CLIMATE ANXIETY AND CONSUMPTION BEHAVIOUR

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Introduction

- Climate Anxiety: “anxiety or difficult feelings associated with perceptions about climate change” (Clayton, 2020)
- Positive vs Negative impact on behavior
- Influence of climate anxiety on consumption behavior
- Hypothesis: the presence of climate anxiety predicts sustainable food and fashion consumption in the student population

Does climate anxiety predict food and fashion related consumer behaviour of students ?

STUDENTS

-young people experience more climate anxiety than old people

-people with higher education have bigger climate anxieties

(Nam, 2020)

FOOD

-everyday activity

(Smith & Gregory, 2012)

CLOTHES

-problem of fast fashion

(Harris et al., 2016)

-Literature-

Climate anxiety

- neural and psychological factors
- individual expectation vs. actual outcome
- adaptive or maladaptive response
- importance of social environment

Sustainable consumption

- acquisition, usage, and disposal
- planetary boundaries

  → six times higher consumption

- awareness of long-term effects
- descriptive norms and injunctive norms

How do people cope with climate anxiety?

- ❑ role of gender
- ❑ problem-focused approach
- ❑ emotion-focused approach
- ❑ meaning-focused approach

Methodological approach

Characteristics	*n*	%
Gender		
Female	40	71,4
Male	15	26,8
Non-Binary	1	1,8
Age		
17-19	4	7,1
20-22	34	60,7
23-25	15	26,8
26-28	3	5,4

Table 1.

Sociodemographic Characteristics of Participants.

Climate anxiety-related questions

Clayton et al. (2020)

Likert scale 1 to 5

1 to 8 cognitive-emotional impairment;

9 to 13 functional impairment.

Food-related consumer behavior questions

Geiger et al. (2017)

Acquisition, usage, and disposal

5 items removed

Fashion-related consumer behavior questions

Suk and Lee (2013)

Buying/usage behavior, boycott behavior, care/disposing behavior

2 items removed

Statistical Results

	Min	Max	Mean	Std	Limit
Climate anxiety score					65
Female	13	46	24,5	9,4	
Male	13	29	16,9	4,7	
Total			22,9	9,8	
Food consumption score					55
Female	25	43	36,2	3,8	
Male	29	42	38,2	3,4	
Total			36,7	3,7	
Fashion consumption score					30
Female	12	30	21,2	3,9	
Male	11	25	18,7	3,9	
Total			20,7	4,1	

Linear Regression

H0: “Presence of climate anxiety predicts sustainable food and fashion consumption behavior.”

Independent samples T-test

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
						Significance				95% Confidence Interval of the Difference	
		F	Sig.	t	df	One-Sided p	Two-Sided p	Mean Difference	Std. Error Difference	Lower	Upper
Total_FA	Equal variances assumed	.022	.884	2.100	53	.020	.040	2.49167	1.18647	.11192	4.87142
	Equal variances not assumed			2.094	25.059	.023	.047	2.49167	1.18983	.04146	4.94187
Total_CA	Equal variances assumed	11.856	.001	2.962	53	.002	.005	7.54167	2.54636	2.43431	12.64902
	Equal variances not assumed			3.925	48.184	<.001	<.001	7.54167	1.92164	3.67833	11.40501
Total_FO	Equal variances assumed	.340	.562	-1.799	53	.039	.078	-2.00000	1.11189	-4.23016	.23016
	Equal variances not assumed			-1.884	27.673	.035	.070	-2.00000	1.06181	-4.17617	.17617

