Codebook for data.set2

Autogenerated data summary from dataMaid

2019-06-15 19:06:16

Data report overview

The dataset examined has the following dimensions:

Feature	Result
Number of observations	180
Number of variables	81

Feature Selection
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The features selected for this database come from the accelerometer and gyroscope 3-axial raw signals tAcc-XYZ and tGyro-XYZ.
These time domain signals (prefix 't' to denote time) were captured at a constant rate of 50 Hz. Then they were filtered using a
median filter and a 3rd order low pass Butterworth filter with a corner frequency of 20 Hz to remove noise. Similarly, the
acceleration signal was then separated into body and gravity acceleration signals (tBodyAcc-XYZ and tGravityAcc-XYZ) using another
low pass Butterworth filter with a corner frequency of 0.3 Hz.

Subsequently, the body linear acceleration and angular velocity were derived in time to obtain Jerk signals (tBodyAccJerk-XYZ
and tBodyGyroJerk-XYZ). Also the magnitude of these three-dimensional signals were calculated using the Euclidean norm (tBodyAccMag,
tGravityAccMag, tBodyAccJerkMag, tBodyGyroMag, tBodyGyroJerkMag).

Finally a Fast Fourier Transform (FFT) was applied to some of these signals producing fBodyAcc-XYZ, fBodyAccJerk-XYZ, fBodyGyro-XYZ,
fBodyAccJerkMag, fBodyGyroMag, fBodyGyroJerkMag. (Note the 'f' to indicate frequency domain signals).

These signals were used to estimate variables of the feature vector for each pattern:
'-XYZ' is used to denote 3-axial signals in the X, Y and Z directions.

tBodyAcc-XYZ
tGravityAcc-XYZ
tBodyAccJerk-XYZ
tBodyGyro-XYZ
tBodyGyroJerk-XYZ
tBodyAccMag
tGravityAccMag
tBodyAccJerkMag
tBodyGyroMag
tBodyGyroJerkMag
fBodyAcc-XYZ
fBodyAccJerk-XYZ
fBodyGyro-XYZ
fBodyAccMag
fBodyAccJerkMag
fBodyGyroMag
fBodyGyroJerkMag

The set of variables that were estimated from these signals are:

mean(): Mean value
std(): Standard deviation

Additional vectors obtained by averaging the signals in a signal window sample. These are used on the angle() variable:

gravityMean
tBodyAccMean
tBodyAccJerkMean
tBodyGyroMean
tBodyGyroJerkMean

==========

The experiments have been carried out with a group of 30 volunteers within an age bracket of 19-48 years. Each person performed six activities (WALKING,

WALKING_UPSTAIRS, WALKING_DOWNSTAIRS, SITTING, STANDING, LAYING) wearing a smartphone (Samsung Galaxy S II) on the waist. Using its embedded accelerometer and gyroscope, we captured 3-axial linear acceleration and 3-axial angular velocity at a constant rate of 50Hz. The experiments have been video-recorded to label the data manually. The obtained dataset has been randomly partitioned into two sets, where 70% of the volunteers was selected for generating the training data and 30% the test data.

The sensor signals (accelerometer and gyroscope) were pre-processed by applying noise filters and then sampled in fixed-width sliding windows of 2.56 sec and 50% overlap (128 readings/window). The sensor acceleration signal, which has gravitational and body motion components, was separated using a Butterworth low-pass filter into body acceleration and gravity. The gravitational force is assumed to have only low frequency components, therefore a filter with 0.3 Hz cutoff frequency was used. From each window, a vector of features was obtained by calculating variables from the time and frequency domain. See 'features_info.txt' for more details.

Codebook summary table

Label	Variable	Class	# unique values	Missing	Description
	Subject	integer	30	0.00 %	
	Activity	factor	6	0.00 %	
	tBodyAcc-mean-X	numeric	180	0.00 %	
	tBodyAcc-mean-Y	numeric	180	0.00 %	
	tBodyAcc-mean-Z	numeric	180	0.00 %	
	tBodyAcc-std-X	numeric	180	0.00 %	
	tBodyAcc-std-Y	numeric	180	0.00 %	
	tBodyAcc-std-Z	numeric	180	0.00 %	
	tGravityAcc-mean-X	numeric	180	0.00 %	
	tGravityAcc-mean-Y	numeric	180	0.00 %	
	tGravityAcc-mean-Z	numeric	180	0.00 %	
	tGravityAcc-std-X	numeric	180	0.00 %	
	tGravityAcc-std-Y	numeric	180	0.00 %	

tGravityAcc-std-Z	numeric	180	0.00 %
tBodyAccJerk-mean-X	numeric	180	0.00 %
tBodyAccJerk-mean-Y	numeric	180	0.00 %
tBodyAccJerk-mean-Z	numeric	180	0.00 %
tBodyAccJerk-std-X	numeric	180	0.00 %
tBodyAccJerk-std-Y	numeric	180	0.00 %
tBodyAccJerk-std-Z	numeric	180	0.00 %
tBodyGyro-mean-X	numeric	180	0.00 %
tBodyGyro-mean-Y	numeric	180	0.00 %
tBodyGyro-mean-Z	numeric	180	0.00 %
tBodyGyro-std-X	numeric	180	0.00 %
tBodyGyro-std-Y	numeric	180	0.00 %
tBodyGyro-std-Z	numeric	180	0.00 %
tBodyGyroJerk-mean-X	numeric	180	0.00 %
tBodyGyroJerk-mean-Y	numeric	180	0.00 %
tBodyGyroJerk-mean-Z	numeric	180	0.00 %
tBodyGyroJerk-std-X	numeric	180	0.00 %
tBodyGyroJerk-std-Y	numeric	180	0.00 %
tBodyGyroJerk-std-Z	numeric	180	0.00 %
tBodyAccMag-mean	numeric	180	0.00 %
tBodyAccMag-std	numeric	180	0.00 %
tGravityAccMag-mean	numeric	180	0.00 %
tGravityAccMag-std	numeric	180	0.00 %
tBodyAccJerkMag-mean	numeric	180	0.00 %
tBodyAccJerkMag-std	numeric	180	0.00 %
tBodyGyroMag-mean	numeric	180	0.00 %

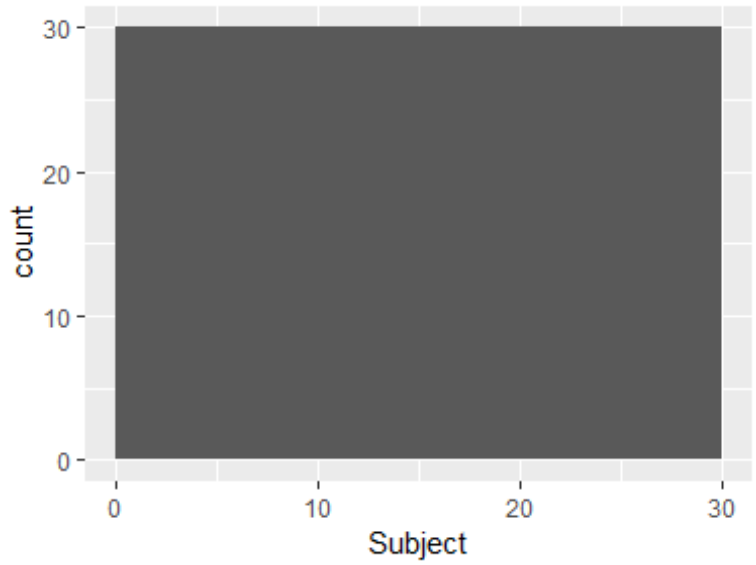
tBodyGyroMag-std	numeric	180	0.00 %
tBodyGyroJerkMag-mean	numeric	180	0.00 %
tBodyGyroJerkMag-std	numeric	180	0.00 %
fBodyAcc-mean-X	numeric	180	0.00 %
fBodyAcc-mean-Y	numeric	180	0.00 %
fBodyAcc-mean-Z	numeric	180	0.00 %
fBodyAcc-std-X	numeric	180	0.00 %
fBodyAcc-std-Y	numeric	180	0.00 %
fBodyAcc-std-Z	numeric	180	0.00 %
fBodyAcc-meanFreq-X	numeric	180	0.00 %
fBodyAcc-meanFreq-Y	numeric	180	0.00 %
fBodyAcc-meanFreq-Z	numeric	180	0.00 %
fBodyAccJerk-mean-X	numeric	180	0.00 %
fBodyAccJerk-mean-Y	numeric	180	0.00 %
fBodyAccJerk-mean-Z	numeric	180	0.00 %
fBodyAccJerk-std-X	numeric	180	0.00 %
fBodyAccJerk-std-Y	numeric	180	0.00 %
fBodyAccJerk-std-Z	numeric	180	0.00 %
fBodyAccJerk-meanFreq-X	numeric	180	0.00 %
fBodyAccJerk-meanFreq-Y	numeric	180	0.00 %
fBodyAccJerk-meanFreq-Z	numeric	180	0.00 %
fBodyGyro-mean-X	numeric	180	0.00 %
fBodyGyro-mean-Y	numeric	180	0.00 %
fBodyGyro-mean-Z	numeric	180	0.00 %
fBodyGyro-std-X	numeric	180	0.00 %
fBodyGyro-std-Y	numeric	180	0.00 %

fBodyGyro-std-Z	numeric	180	0.00 %
fBodyGyro-meanFreq-X	numeric	180	0.00 %
fBodyGyro-meanFreq-Y	numeric	180	0.00 %
fBodyGyro-meanFreq-Z	numeric	180	0.00 %
fBodyAccMag-mean	numeric	180	0.00 %
fBodyAccMag-std	numeric	180	0.00 %
fBodyAccMag-meanFreq	numeric	180	0.00 %
fBodyBodyAccJerkMag-mean	numeric	180	0.00 %
fBodyBodyAccJerkMag-std	numeric	180	0.00 %
fBodyBodyAccJerkMag-meanFreq	numeric	180	0.00 %
fBodyBodyGyroMag-mean	numeric	180	0.00 %
fBodyBodyGyroMag-std	numeric	180	0.00 %
fBodyBodyGyroMag-meanFreq	numeric	180	0.00 %
fBodyBodyGyroJerkMag-mean	numeric	180	0.00 %
fBodyBodyGyroJerkMag-std	numeric	180	0.00 %
fBodyBodyGyroJerkMag-meanFreq	numeric	180	0.00 %

Variable list

Subject

Feature	Result
Variable type	integer
Number of missing obs.	0 (0 %)
Number of unique values	30
Median	15.5
1st and 3rd quartiles	8; 23
Min. and max.	1; 30



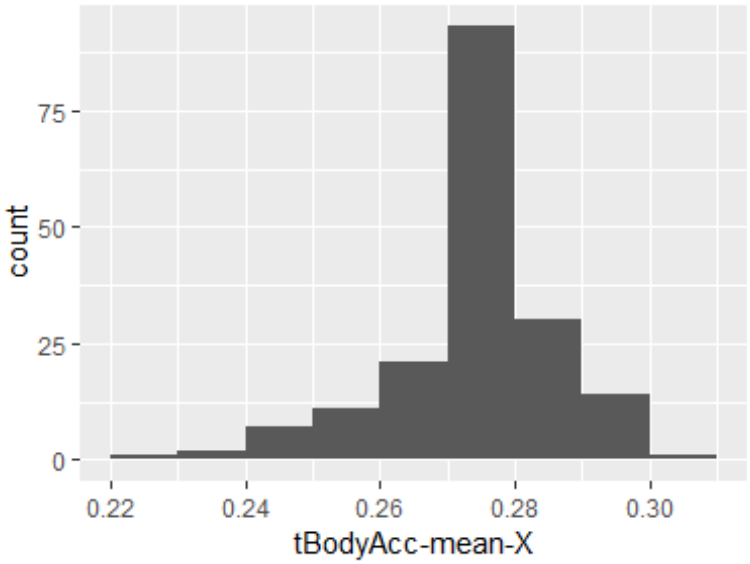
Activity

Feature	Result
Variable type	factor
Number of missing obs.	0 (0 %)
Number of unique values	6
Mode	“WALKING”
Reference category	WALKING

- Observed factor levels: "LAYING", "SITTING", "STANDING", "WALKING", "WALKING_DOWNSTAIRS", "WALKING_UPSTAIRS".

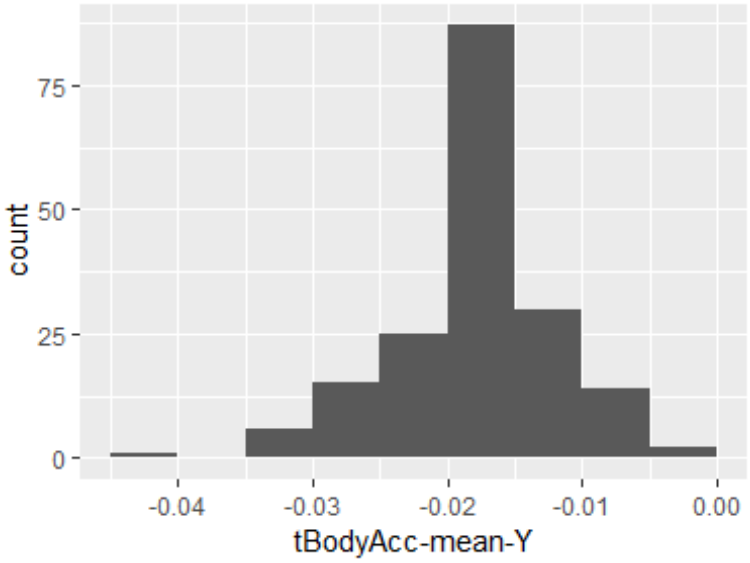
tBodyAcc-mean-X

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	0.28
1st and 3rd quartiles	0.27; 0.28
Min. and max.	0.22; 0.3



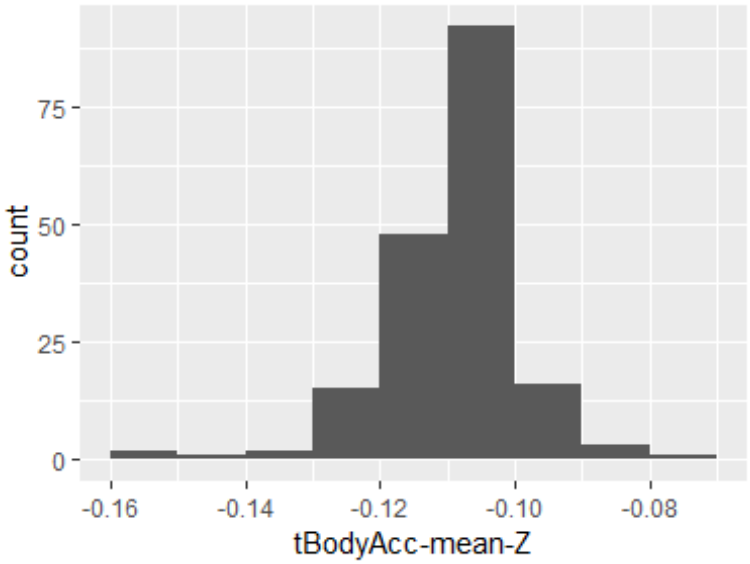
tBodyAcc-mean-Y

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.02
1st and 3rd quartiles	-0.02; -0.01
Min. and max.	-0.04; 0



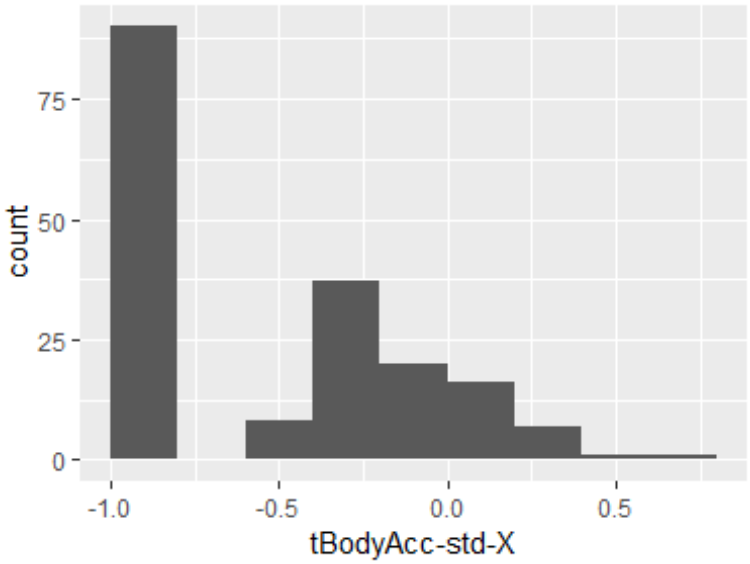
tBodyAcc-mean-Z

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.11
1st and 3rd quartiles	-0.11; -0.1
Min. and max.	-0.15; -0.08



tBodyAcc-std-X

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.75
1st and 3rd quartiles	-0.98; -0.2
Min. and max.	-1; 0.63



