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Fundamentals of Constructive Journalism in Circular Economy
Reporting

Testing effects of self-efficacy and emotional response on interest
and planned behavior within the Economic Circularity

verfasst von / submitted by

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Introduction

A global concern for maintaining and achieving a healthier lifestyle is a dominating characteristic of modern day life in the 21st century. Today these concerns are met with a wide spread of open source data aiming to inform and advance our everyday activities, food consumption, exercise, supplementation etc.. Amongst the uncountable advantages media brings to the health of individuals it does not often address how we as individuals can contribute to the health of our planet. The main purpose of the research is to test the effects of constructive journalism elements within the of Circular Economy reporting. However, the research will also discuss how we can achieve and improve global health by looking at the concept of a circular metabolism and economy and how it is portrayed in media and communicated to the public. Media can provide information on how we as individuals can obtain healthier and more sustainable habits towards our planet and our environment, that is slowly becoming exhausted trying to keep up with our unsustainable activities. Although this research strongly believes in the strength and tangibility of Constructive Journalism reporting in an environmental topic such as the Circular Economy, it must back up its roots and provide accurate information about the effects of the Constructive Journalism elements on the audience.

Social Relevance

In order to deliberate and point out the social relevance of Constructive Environmental Reporting, it is necessary to distinguish the two main actors within this research. The first one being the concept of *Constructive Journalism*, and second one being the conception of a *Circular Economy*.

Constructive journalism, unlike other forms of journalism, has a different, future-oriented approach where tenability and inclusiveness play a key role. Constructive journalism bases its principles on emotion-driven storytelling and exclusion of negative bias in news media. Inclusiveness and engagement of the audience are key values of this future form of journalistic approach. It can occur that applying constructive elements such as future- and solution-orientation with incorporating diverse depolarizing techniques will contribute to the positivity on an individual level, but also the well-being of the society as a whole.

The second key actor bases its concept on longitudinal and sustainable principles, where material life-cycles are assessed, explored and explained, to achieve a healthier environmental society. The concept of Circular Economy emphasizes the reuse and service-life extension of various products as a strategy for waste deterrence in order to decouple our prosperity from the exploitation of natural resources (Hebel, D. E., Wisniewska, M. H., & Heisel, F. 2014).

Social relevance reaches its pinnacle with the linkage between Constructive Journalistic reporting and Environmental concepts such as the Circular Economy. The importance of re-connection of emotions within journalistic reporting and an environmental concept (solution) is more important now than ever. As Canan & Hartman (2007) pointed out: “Environmental science and journalism are valued pillars within democratic societies, as the products of their enterprise are respected as contributing to social life” (Canan P. & Hartman M. 2007).

Contribution is only efficacious if the elements of constructivism reporting, meaning the solution oriented approaches, call-for-action (directives) and implemented policies are met with the principles of Economic Circularity. Audiences being in the center of environmental solutions, through a constructive approach can have a positive impact on their awareness and commitment towards a sustainable future.

Literature Review

Concept of constructive journalism

Across human history and social sciences there was a shift towards emotions and affection.

Clough and Halley (2007) refer to this phenomenon as the "affective turn" of the social (Clough & Halley, 2007). This phenomenon contrasts the very basic principles of journalism, that stand only for objectivity and neutrality. The watchdog status of journalistic reporting was and is being wavered much more with the rise of technological advances from the beginning of this century. Sense for visualization and tangibility were always present within the human consciousness, still not as driven before as they are now. Audiences were never electronically closer with one another, driving them to be more inclusive, rather than disconnected from social-environmental matters.

Constructive Journalism on the one hand, uses emotions and on the other hand, goes to the extent to evoke emotions within the audience members (Meier, 2018). It centers its principles on positive psychology. Constructive news reporting is and will increase positive emotions such as optimism and hope, while reducing negative emotions that include fear, exclusion, anger [etc] (Fredrickson, 2001). The essence is to hold the core functions of journalism with the application of positive psychology, rather than spreading negative and only problem-centered information (McIntyre & Gyldensted, 2018). The sheer argument to shift towards a positive oriented approach comes from an aspiration to strengthen the trust between news media and citizenry with the creation of stronger bonds and discourses with the community (Robertson, 2015; Wenzel et al., 2016). The main initiative is to have a more balanced and appealing coverage of news reporting, one that deals both with setbacks, progress and solutions. Equilibrium is very

much needed, unambiguously when the topic at hand deals with environmental security and waste reduction.

