Results

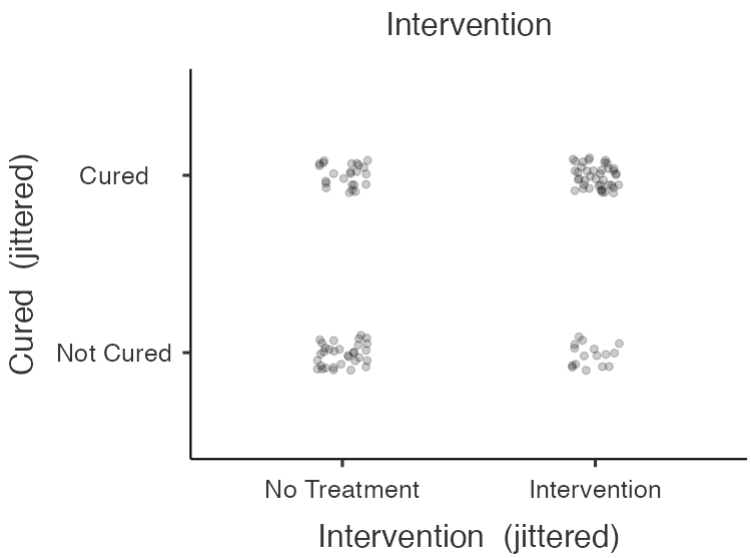
Relationships, Prediction, and Group Comparisons

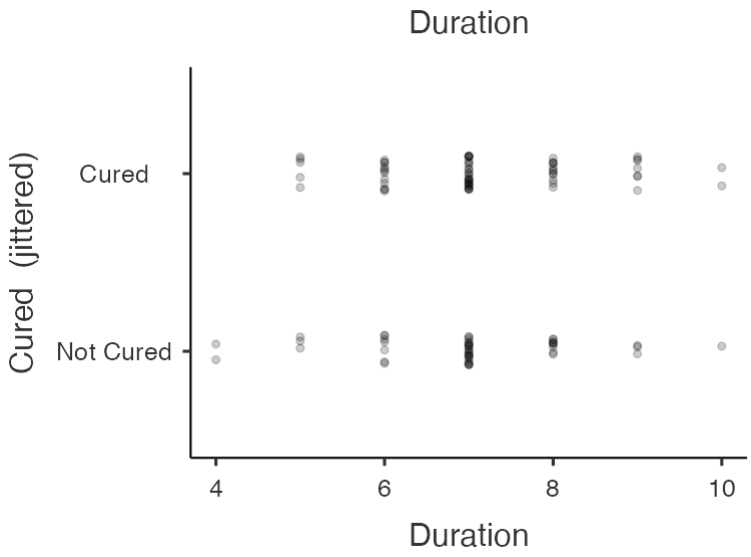
You have entered a dichotomous dependent variable and several independent variables. Hence, logistic regression analysis seems to be a good option for you! In order to run this analysis in jamovi, go to: Regression > 2 Outcomes - Binomial

- Drop your dependent variable in the box below Dependent Variable
- Drop your independent variables in the box below Covariates. Independent variables of nominal or ordinal measurement level that consist of more than two groups should be transformed into code variables before they are included in the analysis. Independent variables of nominal or ordinal measurement level that consist of two groups can be transformed into code variables, but they don't need to be, as long as numbers are used to indicate group membership, not letters (these dichotomous variables actually are code variables already, but you may like to change the coding). In jamovi, instead of transforming your categorical independent variables into code variables yourself, you can also put the untransformed categorical independent variables in the box below Factors. jamovi will then make the code variables for you 'behind the scenes'

Click on the link to learn more about this method!

