



# Personal motives behind minimalism and veganism

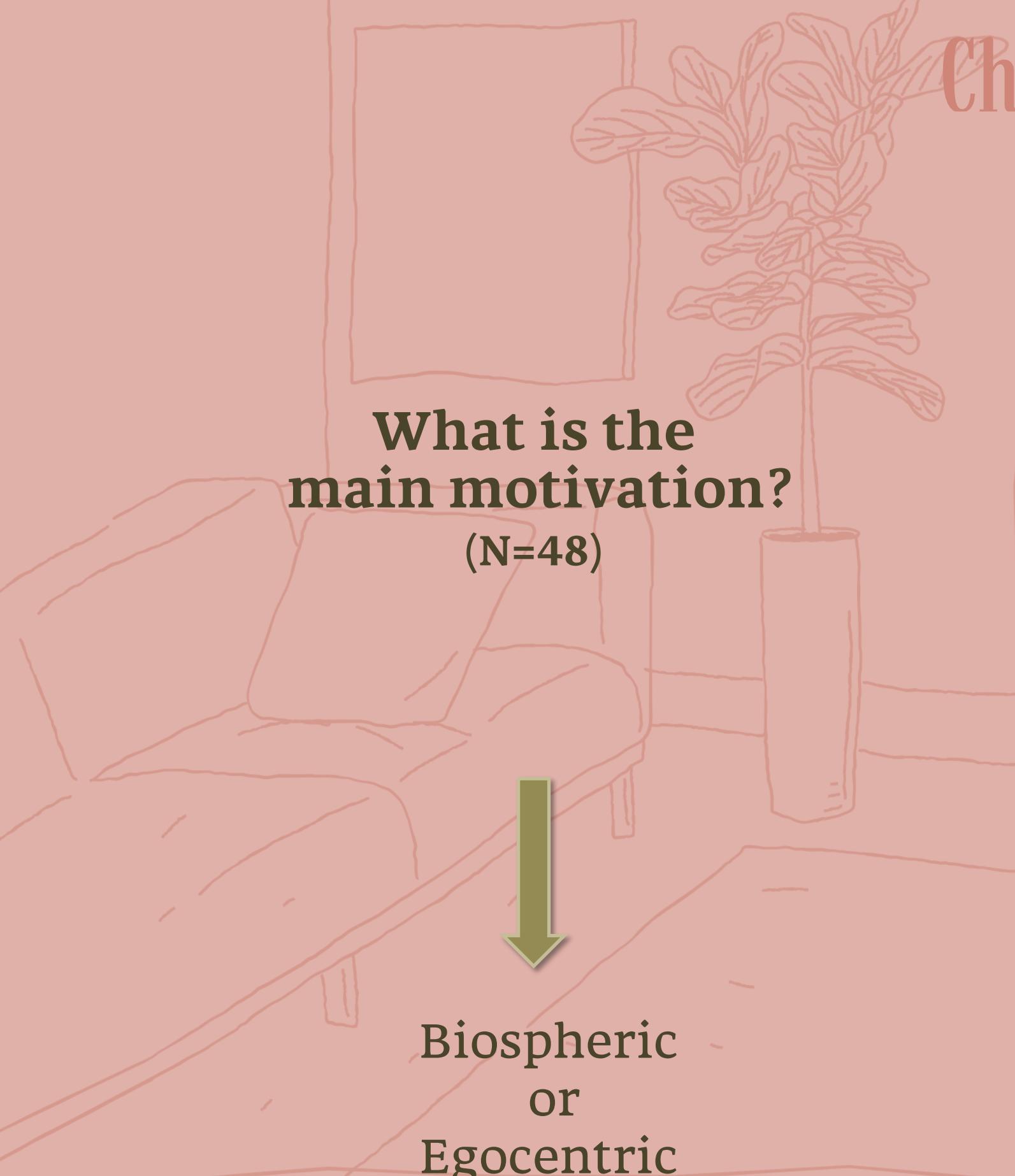
Wasseem Salami & Nelly Groissman

# Tagged Data

	minimalism		veganism	
	prediction	labeled	prediction	labeled
biospheric	11	9	11	11
egocentric	11	14	11	13
mixed	2	1	2	0



# Choosing a Model



What is the  
main motivation?

(N=48)

Biospheric  
or  
Egocentric

What is the  
main motivation  
In each behavior?