When deliberating the concept of Constructive Journalism it is vital to mention the six elements constructed by the Journalism Department at Windesheim University of Applied Sciences in the Netherlands. The first element constructed is a solution. *It* is necessary to address that when covering a story, there is a solution-oriented element that frames the news. Second element being the *Future Orientation*. Both audience and journalists have to ask themselves: “*What is next?*”. This gives space for productivity and argumentation on whether or which policies and tactics can be implemented in the near future. Third constructed element is the combination of *Inclusiveness and Diversity*. As pointed out earlier, the audience is the key actor within the constructive concept. They are active and included in the issue at hand. *Empowerment of people* is the 4th element, and it’s based on optimism and encouragement. Giving tactical advice and reaching out, will give audiences power to contribute and engage in serious issues. This can be done by including different actors within a given issue such as victims, experts, observers, ordinary people, etc.. The fifth element is defined as “*The Rosling*”, meaning giving context and explanation to the news itself. This promotes the infographic sphere of influence, which can attract audiences and captivate their intentions much faster. Last but not least is our sixth element, *Co-Creation*. Co-creating that involves engagement of the audience and co-creating journalistic content with them.

Self-efficacy: determination of planned behavior

Audiences do not only belong in the conversation of journalistic change, but are also key actors in the motivation driven principles. It is a journalist's duty to motivate the audience, in order for an involvement that produces social change (McIntyre, 2015, p.35). In order for the contribution to take place, there should be a sense of belief within a community and audience members. They should believe their engagement can have a noticeable impact, in this case empowering the concept of Circular Economy. The feeling when individuals believe that their contribution is meaningful to society is conceptualized as perceived self-efficacy. Its concept represents change of behavior, from a regular reader, listener to viewer to a contributor and ambassador of change. The importance of self-efficacy is beyond measure, because it can result in a chain reaction, where individuals become small groups, small groups become small communities and so on. Self-efficacy represents a powerful tool that is a result of a constructive approach to reporting in the media. According to Bandura, as a concept, not only bonded with constructive journalism, self-efficacy can be developed from many other ways (Bandura, 1994, p. 72-74). First one being *mastery experiences*, meaning from previous success, individuals are driven to succeed again. *Modeling* would be the second reason. Seeing and processing other people's success can result in one having his own. Third example is interconnected with Constructive Journalism, and is *social persuasion*. *Imagery* is another root and a driving force to a potential success. People are bonded with tangibility and visualization. Lastly, *emotional cues* are the ones that can make you or break you. Emotional state if filled with positivity, will reduce stress and increase determination for a potential triumph. *Here we can come to a hypothetical agreement:* **H1.**Forms of Constructive Journalism increase self-efficacy more than problem-centered reporting.

Emotions: A driving mediator for a sustainable environment

While self-efficacy is in a group of its own, various emotions are characterized separately and are of great importance to the concept of Constructive Journalism. Throughout the decades the relationship between audiences and journalists have not been so positive, due to the fact of constant disappointment and the inability to look eye to eye, one of the main reasons being the *negative-bias* that was represented in the media. From this point of view constructive journalism came at the right time to reconnect what was disconnected between audience members and media outlets. It was a wave of positivity and its constructive thinking. As previously mentioned the driving force of constructive journalism are emotions (Wahl-Jorgensen, 2020). It is most significant to emphasize that Constructive Journalism uses emotional elements within its conceptual core in order to capture the audience's attention, at the same time evokes emotions within the audience (Meier, 2018).

It is widely accepted that emotional framing in journalistic reporting has effects on the audiences. One of the examples that can be represented is the Verkuyten (2004) study that centered its interest in immigration support. Positive or negative feelings on immigration were reliant on the valence framing of asylum seekers and immigrants (Verkuyten, 2004). In addition to that research, study by Lecheler, Bos, and Vliegenthart (2015), discovered that exposure to these frames caused differing emotional responses, such as compassion, enthusiasm, hope, or anger (Lecheler et al., 2015). It is very safe to say that different styles of reporting, naturally with different topics of interest, elicit different emotions as mediators to intended behavior. However, the mediator effect in this case either different emotions or self-efficacy is very much dependent on the moderator, which includes more unconscious variables to the mix. *Here we hypothesize:*

H2. Forms of Constructive journalism increase various emotions such as hope, anger and optimism, than problem-centered reporting.

