

```
GET
FILE='C:\Users\stefa\OneDrive - Careered - CTU\2024\RES814\Data Files SPSS\Week 1\gss.sav'.
DATASET NAME DataSet1 WINDOW=FRONT.
EXAMINE VARIABLES=rincdol BY sex
/PLOT BOXPLOT STEMLEAF HISTOGRAM NPLOT
/COMPARE GROUPS
/MESTIMATORS HUBER(1.339) ANDREW(1.34) HAMPEL(1.7,3.4,8.5) TUKEY(4.685)
/PERCENTILES(5,10,25,50,75,90,95) HAVERAGE
/STATISTICS DESCRIPTIVES EXTREME
/CINTERVAL 95
/MISSING LISTWISE
/NOTOTAL.
```

Explore

[DataSet1] C:\Users\stefa\OneDrive - Careered - CTU\2024\RES814\Data Files SPSS\Week 1\gss.sav

Respondent's sex

Case Processing Summary

		Cases			
		Valid		Missing	
Respondent's sex		N	Percent	N	Percent
Respondent's income; ranges recoded to midpoints	Male	453	69.8%	196	30.2%
	Female	468	60.8%	302	39.2%
				770	100.0%

Descriptives

Respondent's sex		Statistic		Std. Error
Respondent's income; ranges recoded to midpoints	Male	Mean	34603.75	1144.096
	95% Confidence Interval for Mean	Lower Bound	32355.35	
		Upper Bound	36852.16	
	5% Trimmed Mean		32621.90	
	Median		32500.00	
	Variance		592956578.8	
	Std. Deviation		24350.700	
	Minimum		500	
	Maximum		110000	
	Range		109500	
	Interquartile Range		28750	
	Skewness		1.123	.115
	Kurtosis		1.276	.229
	Female	Mean	27729.70	1078.042
	95% Confidence Interval for Mean	Lower Bound	25611.29	
		Upper Bound	29848.11	
	5% Trimmed Mean		25433.76	
	Median		21250.00	
	Variance		543897874.0	
	Std. Deviation		23321.618	
	Minimum		500	
	Maximum		110000	
	Range		109500	
	Interquartile Range		26250	

Descriptives

Respondent's sex		Statistic	Std. Error
	Skewness	1.425	.113
	Kurtosis	2.234	.225

M-Estimators

Respondent's sex		Huber's M-Estimator ^a	Tukey's Biweight ^b	Hampel's M-Estimator ^c	Andrews' Waved
Respondent's income; ranges recoded to midpoints	Male	30950.17	29127.36	30729.17	29115.73
	Female	23108.98	21329.01	23013.16	21319.61

- The weighting constant is 1.339.
- The weighting constant is 4.685.
- The weighting constants are 1.700, 3.400, and 8.500
- The weighting constant is 1.340*pi.

Percentiles

		Percentiles							
		Respondent's sex							
		5							
		10							
		25							
		50							
		75							
		90							
Weighted Average (Definition 1)	Respondent's income; ranges recoded to midpoints	Male	4200.00	6500.00	16250.00	32500.00	45000.00	67500.00	
	Female	2000.00	3500.00	11250.00	21250.00	37500.00	55000.00		
Tukey's Hinges	Respondent's income; ranges recoded to midpoints	Male			16250.00	32500.00	45000.00		
	Female				11250.00	21250.00	37500.00		

Percentiles			
	Respondent's sex		Percentiles
	95		
Weighted Average (Definition 1)	Respondent's income; ranges recoded to midpoints	Male	82500.00
		Female	82500.00
Tukey's Hinges	Respondent's income; ranges recoded to midpoints	Male	
		Female	

Extreme Values

	Respondent's sex		Case Number	Value
	Male	Highest	1	157
Respondent's income; ranges recoded to midpoints			2	424
			3	429
			4	627
			5	651
				110000 ^a
		Lowest	1	1362
			2	1195
			3	897
			4	605
			5	589
				500 ^b
				500
	Female	Highest	1	82
			2	106
				110000
				110000

Extreme Values

Respondent's sex	Case Number	Value
	3	110000
	4	110000
	5	110000 ^a
	1	500
	2	500
Lowest	3	500
	4	500
	5	500 ^b

- a. Only a partial list of cases with the value 110000 are shown in the table of upper extremes.
- b. Only a partial list of cases with the value 500 are shown in the table of lower extremes.

Tests of Normality

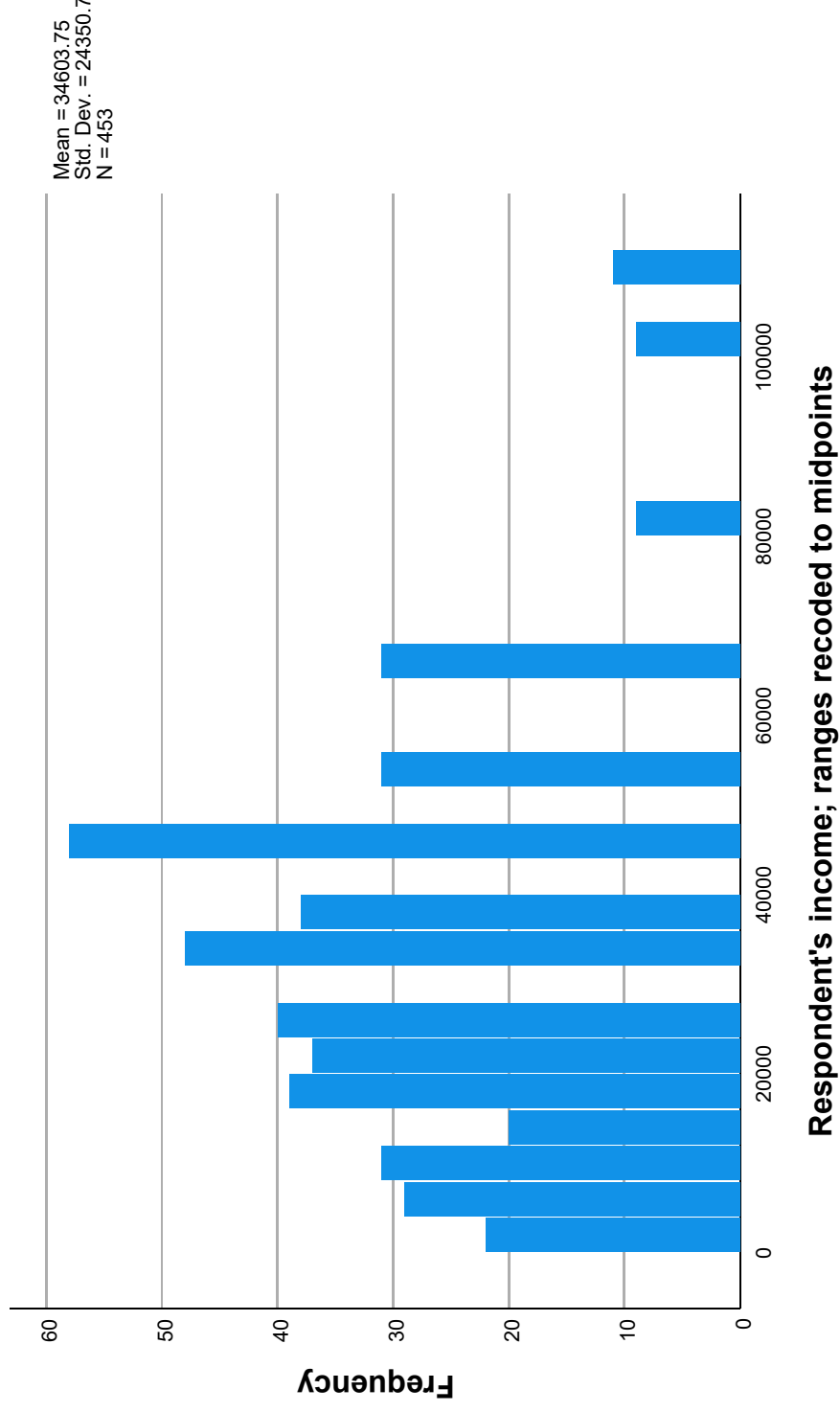
Respondent's sex	Kolmogorov-Smirnov ^a		Shapiro-Wilk	
	Statistic	df	Statistic	df
Respondent's income; ranges recoded to midpoints				
Male	.134	453	.911	453
Female	.150	468	.873	468

