Survey Summary Statistics

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Summary Statistics of Raw Scores

```
library(psych)
data<- read.csv("cfcs_complete.csv")
N<- 12
describe(data[2:(N+1)], skew = FALSE)
```

```
##     vars  n mean   sd median trimmed  mad min max range   se
## q1     1 50 4.00 0.88      4    4.12 0.00   2   5     3 0.12
## q2     2 50 3.78 1.00      4    3.85 1.48   2   5     3 0.14
## q3     3 50 3.60 1.09      4    3.62 1.48   2   5     3 0.15
## q4     4 50 3.68 1.15      4    3.77 1.48   1   5     4 0.16
## q5     5 50 2.58 0.99      2    2.58 1.48   1   5     4 0.14
## q6     6 50 3.86 0.93      4    3.95 0.00   2   5     3 0.13
## q7     7 50 4.30 0.93      5    4.47 0.00   2   5     3 0.13
## q8     8 50 3.80 1.05      4    3.90 1.48   1   5     4 0.15
## q9     9 50 3.92 1.16      4    4.08 1.48   1   5     4 0.16
## q10   10 50 3.72 1.31      4    3.88 1.48   1   5     4 0.19
## q11   11 50 4.04 1.07      4    4.17 1.48   2   5     3 0.15
## q12   12 50 3.06 1.13      3    3.12 1.48   1   5     4 0.16
```

Summary Statistics of Dichotomous Scores

```
describe(data[grep("_bin", names(data), value=TRUE)], skew = FALSE)
```

```
##         vars  n mean   sd median trimmed mad min max range   se
## q1_bin     1 50 0.86 0.35      1    0.95   0   0   1     1 0.05
## q2_bin     2 50 0.70 0.46      1    0.75   0   0   1     1 0.07
## q3_bin     3 50 0.66 0.48      1    0.70   0   0   1     1 0.07
## q4_bin     4 50 0.70 0.46      1    0.75   0   0   1     1 0.07
## q5_bin     5 50 0.22 0.42      0    0.15   0   0   1     1 0.06
## q6_bin     6 50 0.78 0.42      1    0.85   0   0   1     1 0.06
## q7_bin     7 50 0.84 0.37      1    0.92   0   0   1     1 0.05
## q8_bin     8 50 0.68 0.47      1    0.72   0   0   1     1 0.07
## q9_bin     9 50 0.74 0.44      1    0.80   0   0   1     1 0.06
## q10_bin   10 50 0.70 0.46      1    0.75   0   0   1     1 0.07
## q11_bin   11 50 0.74 0.44      1    0.80   0   0   1     1 0.06
## q12_bin   12 50 0.44 0.50      0    0.42   0   0   1     1 0.07
```

Correlation Matrix

```
cor(data[2:(N+1)], method="pearson")
```

```
##            q1        q2        q3        q4         q5        q6        q7
## q1  1.0000000 0.6516846 0.5538186 0.5437716 0.35056299 0.8508619 0.5474399
## q2  0.6516846 1.0000000 0.7083454 0.7210350 0.40058217 0.7184420 0.4907741
## q3  0.5538186 0.7083454 1.0000000 0.8085600 0.52210961 0.6927620 0.4431127
## q4  0.5437716 0.7210350 0.8085600 1.0000000 0.47004187 0.6082709 0.4722824
## q5  0.3505630 0.4005822 0.5221096 0.4700419 1.00000000 0.4902799 0.2276194
## q6  0.8508619 0.7184420 0.6927620 0.6082709 0.49027990 1.0000000 0.5939518
## q7  0.5474399 0.4907741 0.4431127 0.4722824 0.22761945 0.5939518 1.0000000
## q8  0.5077374 0.4061044 0.5360563 0.4527751 0.38818157 0.5374215 0.5009794
## q9  0.4203499 0.4978173 0.6383600 0.7463375 0.46788154 0.5032883 0.5905322
## q10 0.2653708 0.2960370 0.3923650 0.4132214 0.17471293 0.2866786 0.2542745
## q11 0.6074110 0.6799569 0.7339707 0.7909204 0.42076117 0.6246608 0.6440975
## q12 0.1842051 0.4282891 0.4340486 0.3909671 0.09561001 0.2806650 0.1761157
##            q8        q9       q10       q11        q12
## q1  0.5077374 0.4203499 0.2653708 0.6074110 0.18420514
## q2  0.4061044 0.4978173 0.2960370 0.6799569 0.42828910
## q3  0.5360563 0.6383600 0.3923650 0.7339707 0.43404857
## q4  0.4527751 0.7463375 0.4132214 0.7909204 0.39096708
## q5  0.3881816 0.4678815 0.1747129 0.4207612 0.09561001
## q6  0.5374215 0.5032883 0.2866786 0.6246608 0.28066501
## q7  0.5009794 0.5905322 0.2542745 0.6440975 0.17611565
## q8  1.0000000 0.4903085 0.3443061 0.4440270 0.16482587
## q9  0.4903085 1.0000000 0.5635647 0.7946691 0.31509751
## q10 0.3443061 0.5635647 1.0000000 0.4894316 0.52066191
## q11 0.4440270 0.7946691 0.4894316 1.0000000 0.45352029
## q12 0.1648259 0.3150975 0.5206619 0.4535203 1.00000000
```

Average R

```
alpha(data[2:(N+1)])$total$average_r
```

```
## [1] 0.4881043
```

Raw Alpha and Standardized Alpha

Raw Alpha

```
alpha(data[2:(N+1)])$total$raw_alpha
```

```
## [1] 0.9166612
```

Standardized Alpha

```r
alpha(data[2:(N+1)])$total$std.alpha
```

```
## [1] 0.9196288
```

Summary Statistics of Mean Scale Score and Factor Score

Mean Scale Score

```r
describe(data$mean, skew = FALSE)
```

```
##   vars  n mean   sd median trimmed  mad min  max range   se
## 1    1 50 3.69 0.77      4    3.76 0.56   2 4.83  2.83 0.11
```

Factor Score

```r
describe(data$MR1, skew = FALSE)
```

```
##   vars  n mean   sd median trimmed  mad   min  max range   se
## 1    1 50    0 0.97    0.3    0.08 0.82 -2.05 1.32  3.37 0.14
```

Correlation between Mean Scale Score and Factor Score

```r
cor(data$mean, data$MR1, method="pearson")
```

```
## [1] 0.9849172
```