Concept of Circular Economy

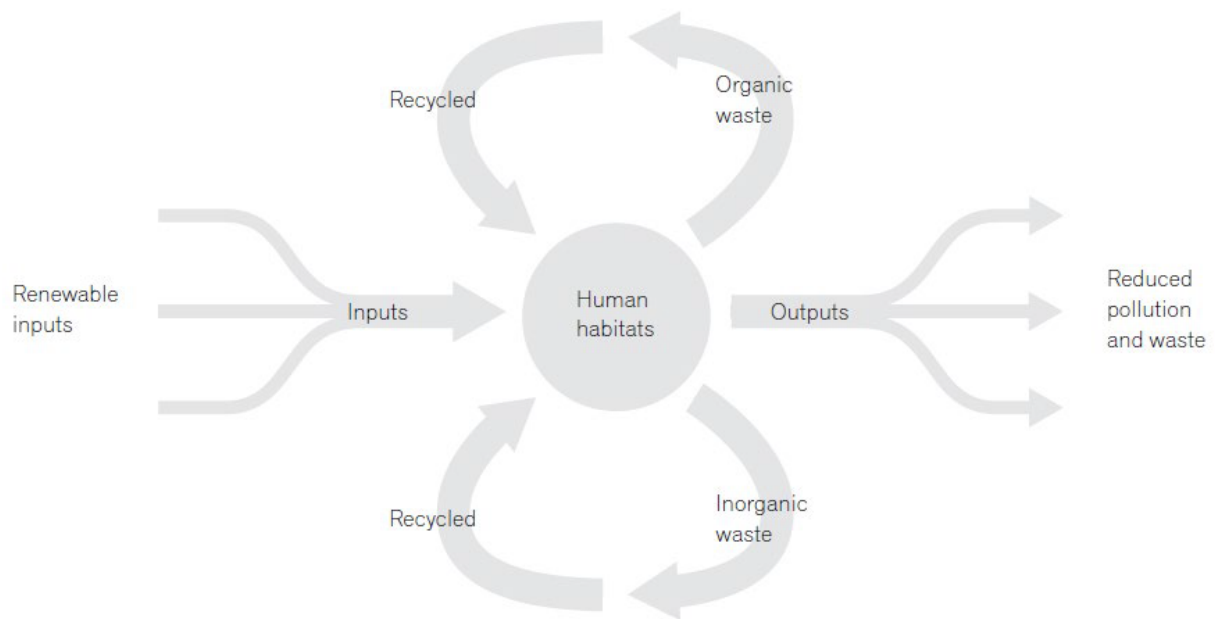
In the previous chapter we discussed Constructive Journalism and its core elements. Constructive Journalism is the main actor playing a role of a coordinator, framing and interconnecting various media outlets with their audiences via emotions and self-efficacy. The topic on which constructive journalism will implement its positive elements in this research is of environmental nature, and it's titled the Circular Economy.

Whereas lines have their beginnings, mid-points and ends, circles go on forever. This same visual code is applied to our economy. Linearity in the economic spheres, where its products are being used once and discarded, is very much present in our everyday lives. Conversely, the Circular Economy is conceivably the key to economic prosperity, deriving more value from the products and cutting emissions. The core principle of Circular Economy is based on the better use of our resources, but also that these same products are designed to last, with the elements or materials that can be used once again, resulting in a regeneration of the natural system. Sectors in which the implication of the circular concept is most present are: plastic, steel, food, cement, and aluminum which is going to cut the CO₂ emissions by almost an astonishing 4 billion tons. This can be compared to cutting emissions from all forms of transport worldwide.

The theoretical model of circularity was first discussed in the USA in the late 70's as a neighborhood strategy where people's daily doings would be limited to the available renewable resources causing a minimal environmental impact (Hebel, 2014, 11).

Figure 1: The visualization diagram below signifies the circular metabolism (mechanism). Unlike the linear system, where there is an absence of circulation of organic and inorganic waste via recycle use, circular metabolism uses both the organic and inorganic waste as recycling material before outputting it as a reduced pollution and waste.

Circular metabolism – cities minimize new inputs and maximize recycling



Illustrations based on: *Cities for a Small Planet* (Richard Rogers, 1996).