a. Lilliefors Significance Correction

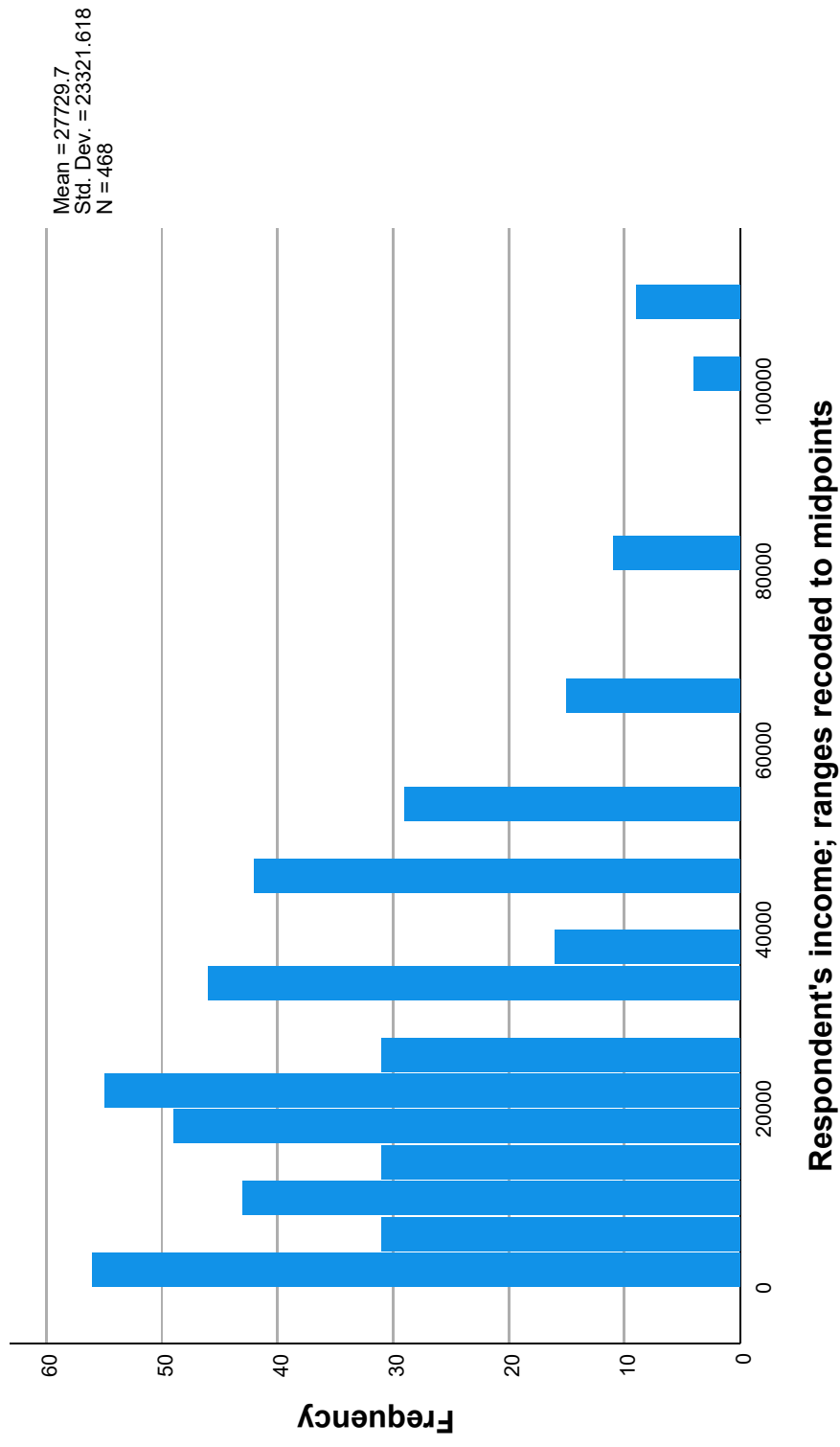
Respondent's income; ranges recoded to midpoints

Histograms

Histogram
for sex= Male



Histogram
for sex= Female



Stem-and-Leaf Plots

Respondent's income; ranges recoded to midpoints Stem-and-Leaf Plot for sex= Male

Frequency	Stem &	Leaf
31.00	0 .	0000000022222233333334444444
31.00	0 .	555555566666677777999999999
40.00	1 .	1111111111111111133333333333333
39.00	1 .	6666666666666668888888888888888
37.00	2 .	1111111111111111133333333333333
40.00	2 .	7777777777777777777777777777777
48.00	3 .	2222222222222222222222222222222
38.00	3 .	7777777777777777777777777777777
.00	4 .	
58.00	4 .	555555555555555555555555555555555
.00	5 .	
31.00	5 .	5555555555555555555555555555555
.00	6 .	
31.00	6 .	7777777777777777777777777777777
.00	7 .	
.00	7 .	
9.00	8 .	22222222
20.00	Extremes	(>=100000)
Stem width:	10000	
Each leaf:	1 case(s)	

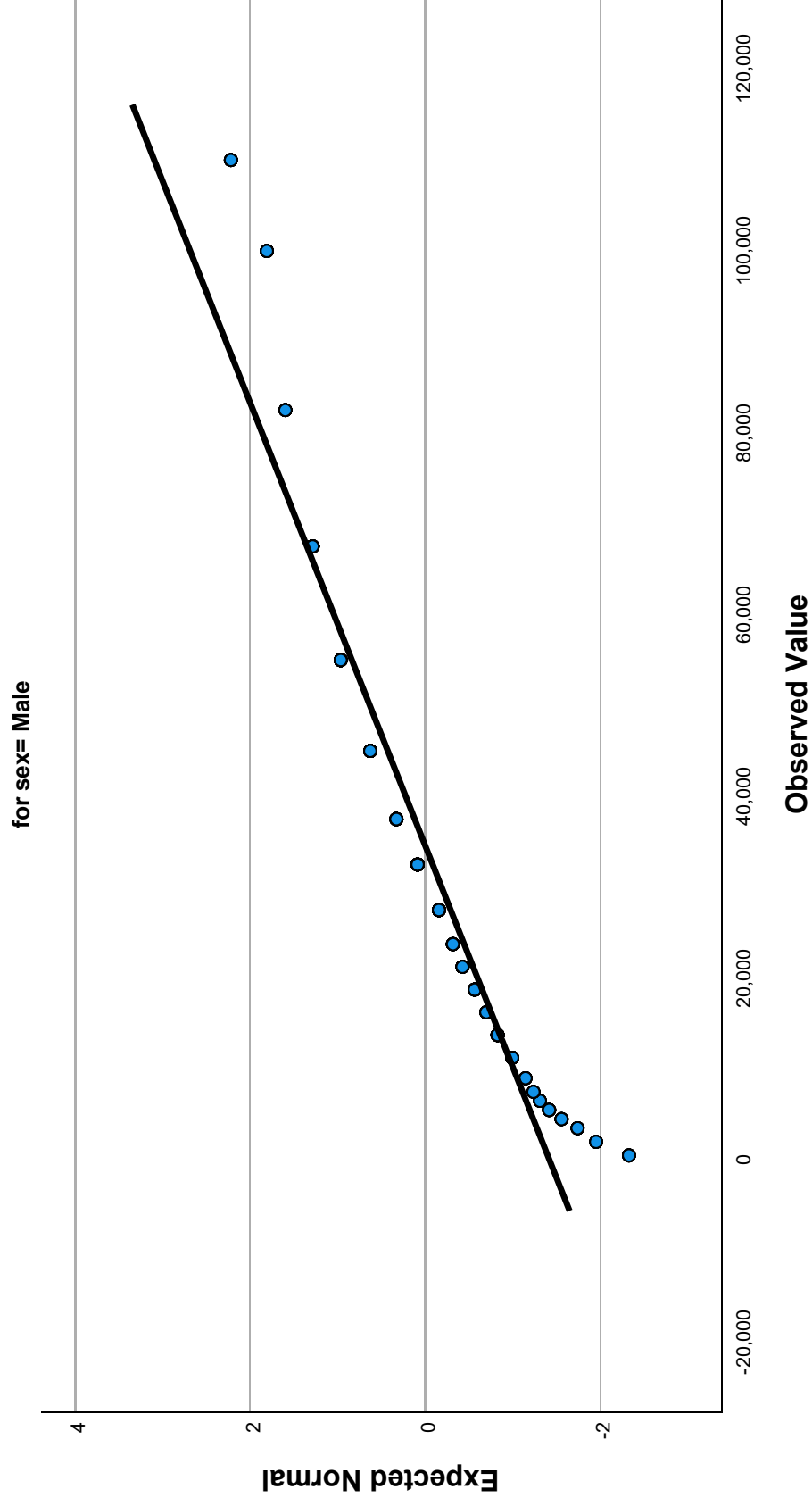
Respondent's income; ranges recoded to midpoints Stem-and-Leaf Plot for sex= Female