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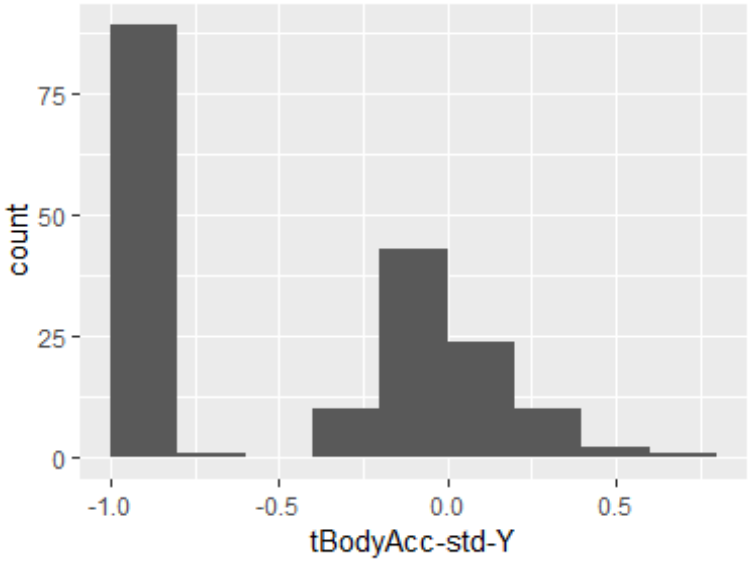
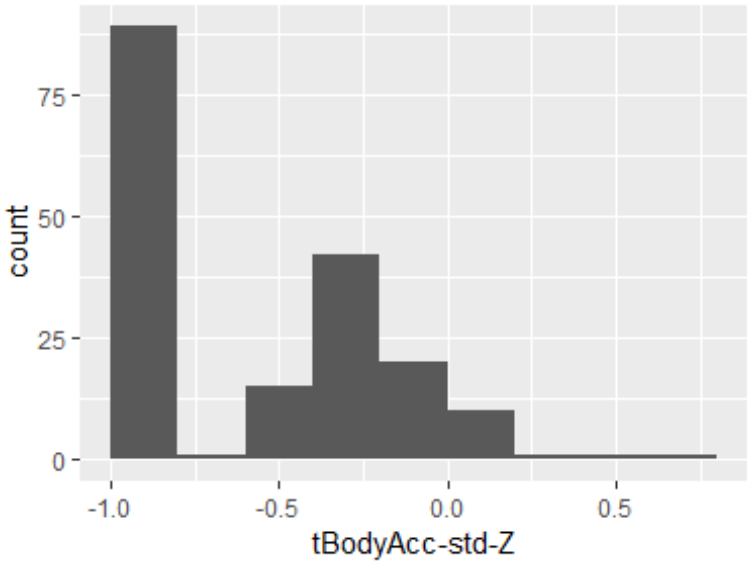
tBodyAcc-std-Y

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.51
1st and 3rd quartiles	-0.94; -0.03
Min. and max.	-0.99; 0.62



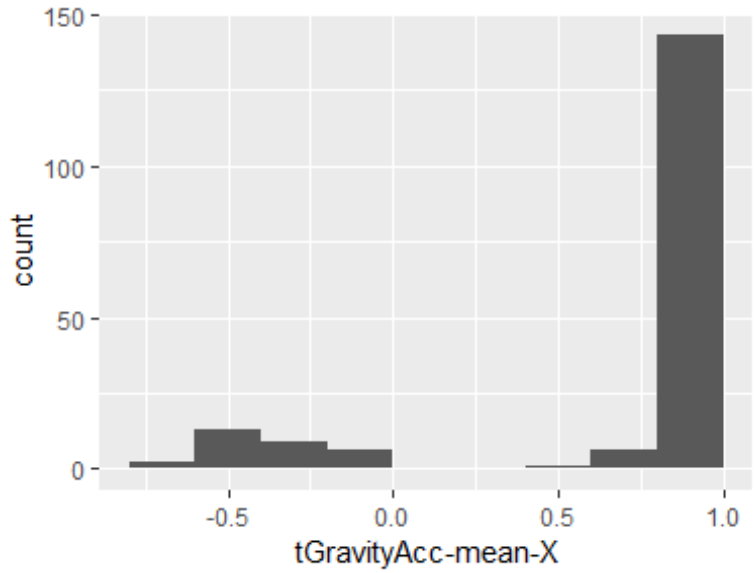
tBodyAcc-std-Z

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.65
1st and 3rd quartiles	-0.95; -0.23
Min. and max.	-0.99; 0.61



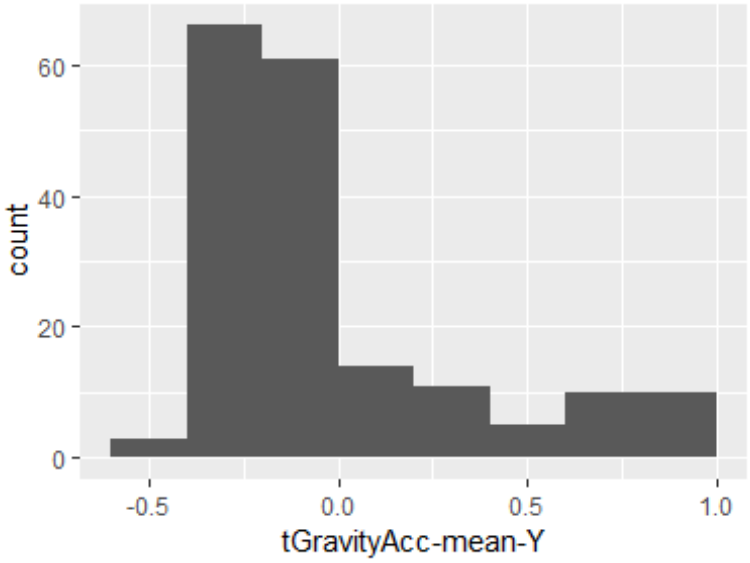
tGravityAcc-mean-X

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	0.92
1st and 3rd quartiles	0.84; 0.94
Min. and max.	-0.68; 0.97



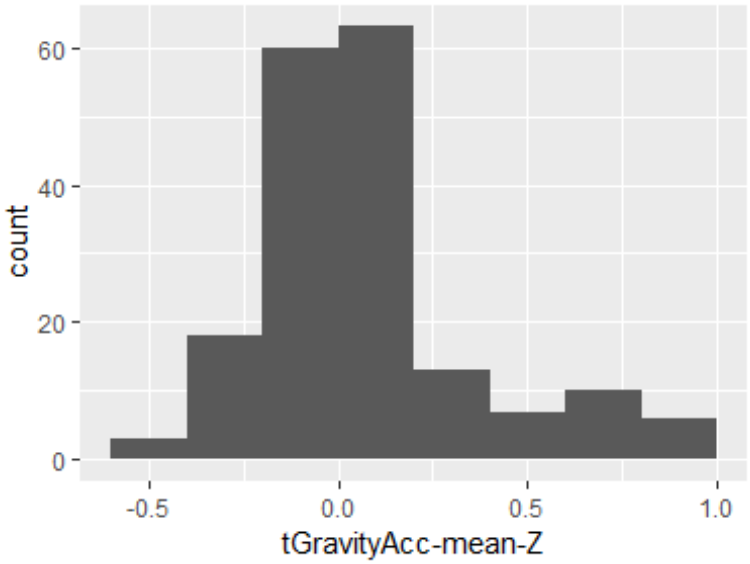
tGravityAcc-mean-Y

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.13
1st and 3rd quartiles	-0.23; 0.09
Min. and max.	-0.48; 0.96



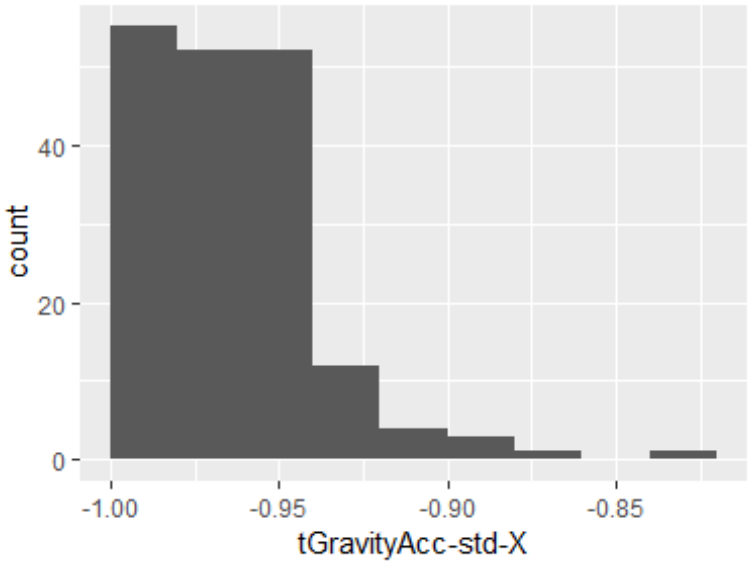
tGravityAcc-mean-Z

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	0.02
1st and 3rd quartiles	-0.12; 0.15
Min. and max.	-0.5; 0.96



tGravityAcc-std-X

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.97
1st and 3rd quartiles	-0.98; -0.95
Min. and max.	-1; -0.83



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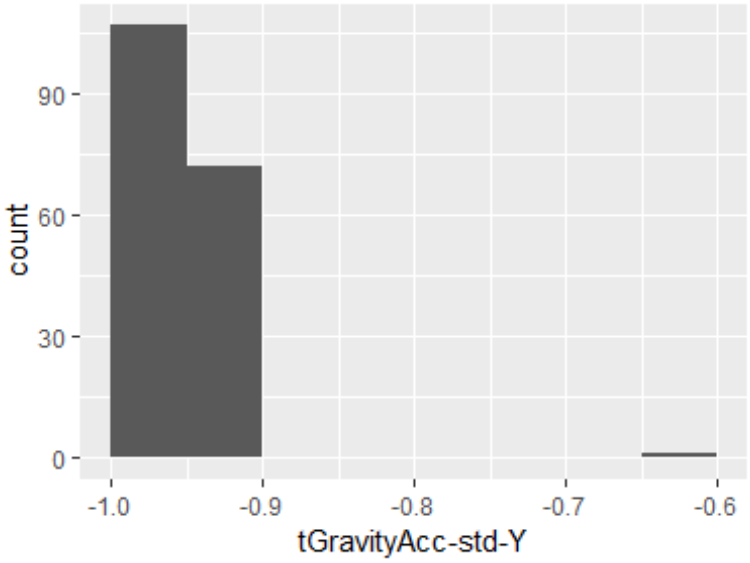
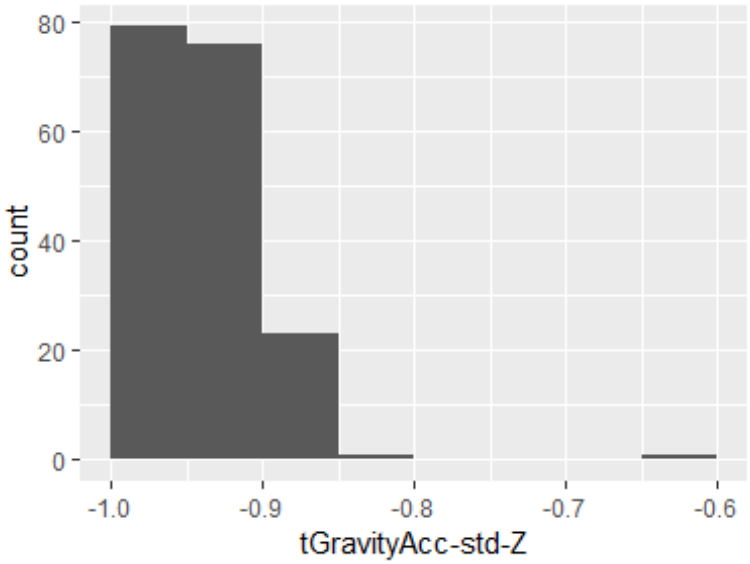
tGravityAcc-std-Y

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.96
1st and 3rd quartiles	-0.97; -0.94
Min. and max.	-0.99; -0.64



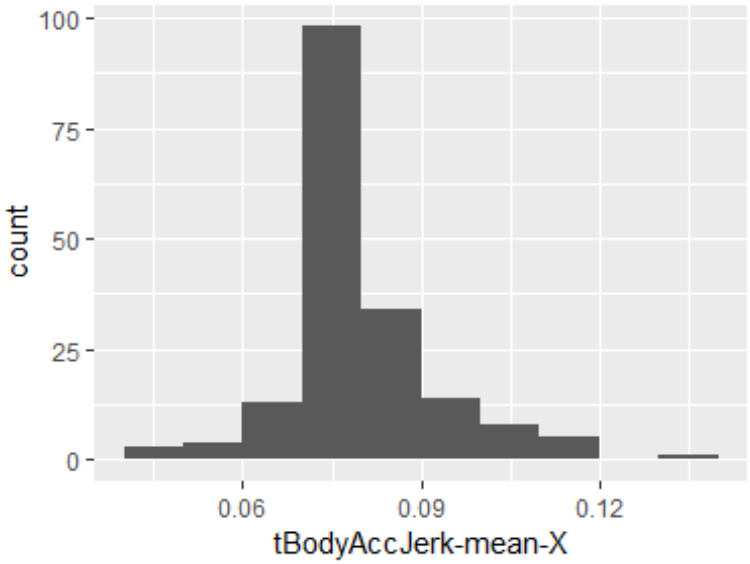
tGravityAcc-std-Z

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.95
1st and 3rd quartiles	-0.96; -0.92
Min. and max.	-0.99; -0.61



tBodyAccJerk-mean-X

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	0.08
1st and 3rd quartiles	0.07; 0.08
Min. and max.	0.04; 0.13



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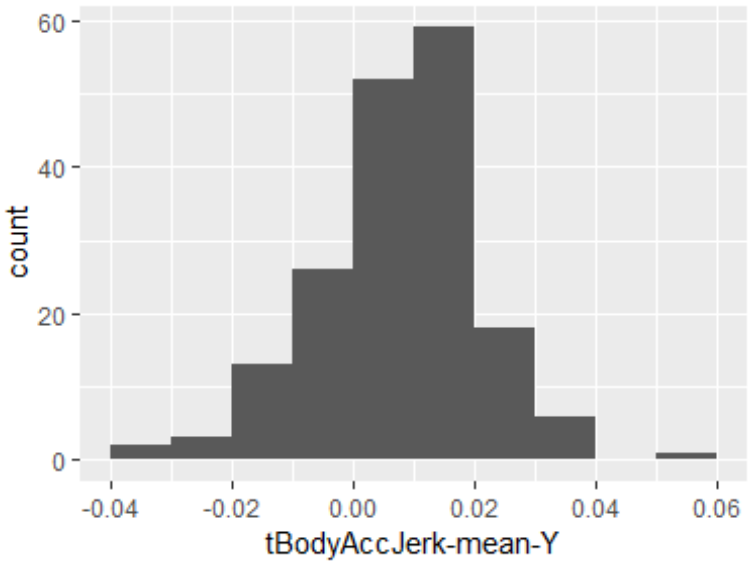
tBodyAccJerk-mean-Y

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	0.01
1st and 3rd quartiles	0; 0.01
Min. and max.	-0.04; 0.06



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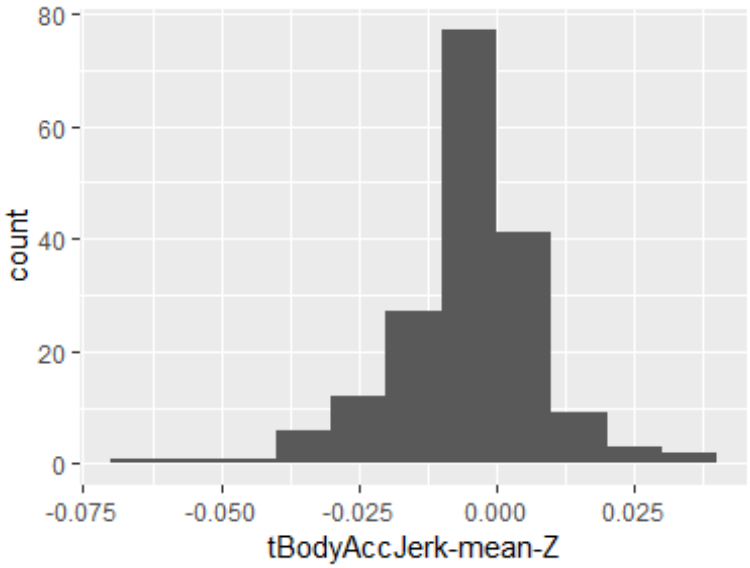
tBodyAccJerk-mean-Z

