Testing eyewitness data against the Block-Marschak inequalities

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3 May 2019

## Demographics

## vars n mean sd median trimmed mad min max range skew kurtosis  
## X1 1 2012 37.15 11.42 35 35.91 10.38 18 81 63 0.92 0.26  
## se  
## X1 0.25

## $demographics\_gender  
## .  
## female male other   
## 0.000000000 0.509443340 0.484095427 0.006461233   
##   
## $demographics\_country  
## .  
## American Samoa Australia Bangladesh Canada   
## 0 0 0 0 0   
## Germany India Italy Jamaica Nepal   
## 0 0 0 0 0   
## Netherlands Romania USA Venezuela   
## 0 0 1 0

## Identification Data

## # A tibble: 10 x 4  
## decile CID FID n  
## <int> <dbl> <dbl> <int>  
## 1 1 35 6.86 202  
## 2 2 42 7 201  
## 3 3 42 6.57 201  
## 4 4 47 6.57 201  
## 5 5 58 6.29 201  
## 6 6 52 6.71 202  
## 7 7 51 6.71 201  
## 8 8 66 5.86 201  
## 9 9 78 5.43 201  
## 10 10 101 5.14 201

Vector of Correct ID and False ID counts for each confidence decile. Note that False ID counts are the number of identifications from target absent lineups divided by the number of items within the lineup (n = 8)

dvector <- din %>%   
 group\_by(decile) %>%  
 summarise(Correct = sum(CID),  
 False = sum(TAFoilID)/8,  
 n = n()) %>%  
 select(-decile,-n) %>%   
 as.matrix() %>%   
 t() %>%   
 as.vector  
  
dvector

## [1] 35.000 6.000 42.000 6.125 42.000 5.750 47.000 5.750  
## [9] 58.000 5.500 52.000 5.875 51.000 5.875 66.000 5.125  
## [17] 78.000 4.750 101.000 4.500

Vector of CIDs and FIDs for each confidence decile. Note that FIDs are calculated using Wixted & Mickes method, as per above.

## [1] 0.17326733 0.02970297 0.20895522 0.03047264 0.20895522 0.02860697  
## [7] 0.23383085 0.02860697 0.28855721 0.02736318 0.25742574 0.02908416  
## [13] 0.25373134 0.02922886 0.32835821 0.02549751 0.38805970 0.02363184  
## [19] 0.50248756 0.02238806