Minimalism

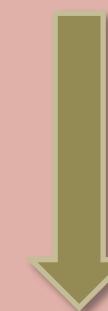
(N=24)



Biospheric  
or  
Egocentric

Veganism

(N=24)



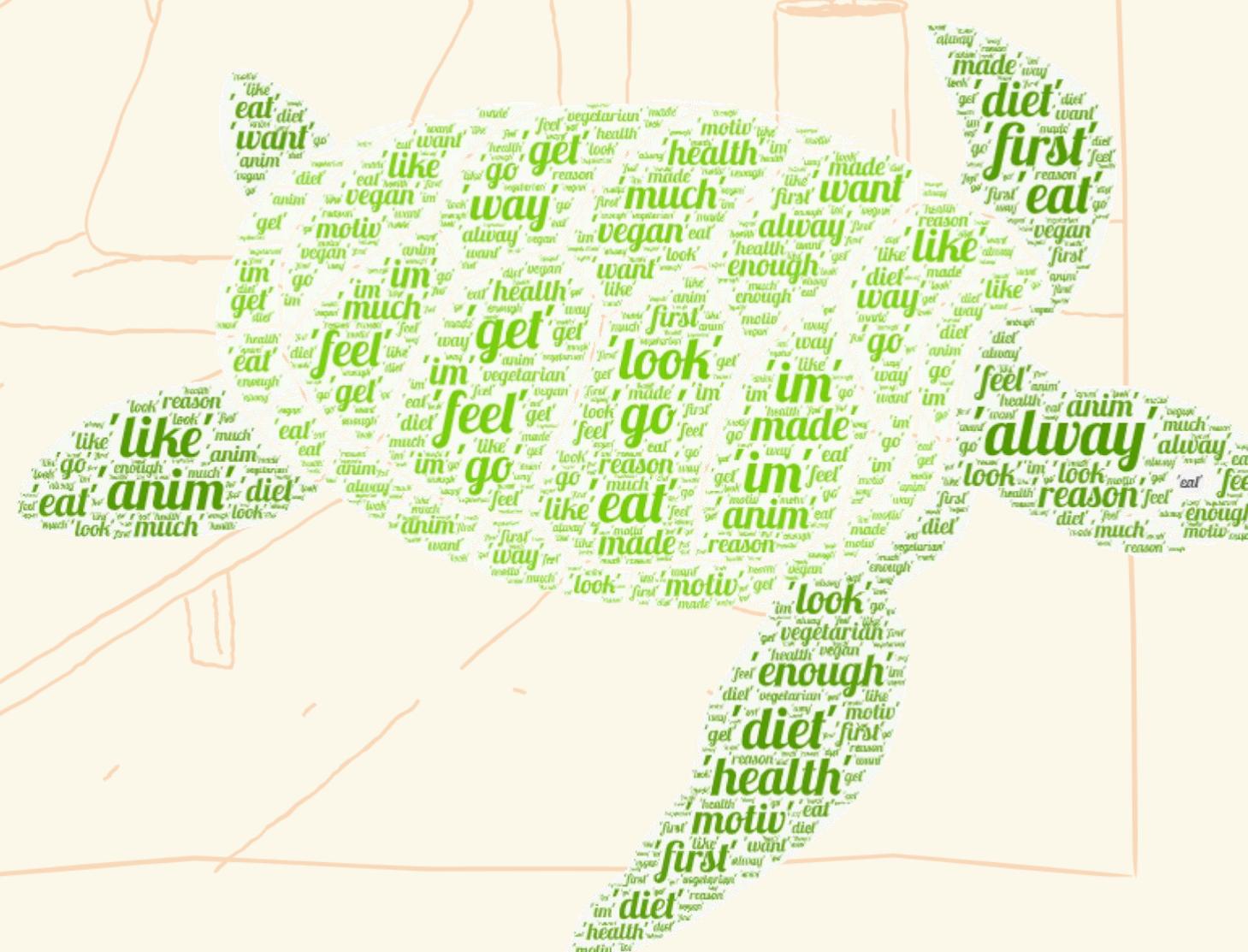
Biospheric  
or  
Egocentric

# Feature Creation



# Veganism

## 21 words



# Minimalism

## 39 words



# + Compound

# Feature Selection

## Minimalism

	Alway(s)	earth	Wast(e)	compound	environment
Filter	+	+	+	+	
Wrapper		+	+	+	+
Embedded				+	

## Veganism

	Alway(s)	Anim(al)	get	health	compound	want	Motiv(ation)
Filter	+	+	+	+			
Wrapper	+	+	+		+		
Embedded		1.61			-0.19	0.27	-0.17

# selected features' Decisiveness in informative models

Fitted on the whole labeled set

Minimalism

Linear regression

## Coefficient

<b>earth</b>	0.621821
<b>environment</b>	0.534881
<b>wast</b>	0.225823
<b>compound</b>	-0.694055

Veganism

## Coefficient

<b>anim</b>	1.091093
<b>want</b>	0.417517
<b>motiv</b>	-0.058316
<b>compound</b>	-1.090774

