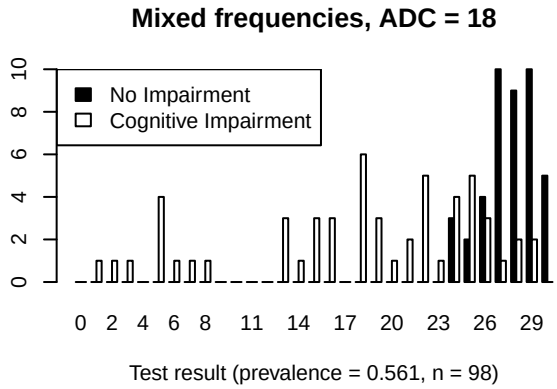

Mixed densities, ADC = 15
No Impairment
Cognitive Impairment
0.00 0.10 0.20
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.465, n = 142)

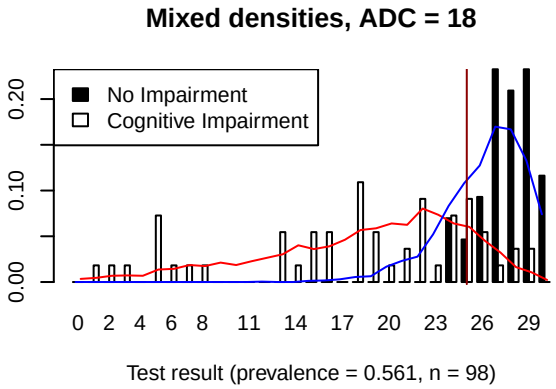

Mixed frequencies, ADC = 16
No Impairment
Cognitive Impairment
0 5 10 15
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.478, n = 178)

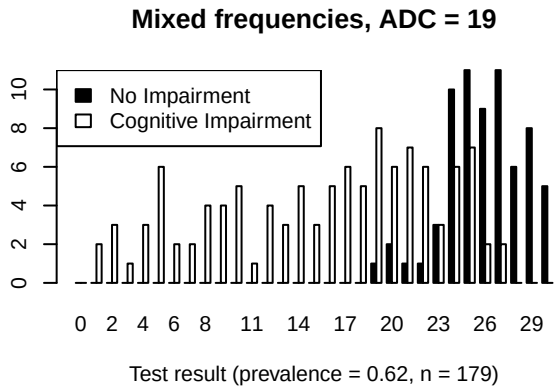

Mixed densities, ADC = 16
No Impairment
Cognitive Impairment
0.00 0.10
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.478, n = 178)

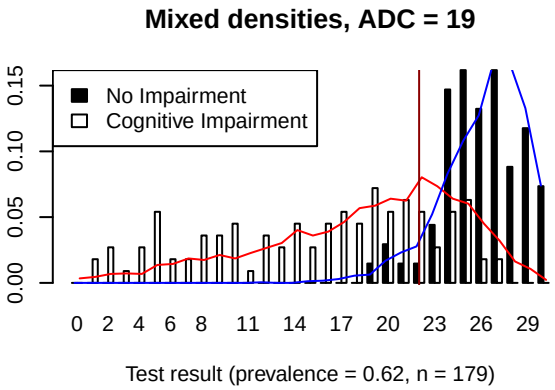

Mixed frequencies, ADC = 17
No Impairment
Cognitive Impairment
0 2 4 6 8
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.543, n = 81)

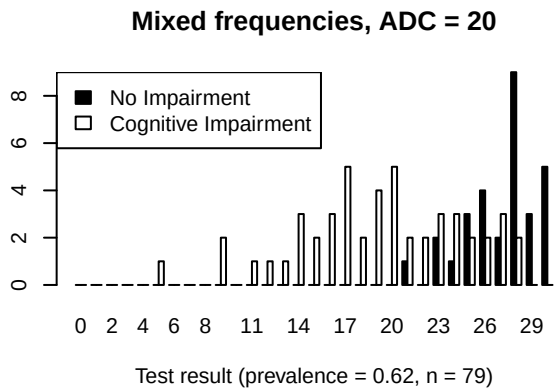

Mixed densities, ADC = 17
No Impairment
Cognitive Impairment
0.00 0.10 0.20
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.543, n = 81)