Scatter Plots of Bivariate Relationships - Dependent/Independent Variables





Descriptives

Descriptives

	Cured	Intervention
N	113	113
Missing	0	0
Minimum	0	0
Maximum	1	1

Frequencies

Frequencies of Cured

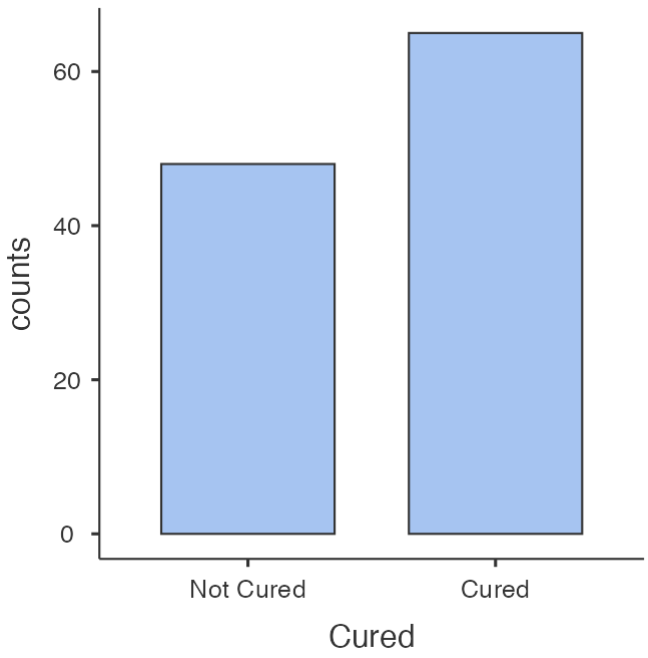
Cured	Counts	% of Total	Cumulative %
Not Cured	48	42.5 %	42.5 %
Cured	65	57.5 %	100.0 %

Frequencies of Intervention

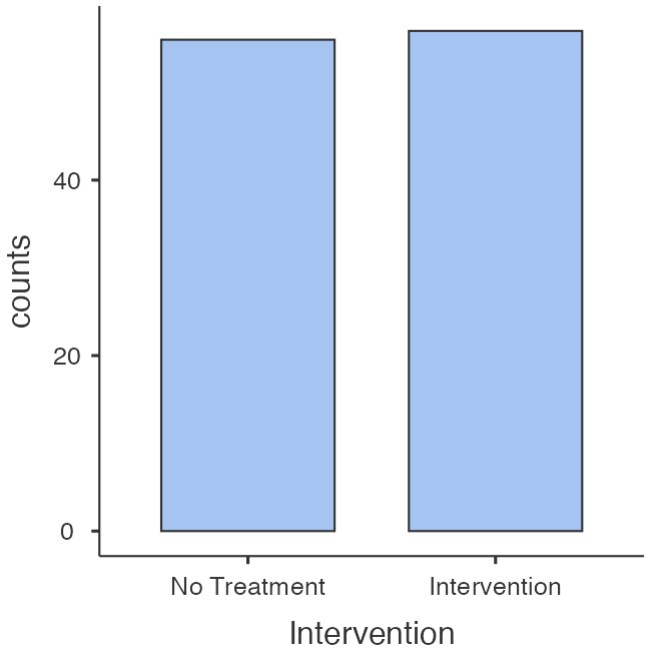
Intervention	Counts	% of Total	Cumulative %
No Treatment	56	49.6 %	49.6 %
Intervention	57	50.4 %	100.0 %