Decision tree

## feature importance

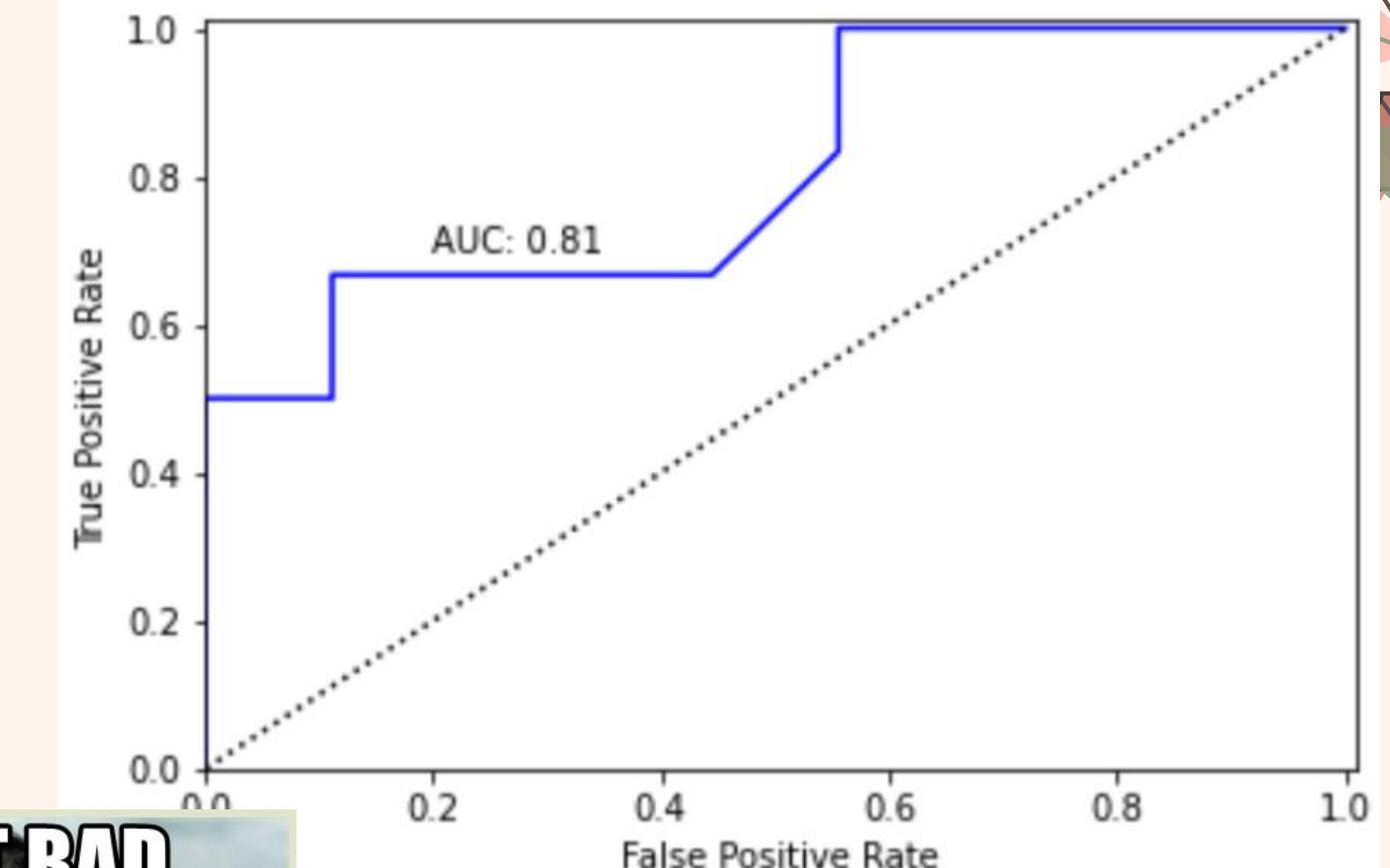
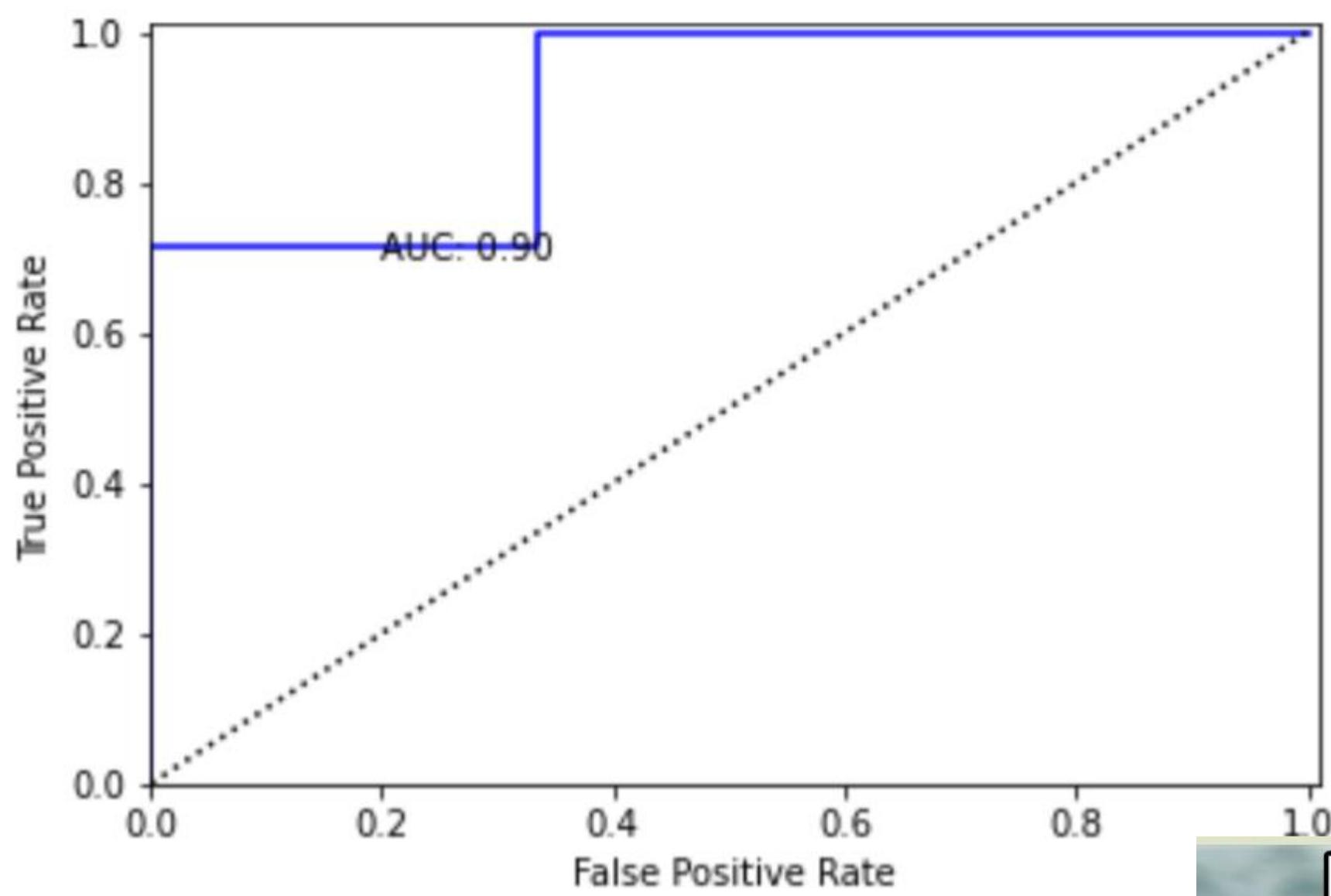
<b>3</b>	compound	0.630
<b>0</b>	earth	0.233
<b>1</b>	environment	0.137
<b>2</b>	wast	0.000