Frequency	Stem &	Leaf
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Stem width: 10000
Each leaf: 1 case(s)
```

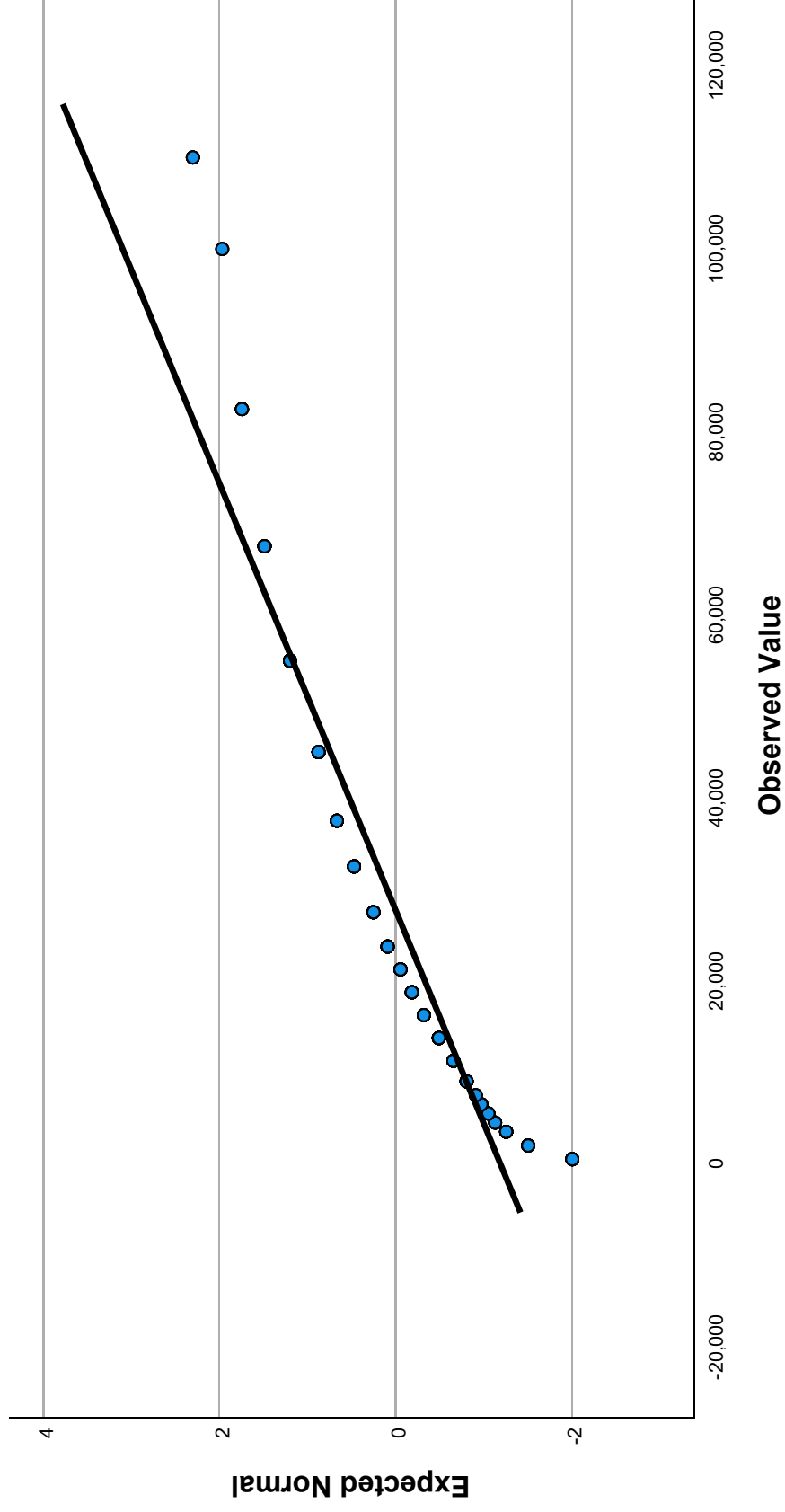
Page 9

Normal Q-Q Plot of Respondent's income; ranges recoded to midpoints



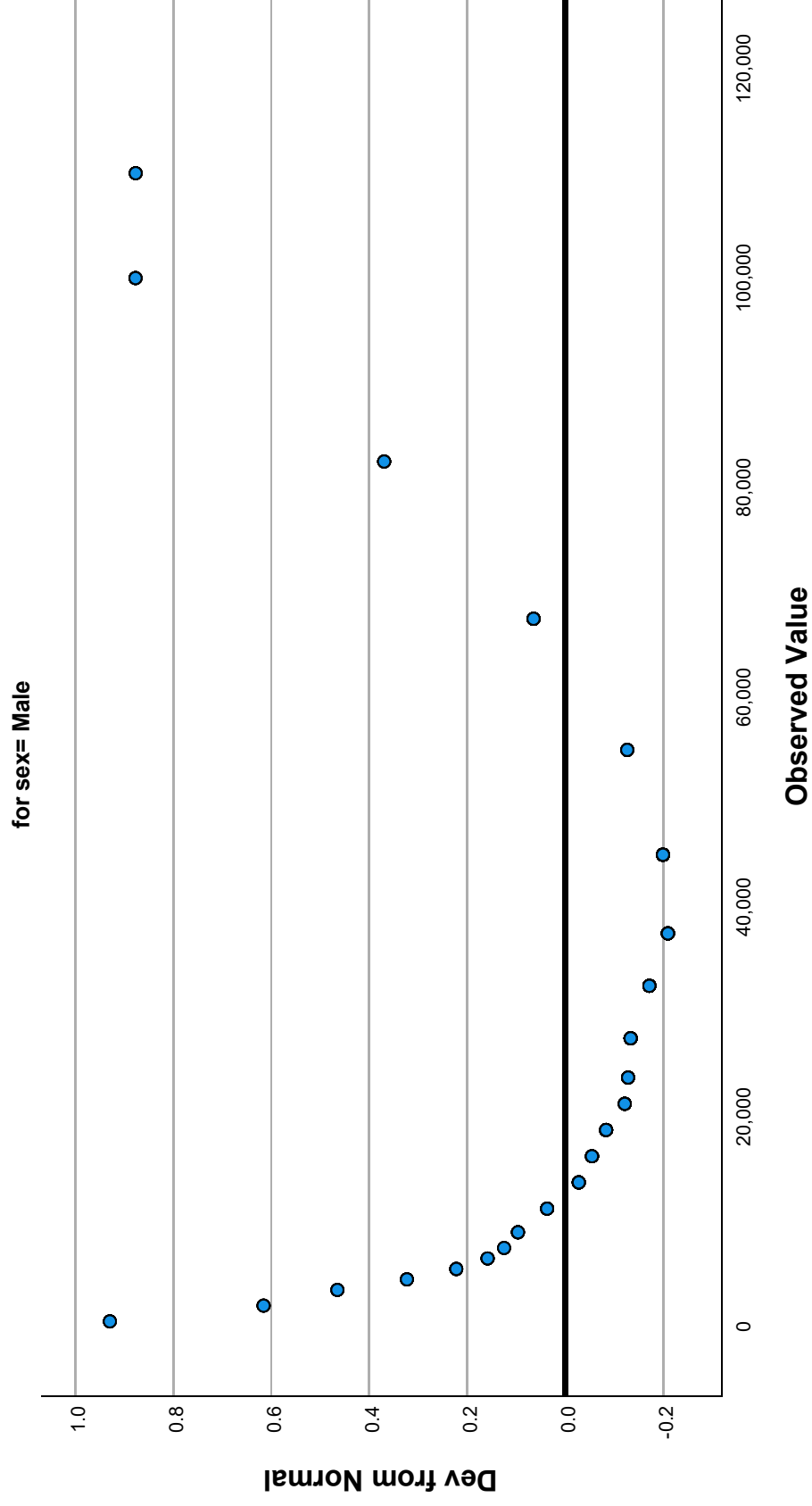
Normal Q-Q Plot of Respondent's income; ranges recoded to midpoints