Plots

Cured



Intervention



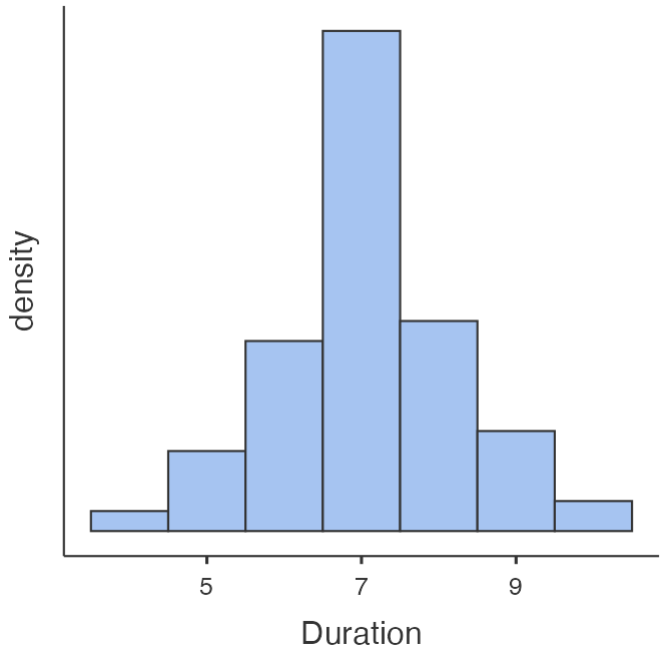
Descriptives

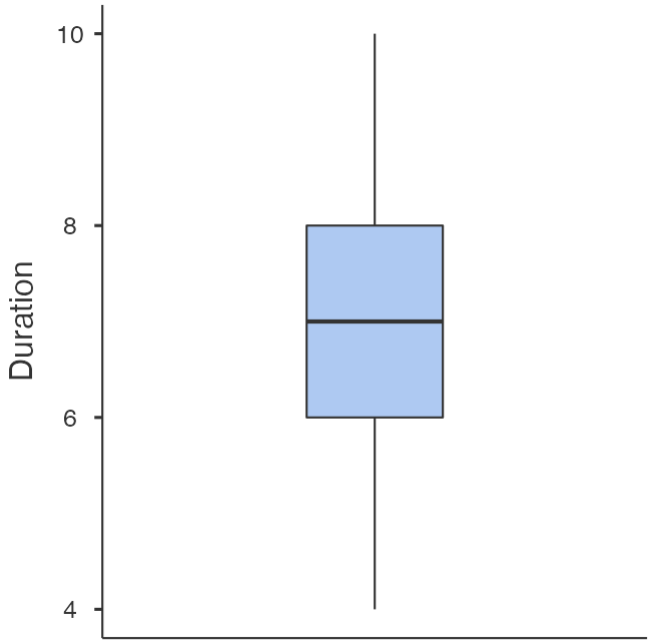
Descriptives

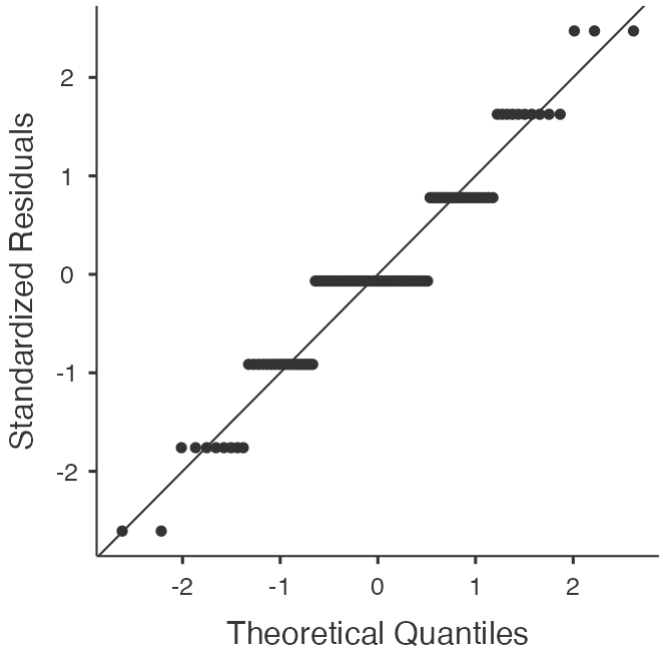
	Duration
N	113
Missing	0
Mean	7.08
Median	7.00
Standard deviation	1.18
Minimum	4.00
Maximum	10.0
Skewness	0.0419
Std. error skewness	0.227
Shapiro-Wilk W	0.925
Shapiro-Wilk p	<.001