## feature importance

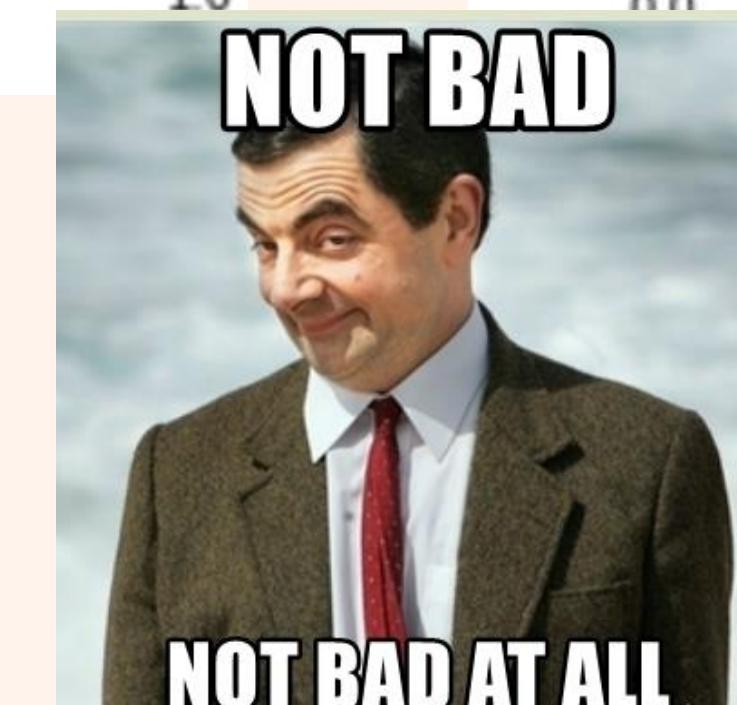
<b>0</b>	anim	0.597
<b>3</b>	compound	0.249
<b>2</b>	want	0.154
<b>1</b>	motiv	0.000