for sex= Female

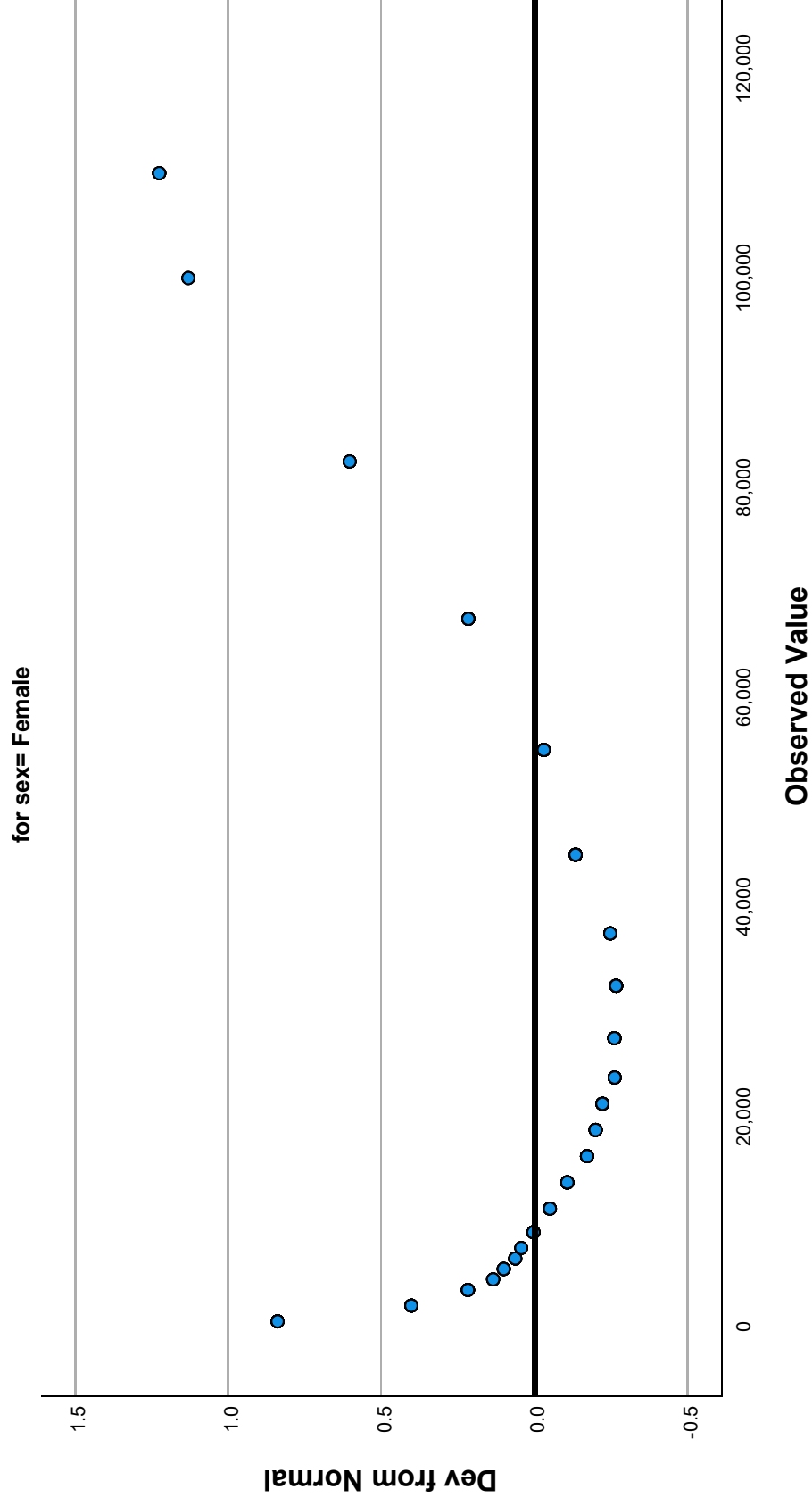


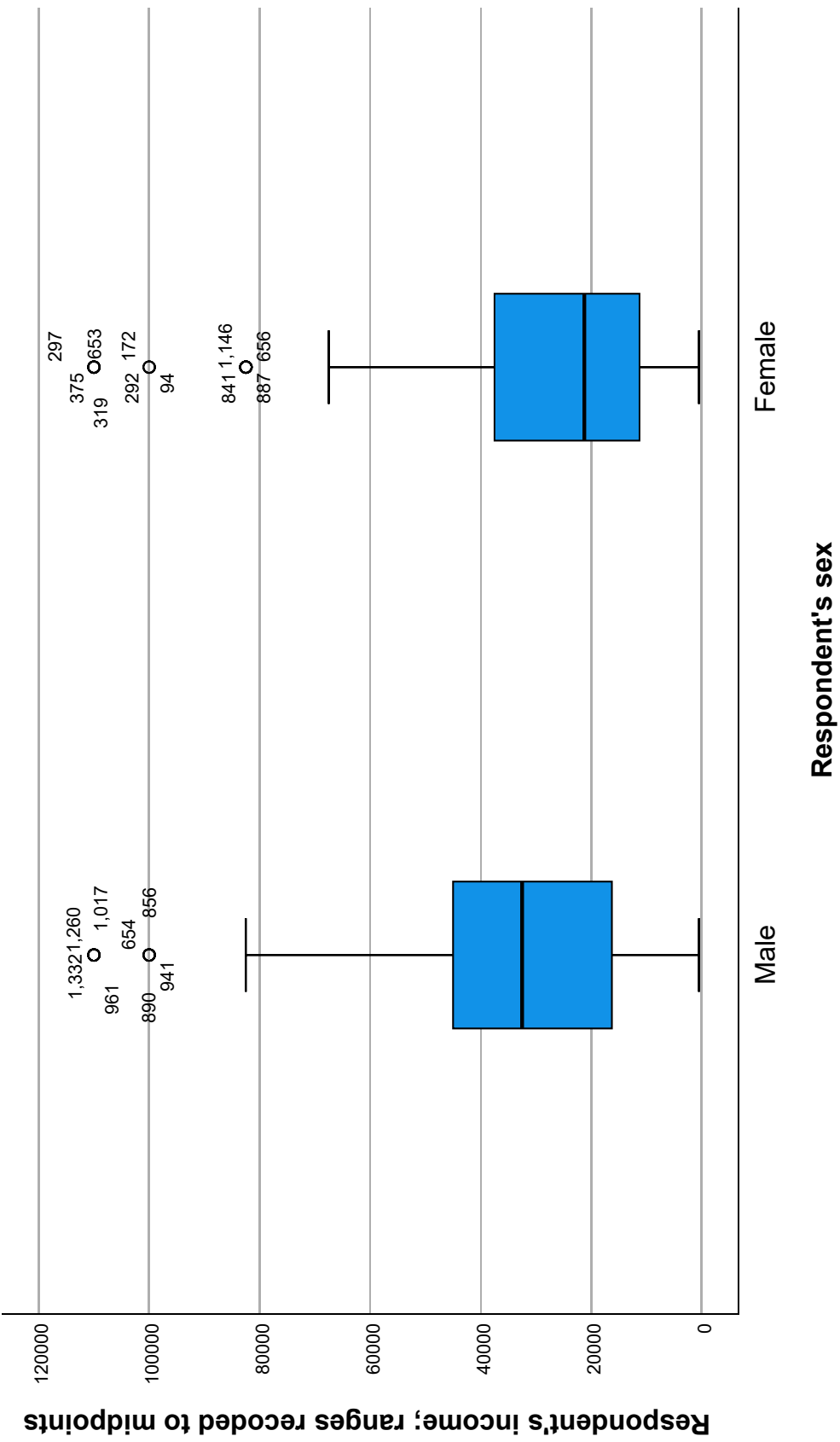
Detrended Normal Q-Q Plots

Detrended Normal Q-Q Plot of Respondent's income; ranges recoded to midpoints



Detrended Normal Q-Q Plot of Respondent's income; ranges recoded to midpoints