FA 95% CI: [0,11, 4,87] p=,04

CA 95% CI: [3,68, 11,4] p<,001

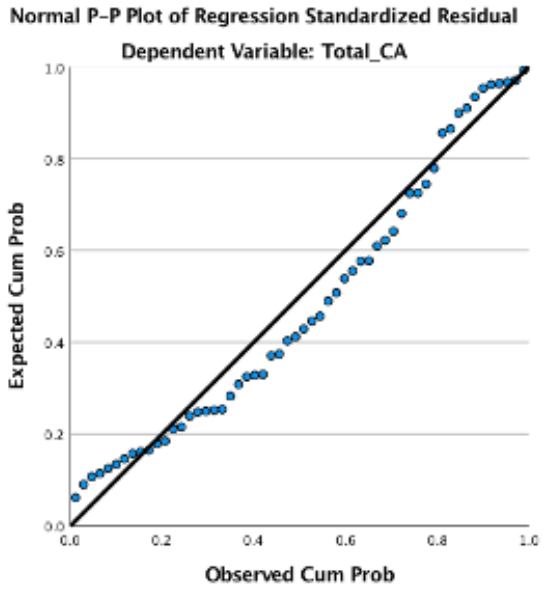
FO 95% CI: [-4,23, 0,23] p=,078

Figure 1

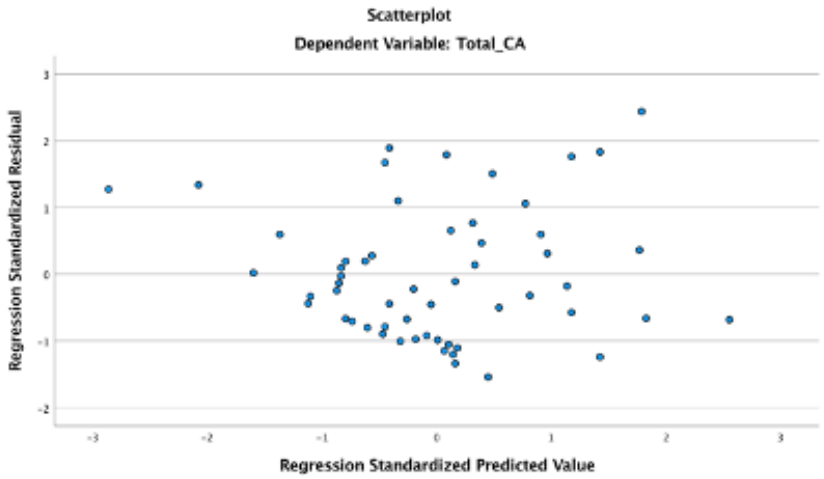
a. Normal P-P plot of regression standardized residual, with the dependent variable of climate anxiety score.

b. Scatterplot of regression standardized residual against regression standardized predicted value.

a.



b.