Plots

Duration


density
5
7
9
Duration


10
8
6
4
Duration



Binomial Logistic Regression

Model Fit Measures

Model	Deviance	AIC	R^2_{McF}
1	151	159	0.0201

Model Coefficients - Cured

Predictor	Estimate	SE	Z	p
Intercept	17.5	16.4	1.07	0.286
Duration	-97.2	69.6	-1.40	0.163
ln_Duration	167.2	119.3	1.40	0.161
Duration ✻ ln_Duration	24.8	17.8	1.40	0.163

Note. Estimates represent the log odds of "Cured = Cured" vs. "Cured = Not Cured"

Binomial Logistic Regression

Model Fit Measures

						Overall Model Test		
Model	Deviance	AIC	R^2_{McF}	R^2_{CS}	R^2_{N}	χ^2	df	p
1	144	148	0.0644	0.0841	0.113	9.93	1	0.002
2	144	148	0.0644	0.0841	0.113	9.93	1	0.002

Model Comparisons

Comparison					
Model		Model	χ^2	df	p
1	-	2	0.00	0	NaN

Model Specific ResultsModel 1Model 2

Omnibus Likelihood Ratio Tests

Predictor	χ^2	df	p
Intervention	9.93	1	0.002

[3]

Model Coefficients - Cured

		95% Confidence Interval						95% Confidence Interval	
Predictor	Estimate	Lower	Upper	SE	Z	p	Odds ratio	Lower	Upper
Intercept	-0.288	-0.817	0.242	0.270	-1.07	0.287	0.750	0.442	1.27
Intervention:									
Intervention – No Treatment	1.229	0.445	2.012	0.400	3.07	0.002	3.417	1.561	7.48

Note. Estimates represent the log odds of "Cured = Cured" vs. "Cured = Not Cured"

Assumption Checks

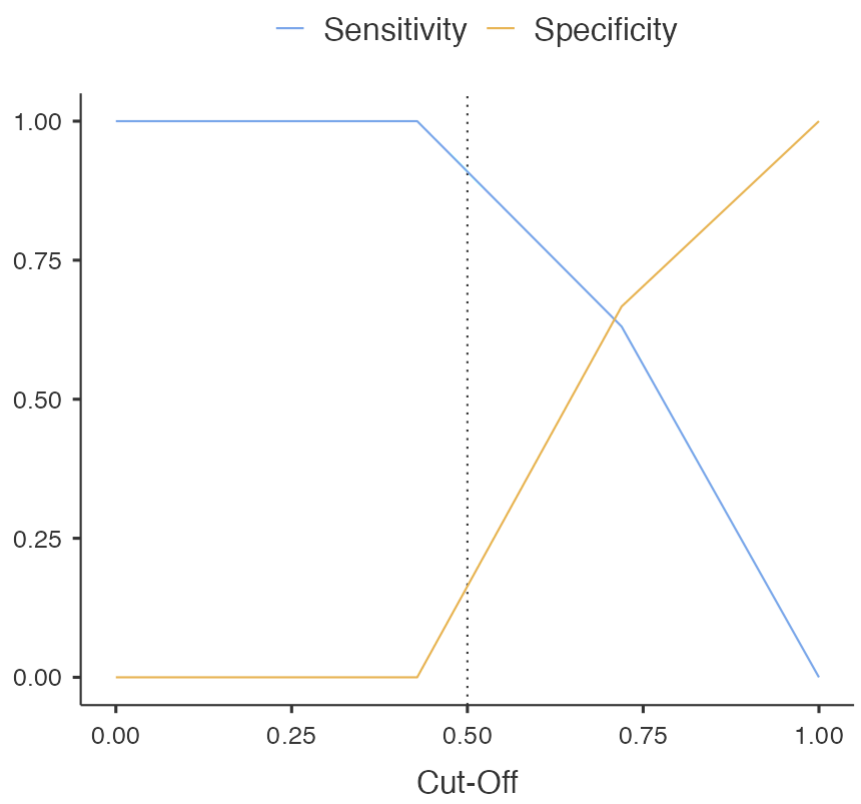
Collinearity Statistics

	VIF	Tolerance
Intervention	1.00	1.00

[3]