# 4. Winner : Random Forest - LOO evaluation on Train Set

Veganism:



	feature	importance
0	anim	0.600
3	compound	0.224
2	want	0.159
1	motiv	0.017

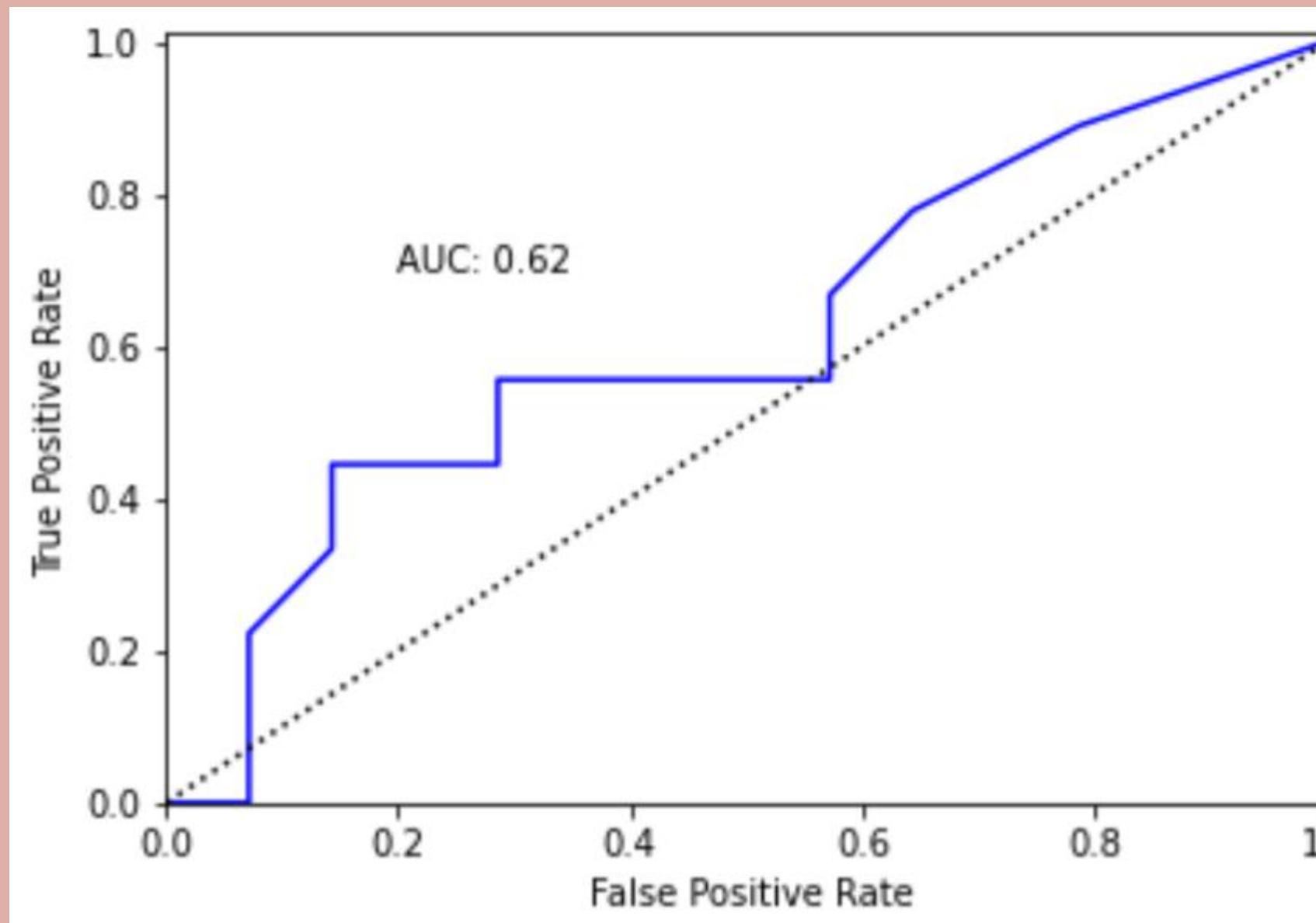


	feature	importance
3	compound	0.619
1	environment	0.136
0	earth	0.123
2	wast	0.121

