Investigating The Relationship Between Climate Anxiety

And Consumer Behaviour In Students

Final Project assignement

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Introduction

Climate anxiety is not a new phenomenon; however, media and research have become increasingly preoccupied with the topic, so much that it has been described as the biggest pop-culture trend of 2019 (McGinn, 2019). Climate anxiety is a sub-branch of Eco-anxiety and can be broadly defined as anxiety or difficult feelings associated with perceptions about climate change (Clayton, 2020).

A survey conducted among 16- to 25-year-olds revealed that 59% of these people were very or even extremely worried about climate change, and only 5% did not worry at all (Thompson, 2021). These numbers show that the majority of the younger generation is to some degree worried about the climate and, as such, elucidates the connection between climate change and people's mental health. Acknowledging the utmost importance of this relationship, the APA published a report about the effects of the changing climate on mental health, providing guidance and recommendations to the public, health officials, and psychologists (Clayton et al., 2017). However, despite the growing body of research and increasing media coverage, climate anxiety remains under-researched, particularly concerning its exact definition and how it is expressed in individuals (Panu, 2020). Previous studies on the impact of climate anxiety on behavior have found that anxiety can be adaptive, leading to a motivated pro-environmental response, but also maladaptive, leading to impairments in daily functioning and pathological worry (Versplanken et al., 2020).

Furthermore, environmentally conscious behavior has been associated with both climate anxiety and sustainable behavior: It has been found that climate anxiety is more common amongst those who exhibit greater care about the environment (Clayton, 2020) and similarly, that engagement in sustainable behavior is more pronounced in people who care more about the environment (Kautish & Sharma, 2019). As such, environmentally conscious behavior seems to be a common denominator of climate anxiety and sustainable behavior; however, a direct link between the two has not been established thus far. Therefore, this paper will investigate the research question "Does climate anxiety predict consumer behavior in the field of clothes and food consumption?" Due to the apparent relationship between climate anxiety and environmentally conscious behavior, it was hypothesized that the presence of climate anxiety predicts sustainable food and fashion consumption.

As research directed to the effect of climate anxiety on consumer behavior is still limited, our research could contribute to the understanding of whether climate anxiety leads people to make 'greener' choices. The research results could be used as input for creating an intervention to help people cope with climate anxiety on the one hand and on the other to help

people make pro-environmental choices. As previous literature suggests, these things might go hand in hand. For example, in a study conducted in 2013, it was concluded that habitual ecological worrying was associated with pro-environmental attitudes and behaviors (Verplanken & Roy, 2013).

Literature review

When examining the topic in question, a problem is a lack of consensus for defining sustainable consumption (Geiger et al., 2018) and climate anxiety. The following section functions to gain insights into the literature related to these topics and allows an overall understanding of the terms.

Anxiety can be explained by various mechanisms based on neural circuits and psychological factors. Disorders associated with anxiety can lead to social and employment struggles, as individuals' behavior and decision-making are often impaired by their anxious nature. While fear responses are experienced over a short period, anxiety can persist over long periods and is described as a sustained state of fear with associated emotions (Hartley & Phelps, 2012). In the debate of anxiety and climate, many models neglect the complex social-psychological processes involved. It is argued that individuals experiencing anxiety may react negatively to potentially threatening information. Climate threats are often not directly affecting a climate anxious individual and thus do not represent a physical danger.

Anxiety is a defensive mechanism aroused by a discrepancy between what is expected and desired and the actual situation. This defensive mechanism can initiate motivated or demotivated behavior (Kapeller & Jäger 2020), also known as an adaptive response and a maladaptive response (Clayton & Karazsia, 2020). Anxious individuals tend to interpret various aspects as more negative and judge a bad scenario to be more likely to occur. There is evidence for a hyperresponsivity of the amygdala to affect these cognitive perceptions as more negative (Hartley & Phelps, 2012). Nonetheless, it is argued that experiencing climate anxiety within a social context, meaning sharing the fear with others, can foster an adaptive response. Thus, resulting in a maintenance of psychological wellbeing and the simultaneous acknowledgment of the negative situation, e.g., the changing climate (Clayton & Karazsia, 2020).