```
EXAMINE VARIABLES=rincdol BY sex
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/COMPARE VARIABLES
/MESTIMATORS HUBER(1.339) ANDREW(1.34) HAMPEL(1.7,3.4,8.5) TUKEY(4.685)
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- c. The weighting constants are 1.700, 3.400, and 8.500
- d. The weighting constant is 1.340*pi.

Percentiles

		Percentiles							
		Respondent's sex							
		51025507590							
Weighted Average (Definition 1)	Respondent's income; ranges recoded to midpoints	Male	4200.00	6500.00	16250.00	32500.00	45000.00	67500.00	
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	Respondent's sex		Percentiles
	95		
Weighted Average (Definition 1)	Respondent's income; ranges recoded to midpoints	Male	82500.00
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Tukey's Hinges	Respondent's income; ranges recoded to midpoints	Male	
		Female	

Extreme Values

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Respondent's income; ranges recoded to midpoints		2	424	110000
		3	429	110000
		4	627	110000
		5	651	110000 ^a
	Lowest	1	1362	500
		2	1195	500
		3	897	500
		4	605	500
		5	589	500 ^b
	Female	Highest	1	82
		2	106	110000

Extreme Values

Respondent's sex	Case Number	Value
	3	110000
	4	110000
	5	110000 ^a
	1	500
	2	500
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	4	500
	5	500 ^b

- a. Only a partial list of cases with the value 110000 are shown in the table of upper extremes.
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Tests of Normality

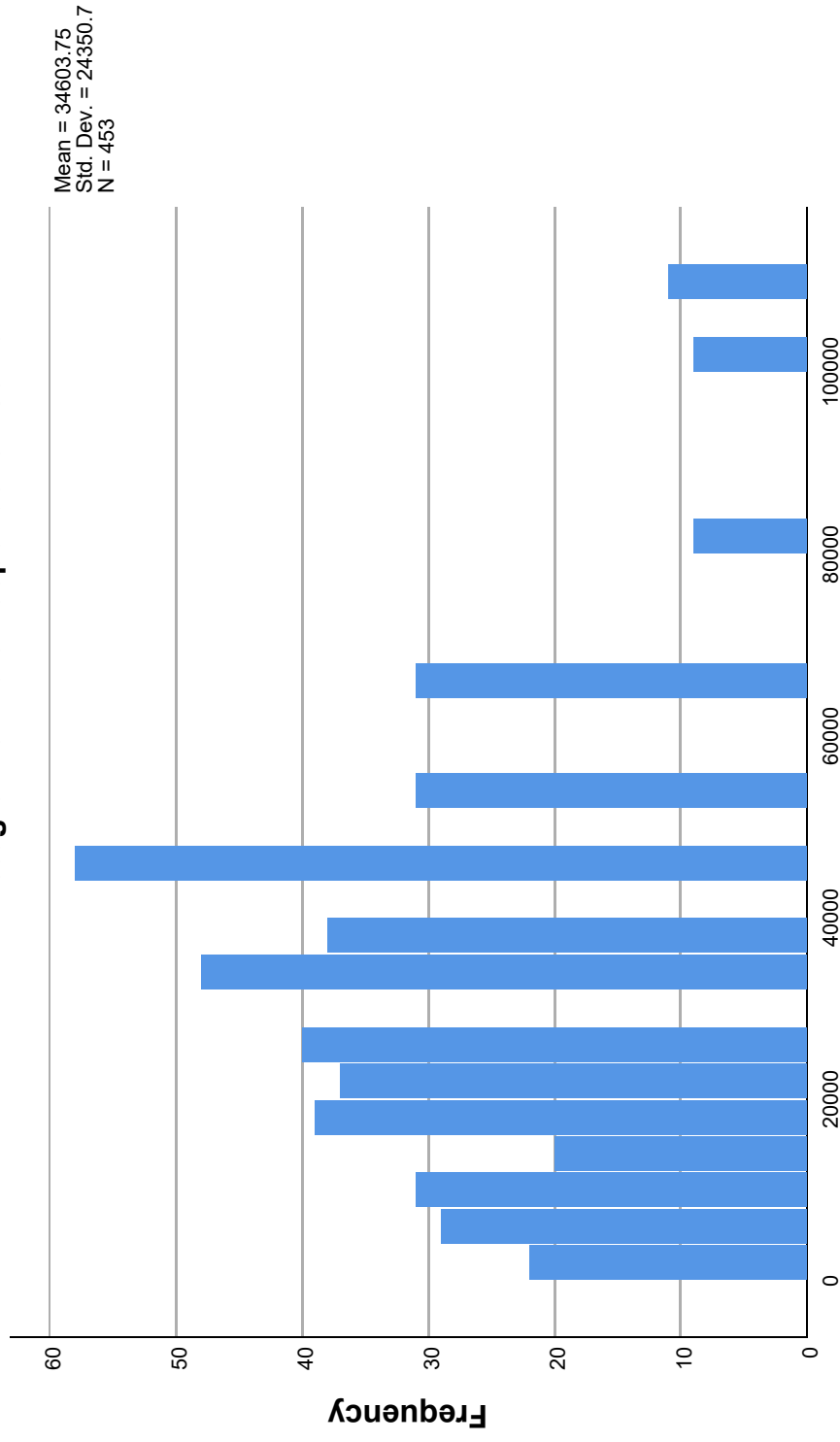
Respondent's sex	Kolmogorov-Smirnov ^a		Shapiro-Wilk	
	Statistic	df	Statistic	df
Respondent's income; ranges recoded to midpoints				
Male	.134	453	.911	453
Female	.150	468	.873	468

a. Lilliefors Significance Correction

Respondent's sex = Male

Histograms

Histogram of Male Respondent Income



Stem-and-Leaf Plots

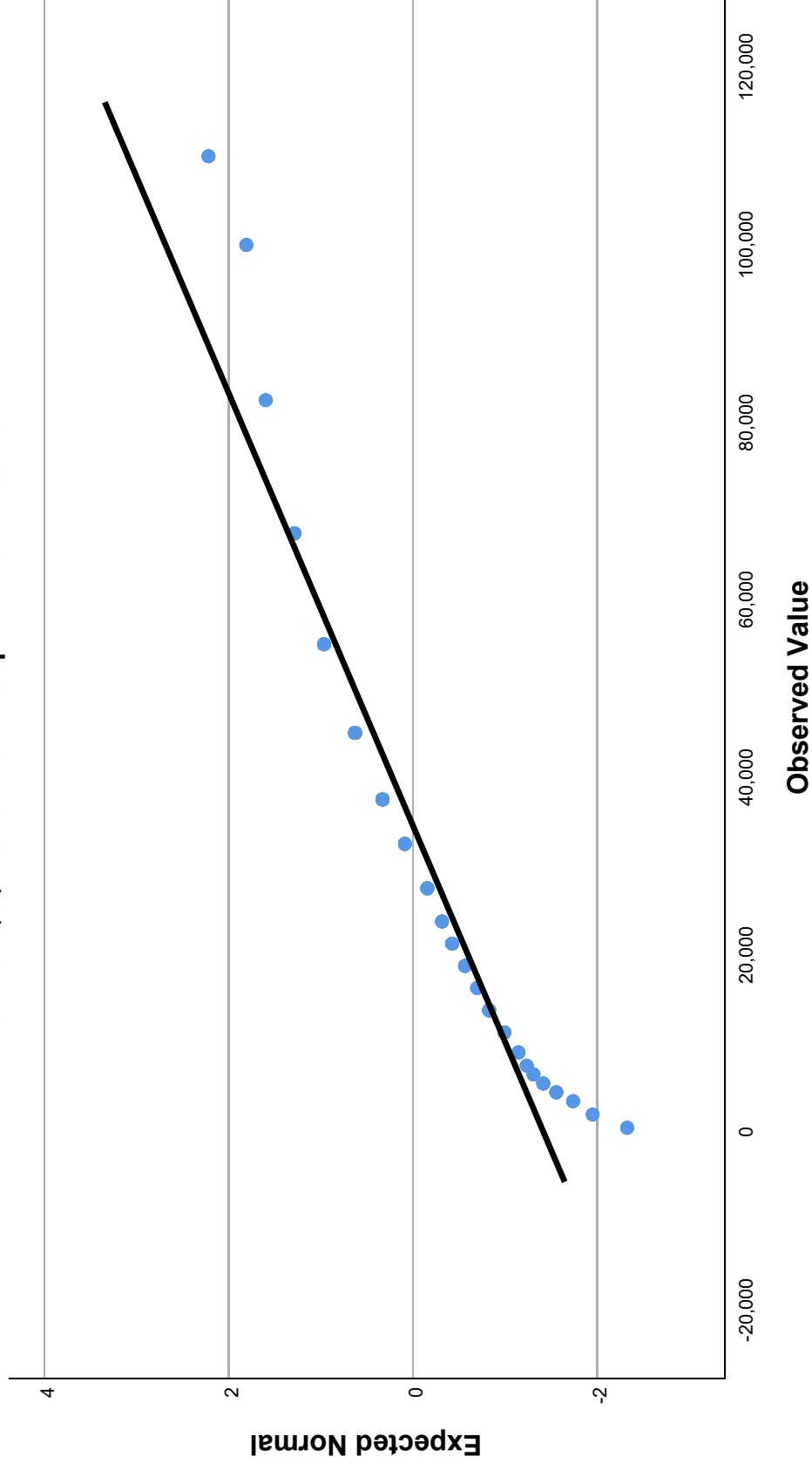
Male Respondent's Income
Ranges recoded to midpoints
Stem-and-Leaf Plot for Male Income

[illegible]