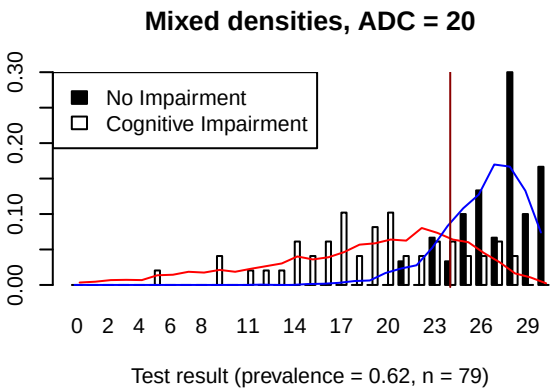

Mixed frequencies, ADC = 18
No Impairment
Cognitive Impairment
0 2 4 6 8 10
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.561, n = 98)

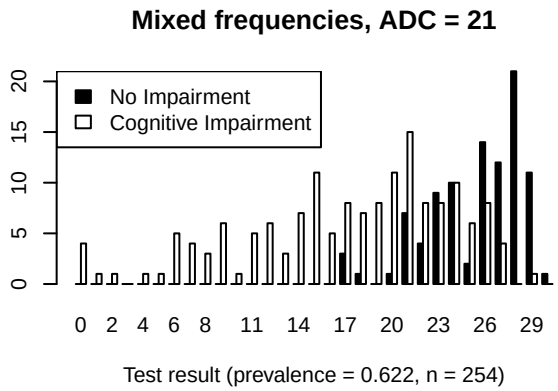

Mixed densities, ADC = 18
No Impairment
Cognitive Impairment
0.00 0.10 0.20
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.561, n = 98)

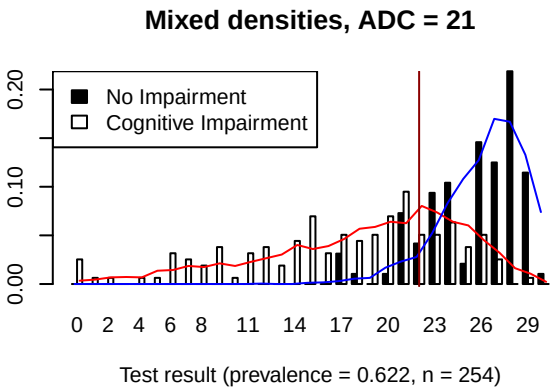

Mixed frequencies, ADC = 19
No Impairment
Cognitive Impairment
0 2 4 6 8 10
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.62, n = 179)

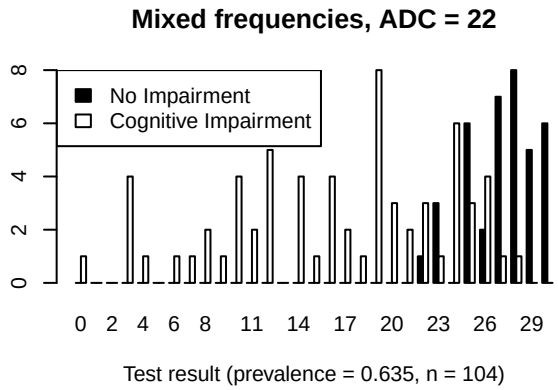

Mixed densities, ADC = 19
No Impairment
Cognitive Impairment
0.00 0.05 0.10 0.15
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.62, n = 179)

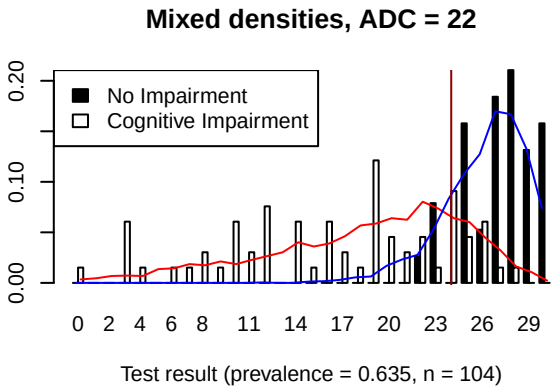

Mixed frequencies, ADC = 20
No Impairment
Cognitive Impairment
0 2 4 6 8
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.62, n = 79)

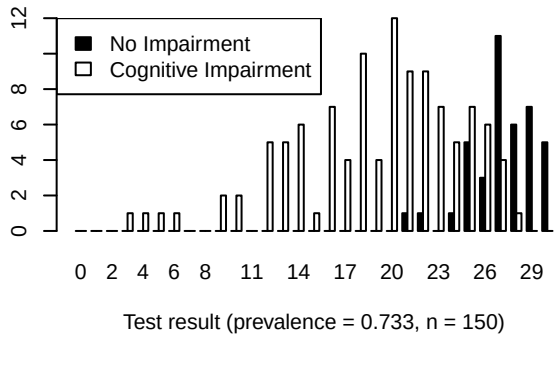

Mixed densities, ADC = 20
No Impairment
Cognitive Impairment
0.00 0.10 0.20 0.30
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.62, n = 79)