Besides the term climate anxiety, we also investigate sustainable consumption. The term consumption describes three phases of a product or a resource: Acquisition, usage, and disposal (Geiger et al., 2018). Actual sustainable actions that reduce carbon emissions have shown to be rather difficult. For instance, the meat sector emits significant amounts of carbon,

and the global consumption of meat is increasing continuously (Kapeller & Jäger, 2020). Today's consumption standards are six times higher when compared to averages of 50 years ago (Kadic-Maglajlic et al., 2019). Human demands for resources found or produced on our planet exceed the planetary capacities to cope with the created changes (Sesini et al., 2020). Sustainable consumption is the individual awareness of the long-term effects of consumption on the natural or social environment (Kadic-Maglajlic et al., 2019). In other words, sustainability means to maintain something, whether it is a social paradigm or natural resource. It is mentioned that humans are highly dependent on social norms and learn by observing their social surroundings, which means that trends in society may partly determine consumer behavior. Consumption behavior underlies descriptive norms that describe how people collectively act and injunctive norms, which describe how, e.g., behavior in our society is punished or sanctioned (Quoquab & Mohammad, 2020).

Feelings of guilt and anxiety from environmental degradation lead to various changes in shopping norms. Consumers concerned with environmental problems usually believe their consumption matters influence environmental issues. Emotions such as guilt and pride have an important role in self-regulation. Furthermore, feelings of empathy for others and the environment are also helpful (Antonetti & Maklan, 2014).

In a paper by Ojala (2012), three main coping mechanisms for climate anxiety were identified. The first is problem-focused coping, which leads to the individual creating an action plan directed against the stressor or problem. This strategy was found to be effective against anxiety development. Another strategy is emotion-focused coping, where individuals create an action plan merely directed against the negative feeling and not the problem itself. It was found that this promotes anxiety and negative feelings, as individuals tend to distance themselves from the problem, deny the situation, or seek emotional support. The last strategy is meaning-focused coping, which uses values, beliefs, and morals to overcome anxious feelings. This can serve as a source of motivation (Ojala, 2012). However, a study examining anxiety development of caregivers for people with dementia showed that an emotion-focused approach was more effective in preventing higher levels of anxiety from developing when compared to caregivers using a problem-focused approach (Cooper et al., 2008).

It is essential to mention that individuals with anxiety may choose different and more personal coping strategies. For instance, a study by et al. Kasi (2012) determined religion as the most common coping mechanism for subjects in Pakistan. Other factors involved in coping strategies were acceptance, instrumental support, and active coping.

Studies show that a suitable moderator for distinguishing between people's anxieties is gender. If dividing people into women and men, women are experiencing anxiety more. They report depression, disordered eating, and headaches which are all psychological problems usually connected to anxieties. While comparing women and men having anxieties, women have higher anxieties (Silverstein et al. 1995). Further information about those differences between gender can also be discussed in correlation to adult occupational level. It has been investigated that men are less likely to be experiencing anxiety while having a high adult occupation achievement. Women who exhibit high potential for this adult occupational achievement, on the other hand, are at greater risk for developing anxieties (Silverstein et al. 1995).

Another point of view why women are experiencing more anxieties is due to their placement in society. Many women experience anxieties and depression because of areas of life that have been historically more open to men, meaning job opportunities. Women are more visualized as being with family than doing career. Women that tend not to follow this socially-constructed model are seen as masculine. Because women are socially forced to be feminine, also visually, it leads to more and more anxieties and psychological problems-as eating disorders (Silverstein et al. 1995).

Adolescent women are six times more likely to experience anxiety problems than men. Women are further influenced by hormones, mainly due to the menstrual cycle and pregnancy. Women also experience higher physiological symptoms of anxiety than men. These symptoms may lead women to increased self-focused attention and eventually recalling their anxieties and making them, therefore, present more often (McLean & Anderson, 2009).