Prediction

Cut-Off Plot

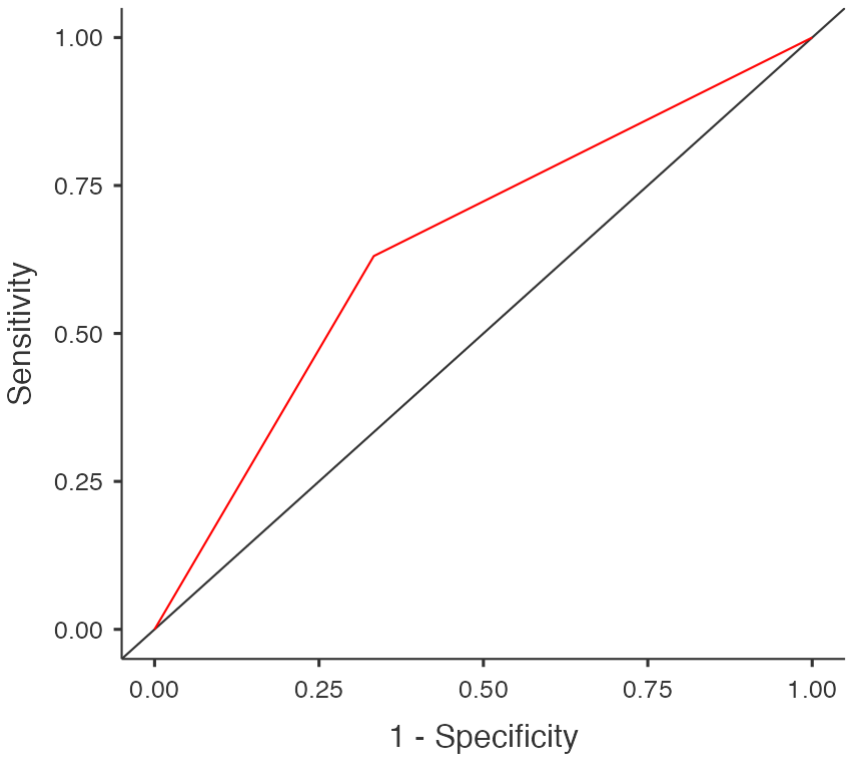


Predictive Measures

Accuracy	Specificity	Sensitivity	AUC
0.646	0.667	0.631	0.649

Note. The cut-off value is set to 0.5

ROC Curve



[4]

Omnibus Likelihood Ratio Tests

Predictor	χ^2	df	p
Intervention	9.93	1	0.002

[3]

Model Coefficients - Cured

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Prediction

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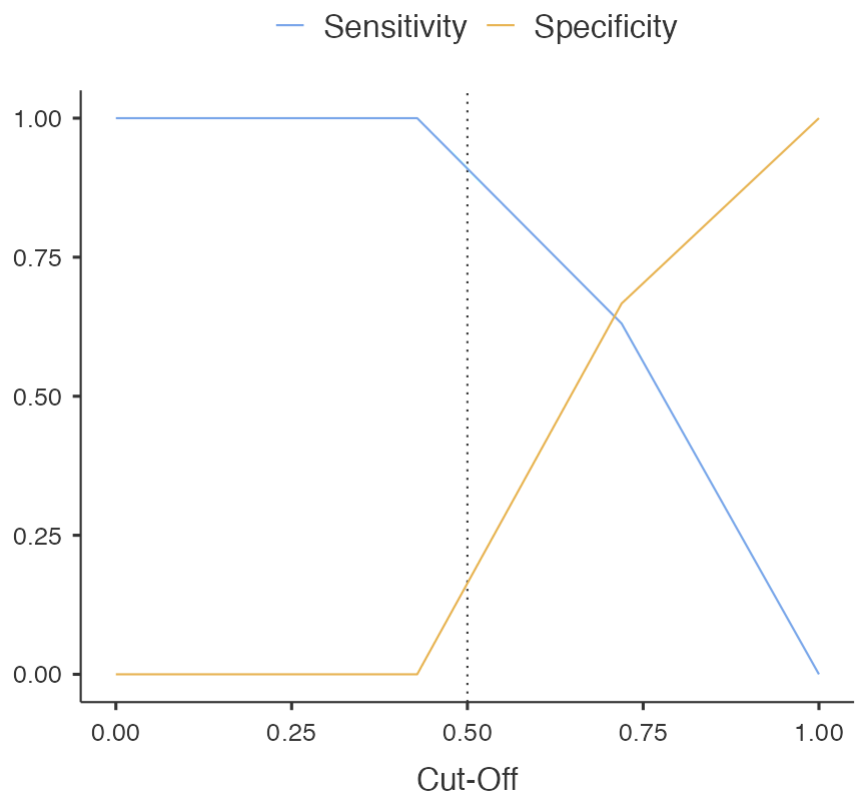