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	0
1st and 3rd quartiles	-0.01; 0
Min. and max.	-0.07; 0.04



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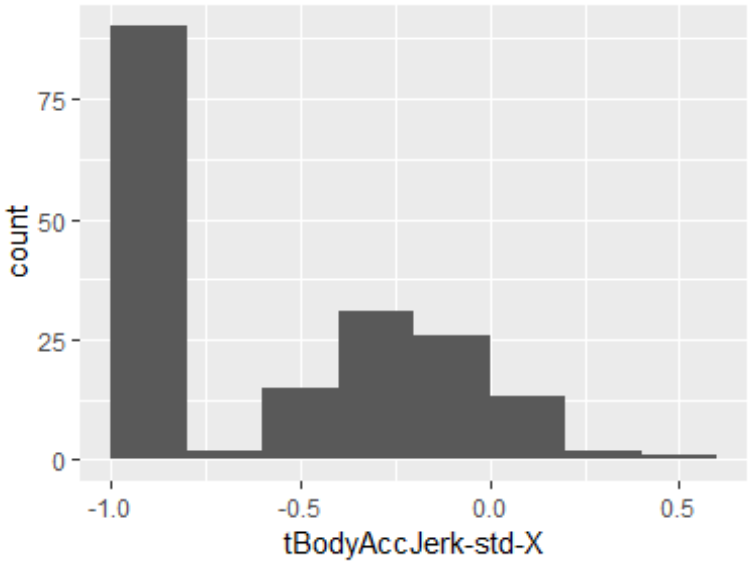
tBodyAccJerk-std-X

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.81
1st and 3rd quartiles	-0.98; -0.22
Min. and max.	-0.99; 0.54



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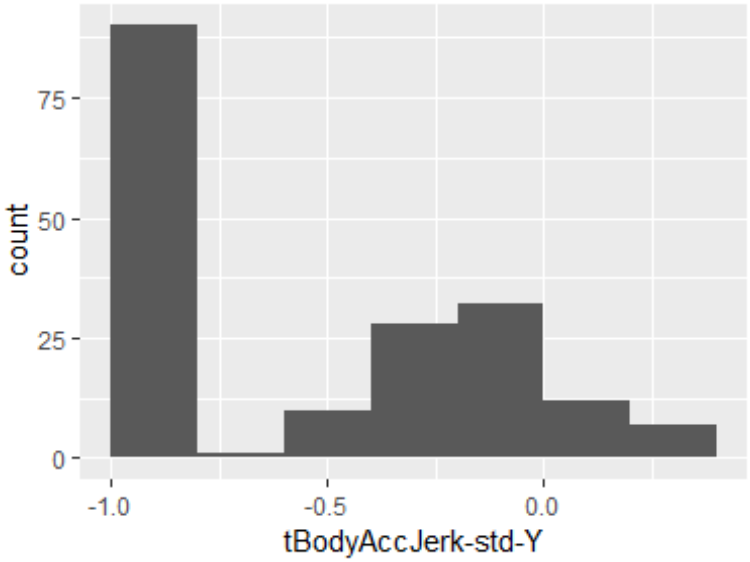
tBodyAccJerk-std-Y

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.78
1st and 3rd quartiles	-0.97; -0.15
Min. and max.	-0.99; 0.36



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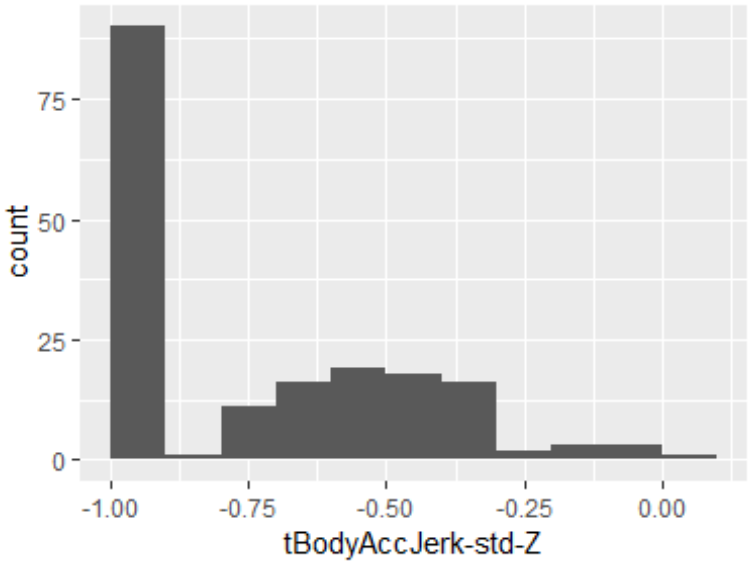
tBodyAccJerk-std-Z

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.88
1st and 3rd quartiles	-0.98; -0.51
Min. and max.	-0.99; 0.03



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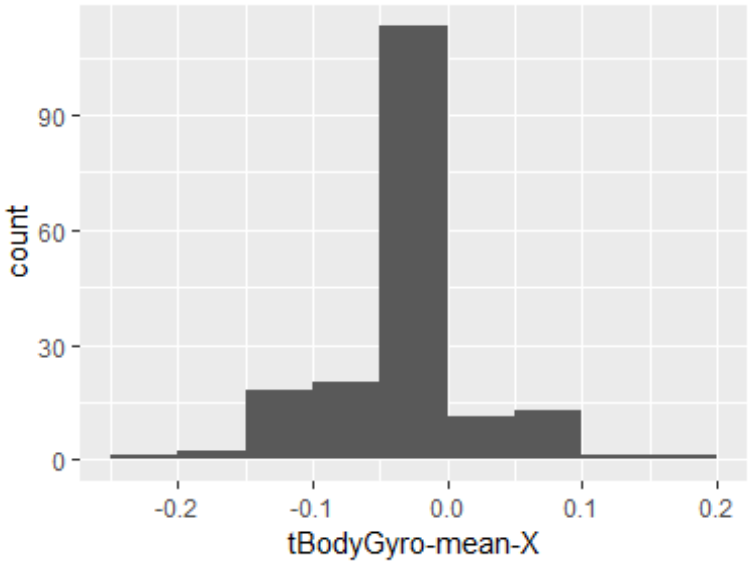
tBodyGyro-mean-X

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.03
1st and 3rd quartiles	-0.05; -0.02
Min. and max.	-0.21; 0.19



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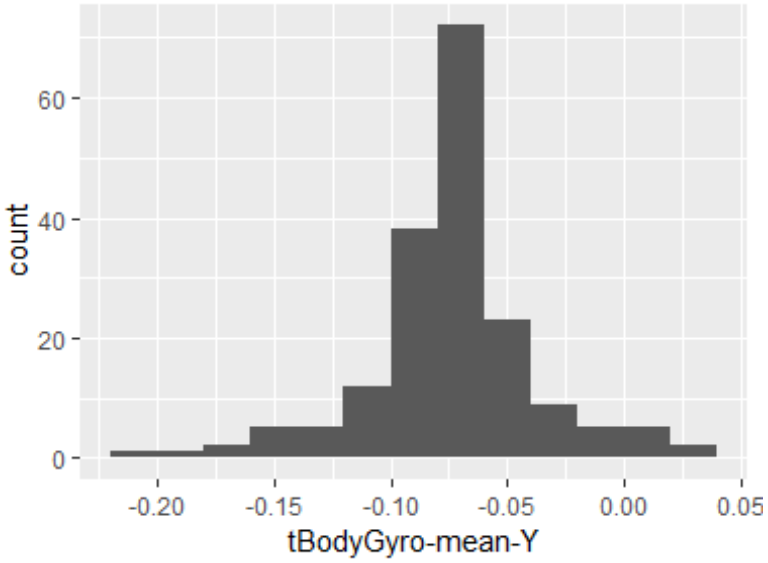
tBodyGyro-mean-Y

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.07
1st and 3rd quartiles	-0.09; -0.06
Min. and max.	-0.2; 0.03



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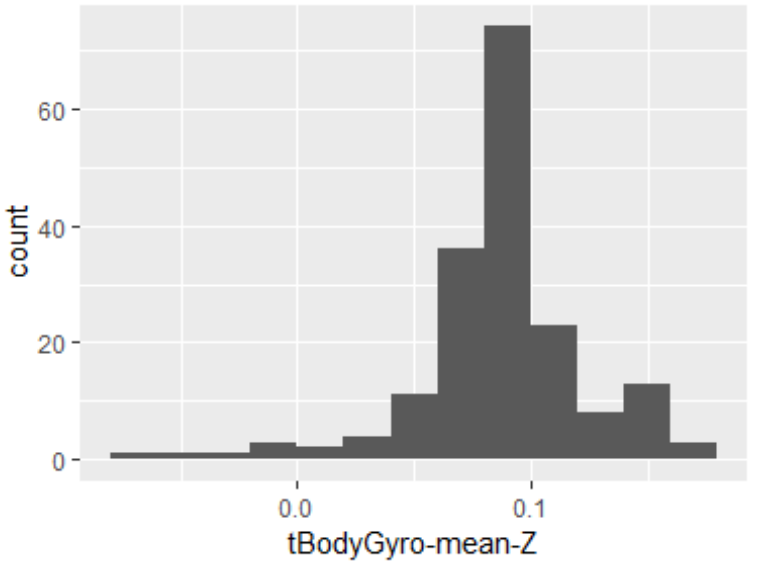
tBodyGyro-mean-Z

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	0.09
1st and 3rd quartiles	0.07; 0.1
Min. and max.	-0.07; 0.18



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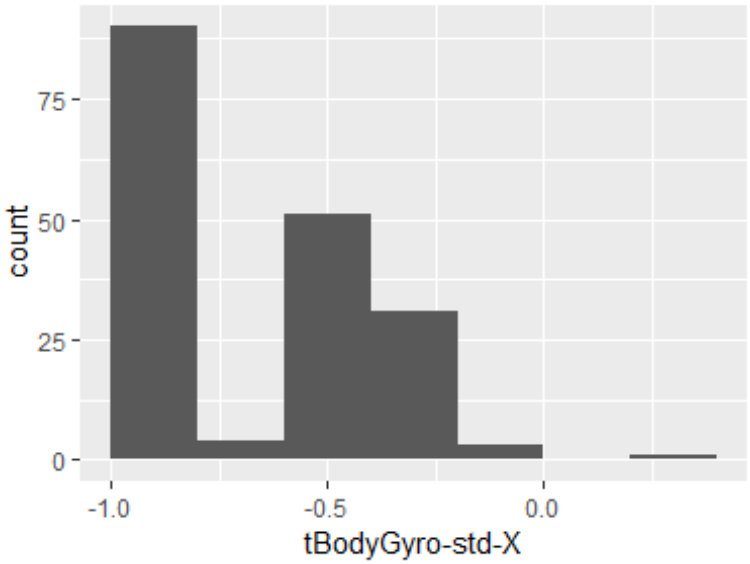
tBodyGyro-std-X

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.79
1st and 3rd quartiles	-0.97; -0.44
Min. and max.	-0.99; 0.27



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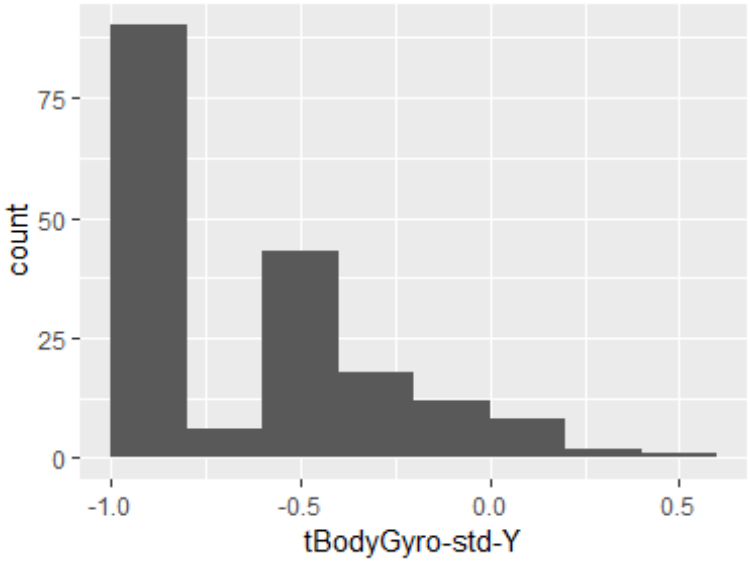
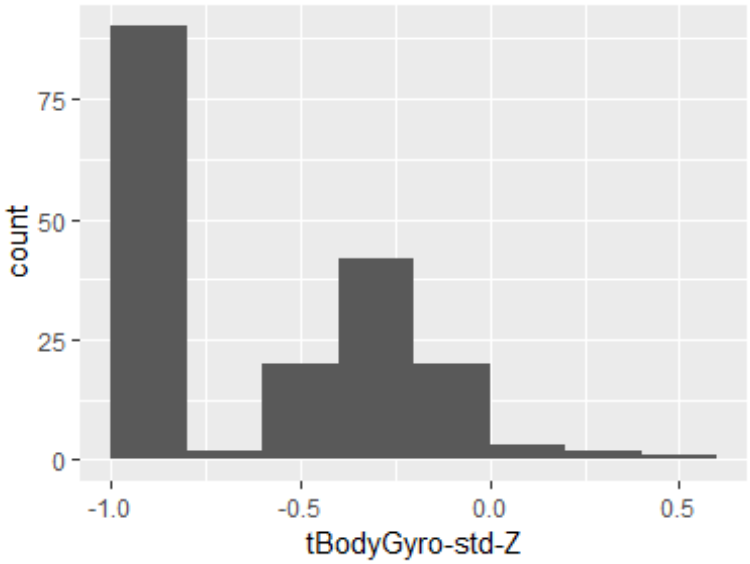
tBodyGyro-std-Y

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.8
1st and 3rd quartiles	-0.96; -0.42
Min. and max.	-0.99; 0.48



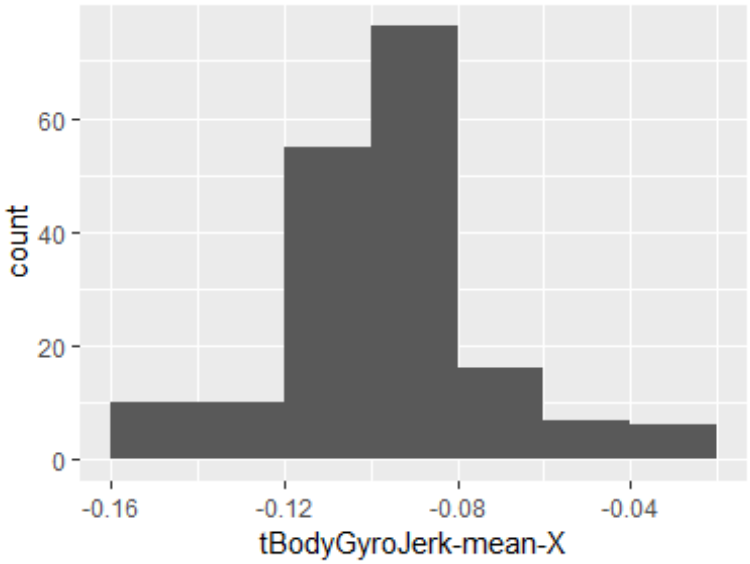
tBodyGyro-std-Z

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.8
1st and 3rd quartiles	-0.96; -0.31
Min. and max.	-0.99; 0.56



tBodyGyroJerk-mean-X

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.1
1st and 3rd quartiles	-0.1; -0.09
Min. and max.	-0.16; -0.02