Theoretical background

It is crucial to further investigate the relationship between climate change and mental health because climate change is a real, ongoing, and developing threat, and thus, it is rational to experience worry, mainly because adaptation solutions are not yet sufficient. Furthermore, climate change is globally shared, and therefore, climate anxiety is not limited to individuals experiencing the effects of global warming directly but can also affect people who have not personally experienced any impacts (Clayton, 2020). In fact, attention is increasingly directed to the latter as contemporary media is full of information about the threats of climate change and climate anxiety. Therefore, given the broad reach of communication technologies, anyone who knows about climate change could suffer from climate anxiety (Clayton, 2020).

Young people are usually exposed to information about environmental degradation very often. They may be experiencing climate anxiety more than adults because they are at their current point of psychological development, and being exposed to this vulnerability on an everyday level increases their levels of depression and substance use disorders (Wu et al., 2020).

Eco-friendly consumption derives from people's desires and the effects of those behaviors on the environment. Youth in general and people with higher education are usually the part of society that cares about eco-friendly consumption more than others (Nam, 2020). Therefore, people with higher education and those interested are also intrigued by eco-friendly food, engagement empowerment, and its frequency (Nam, 2020). Because of that, we can argue that choosing students as a group includes both suitable categories- youth and education. Students are an adequate group for discussing our topic of consumer behavior connected to climate anxiety.

Sustainable consumption is seen as one of the crucial steps towards increasing environmental stability. People's perception of everyday life's impact on the planet is strongly connected with their purchasing behavior (Hanss et al., 2016).

The first product category that will be analyzed is food. Because the population of our planet is increasing enormously, our current unsustainable eating and food-producing practices are one of the most extensive problems for the environment. The concern about this topic is increasing, and people are trying to develop various novelties in this everyday activity. Several options have been put on the table, such as using new technologies for producing food, reducing waste, trying new diets, and expanding aquacultures. There is also an overall need for decreasing the climate impact of food production. Food practices are also connected to freshwater resources, biodiversity loss, and other impacts on ecosystem services (Smith & Gregory, 2012).

Clothing is another group of products that will be analyzed. Having clothes is one of the basic human needs. However, what affects unsustainable practices with clothing is that people are motivated by the need for identity (Harris et al., 2016). The increasing trend of fast fashion shopping, which women mainly contribute to, is another threat to our planet. People are also becoming aware of this problem and shopping more sustainably. Sustainable clothing is defined as one that incorporates one or more aspects of social and environmental sustainability, which can be organic materials, Fair Trade manufacturing, but also care and disposal of clothes is important (Harris et al., 2016).

Clothing and food are the most purchased products by young people, followed by accessories or personal care (Tighe, 2020). Clothes and food are products people use on an everyday level, and therefore also students need to buy them. On the other hand, older people and families purchase cosmetic or cleaning products more. Buying large amounts of cosmetics is usually the case for middle-aged people. Organic cosmetics are usually refused due to their higher prices. There is another problem of people's lack of knowledge of eco-labeling on cosmetics products, as for most people, eco-labeling is more precise on food than cosmetic products (Šniepienė & Jankauskienė, 2021).

As such, the most interested group of people thinking about what cleaning products to buy and whether they are environmentally friendly are middle-aged women – primarily mothers (Pickett-Baker & Ozaki, 2008).

Methods

Participants

The participants were recruited to the survey via sending the questionnaire to messaging groups, specifically to students between the ages of 17 and 28. In total, 57 participants answered the questions; however, one person was removed as the individual did not answer one question and thus, would have altered the statistical analysis. Table 1 shows the gender and age demographics of the participants.

Table 1

Sociodemographic Characteristics of Participants.

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

Procedure

In order to measure the climate anxiety level of individuals and their sustainable consumer behavior regarding food and clothing consumption, an online survey was formulated with Google Forms (Google, n.d.). For the study design, it was decided that the questionnaires would not be taken entirely and be adapted to be included in the survey.