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Stem width: 10000
Each leaf: 1 case(s)
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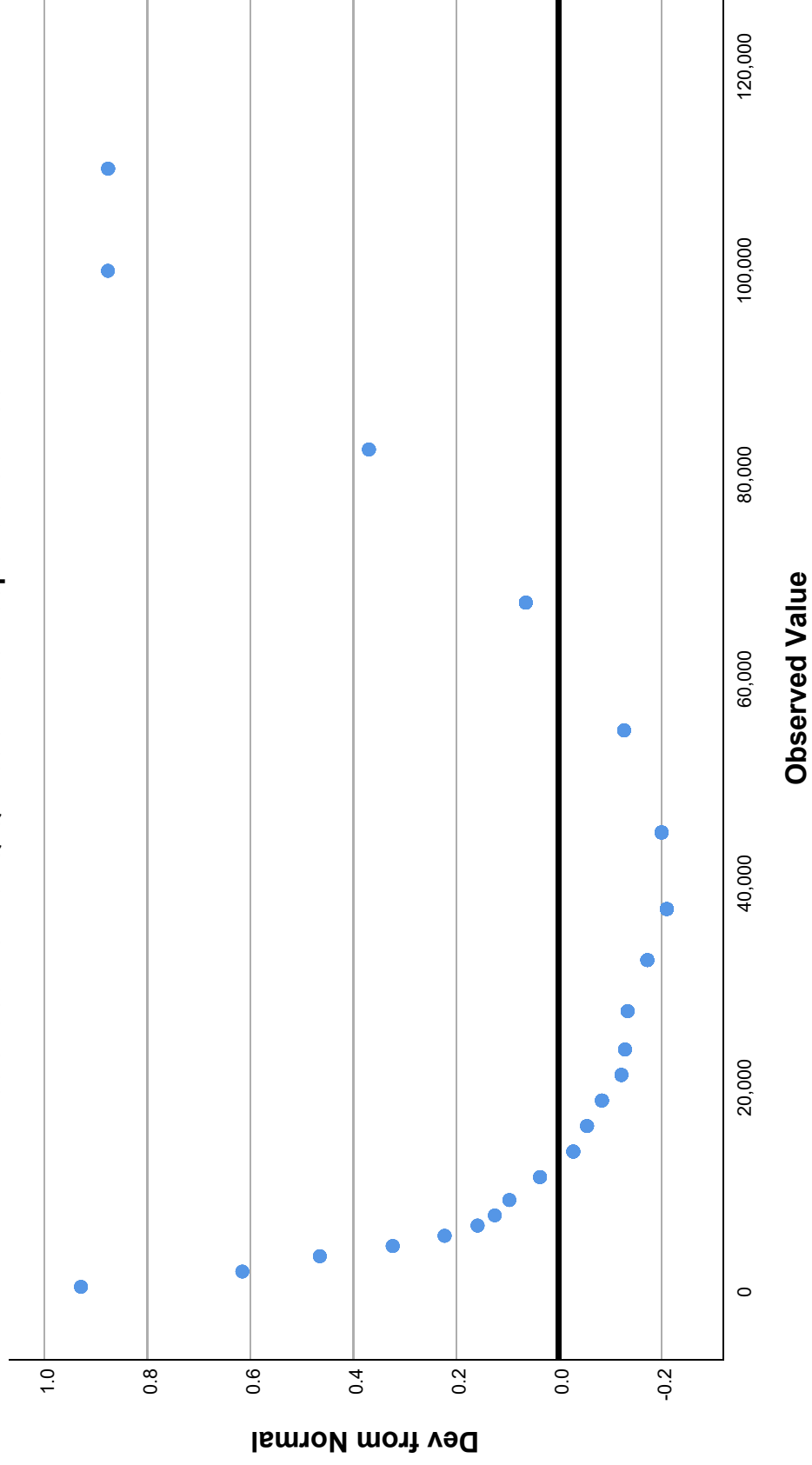
Normal Q-Q Plots

Normal Q-Q Plot of Male Respondent's Income



Detrended Normal Q-Q Plots

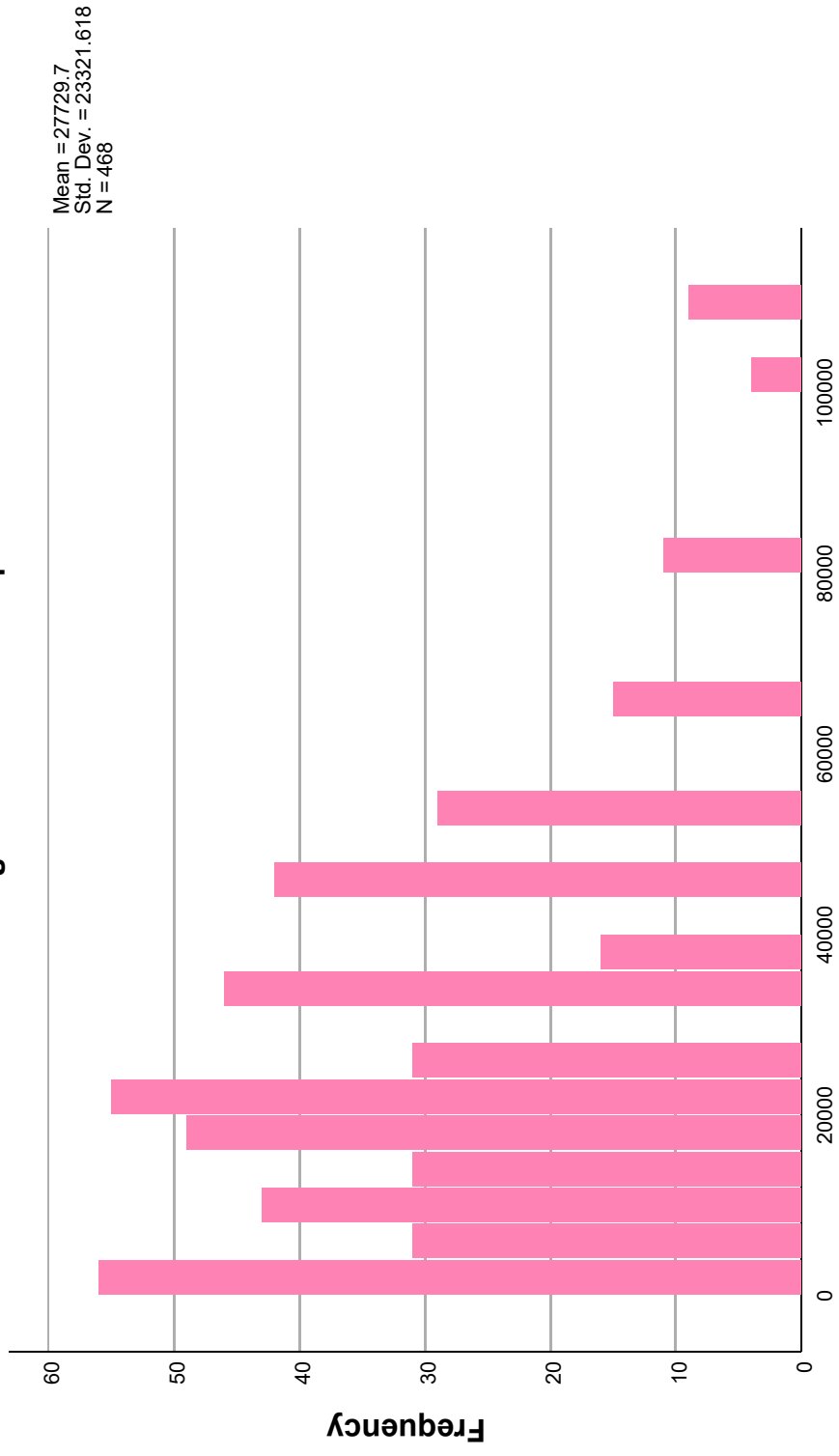
Detrended Normal Q-Q Plot of Male Respondent's Income