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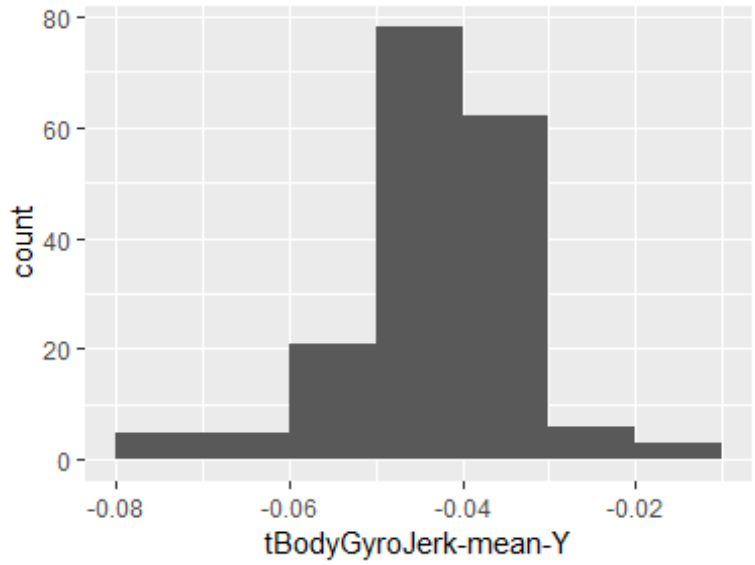
tBodyGyroJerk-mean-Y

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.04
1st and 3rd quartiles	-0.05; -0.04
Min. and max.	-0.08; -0.01



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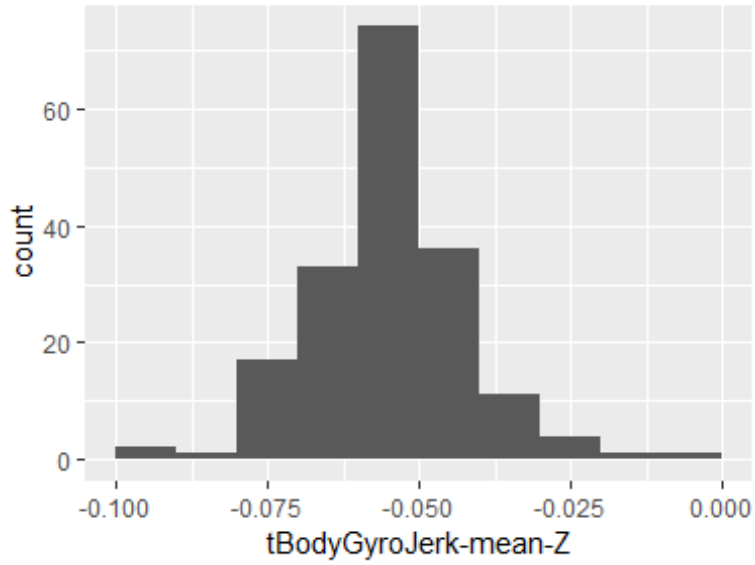
tBodyGyroJerk-mean-Z

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.05
1st and 3rd quartiles	-0.06; -0.05
Min. and max.	-0.09; -0.01



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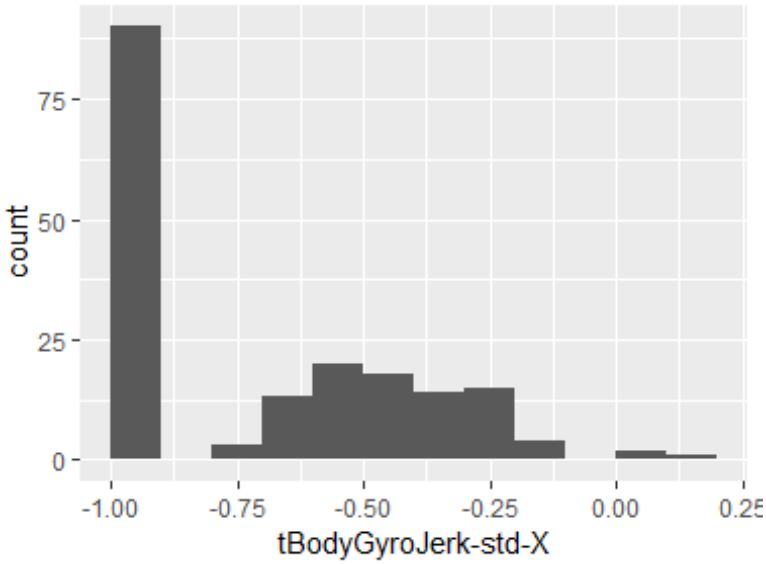
tBodyGyroJerk-std-X

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.84
1st and 3rd quartiles	-0.98; -0.46
Min. and max.	-1; 0.18



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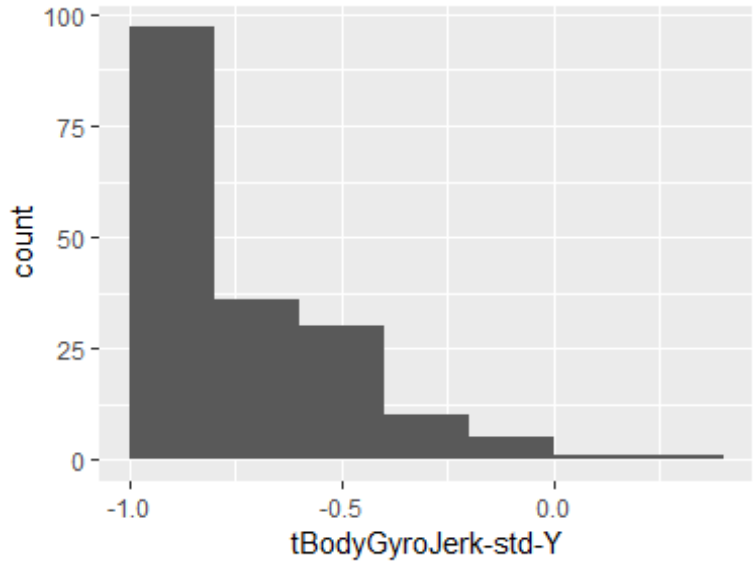
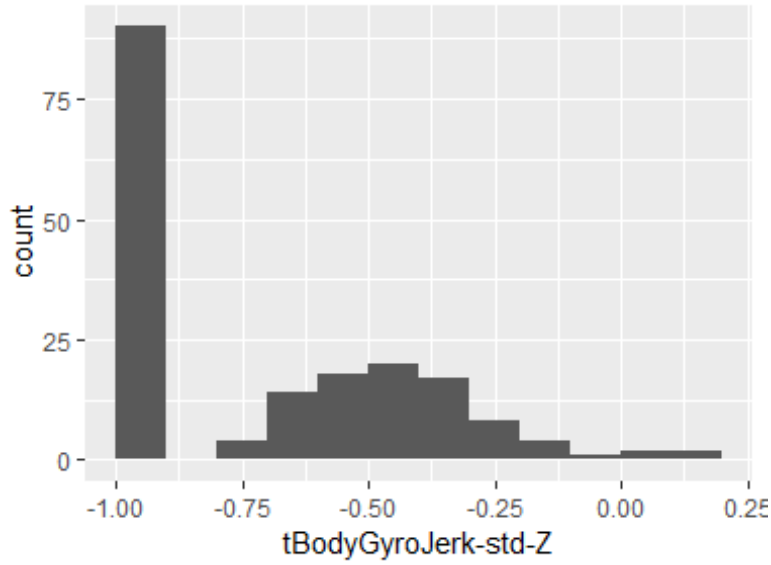
tBodyGyroJerk-std-Y

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.89
1st and 3rd quartiles	-0.98; -0.59
Min. and max.	-1; 0.3



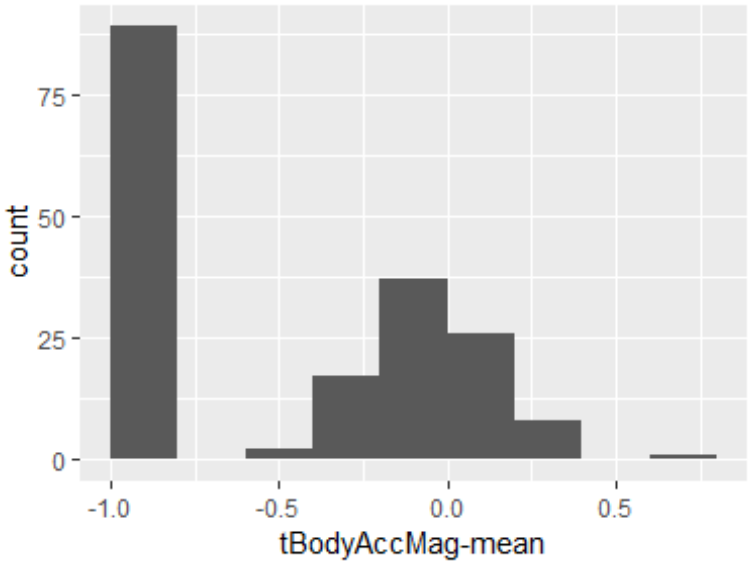
tBodyGyroJerk-std-Z

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.86
1st and 3rd quartiles	-0.98; -0.47
Min. and max.	-1; 0.19



tBodyAccMag-mean

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.48
1st and 3rd quartiles	-0.96; -0.09
Min. and max.	-0.99; 0.64



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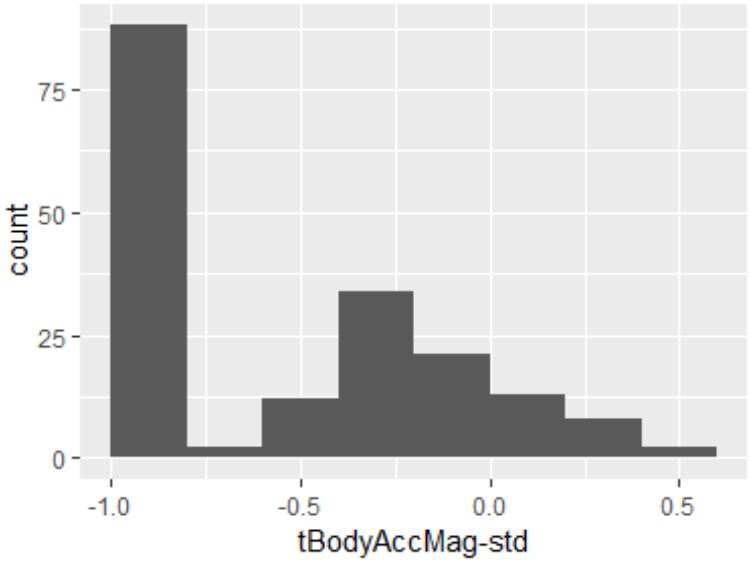
tBodyAccMag-std

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.61
1st and 3rd quartiles	-0.94; -0.21
Min. and max.	-0.99; 0.43



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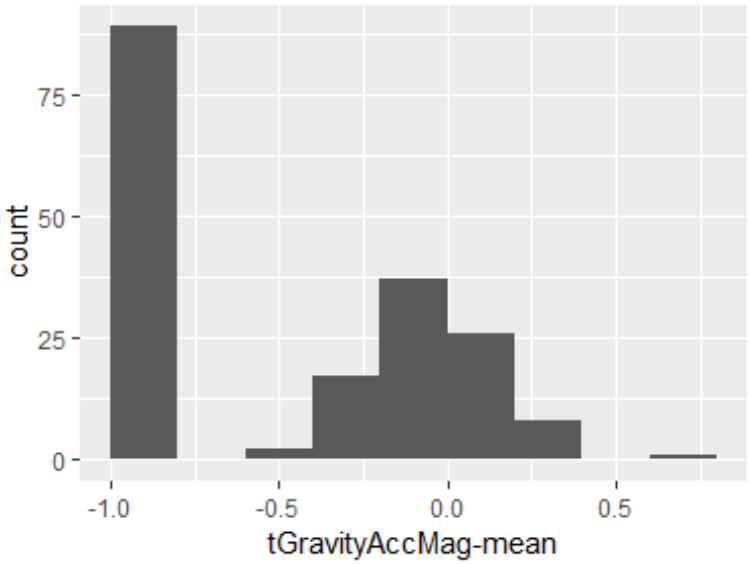
tGravityAccMag-mean

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.48
1st and 3rd quartiles	-0.96; -0.09
Min. and max.	-0.99; 0.64



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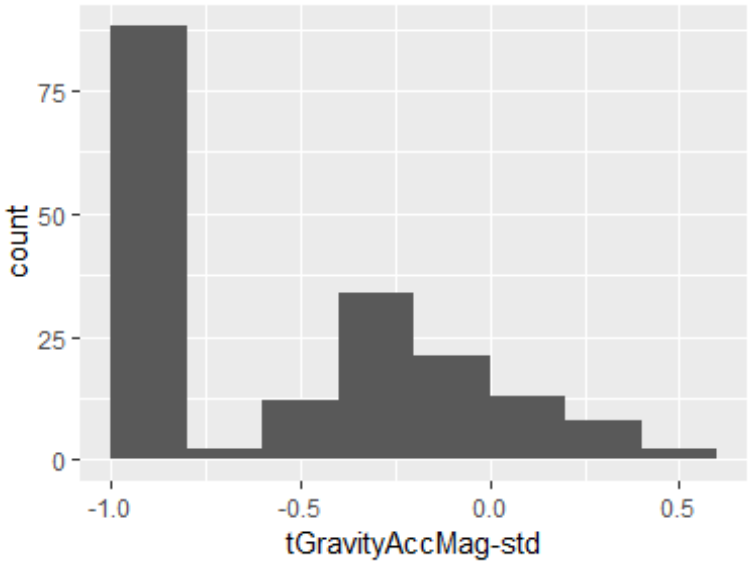
tGravityAccMag-std

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.61
1st and 3rd quartiles	-0.94; -0.21
Min. and max.	-0.99; 0.43



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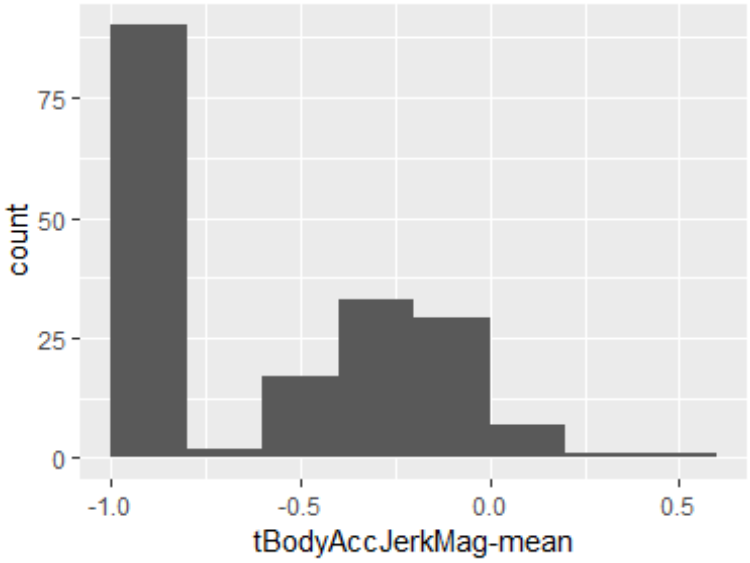
tBodyAccJerkMag-mean

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.82
1st and 3rd quartiles	-0.98; -0.25
Min. and max.	-0.99; 0.43



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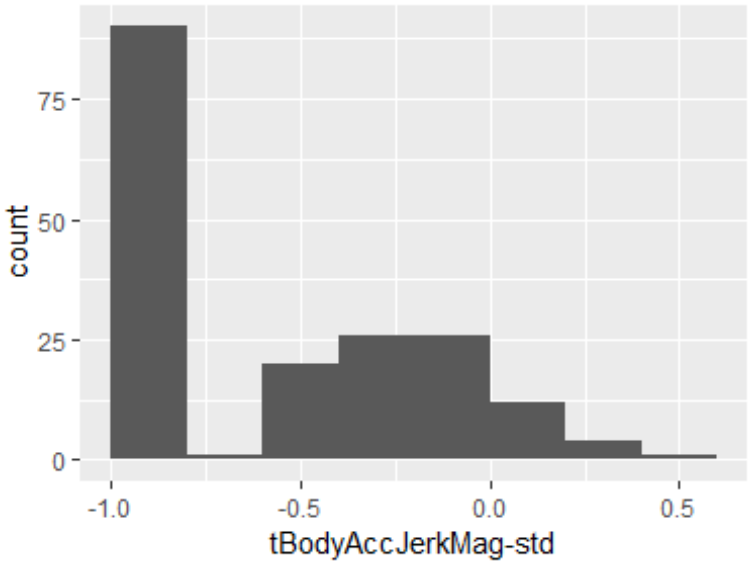
tBodyAccJerkMag-std