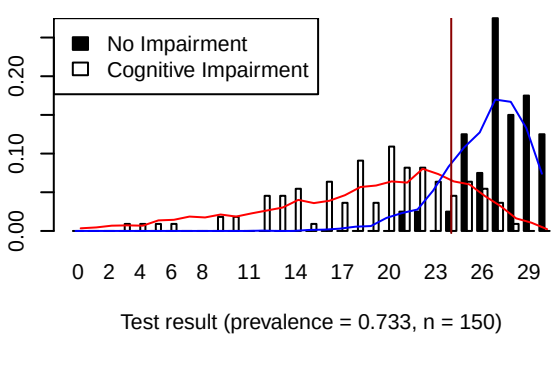

Mixed frequencies, ADC = 21
No Impairment
Cognitive Impairment
0 5 10 15 20
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.622, n = 254)

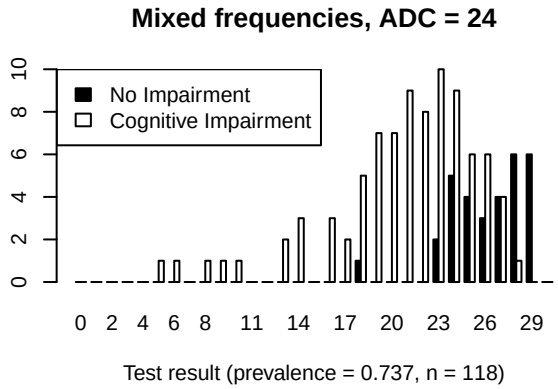

Mixed densities, ADC = 21
No Impairment
Cognitive Impairment
0.00 0.10 0.20
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.622, n = 254)

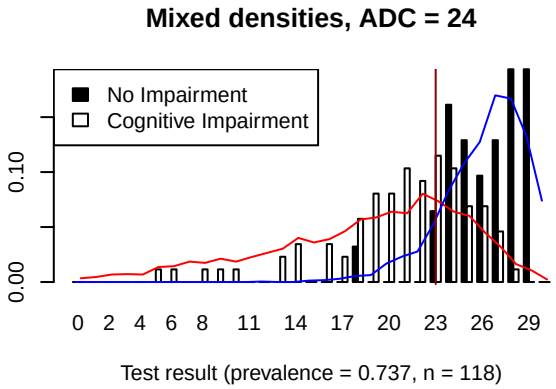

Mixed frequencies, ADC = 22
No Impairment
Cognitive Impairment
0 2 4 6 8
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.635, n = 104)

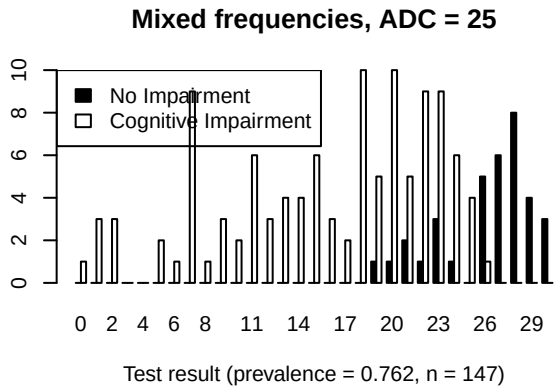

Mixed densities, ADC = 22
No Impairment
Cognitive Impairment
0.00 0.10 0.20
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.635, n = 104)

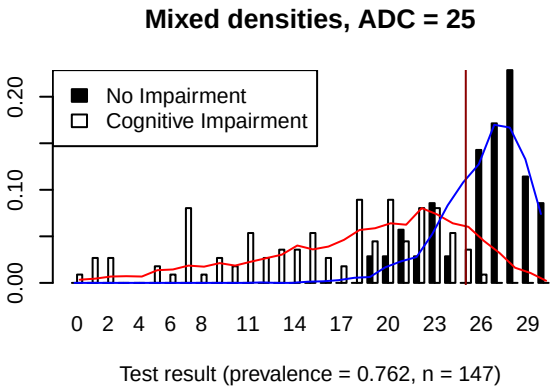

Mixed frequencies, ADC = 23
No Impairment
Cognitive Impairment
0 2 4 6 8 12
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.733, n = 150)