Instruments

Climate anxiety-related questions

Clayton et al. (2020) aimed to examine the "Development and validation of a measure of climate change anxiety" and formed a questionnaire (*see appendix table 1a*) to identify the climate anxiety-related emotions and behaviors. One example question is "Thinking about climate change makes it difficult for me to concentrate.". The answers were given on a Likert scale ranging from 1 to 5. The difference of this measure from previous research was the inclusion of the relationship between climate anxiety and personal wellbeing. Further, the clinical relevance of this interaction was of interest. The first 13 questions were chosen as they constitute the climate change anxiety scale, with statements 1 to 8 representing cognitive-emotional impairment; and 9 to 13 measuring functional impairment.

Food-related consumer behavior questions

The food-related consumer behavior questions were adapted from Geiger et al. (2017). This paper investigated the sustainability dimension in the consumption phases: acquisition, usage, and disposal (see appendix table 1b). From the 16 items, (5) "I cook in an energy-saving way" (6) "I buy frozen foods and meals." (7) "I dispose of food in the garbage." (13) "I produce/grow food myself." (14) "I eat healthily." as it was decided that they were either unclear, not a necessity to measure the sustainable consumer behavior or not fit to the target audience.

Fashion-related consumer behavior questions

In order to assess fashion-related consumer behavior, the study of Suk and Lee (2013) was used, as the questionnaire (see appendix table 1c) they created included buying/usage behavior, boycott behavior, and care/disposing behavior. The behaviors analyzed were in line with the areas of interest of the study. The statement "I consider the violations of workers' rights or poor working conditions made by a label when purchasing fashion items." was removed as it was too similar to another item ("I do not purchase fashion products from companies that use child labor, forced labor, or poor working conditions.") for the sake of conciseness. Another item, "I do not purchase fur items for animal welfare, " was removed as it was controversial. The statement was unclear whether the animal in question was being hunted for its fur or it was an animal being produced and slaughtered for dairy/meat purposes.

In order to investigate under what conditions anxiety leads to the behavior, demographic questions of sex and age were added. In addition, because the study relies on the survey answers, getting objective data in self-report was important. In order to minimize the effect of the acquiescence bias (Berg & Rapaport, 1954) and the response bias of satisficing

(Krosnick, 1991), the Likert scale of 1 to 5 used in Clayton et al. (2020) was applied to the other questions. This broader choice of options is preferred to lessen the effects of feeling obliged to choose what is considered right. Finally, as private information regarding anxiety will be collected, the data were anonymous, and all participants agreed to a consent form.

Statistical Analysis

Statistical analysis was performed using IBM SPSS statistic version 27 for Mac. In order to test the hypothesis "Presence of climate anxiety predicts sustainable food and fashion consumption behavior."; linear regression was performed. The linear regression assumptions linearity, homoscedasticity, normal distribution of residual errors, multicollinearity, and normality was checked. Here the dependent variable is the food- and fashion consumption behavior, the independent variable is climate anxiety. Additionally, the significance of sexual dimorphism on the mean scores was tested with an independent T-test.

Results

There were in total 56 participants that completed the survey. The minimum and maximum scores for each category, along with mean scores and standard deviations, are presented in Table 2. The separate values by gender are also calculated. The limit represents the highest possible score in each category.

In order to check the significance of the mean differences between genders, Independent samples T-test was performed. The differences in food consumption were not significant. However, the mean differences in the fashion consumption and climate anxiety were significant with FA 95% CI: [0,11, 4,87] p=,04 and CA 95% CI: [3,68, 11,4] p<,001 (*see appendix Table 2.*).

The linear regression assumptions were checked (*see appendix Fig.1 and Fig.2*); The normality of the residual errors was checked with the normal P-P plot of regression standardized residual. The linearity assumption was not violet according to the scatterplot of the residuals. However, the homoscedasticity assumption was uncertain as the bottom portion of the scatterplot resembled a cone shape while the top half did not violate the assumption. It was determined that homoscedasticity should be considered when concluding the regression. The absence of multicollinearity was checked with the VIF values, which was 1.094 for food and fashion consumption behavior. The normality of the distribution was checked for each variable with a histogram; the distributions of the food and fashion consumption behaviors were observed to be normal, while the distribution of the climate anxiety scores was not seen as normally distributed.