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.8
1st and 3rd quartiles	-0.98; -0.22
Min. and max.	-0.99; 0.45



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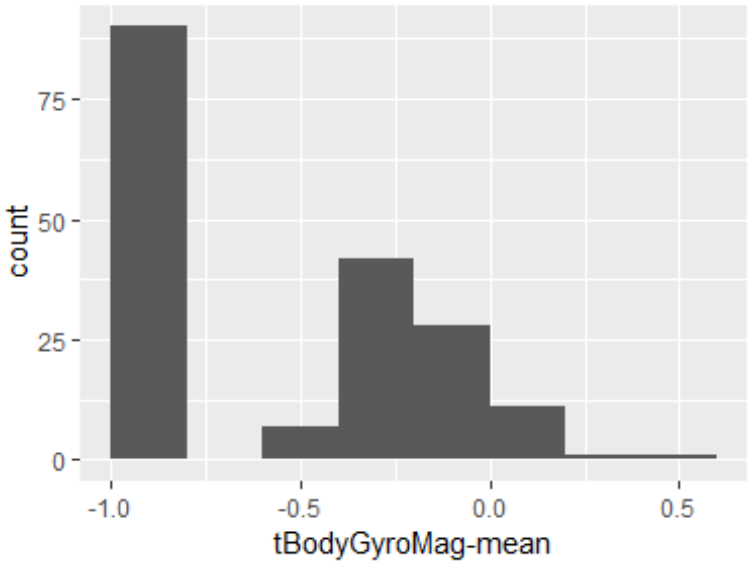
tBodyGyroMag-mean

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.66
1st and 3rd quartiles	-0.95; -0.22
Min. and max.	-0.98; 0.42



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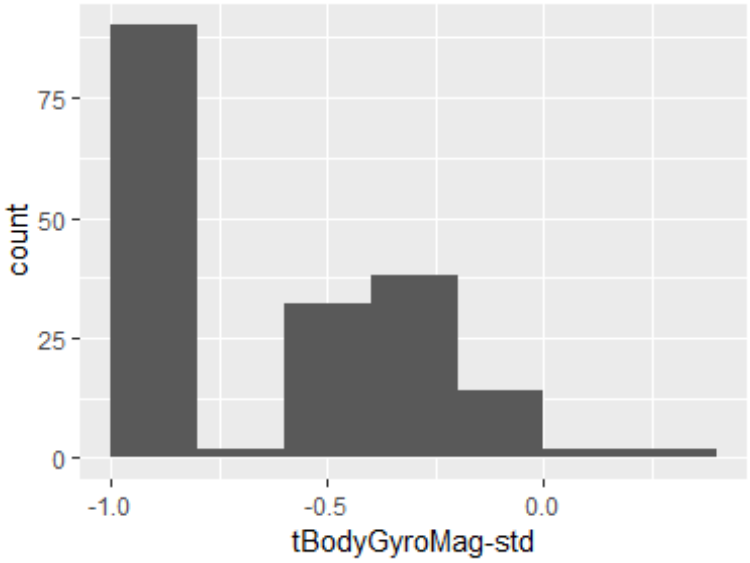
tBodyGyroMag-std

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.74
1st and 3rd quartiles	-0.95; -0.36
Min. and max.	-0.98; 0.3



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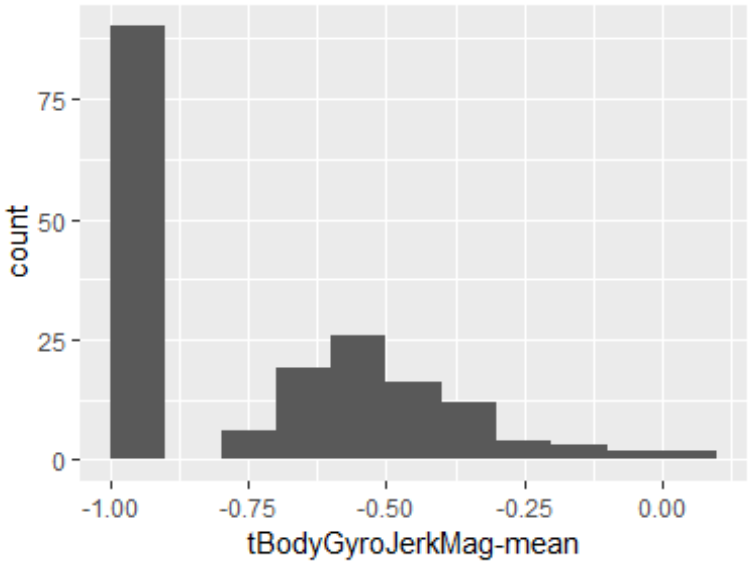
tBodyGyroJerkMag-mean

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.86
1st and 3rd quartiles	-0.99; -0.51
Min. and max.	-1; 0.09



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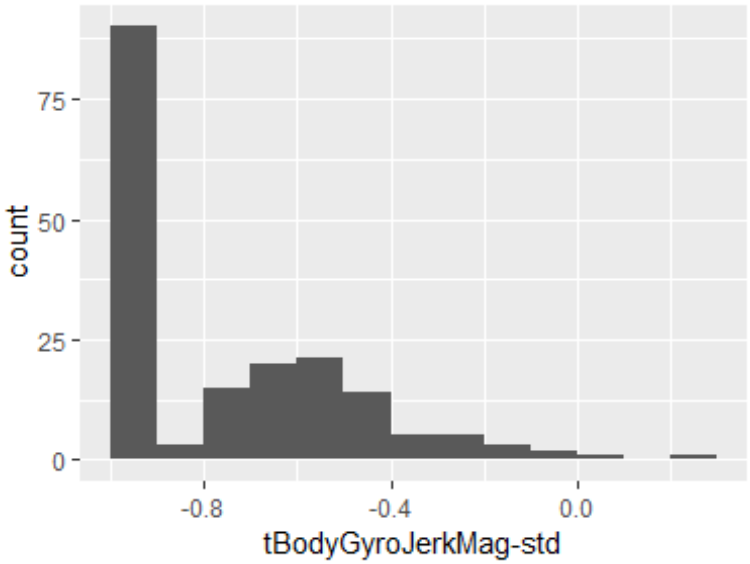
tBodyGyroJerkMag-std

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.88
1st and 3rd quartiles	-0.98; -0.58
Min. and max.	-1; 0.25



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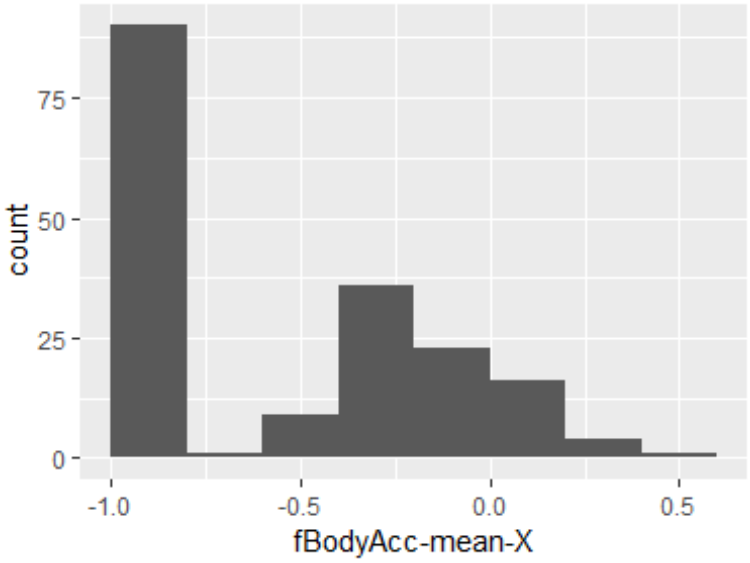
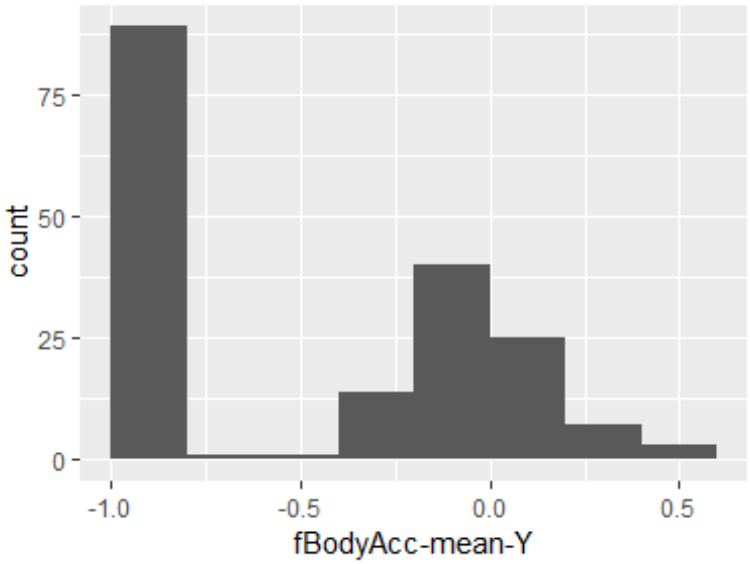
fBodyAcc-mean-X

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.77
1st and 3rd quartiles	-0.98; -0.22
Min. and max.	-1; 0.54



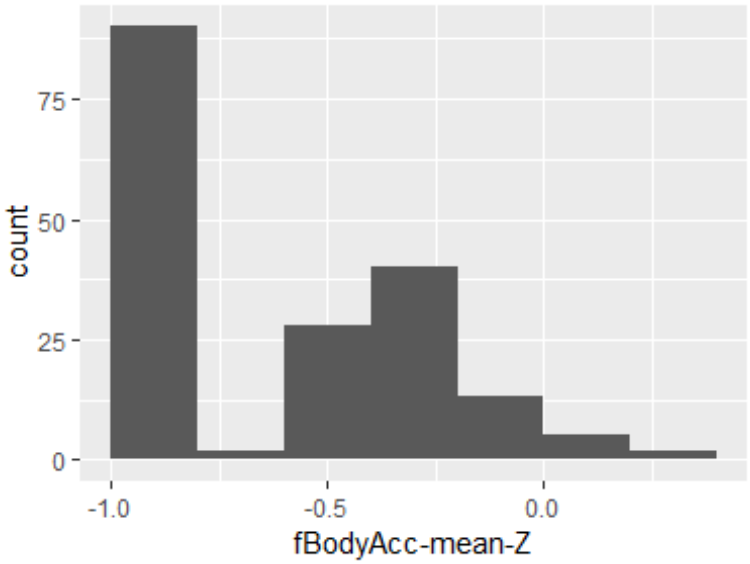
fBodyAcc-mean-Y

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.59
1st and 3rd quartiles	-0.95; -0.06
Min. and max.	-0.99; 0.52



fBodyAcc-mean-Z

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.72
1st and 3rd quartiles	-0.96; -0.32
Min. and max.	-0.99; 0.28



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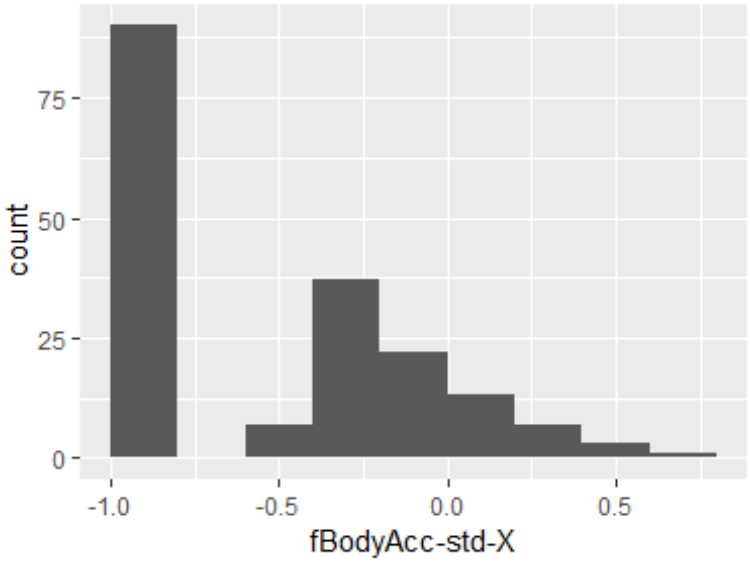
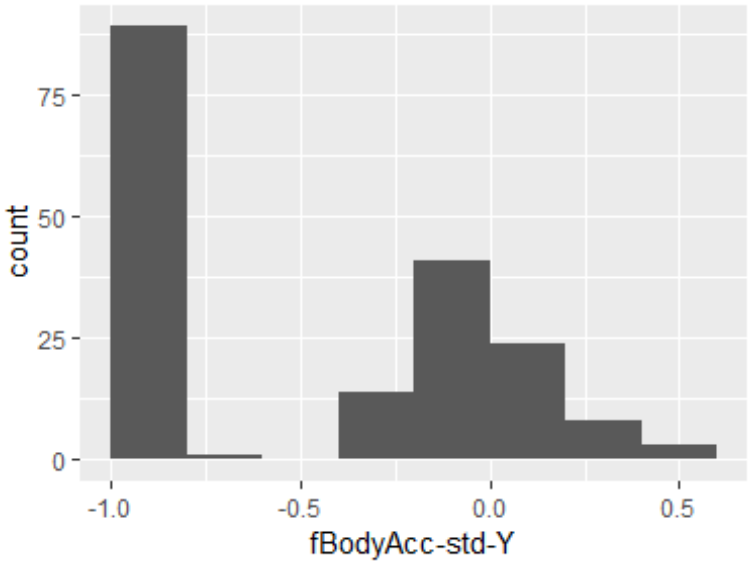
fBodyAcc-std-X

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.75
1st and 3rd quartiles	-0.98; -0.2
Min. and max.	-1; 0.66



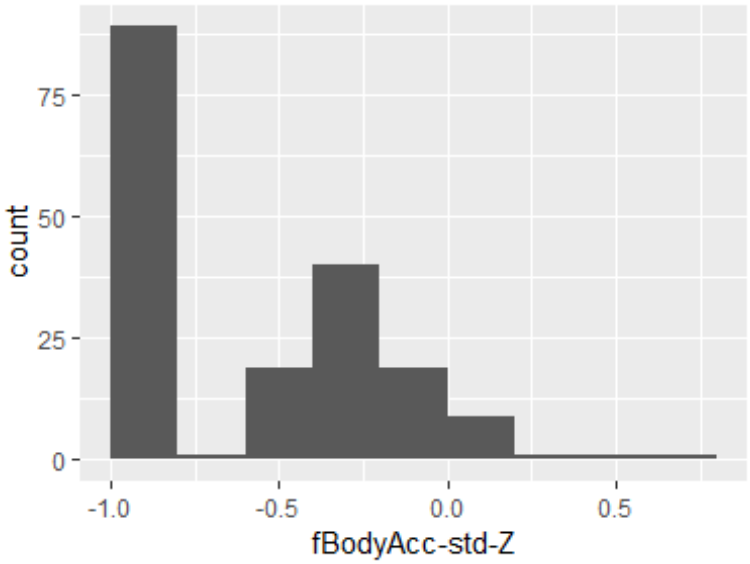
fBodyAcc-std-Y

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.51
1st and 3rd quartiles	-0.94; -0.08
Min. and max.	-0.99; 0.56



fBodyAcc-std-Z

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.64
1st and 3rd quartiles	-0.95; -0.27
Min. and max.	-0.99; 0.69