Figure 1: Circular Economy

Organizations such as the United Nations developed Sustainable Development Goals (SDGs), where the 11th SDG is the Sustainable Cities and Communities (THE 17 GOALS |Sustainable Development 2021). As stated by the former UN secretary general Ban Ki-Moon: ‘Our struggle for global sustainability will be won or lost in cities’ (Ban Ki-Moon, 2012).

Constructivity in environmental reporting

The key to a successful application of circularity is through building collective awareness of how our everyday practices affect our life and also future generations. Media plays a great role in dispersing this information to a broader audience, where the sustaining factor of this type of information needs to be precise and effective, in order for the audience to be engaged. Who better to represent such an important and significant concept than constructive media reporting. It is important to note that both main actors within the research are positively driven, meaning the intentions of both concepts are for the good among various communities and also the health of our planet.

In order for the constructive elements to be successful within an environmental concept such as circularity, journalists should not only present positive elements but also the negative ones. Awareness is driven by serious issues that are affecting each and every one of us. As much as Constructive Journalism is a future form of journalistic approach, decorated with positive emotions and philosophy, it should not and is not backing down from core values of traditional journalism. Reporting must have its problem-centered part in order to engage the audience, while giving them practical solutions, already or future-implemented policies. The significance of waste reduction, better consumption and systematic change is limited without the notion of public encouragement and awareness about the circularity concept.

Another key aspect where constructive elements, but also immersive journalism can affect, attract, and engage audiences is with visualization. Although we live in a period of digital expansion, where information, and communication flows much faster than in the previous century, audiences tend to have more interest in topics that are more tangible and visual, rather than more theoretical and scientific minded. Numbers, graphs, interactive diagrams and imagery

are a staple in attracting audiences to think and perhaps engage in helping, whether it's on an individual/daily basis, working in a non-profit organization, helping others in need, or spreading the word via multiple platforms. In order for the circular economy to rise it is mostly dependent on social marketing. Unlike commercial marketing where you have brands competing with one another for gains, social marketing fits perfectly to the environmental scale, where there is a selling of better behavior through governments and nonprofit organizations. This selling can be done constructively, setting examples of various countries that have implemented the policies (whether that being from the UN, the European Commission or any other institution).

When reporting about the environment and the circular concept, there should be a sense of inclusion rather than just putting data on the map. As it is a wide-range audience, the language must not be too scientific, rather more practical, giving examples that can stimulate the audience personally rather than making them strangers to the ways Circular Economy can benefit the ecosystem. Use positive information and numbers rather than only negative information and struggles. Evoking emotions such as hope, courage, self-importance and especially self-efficacy can and will better global health. However there is always the moderator effect that can change the intended behavior of different individuals.

So I can also hypothesize:

H3. Forms of Constructive Journalism reporting will have a stronger effect on individuals that are easier influenced by others, in contrast, those individuals that are harder to influence by others will also be less affected by forms of Constructive Journalism.

H4. Participants with higher perceptions of self-efficacy will report stronger intentions to participate in a pro-environmental behavior (Circular Economy) than participants with lower levels of self-efficacy.

The diagram below points out the visualization process from point X independent variable) to Y1 and Y2 (dependent variables). In more depth, X variable resents the solution implemented, solution will be implemented and regular article. On the other hand, the mediators are divided into two routes, One being the cognitive, involvement of self-efficacy and the other being the affective route, which includes emotional response. These mediators lead an individual's interests in a topic (in this case circular economy) , as well as engagement in various different ways. Lastly, moderators are some uncontrollable aspects, that involve pre Environmental self-identity, optimism, pessimism etc. Control variables, as seen in Figure 2 below, are age, gender and manipulation check.