Table 2

Descriptive Statistics of the Climate Anxiety, Food and Fashion Consumption Score.

	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	

Note: The scores of the non-binary person were excluded from the table to protect their privacy, as they were the only one. However, their data was still included in the total values.

     The Pearson correlation of climate anxiety and fashion consumption was significant with a p-value of <0.001. However, there was no significant correlation between climate

anxiety scores and food consumption scores. As for the correlation of fashion and food consumption, the p-value was significant with 0.028 (*Table 3*).

Table 3

Correlations Table of Climate Anxiety, Fashion and Food Consumption Scores.

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).

The linear regression analysis (*see appendix Table 3.*) was performed to establish the effect of climate anxiety on fashion consumption, as it was seen that there was a significant correlation. The regression was significant with F-value= 19,2, $p < .001$. The R^2 was 0,26, meaning that %26 of the total variance in fashion consumption behavior is explained by climate anxiety. In the coefficients table, it was observed that when the climate anxiety score increases by 1, the fashion consumption score increases by 0,21 ($p < .001$). The regression on climate anxiety and food consumption was not significant.

Discussion

The relationship of climate anxiety to food and fashion consumption behavior

According to the initial introduction, the statistical correlation between climate anxiety and fashion consumption is as expected. Climate anxiety also showed a positive effect on sustainable fashion consumption behavior. However, there was no significant relationship between food consumption and climate anxiety. This can be explained by observing the questions asked for the food-related behavior. The question "I use left-overs for the next meal." for example, relates to sustainable behavior as it contributes to cutting down waste. However, it can also be preferred by someone with a low income or perhaps little-to-no interest in cooking. These possibilities can both be observed in the target group of students.

Furthermore, the questionnaire about food consumption might not have targeted the behavior that it was intended to target for this paper. For instance, question (2) 'I eat dairy products' might not measure sustainable consumption behavior adequately, as people with

lactose intolerance will not eat dairy for another reason than sustainability. The questionnaire did not ask whether people were lactose intolerant, so it was impossible to control for this.

Additionally, questions (8) 'I refrain from foods with excessive packaging' and (9) 'I use leftovers for the next meal' might also be influenced by the respondent's financial situation. For example, if someone buys a cheaper option with more packaging and eats leftovers because of their financial situation or dislike of cooking, this was not a conscious choice of consuming sustainably and might not be related to climate anxiety.

Certain choices made because of the financial situation might have also influenced the questions about sustainable fashion consumption. One way of solving this issue would be to ask additional questions about the person's income. That way, the financial situation can be controlled for in the analysis.

The findings that climate anxiety positively influences sustainable fashion consumption align with previous research about the potential adaptive function of anxiety. People with climate anxiety seem to be more conscious about their fashion consumption and thus, contribute positively to the bettering of climate change. However, due to the previously mentioned limitations inherent in the questionnaire, a concrete connection between feelings of climate anxiety and less frequent consumption behavior or generally, more environmentally responsible behavior cannot be argued for certain. Moreover, when evaluating the statistical analysis results, it is important to be precautious and not make any assertive arguments because of the inconclusive results of the linear regression assumptions. Thus, the results of this study could merely be taken as a possible departure point for future research.

The effect of gender on sustainable behavior and climate anxiety

The difference in the mean scores was significant for fashion consumption and highly significant for climate anxiety. This result is in line with the previous literature. Climate anxiety is, as other anxieties, more experienced by women due to various reasons. First of all, it is a social pressure that forces them to live in certain ways, which creates a constant small level of anxiety higher than for men. Second, women experience higher anxieties due to their hormones and menstruation cycles (Silverstein et al. 1995). The interest levels of the genders can perhaps explain the difference in the fashion consumption scores. Women usually follow fashion trends more than men (Harris et al., 2016). The mean food consumption scores were very similar in both genders with a difference of one score, again underlining the importance of creating better questions to measure the behavior.