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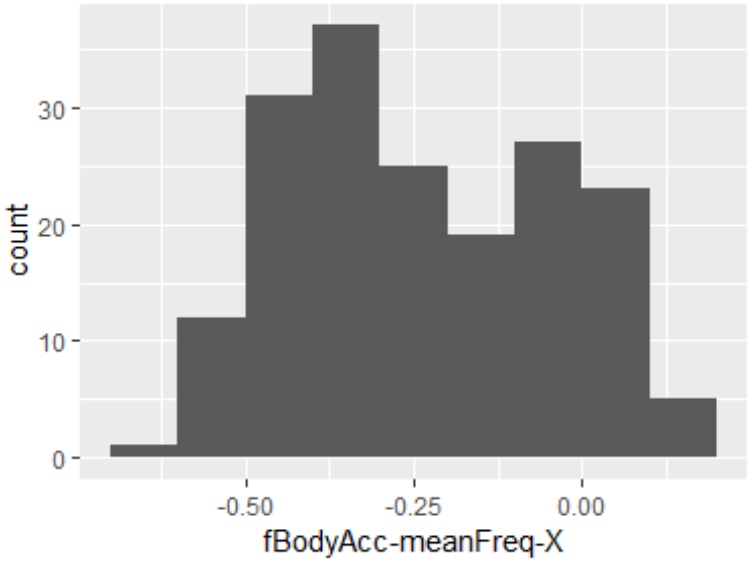
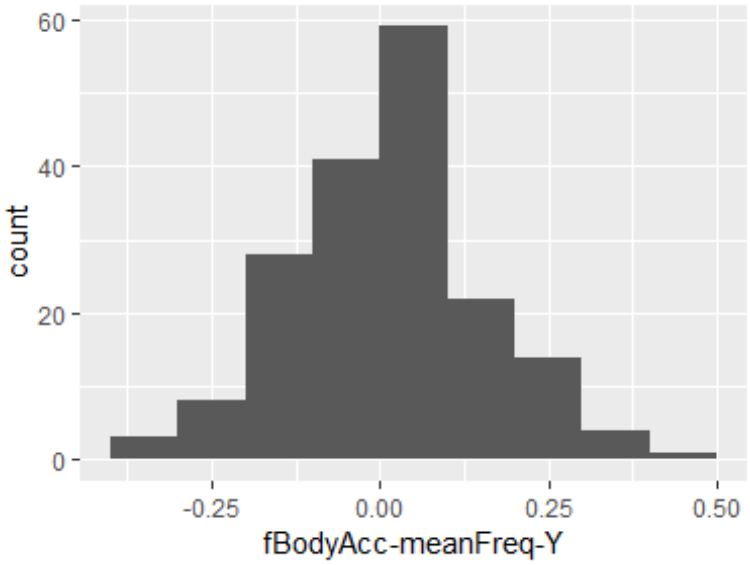
fBodyAcc-meanFreq-X

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.26
1st and 3rd quartiles	-0.39; -0.06
Min. and max.	-0.64; 0.16



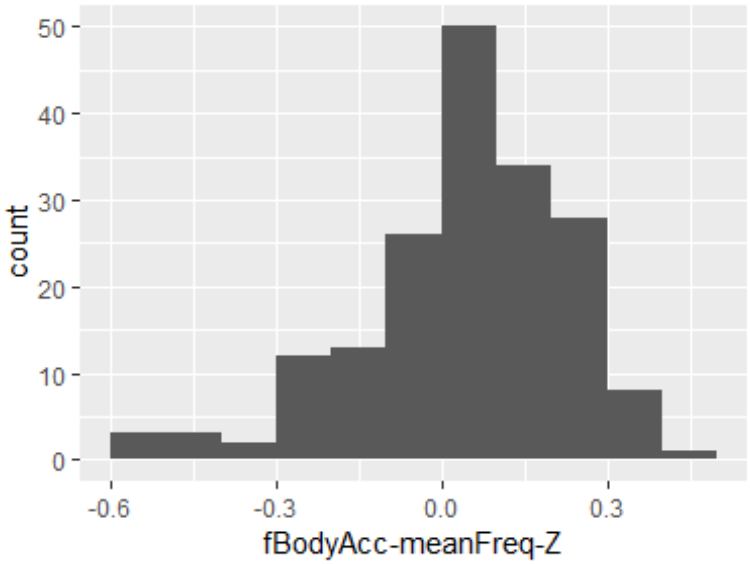
fBodyAcc-meanFreq-Y

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	0.01
1st and 3rd quartiles	-0.08; 0.09
Min. and max.	-0.38; 0.47



fBodyAcc-meanFreq-Z

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	0.07
1st and 3rd quartiles	-0.04; 0.18
Min. and max.	-0.52; 0.4



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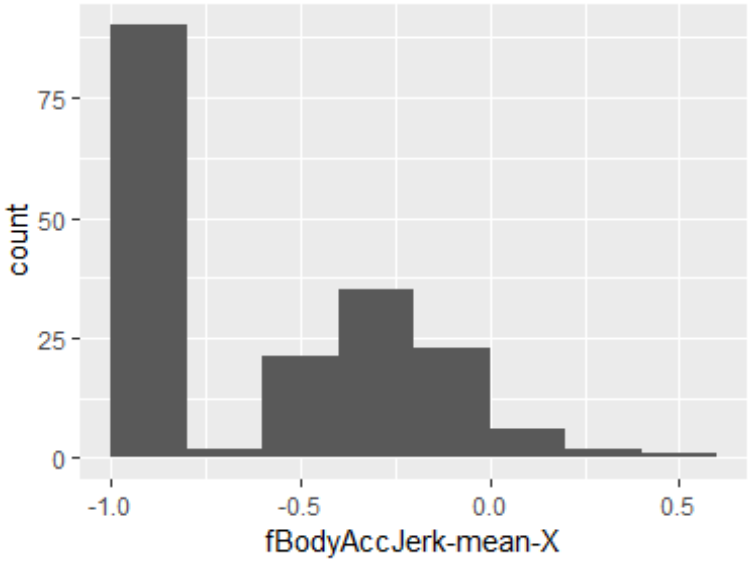
fBodyAccJerk-mean-X

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.81
1st and 3rd quartiles	-0.98; -0.28
Min. and max.	-0.99; 0.47



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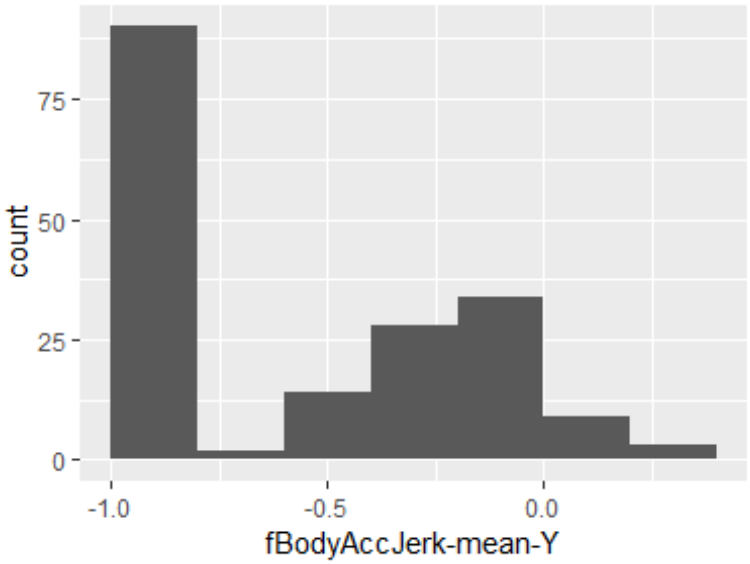
fBodyAccJerk-mean-Y

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.78
1st and 3rd quartiles	-0.97; -0.2
Min. and max.	-0.99; 0.28



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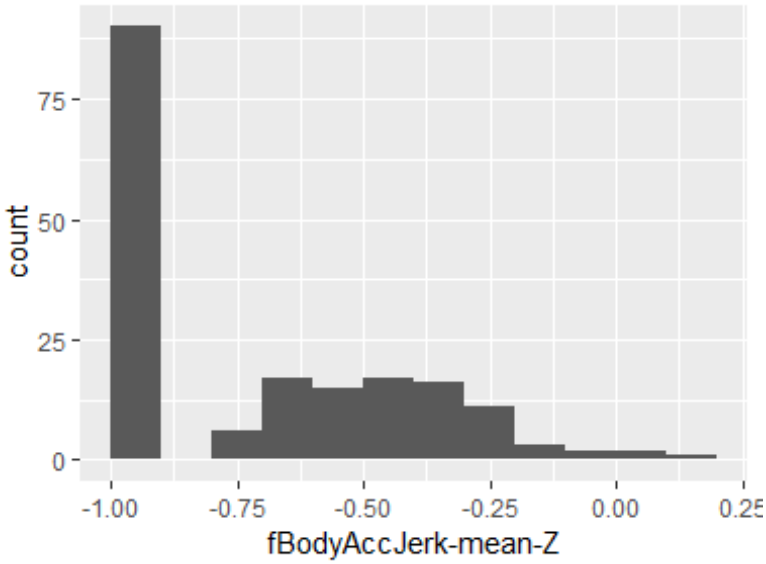
fBodyAccJerk-mean-Z

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.87
1st and 3rd quartiles	-0.98; -0.47
Min. and max.	-0.99; 0.16



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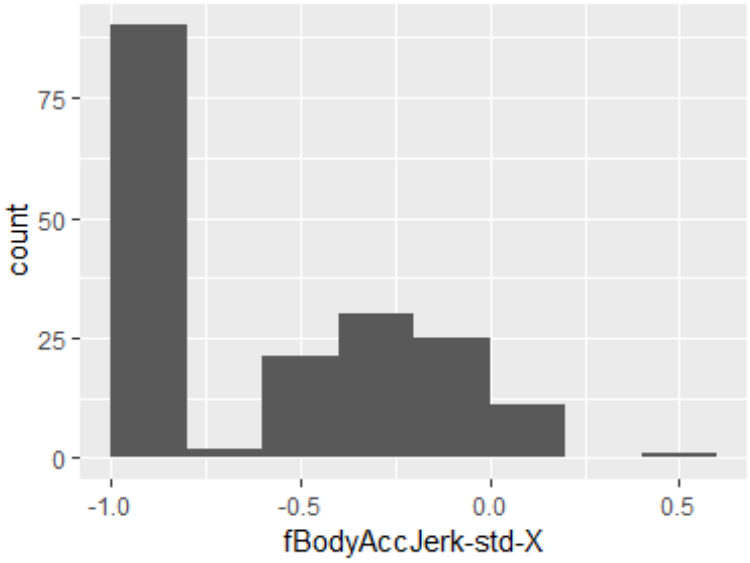
fBodyAccJerk-std-X

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.83
1st and 3rd quartiles	-0.98; -0.25
Min. and max.	-1; 0.48



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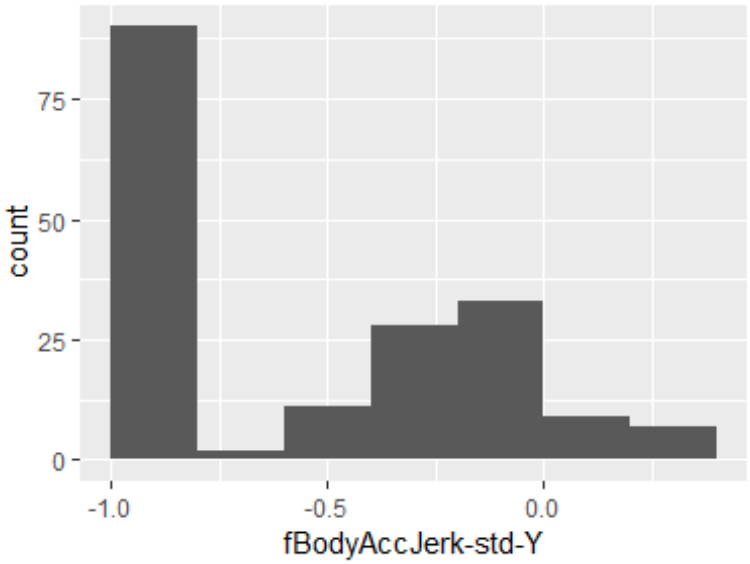
fBodyAccJerk-std-Y

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.79
1st and 3rd quartiles	-0.97; -0.17
Min. and max.	-0.99; 0.35



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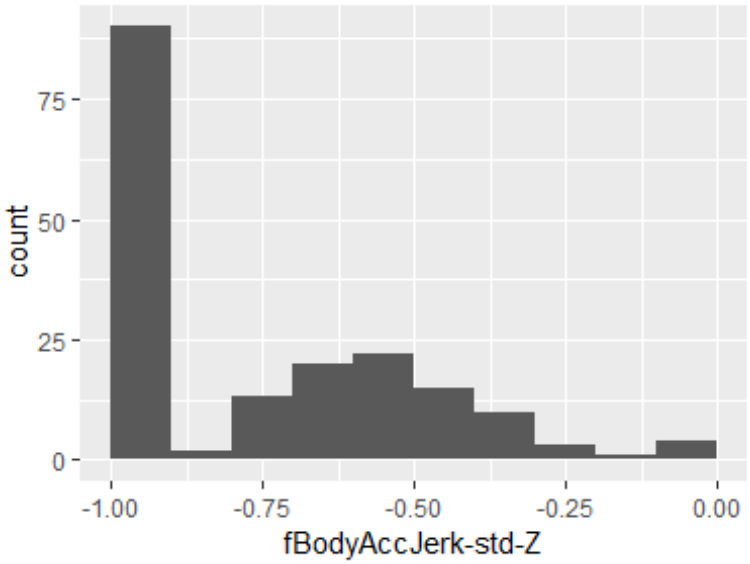
fBodyAccJerk-std-Z

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.9
1st and 3rd quartiles	-0.98; -0.54
Min. and max.	-0.99; -0.01



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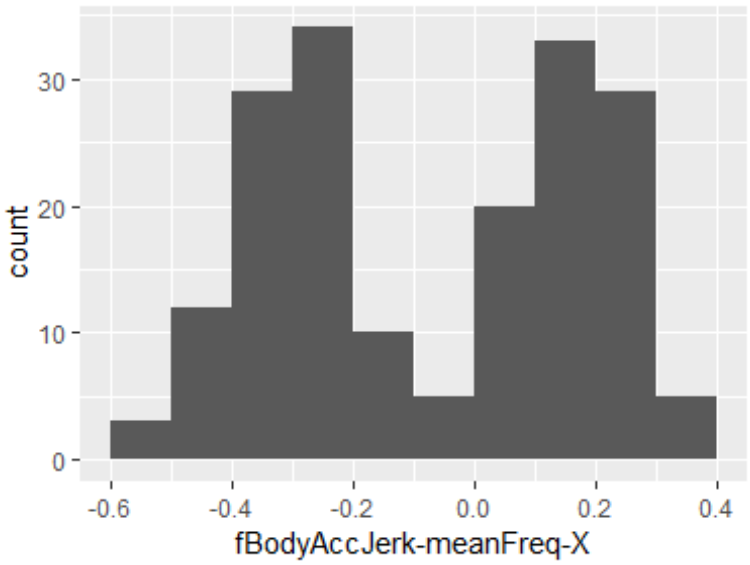
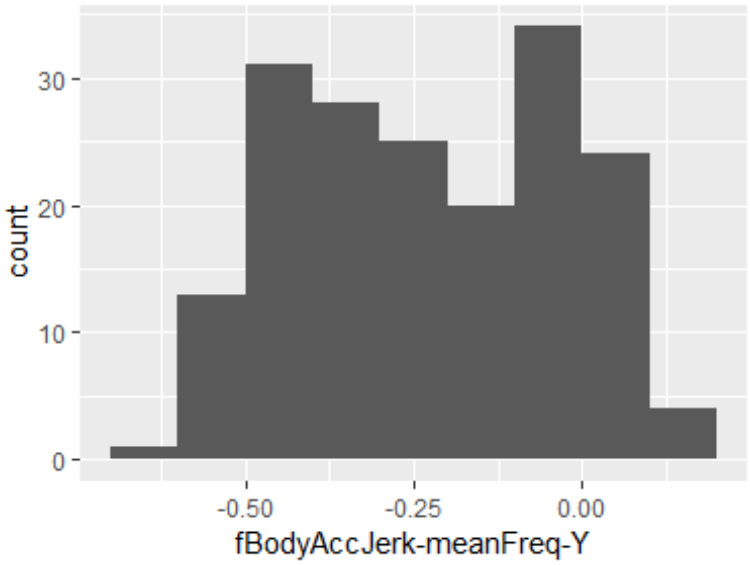
fBodyAccJerk-meanFreq-X

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.06
1st and 3rd quartiles	-0.29; 0.18
Min. and max.	-0.58; 0.33



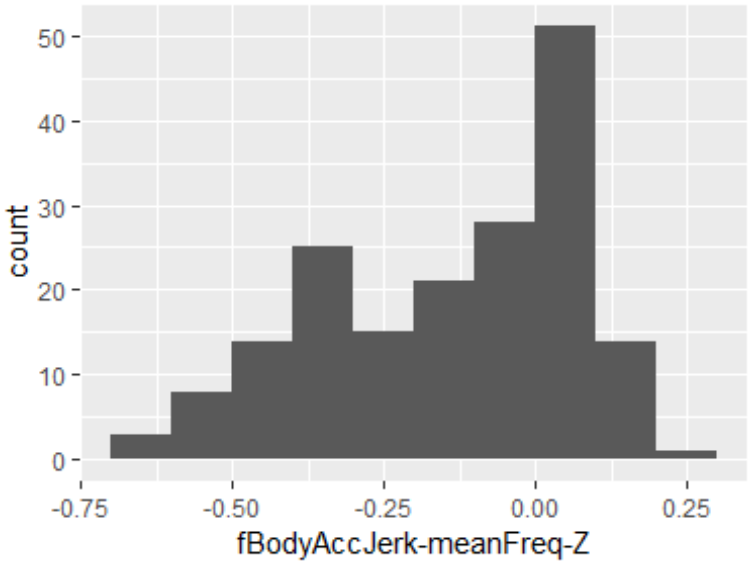
fBodyAccJerk-meanFreq-Y

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.23
1st and 3rd quartiles	-0.4; -0.05
Min. and max.	-0.6; 0.2



fBodyAccJerk-meanFreq-Z

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.09
1st and 3rd quartiles	-0.31; 0.04
Min. and max.	-0.63; 0.23