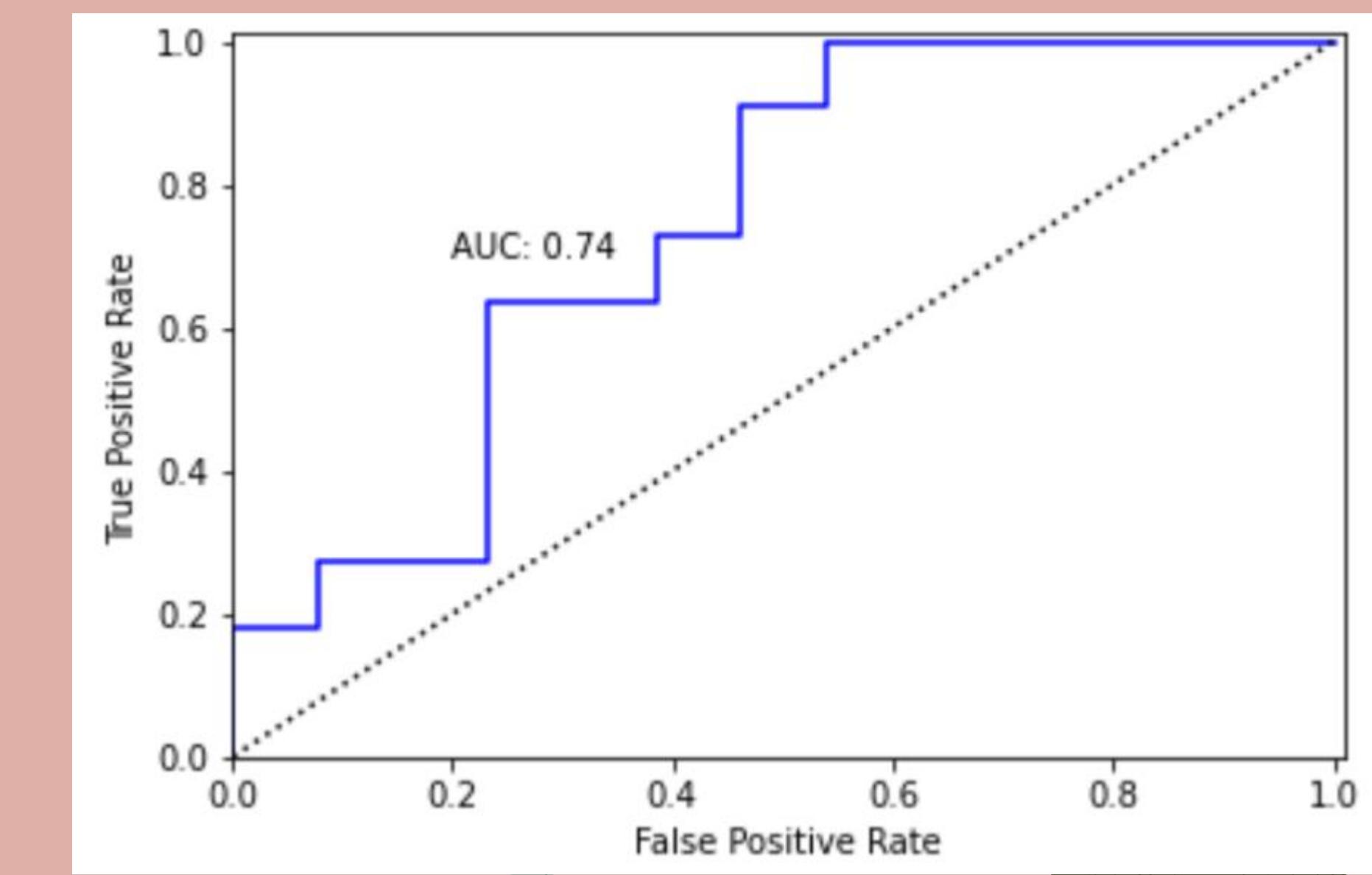
NOT BAD AT ALL

# LOO CV with Random Forest on the whole labeled sets

Minimalism:



Veganism:



feature	importance
compound	0.612
earth	0.175
environment	0.131
wast	0.082

feature	importance
anim	0.519
compound	0.325
want	0.109
motiv	0.047

# Correlation Test

## On labeled data

Veganism:

X	Y	method	alternative	n	r	CI95%	p-unc	BF10	power
biospheric_percent	predictions_vegan	pearson	two-sided	24	0.459	[0.07, 0.73]	0.024	2.811	0.639