Limitations

One of the limitations of this study is the limited amount of responses that were gathered. The conclusions would have been stronger if more people had responded. This might have also led to a better distribution between genders, as for this study, 71,4% of respondents were female. The limited number of responses also has to do with the limited timeframe available for this research. The study group of students was also a limited population, making it harder to conclude for other groups of people. Another limitation is the bias that can occur when using questionnaires as a research instrument, as self-report can result in the participants giving socially desirable answers. Also, as has already been discussed, the food consumption questionnaire might measure sustainable food consumption behavior; however, it does not measure people's intention to showcase this behavior.

The mean climate anxiety score was 22,9, while the highest possible score was 65. This relatively low score could be explained by the extreme nature of the questionnaire used as it included questions such as (4) I find myself crying because of climate change. Furthermore, there need to be new and improved questionnaires to classify climate anxiety in different levels such as low, moderate, and extreme because of the aforementioned reasons. In Clayton et al. (2020), there was no cut point in the scores where the person was either considered climate anxious or not, nor a scale to various levels of climate anxiety.

Recommendations for future research

In order to strengthen the conclusions, similar research would have to be conducted on a larger scale. Also, new questionnaires might have to be made specifically for the study to measure the correct behavior. As previously mentioned, there were limitations caused by the questionnaire's specificity. New research should investigate better ways to identify and diagnose climate anxiety in people by perhaps a more extensive questionnaire. When conducting research on mental wellbeing, general questions such as the history of other mental disorders should be asked to determine the correlations. Different demographic questions should also be included when discussing climate anxiety, such as "Have you ever been forced to do a climate migration?" since climate change's direct and indirect effects on mental wellbeing can have different effects (Clayton, 2020). Therefore, the different types should also be investigated separately. The effect of nationality, location, or other various cultural differences on sustainable behavior and climate anxiety can also be interesting for the research to follow. By creating a more precise questionnaire, perhaps the effect of social norms on the behavior of individuals could have been determined as well. However, this requires the consent of participants to share more personal information, and more time is needed to find suitable candidates.

One of the challenges for future research is that there is no clear definition of climate anxiety, making it more difficult to find and prove causal relationships. Something that might also help is to incorporate climate anxiety in the DSM-5, which is a guide for diagnosing mental disorders (DSM–5; American Psychiatric Association, 2013). By doing this, climate anxiety could be officially diagnosed.

It is evident that research on a bigger scale would be interesting and necessary to strengthen the conclusions. This could also be done in different age groups coming from different backgrounds and with different types of consumption. Another research design, for example, a cohort study could also be interesting. In a cohort study, bias can be minimized, as the same group of people is being monitored for longer and not for a particular period.

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Appendix

Table 1

a. *The Complete Questionnaire of Climate Anxiety Scale From Clayton & Karazsia (2020)*

b. *The Complete Questionnaire on Sustainable Food Consumption, From Geiger, Fischer, & Schrader (2017)*

c. *The Complete Questionnaire on Sustainable Fashion Consumption Behavior From Suk & Lee (2013)*

Questionnaire items.

a.

Please rate how often the following statements are true of you.

1	2	3	4	5
Never	Rarely	Sometimes	Often	Almost always

1. Thinking about climate change makes it difficult for me to concentrate.
2. Thinking about climate change makes it difficult for me to sleep.
3. I have nightmares about climate change
4. I find myself crying because of climate change
5. I think, "why can't I handle climate change better?"
6. I go away by myself and think about why I feel this way about climate change
7. I write down my thoughts about climate change and analyze them
8. I think, "why do I react to climate change this way?"
9. My concerns about climate change make it hard for me to have fun with my family or friends.
10. I have problems balancing my concerns about sustainability with the needs of my family.
11. My concerns about climate change interfere with my ability to get work or school assignments done.
12. My concerns about climate change undermine my ability to work to my potential.
13. My friends say I think about climate change too much.
14. I have been directly affected by climate change
15. I know someone who has been directly affected by climate change
16. I have noticed a change in a place that is important to me due to climate change
17. I wish I behaved more sustainably
18. I recycle
19. I turn off lights
20. I try to reduce my behaviors that contribute to climate change
21. I feel guilty if I waste energy

Table 3. Factor analysis result of sustainable consumption behavior

c.
b.