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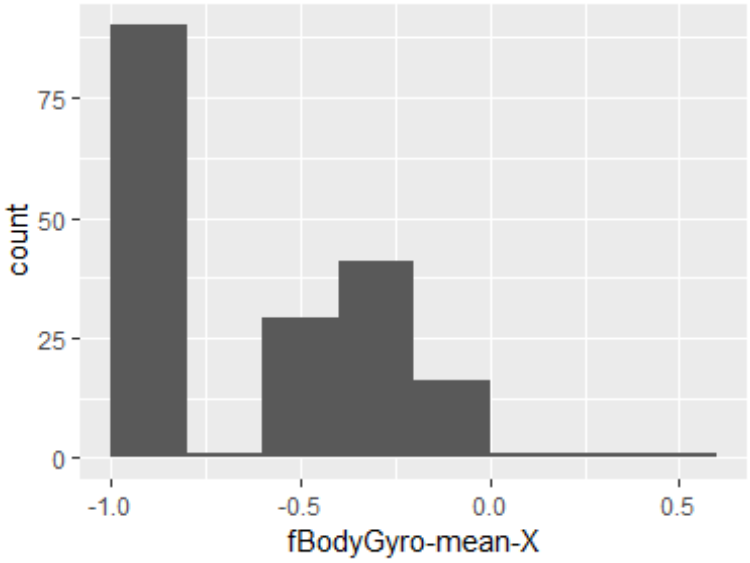
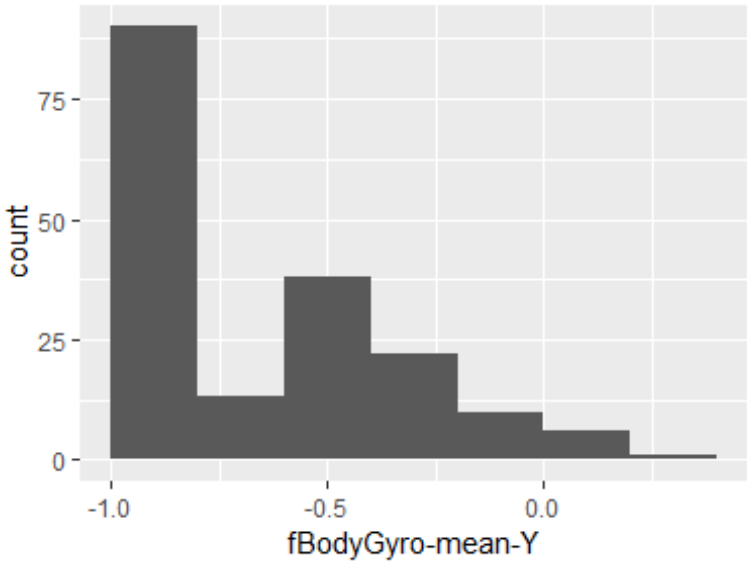
fBodyGyro-mean-X

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.73
1st and 3rd quartiles	-0.97; -0.34
Min. and max.	-0.99; 0.47



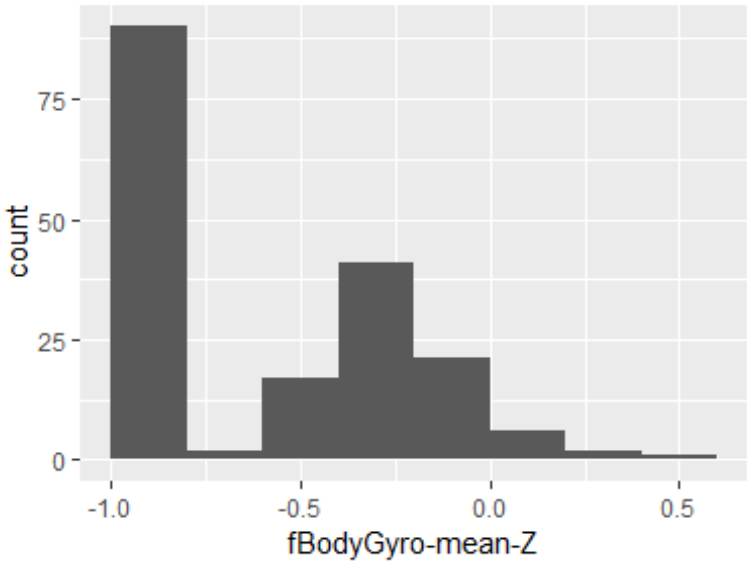
fBodyGyro-mean-Y

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.81
1st and 3rd quartiles	-0.97; -0.45
Min. and max.	-0.99; 0.33



fBodyGyro-mean-Z

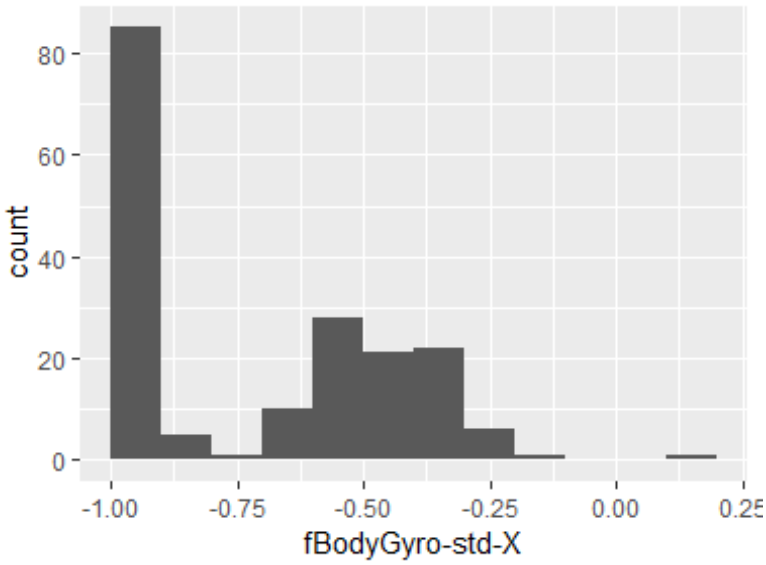
Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.79
1st and 3rd quartiles	-0.96; -0.26
Min. and max.	-0.99; 0.49



---

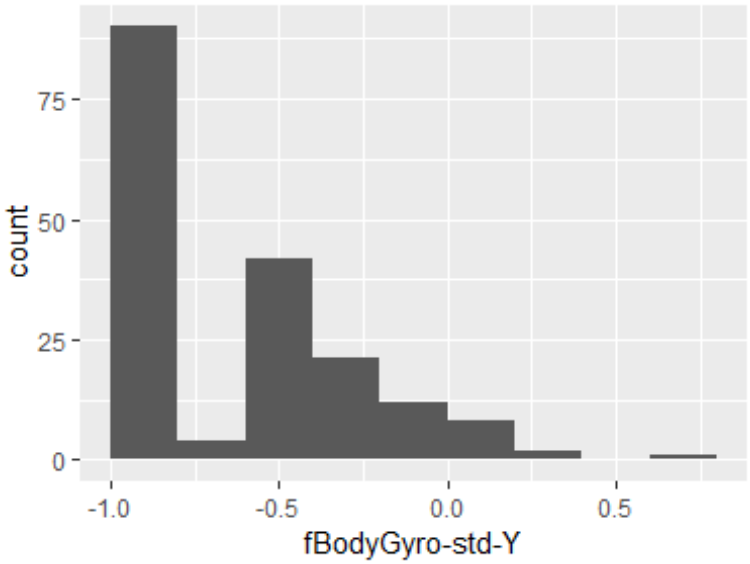
fBodyGyro-std-X

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.81
1st and 3rd quartiles	-0.98; -0.48
Min. and max.	-0.99; 0.2



fBodyGyro-std-Y

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.8
1st and 3rd quartiles	-0.96; -0.42
Min. and max.	-0.99; 0.65



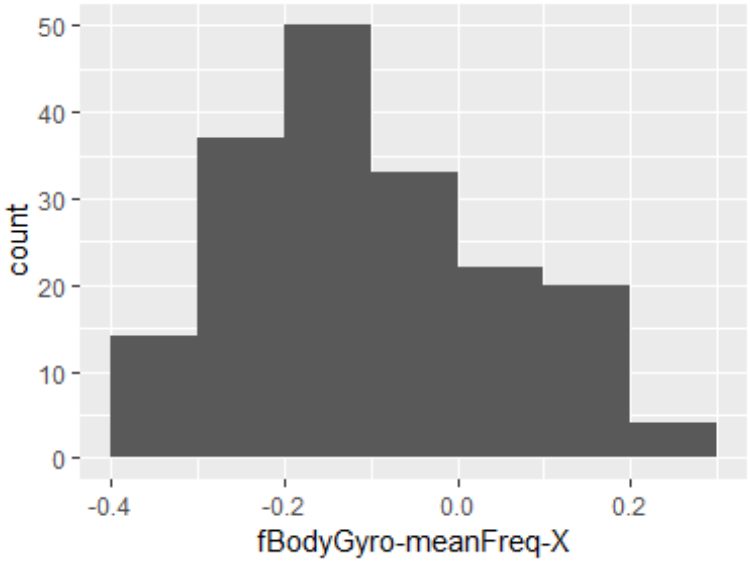
fBodyGyro-std-Z

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.82
1st and 3rd quartiles	-0.96; -0.39
Min. and max.	-0.99; 0.52

---

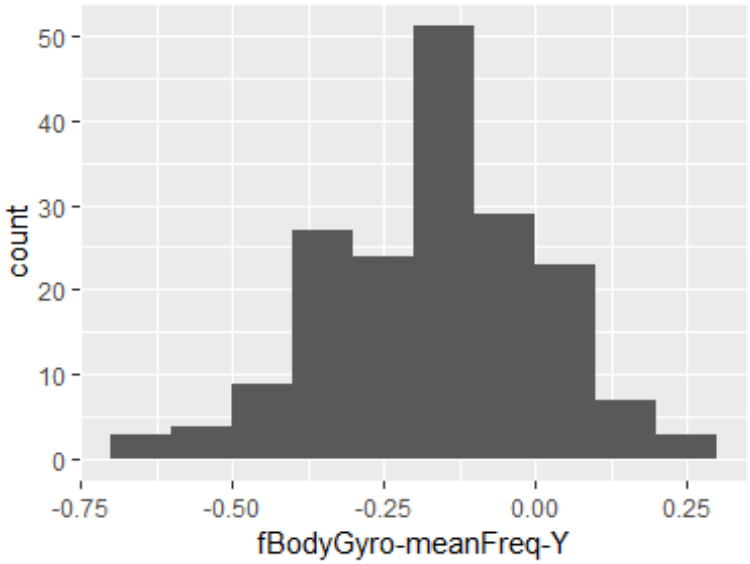
fBodyGyro-meanFreq-X

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.12
1st and 3rd quartiles	-0.21; 0
Min. and max.	-0.4; 0.25



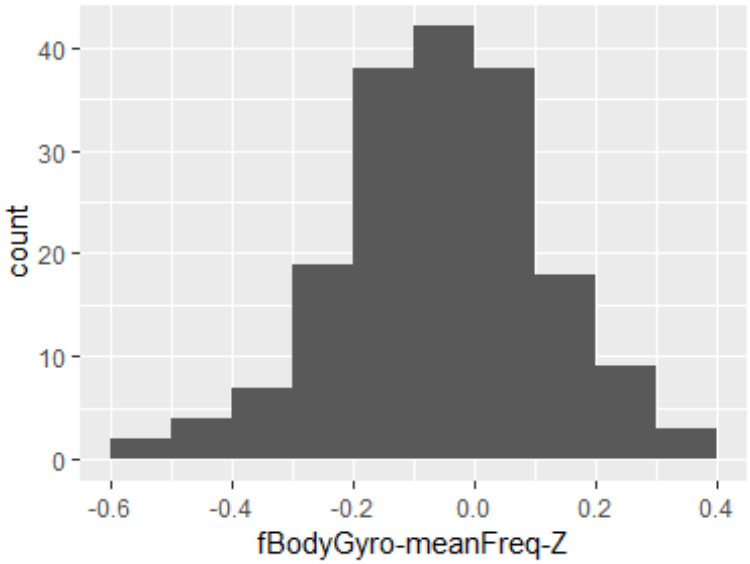
fBodyGyro-meanFreq-Y

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.16
1st and 3rd quartiles	-0.29; -0.04
Min. and max.	-0.67; 0.27



fBodyGyro-meanFreq-Z

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.05
1st and 3rd quartiles	-0.15; 0.04
Min. and max.	-0.51; 0.38



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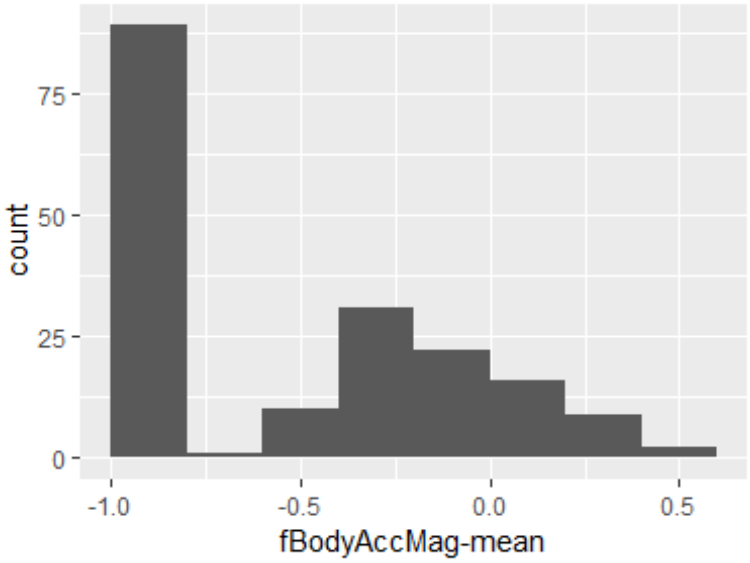
fBodyAccMag-mean

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.67
1st and 3rd quartiles	-0.96; -0.16
Min. and max.	-0.99; 0.59



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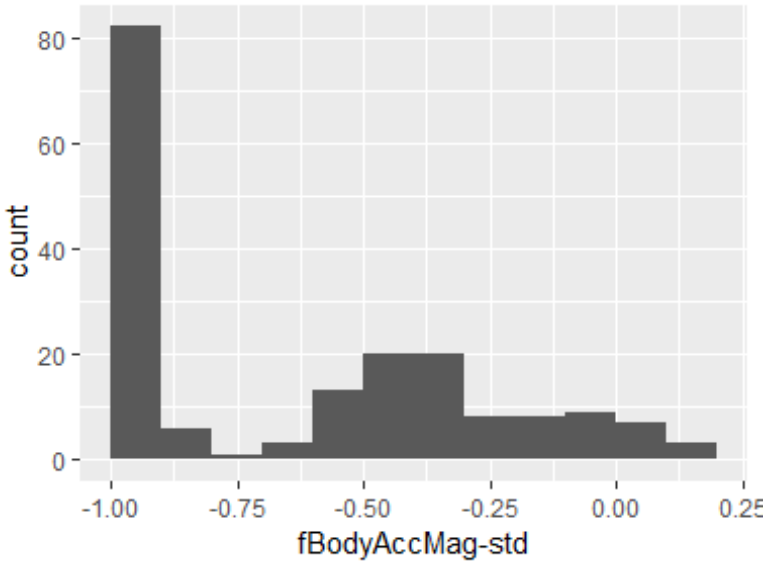
fBodyAccMag-std

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.65
1st and 3rd quartiles	-0.95; -0.37
Min. and max.	-0.99; 0.18