Respondent's sex = Female

Histograms

Histogram of Female Respondent Income



Stem-and-Leaf Plots

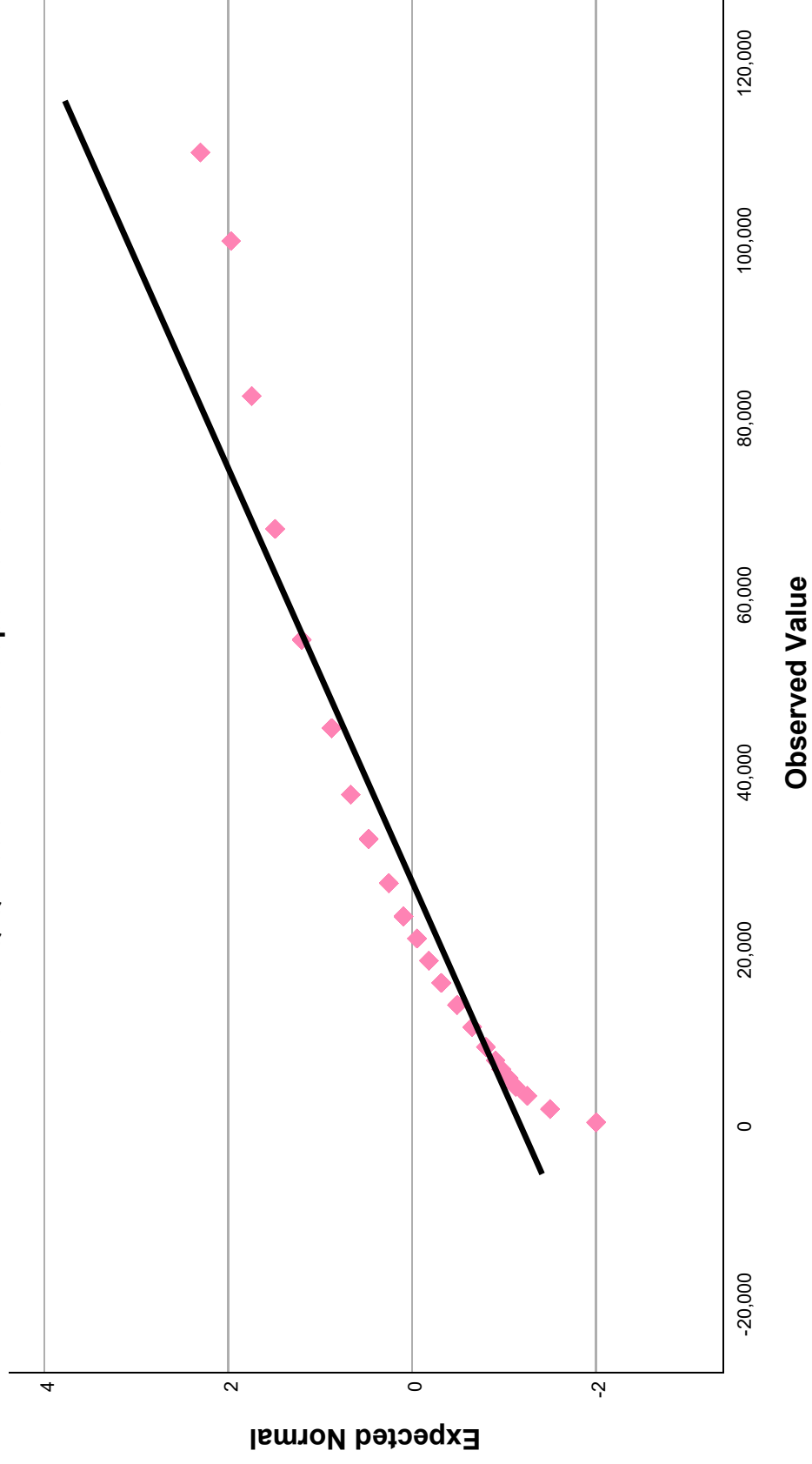
Female Respondent's Income
Ranges recoded to midpoints
Stem-and-Leaf Plot for Female Income