Factor	Item	Factor Loading	Eigen Value	% of Variance	Cronbach's α
Buying/ Usage behavior	I consider environmental effects from manufacturing to after-use of fashion products when purchasing fashion items.	.891	2.640	32.994	.758
	I consider the violations of workers' rights or poor working conditions made by a label when purchasing fashion items.	.872			
	I use environmentally friendly laundry detergents even though they are less effective or more expensive than regular ones.	.711			
	I purchase used fashion items.	.512			
Boycott behavior	I do not purchase fur items for animal welfare.	.890	1.426	50.815	.608
	I do not purchase fashion products from companies that use child labor, forced labor, or poor working conditions.	.690			
Care/ Disposing behavior	I donate or recycle used clothes.	.829	1.383	68.108	.600
	I manage clothes with care for long usage.	.766			

Table 2

The Results of the Independent Samples T-Test.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
						Significance		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
		F	Sig.	t	df	One-Sided p	Two-Sided p			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

Figure 1

    a. *Normal P-P Plot of Regression Standardized Residual, with the Dependent Variable of Climate Anxiety Score.*

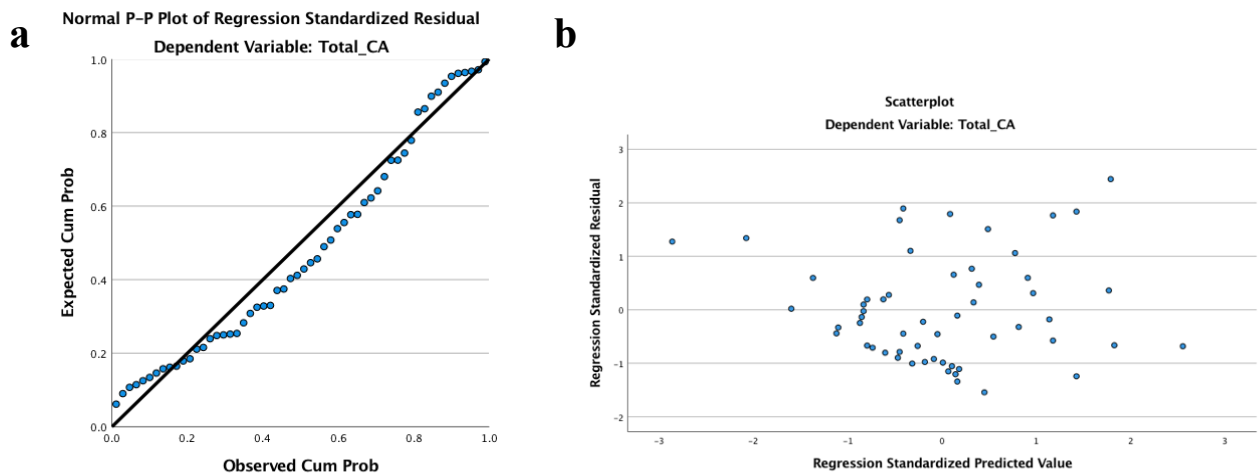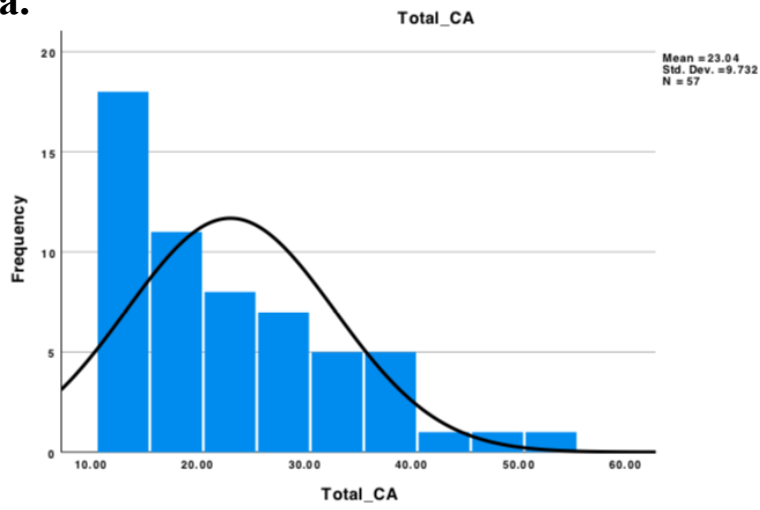   b. *Scatterplot of Regression Standardized Residual Against Regression Standardized Predicted Value.*
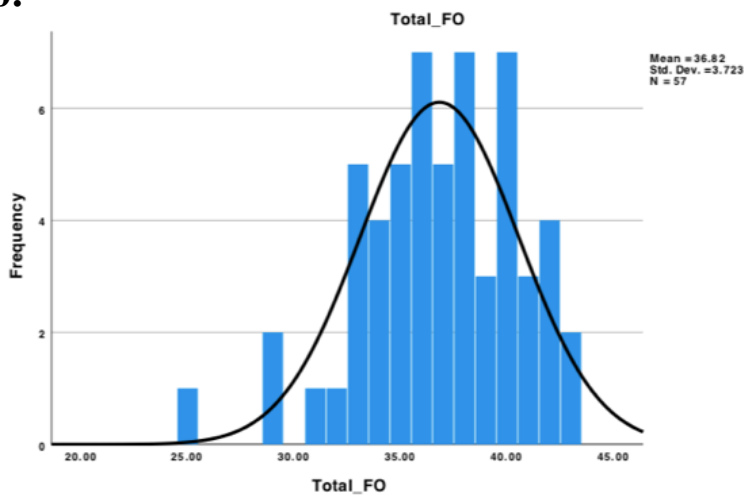