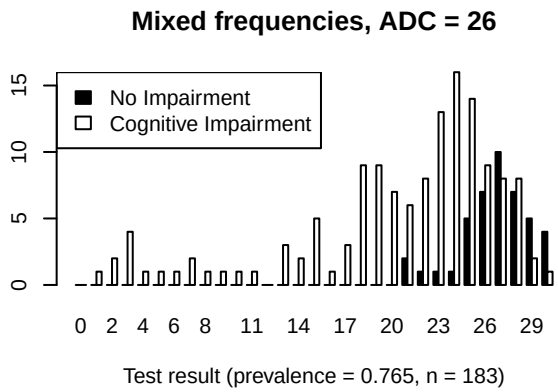

Mixed densities, ADC = 23
No Impairment
Cognitive Impairment
0.00 0.10 0.20
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.733, n = 150)

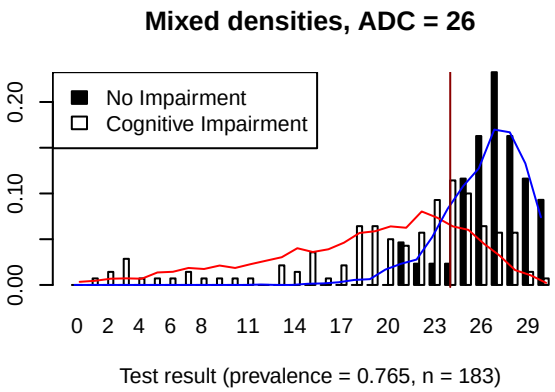

Mixed frequencies, ADC = 24
No Impairment
Cognitive Impairment
0 2 4 6 8 10
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.737, n = 118)

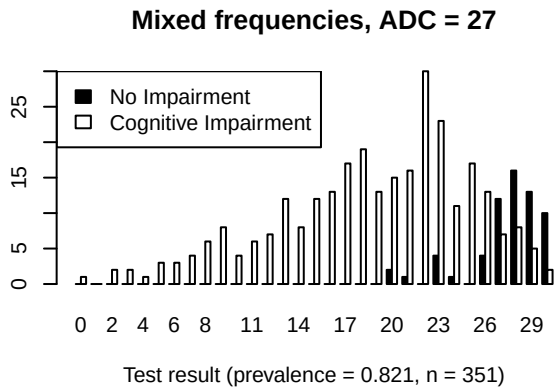

Mixed densities, ADC = 24
No Impairment
Cognitive Impairment
0.00 0.10
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.737, n = 118)

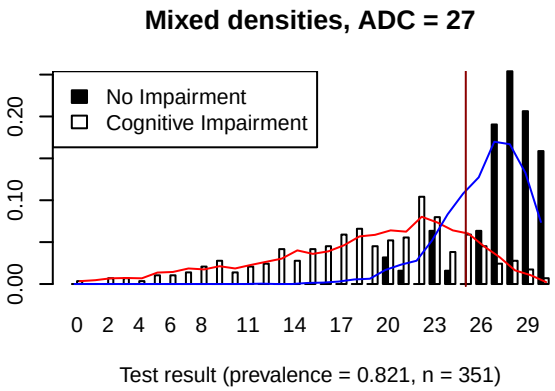

Mixed frequencies, ADC = 25
No Impairment
Cognitive Impairment
0 2 4 6 8 10
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.762, n = 147)

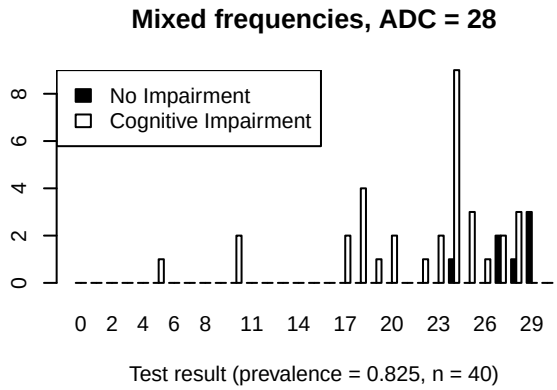

Mixed densities, ADC = 25
No Impairment
Cognitive Impairment
0.00 0.10 0.20
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.762, n = 147)

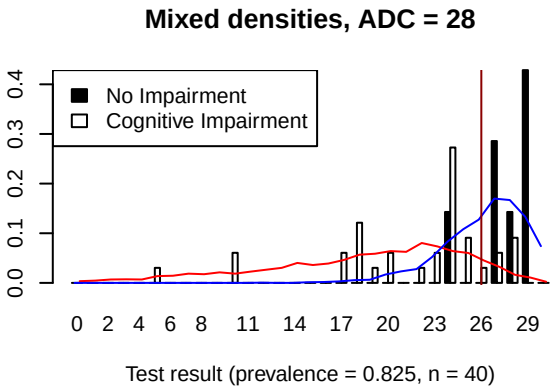

Mixed frequencies, ADC = 26
No Impairment
Cognitive Impairment
0 5 10 15
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.765, n = 183)