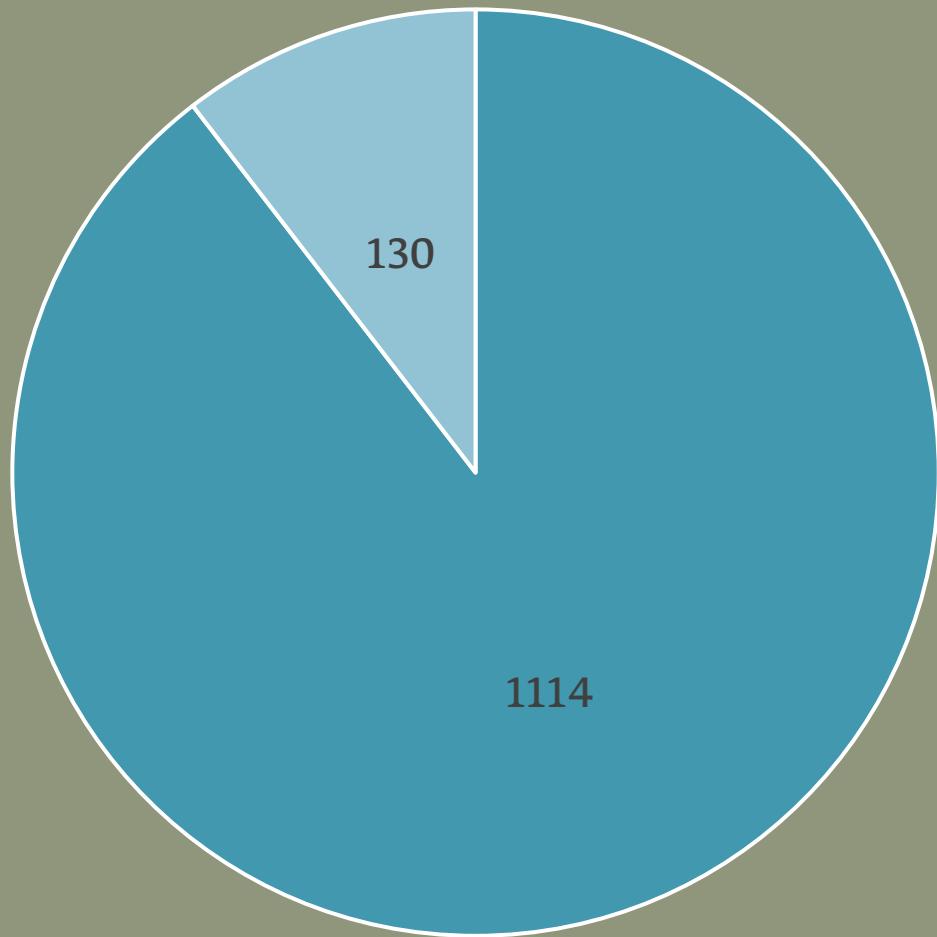
Minimalism:

X	Y	method	alternative	n	r	CI95%	p-unc	BF10	power
biospheric_percent	predictions_minimalism	pearson	two-sided	23	0.317	[-0.11, 0.65]	0.14	0.722	0.322