Figure 2

    a. *Histogram of the Climate Anxiety Scores*

    b. *Histogram of Food Consumption Behavior Scores*

c.   Histogram of Fashion Consumption Behavior Scores

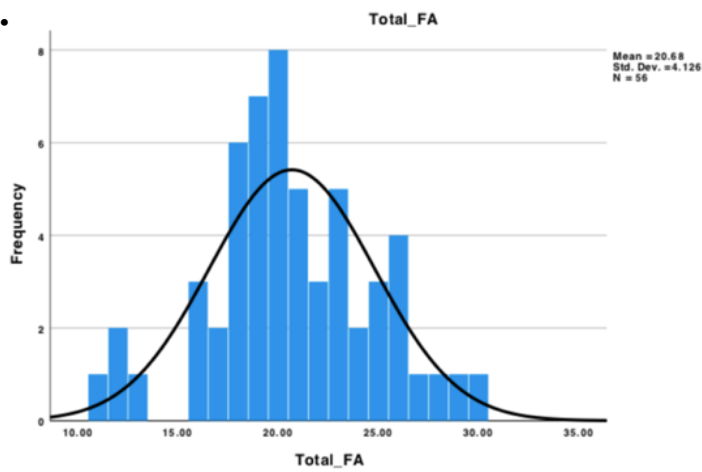**a.**

Total_CA

Mean = 23.04
Std. Dev. = 9.732
N = 57

b.

Total_FO

Mean = 36.82
Std. Dev. = 3.723
N = 57

c.

Total_FA

Mean = 20.68
Std. Dev. = 4.126
N = 56

Table 3

The Results of the Linear Regression Analysis.

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

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	245.490	1	245.490	19.192	<.001[b]
	Residual	690.724	54	12.791		
	Total	936.214	55			

a. Dependent Variable: Total_FA
b. Predictors: (Constant), Total_CA

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