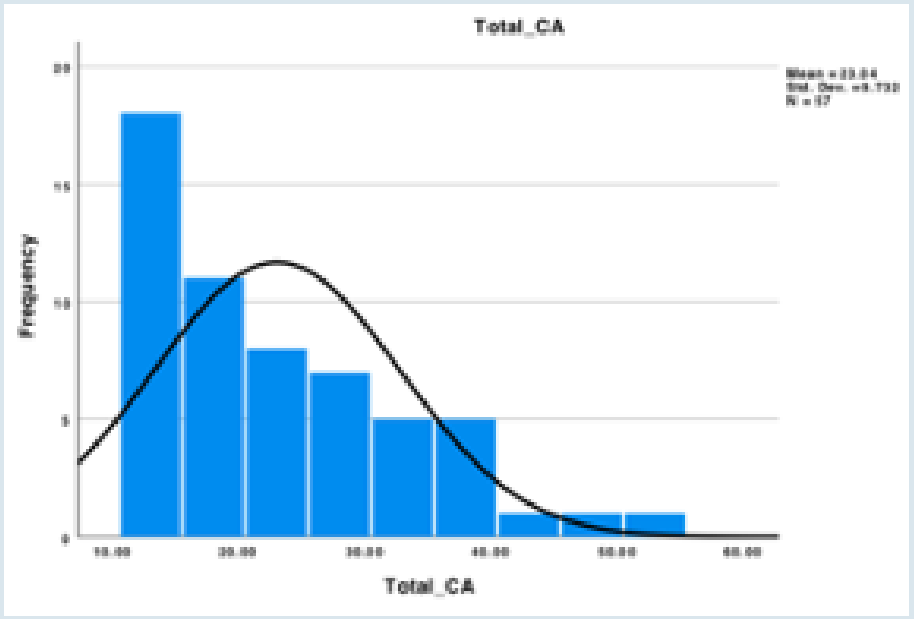


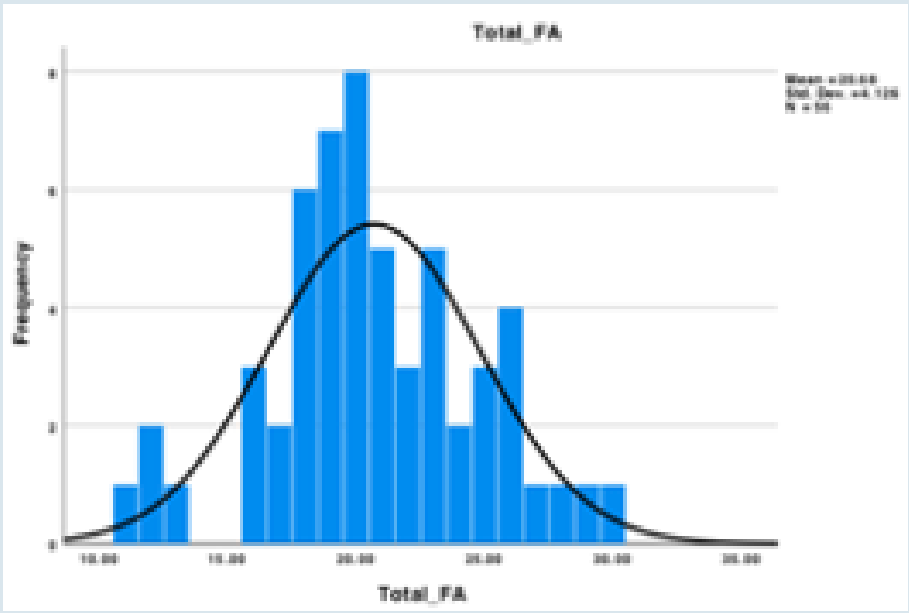
The linear regression assumptions

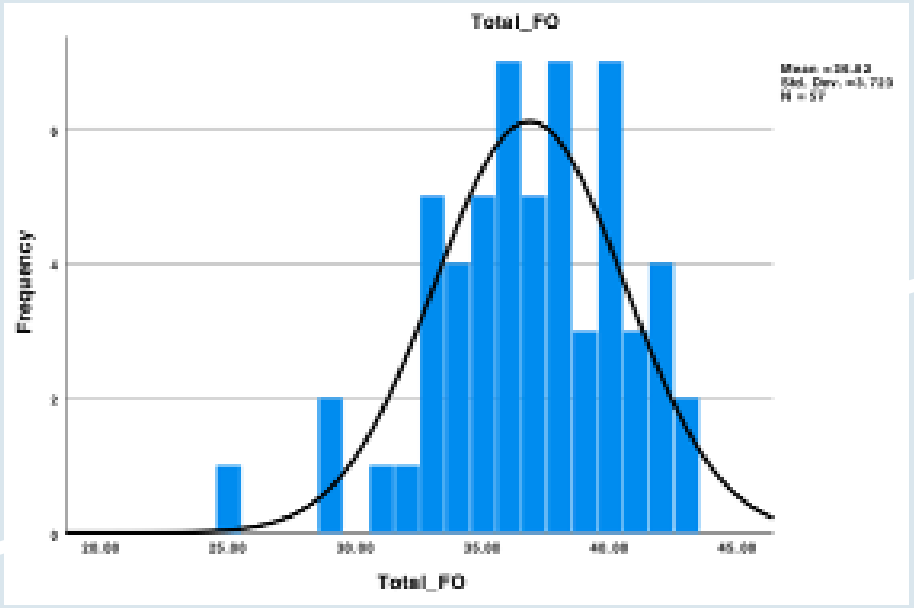
Linearity assumption

Homoscedasticity assumption

Errors are normally distributed







The linear regression assumptions

Multicollinearity

VIF values ; 1.094

Normality

The Pearson correlation of climate anxiety and fashion consumption $p < .001$.

No significant correlation between climate anxiety scores and food consumption scores.

The correlation of fashion and food consumption, the $p = .028$

Correlations

		Total_CA	Total_FO	Total_FA
Total_CA	Pearson Correlation	1	-.104	.512**
	Sig. (2-tailed)		.440	<.001
	N	57	57	56
Total_FO	Pearson Correlation	-.104	1	.294*
	Sig. (2-tailed)	.440		.028
	N	57	57	56
Total_FA	Pearson Correlation	.512**	.294*	1
	Sig. (2-tailed)	<.001	.028	
	N	56	56	56

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Regression is significant, F-value= 19,2, $p < .001$.

R^2 is .26, so 26% of the total variance is explained by the independent variable

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics			
					R Square Change	F Change	df1	df2	Sig. F Change
1	.512[a]	.262	.249	3.57648	.262	19.192	1	54	<.001

a. Predictors: (Constant), Total_CA

When the climate anxiety score increases by 1, the fashion consumption score increases by 0,21 ($p < .001$).

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	15.731	1.226		12.827	<.001
	Total_CA	.215	.049	.512	4.381	<.001

a. Dependent Variable: Total_FA

Discussion

– Main Findings

The statistical correlation between the climate anxiety and fashion consumption is as expected according to the prior introduction.

Climate anxiety has a positive effect on sustainable fashion consumption behaviour

However, there was *no significant correlation* between food consumption and climate anxiety.

→ Food consumption questions might have influenced results

examples: Question “I use leftovers for the next meal”

Question “I eat dairy products”

Discussion

Limitations

→ low number of responses, unequal distribution of gender
→ Bias because of questionnaire, self-report
→ Socially desirable answers
→ Climate anxiety scores were relatively low, might be because of extreme questions (‘I find myself crying because of climate change)’
→ Behaviour is measured, not intention
→ This research targeted specific population (students), so results do not apply to entire population.

Discussion

Recommendations

Recommendation and solutions

- Including climate anxiety in DSM-5 (Diagnostic and Statistical Manual of Mental Disorders)
- development of better questionnaires

Challenges

Not yet a clear definition climate anxiety

Future research

- Research on bigger scale, different groups of people, different product categories
- Include more demographics in research, like locations
- Different research design: Cohort study

Questions?

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