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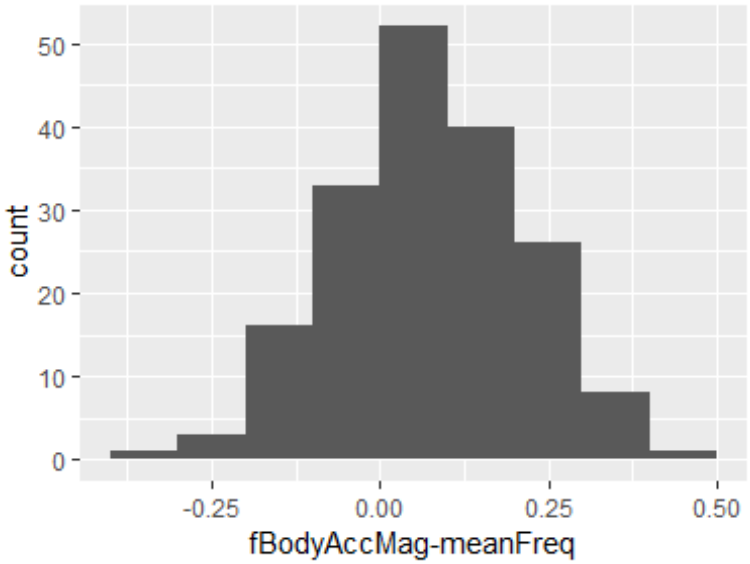
fBodyAccMag-meanFreq

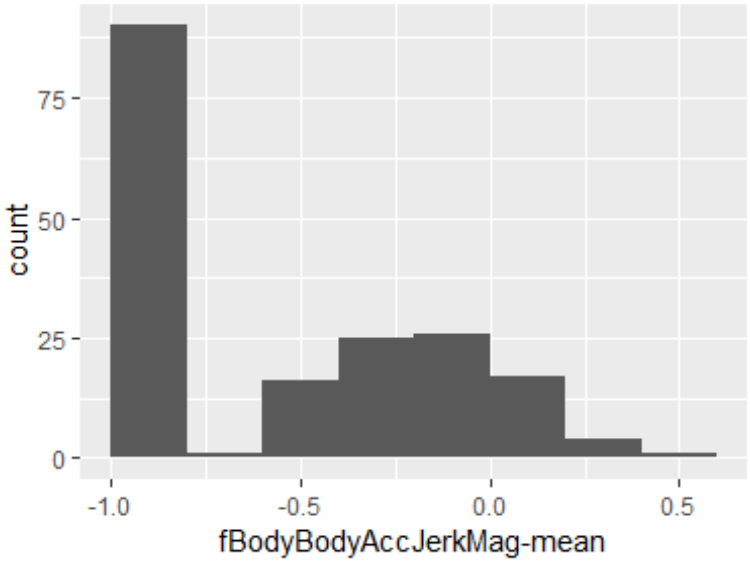
Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	0.08
1st and 3rd quartiles	-0.01; 0.17
Min. and max.	-0.31; 0.44



---

fBodyBodyAccJerkMag-mean

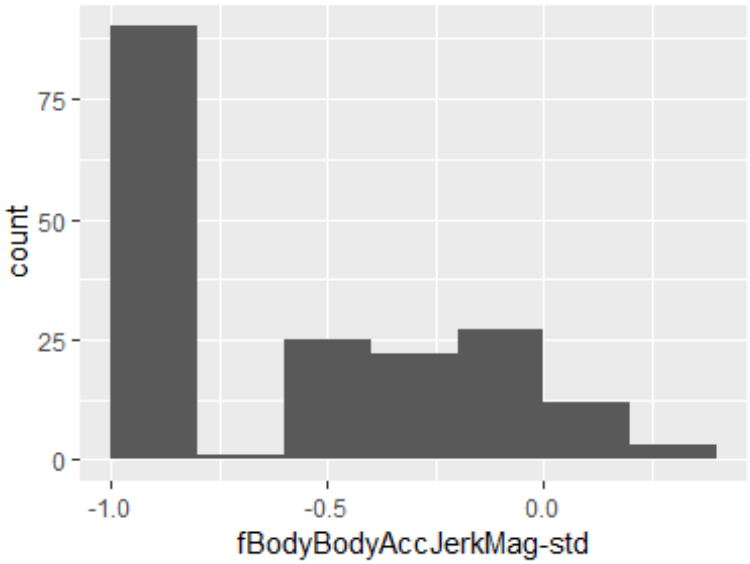
Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.79
1st and 3rd quartiles	-0.98; -0.19
Min. and max.	-0.99; 0.54



---

fBodyBodyAccJerkMag-std

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.81
1st and 3rd quartiles	-0.98; -0.27
Min. and max.	-0.99; 0.32



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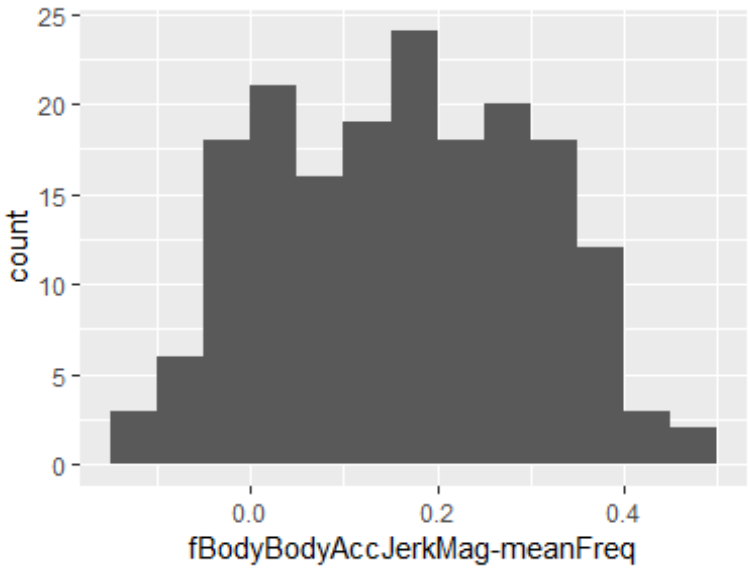
fBodyBodyAccJerkMag-meanFreq

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	0.17
1st and 3rd quartiles	0.05; 0.28
Min. and max.	-0.13; 0.49



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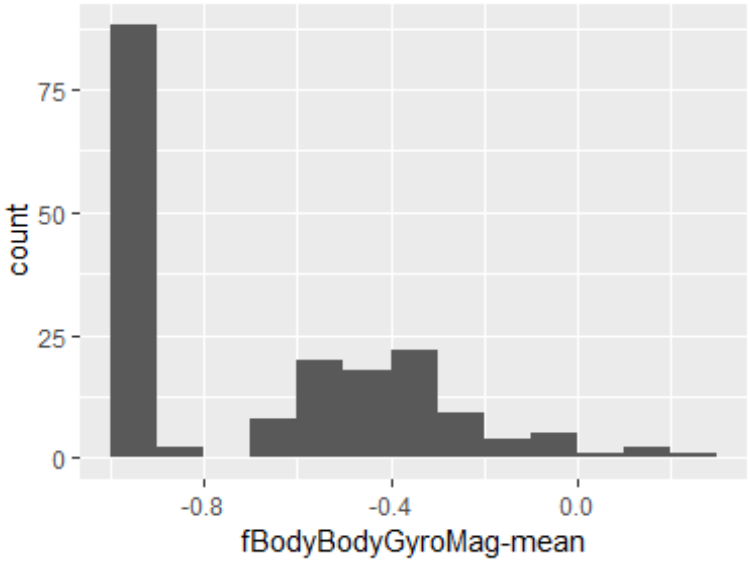
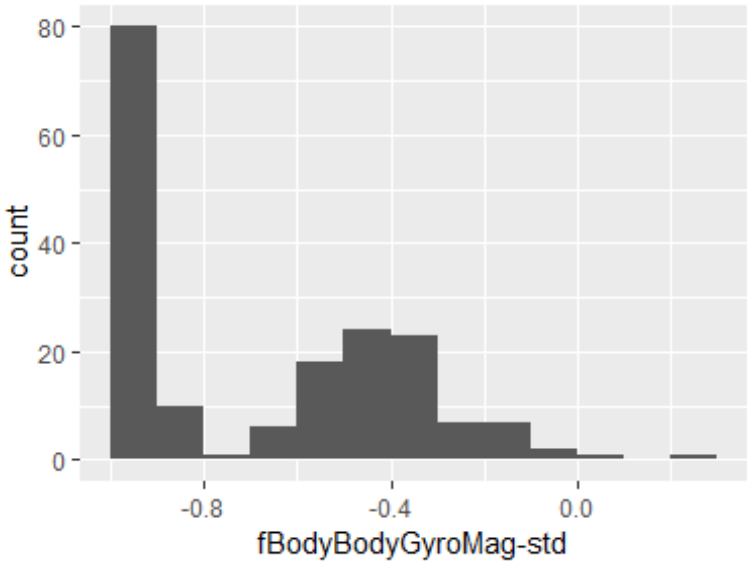
fBodyBodyGyroMag-mean

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.77
1st and 3rd quartiles	-0.96; -0.41
Min. and max.	-0.99; 0.2



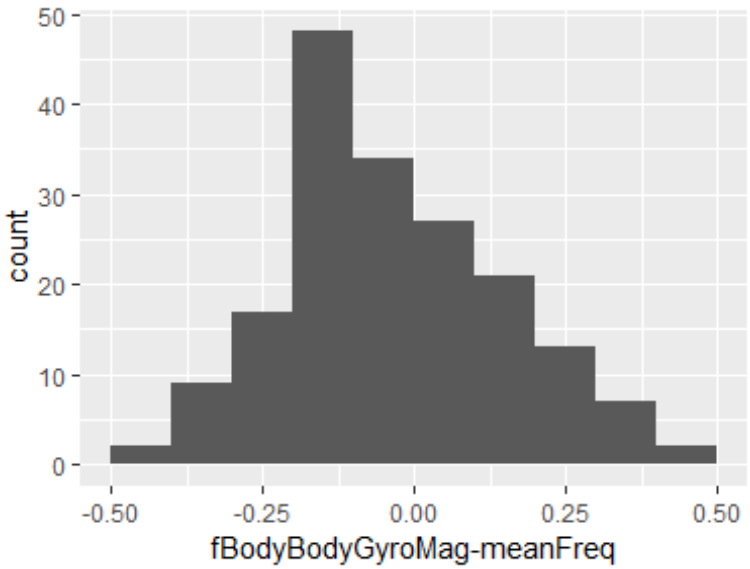
fBodyBodyGyroMag-std

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.77
1st and 3rd quartiles	-0.95; -0.43
Min. and max.	-0.98; 0.24



fBodyBodyGyroMag-meanFreq

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.05
1st and 3rd quartiles	-0.17; 0.08
Min. and max.	-0.46; 0.41



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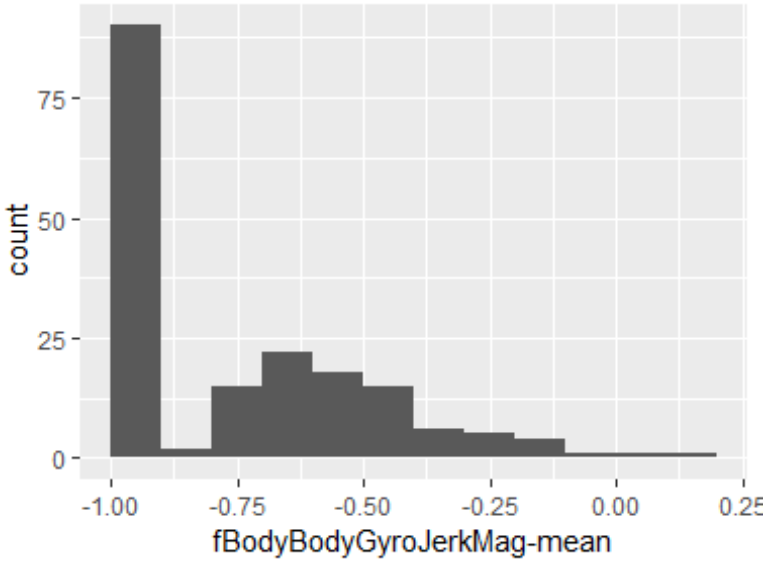
fBodyBodyGyroJerkMag-mean

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.88
1st and 3rd quartiles	-0.98; -0.58
Min. and max.	-1; 0.15



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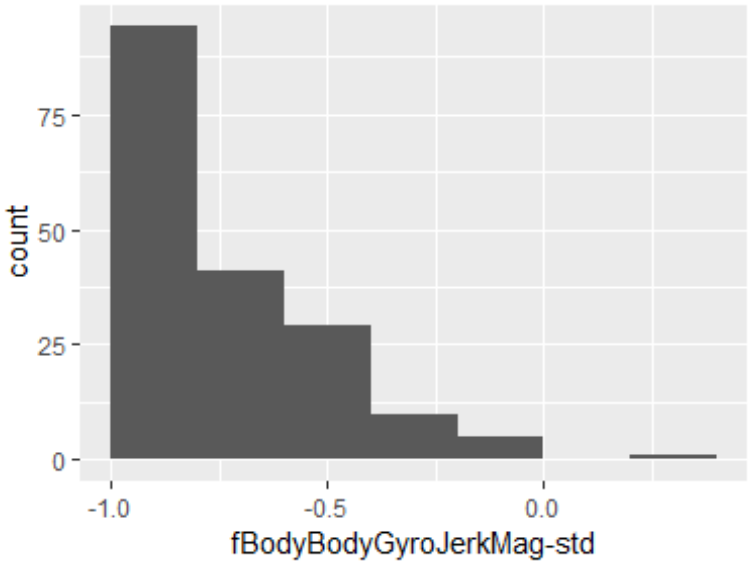
fBodyBodyGyroJerkMag-std

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	-0.89
1st and 3rd quartiles	-0.98; -0.61
Min. and max.	-1; 0.29



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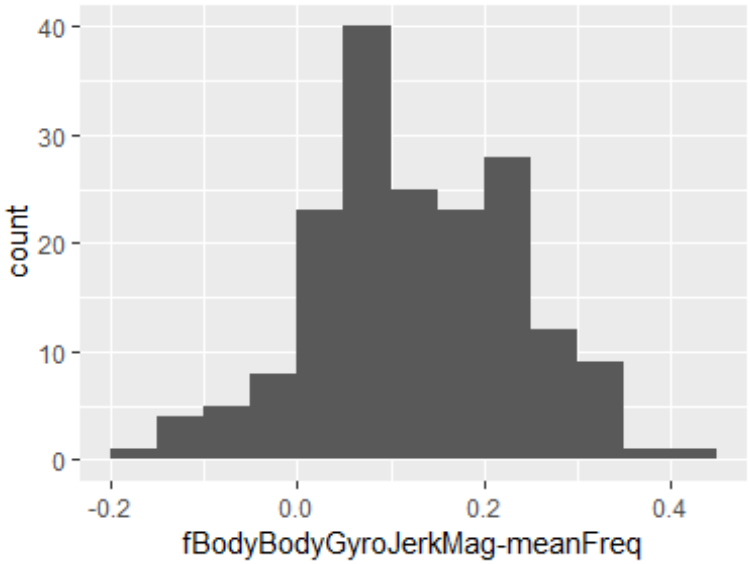
fBodyBodyGyroJerkMag-meanFreq

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	180
Median	0.11
1st and 3rd quartiles	0.05; 0.21
Min. and max.	-0.18; 0.43



Report generation information:

- Created by Allie Xiong (username: `allie`).
- Report creation time: Sat Jun 15 2019 19:06:17
- Report was run from directory: `C:/MyDocuments/ProfessionalDevelopment/TechnicalSkillDevelopment/DataScience/JohndHopkinsUniversity_DS_program/C3_Getting_n_cleaning_data/Lab_assignment`
- dataMaid v1.3.0 [Pkg: 2019-06-07 from CRAN (R 3.6.0)]
- R version 3.6.0 (2019-04-26).
- Platform: x86_64-w64-mingw32/x64 (64-bit)(Windows 10 x64 (build 17134)).
- Function call: `makeDataReport(data = data.set2, mode = c("summarize", "visualize", "check"), smartNum = FALSE, file =`

```
"codebook_data.set2.Rmd",  checks = list(character =
"showAllFactorLevels", factor = "showAllFactorLevels",      labelled =
"showAllFactorLevels", haven_labelled = "showAllFactorLevels",
numeric = NULL, integer = NULL, logical = NULL, Date = NULL),  listChecks
= FALSE, maxProbVals = Inf, codebook = TRUE, reportTitle = "Codebook for
data.set2")
```