[illegible]

```
Stem width: 10000
Each leaf: 1 case(s)
```

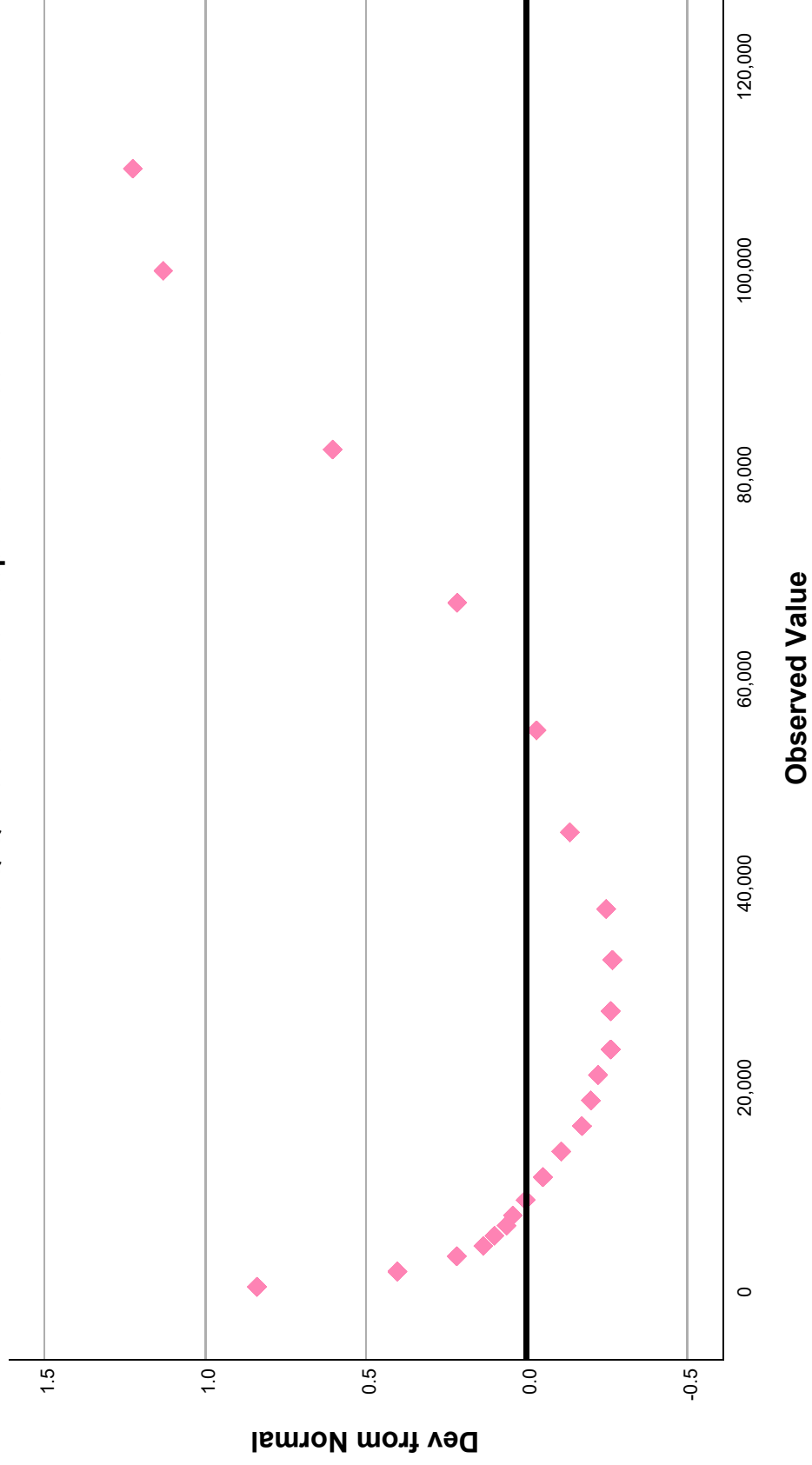
Normal Q-Q Plots

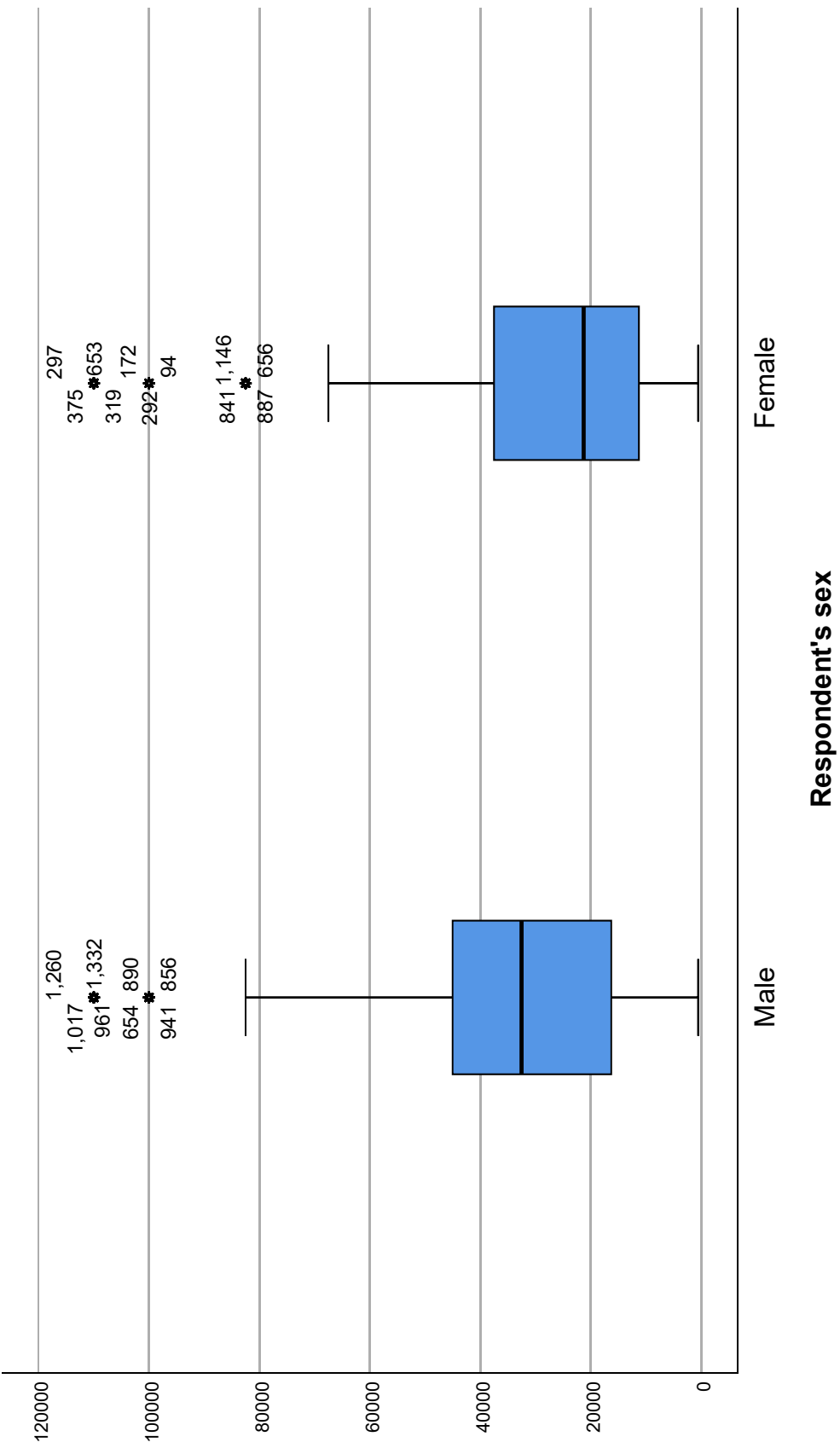
Normal Q-Q Plot of Female Respondent's Income



Detrended Normal Q-Q Plots

Detrended Normal Q-Q Plot of Female Respondent's Income





DESCRIPTIVES VARIABLES=sex rincdol
/STATISTICS=MEAN STDDEV VARIANCE RANGE MIN MAX SEMEAN KURTOSIS SKEWNESS.

Descriptives

Descriptive Statistics

	N Statistic	Range Statistic	Minimum Statistic	Maximum Statistic	Mean		Std. Error	Std. Deviation Statistic	Variance Statistic	Skewness Statistic
					Statistic	Std. Error				
Respondent's sex	1419	1	1	2	1.54	.013		.498	.248	-.171
Respondent's income; ranges recoded to midpoints	921	109500	500	110000	31110.75	793.043		24067.245	579232286.5	1.245
Valid N (listwise)	921									

Descriptive Statistics

	Skewness		Kurtosis	
	Std. Error	Statistic	Std. Error	Statistic
Respondent's sex	.065	-1.973	.130	
Respondent's income; ranges recoded to midpoints	.081	1.607	.161	
Valid N (listwise)				

SAVE TRANSLATE OUTFILE='C:\Users\stefa\OneDrive - Careered - CTU\2024\RES814\Data Files '+
'SPSS\Week 4\gss.csv'
/TYPE=CSV

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/ENCODING= 'UTF8'
/MAP
/REPLACE
/FIELDNAMES
/CELLS=VALUES.

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Data written to C:\Users\stefa\OneDrive - Careered - CTU\2024\RES814\Data Files SPSS\Week 4\gss.csv.
47 variables and 1419 cases written.

Variable: age	Type: Number	Width: 2	Dec: 0
Variable: agecat	Type: Number	Width: 8	Dec: 0
Variable: degree	Type: Number	Width: 1	Dec: 0
Variable: educ	Type: Number	Width: 2	Dec: 0
Variable: emailhrs	Type: Number	Width: 8	Dec: 2
Variable: hrs1	Type: Number	Width: 2	Dec: 0
Variable: ndegree	Type: Number	Width: 1	Dec: 0
Variable: netcat	Type: Number	Width: 1	Dec: 0
Variable: nethrs	Type: Number	Width: 8	Dec: 2
Variable: sex	Type: Number	Width: 1	Dec: 0
Variable: sphrs1	Type: Number	Width: 2	Dec: 0
Variable: srcheng2	Type: Number	Width: 2	Dec: 0
Variable: tvhours	Type: Number	Width: 2	Dec: 0
Variable: usecomp	Type: Number	Width: 1	Dec: 0
Variable: usemail	Type: Number	Width: 1	Dec: 0
Variable: usenet	Type: Number	Width: 1	Dec: 0
Variable: useweb	Type: Number	Width: 1	Dec: 0
Variable: webhrs	Type: Number	Width: 8	Dec: 2
Variable: hapmar	Type: Number	Width: 1	Dec: 0
Variable: happy	Type: Number	Width: 1	Dec: 0
Variable: speduc	Type: Number	Width: 2	Dec: 0
Variable: rincome	Type: Number	Width: 2	Dec: 0
Variable: life	Type: Number	Width: 1	Dec: 0
Variable: income	Type: Number	Width: 2	Dec: 0
Variable: maeduc	Type: Number	Width: 2	Dec: 0
Variable: paeduc	Type: Number	Width: 2	Dec: 0
Variable: marital	Type: Number	Width: 1	Dec: 0

Variable: postlife	Type: Number	Width: 1	Dec: 0
Variable: pres96	Type: Number	Width: 1	Dec: 0
Variable: richwork	Type: Number	Width: 1	Dec: 0
Variable: satjob	Type: Number	Width: 1	Dec: 0
Variable: sibs	Type: Number	Width: 2	Dec: 0
Variable: spdeg	Type: Number	Width: 1	Dec: 0
Variable: spwrksta	Type: Number	Width: 1	Dec: 0
Variable: vote96	Type: Number	Width: 1	Dec: 0
Variable: wrkstat	Type: Number	Width: 1	Dec: 0
Variable: zodiac	Type: Number	Width: 2	Dec: 0
Variable: incomdol	Type: Number	Width: 8	Dec: 0
Variable: rincdol	Type: Number	Width: 8	Dec: 0
Variable: husbeduc	Type: Number	Width: 8	Dec: 2
Variable: wifeduc	Type: Number	Width: 8	Dec: 2
Variable: husbhr	Type: Number	Width: 8	Dec: 2
Variable: wifehr	Type: Number	Width: 8	Dec: 2
Variable: husbft	Type: Number	Width: 8	Dec: 2
Variable: wifeft	Type: Number	Width: 8	Dec: 2
Variable: cpldifed	Type: Number	Width: 8	Dec: 2
Variable: prtdifed	Type: Number	Width: 8	Dec: 2

```

GET
  FILE='C:\Users\stefa\OneDrive - Careered - CTU\2024\RES814\Data Files SPSS\Week 1\gss.sav'.
DATASET NAME DataSet1 WINDOW=FRONT.
* Chart Builder.
GGRAPH
  /GRAPHDATASET NAME="graphdataset" VARIABLES=rincdol sex MISSING=LISTWISE REPORTMISSING=NO
  /GRAPHSPEC SOURCE=INLINE.
BEGIN GPL
  SOURCE: s=userSource(id("graphdataset"))
  DATA: rincdol=col(source(s), name("rincdol"))

```

```

DATA: sex=col(source(s), name("sex"), unit.category())
COORD: transpose(mirror(rect(dim(1,2))))
GUIDE: axis(dim(1), label("Respondent's income; ranges recoded to midpoints"))
GUIDE: axis(dim(1), opposite(), label("Respondent's income; ranges recoded to midpoints"))
GUIDE: axis(dim(2), label(""))
GUIDE: axis(dim(3), label("Respondent's sex"), opposite(), gap(0px))
GUIDE: legend(aesthetic(aesthetic.color), null())
GUIDE: text.title(label("Population Pyramid Frequency Respondent's income; ranges recoded to ",
    "midpoints by Respondent's sex"))
SCALE: cat(dim(3), reverse(), include("1", "2"))
ELEMENT: interval(position(summary.count(bin.rect(rincdol*1*sex))), color.interior(sex))
END GPL.

```

GGraph

```
[DataSet1] C:\Users\stefa\OneDrive - Careered - CTU\2024\RES814\Data Files SPSS\Week 1\gss.sav
```

Population Pyramid Frequency of Reported Income Midpoints by Sex