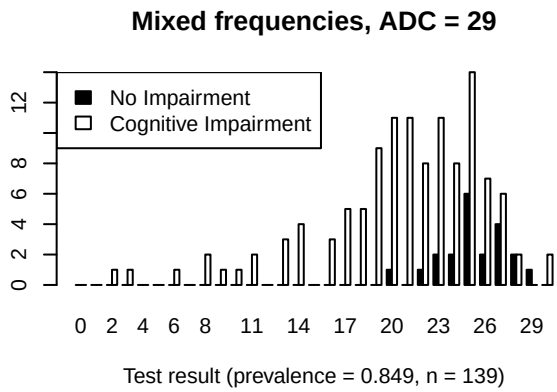

Mixed densities, ADC = 26
No Impairment
Cognitive Impairment
0.00 0.10 0.20
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.765, n = 183)

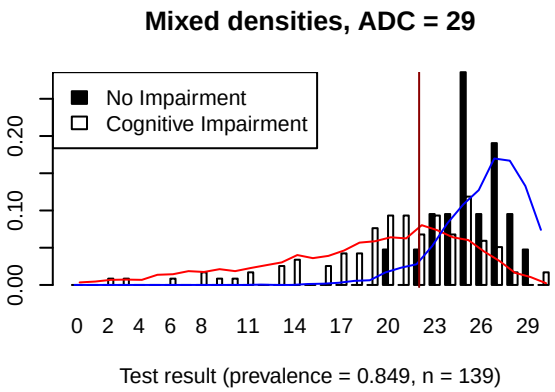

Mixed frequencies, ADC = 27
No Impairment
Cognitive Impairment
0 5 15 25
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.821, n = 351)

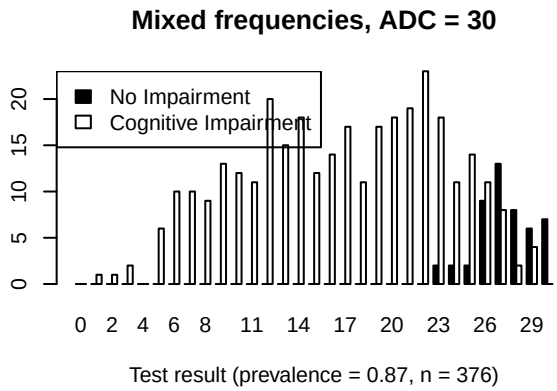

Mixed densities, ADC = 27
No Impairment
Cognitive Impairment
0.00 0.10 0.20
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.821, n = 351)

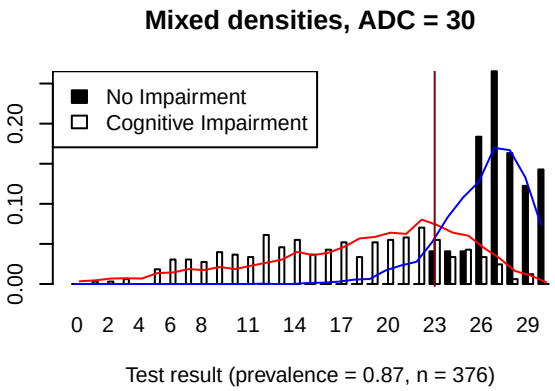

Mixed frequencies, ADC = 28
No Impairment
Cognitive Impairment
0 2 4 6 8
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.825, n = 40)


Mixed densities, ADC = 28
No Impairment
Cognitive Impairment
0.0 0.1 0.2 0.3 0.4
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.825, n = 40)


Mixed frequencies, ADC = 29
No Impairment
Cognitive Impairment
0 2 4 6 8 12
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.849, n = 139)


Mixed densities, ADC = 29
No Impairment
Cognitive Impairment
0.00 0.10 0.20
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.849, n = 139)


Mixed frequencies, ADC = 30
No Impairment
Cognitive Impairment
0 5 10 15 20
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.87, n = 376)


Mixed densities, ADC = 30
No Impairment
Cognitive Impairment
0.00 0.10 0.20
0 2 4 6 8 11 14 17 20 23 26 29
Test result (prevalence = 0.87, n = 376)