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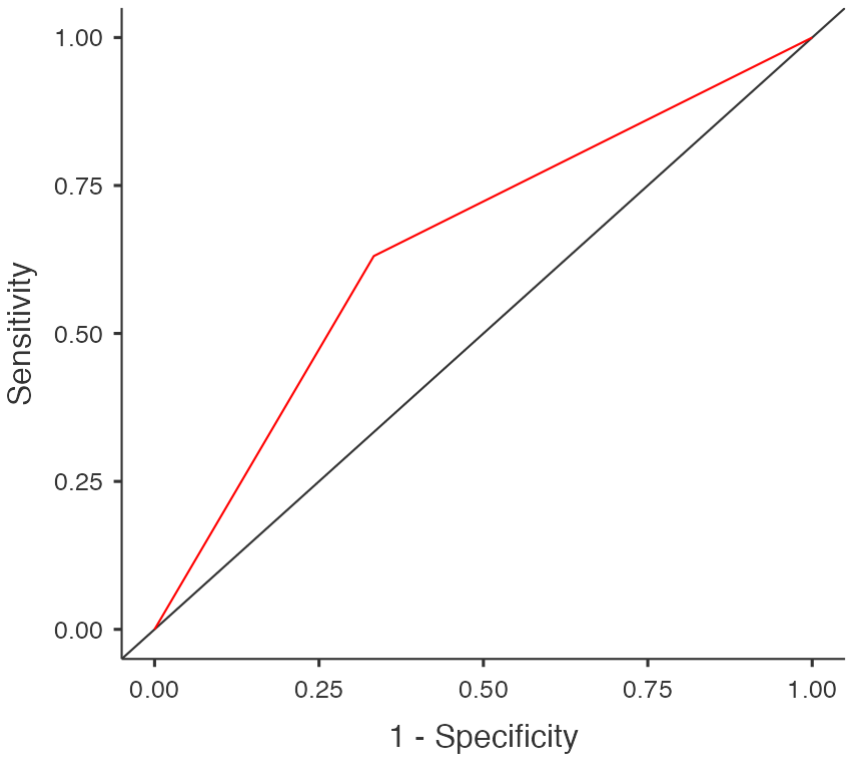

[4]

References

[1] The jamovi project (2022). *jamovi*. (Version 2.3) [Computer Software]. Retrieved from https://www.jamovi.org.

[2] R Core Team (2021). *R: A Language and environment for statistical computing*. (Version 4.1) [Computer software]. Retrieved from https://cran.r-project.org. (R packages retrieved from MRAN snapshot 2022-01-01).

[3] Fox, J., & Weisberg, S. (2020). *car: Companion to Applied Regression*. [R package]. Retrieved from https://cran.r-project.org/package=car.

[4] Sing, T., Sander, O., Beerenwinkel, N., & Lengauer, T. (2015). *ROCR: Visualizing the Performance of Scoring Classifiers*. [R package]. Retrieved from https://cran.r-project.org/package=ROCR.