# Prediction of motivation on Full Datasets

Vegan

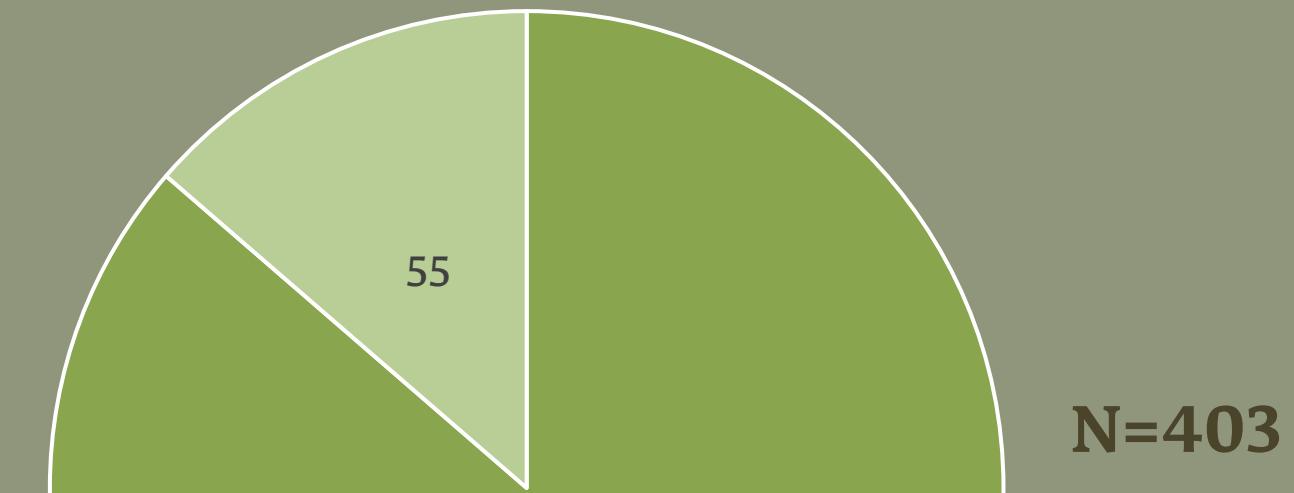
■ egocentric ■ biospheric



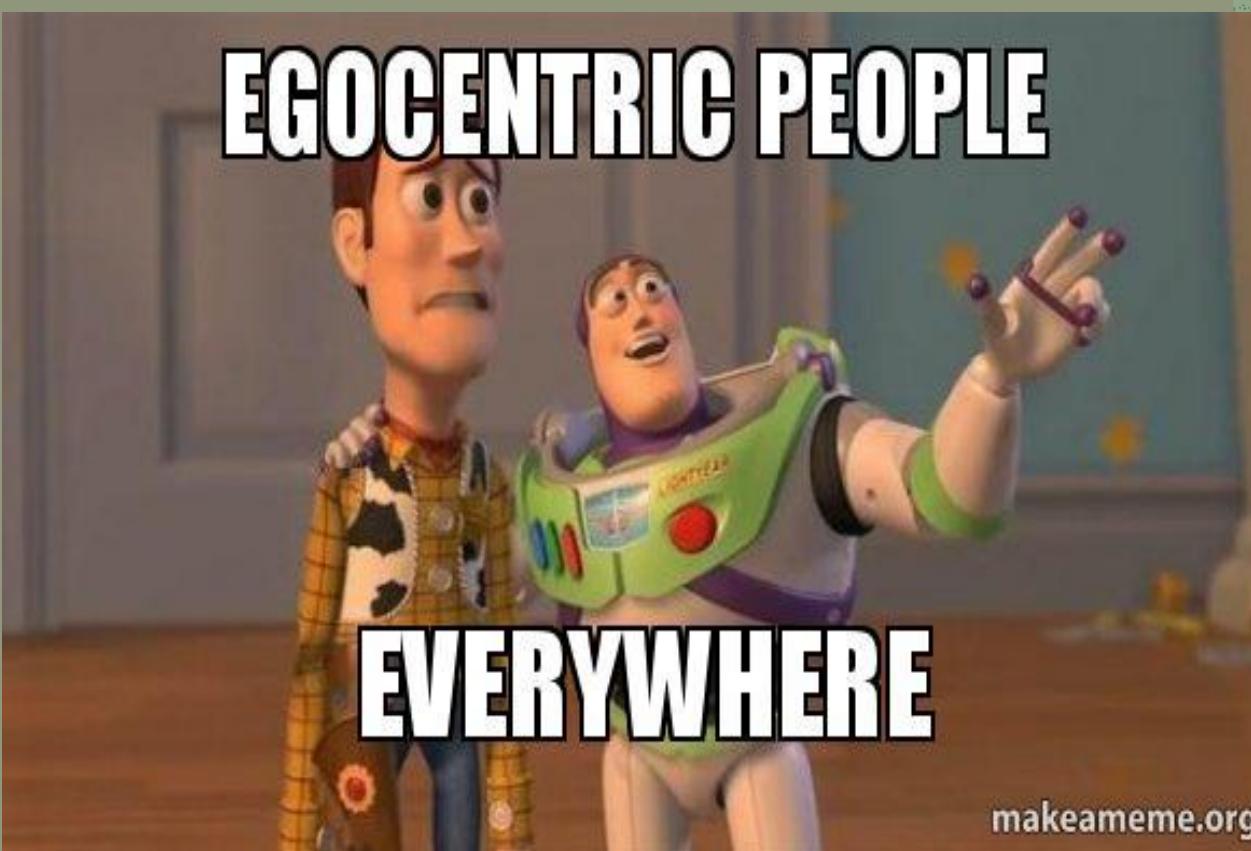
N=1244

Minimalism

■ Egocentric ■ Biospheric



N=403



# Chi Square test

**label \* behavior Crosstabulation**

		behavior		Total	
		minimalism			
label	biospheric	Count	55	130	185
		Expected Count	45.3	139.7	185.0
egocentric	biospheric	Count	348	1114	1462
		Expected Count	357.7	1104.3	1462.0
Total		Count	403	1244	1647
		Expected Count	403.0	1244.0	1647.0

N=1647

**Chi-Square Tests**

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. $\mu$ -sided)
Pearson Chi-Square	3.121 <sup>a</sup>	1	.077		
Continuity Correction <sup>b</sup>	2.809	1	.094		
Likelihood Ratio	3.004	1	.083		
Fisher's Exact Test				.085	.049
N of Valid Cases	1647				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 45.27.

b. Computed only for a 2x2 table

# Thank you!