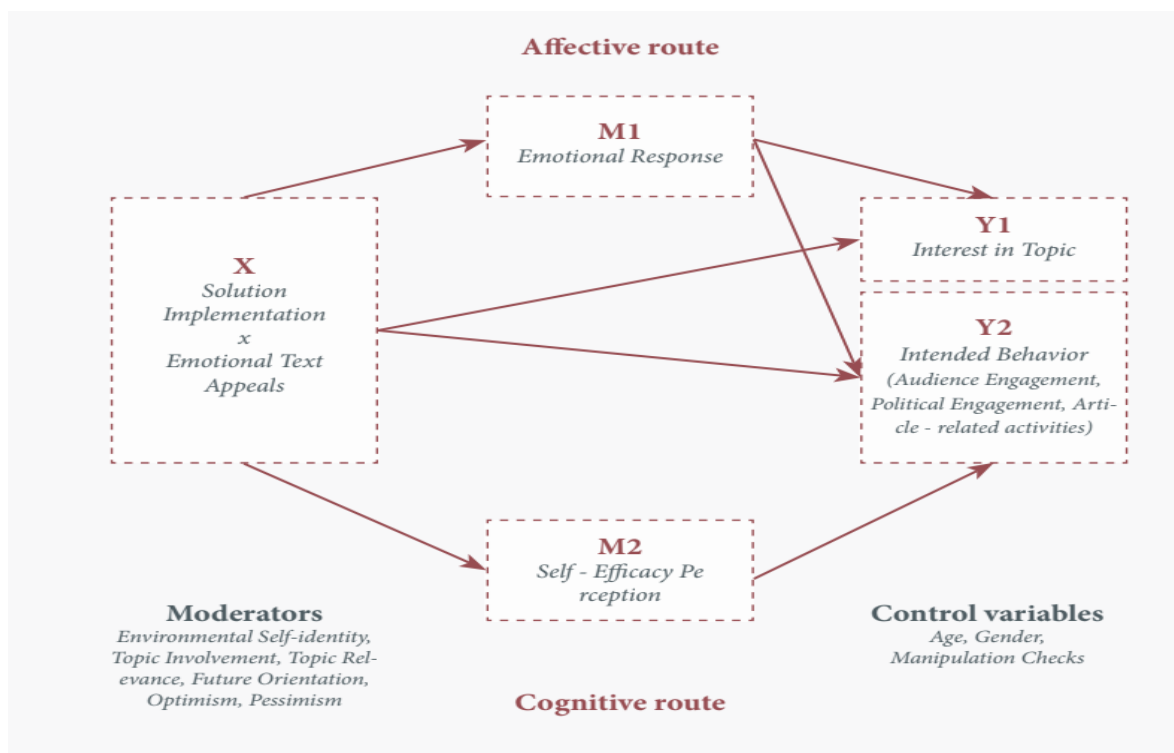


Figure 2: Visualized Diagram

Method

Research Design

The methodological approach I am using to conduct my research is an between subject, online experiment. The experiment is led in the form of a questionnaire, which in its structure includes questions in basic socio-demographic data, topic Importance, topic involvement, environmental self-Identity, future orientation/attitude and article material. The online engine used for the experiment is google forms, thus giving us more visual results, in the shape of pie and column charts. In the questionnaire, the reader will be introduced with the purpose of the study and generally informed by the procedures that will follow up within the questionnaire. It is of great importance to reference that the questionnaire is confidential and its purpose only lies with its scientific nature.

The intro includes basic socio-demographic data, making the respondent more comfortable. In most of the cases the participant/respondent is given a choice to select “prefer not to answer”, if he/she doesn’t feel comfortable in answering a specific question. The follow up segment is topic importance. This shows how significant environmental stability is for the respondent. The next segment includes topic involvement (moderator of extreme importance), sharing a responders inclusion within the environmental circles. The segment that follows is Future Orientation/Attitude, which gives us the idea on an individual basis, a moderation that could lead to a different response after the article material. The last section within the questionnaire is the article material. The responders are faced with three options, which will lead them to three diverse articles. All three articles are formatted the same, with almost the same reading longevity, around 2 minutes. However, while their topics are saturated around production of meat, their approach significantly differs.

The first article only addresses the issues at hand, representing only the concerns over meat production. The second article differs from the beginning, with an optimistic headline and something to look forward to in the future. The third and final article deals with hopefulness and positivity, ways we can deal with emissions, thus in total contrast to the first article. In its conclusion, responders are given questions in regards to the articles they have read. Information and contact is given if any participants are willing to ask questions about the research.

Procedure and Sampling

Both Constructive Journalism in correlation with the concept of Circular Economy, are topics of contemporary nature, having global impact and importance for past-current-future generations. As global topics, they are deserving of a large sample size. The research targets both males and females. When it comes to age, the range used was: 20-30 years, 30-40 years, 40-50 years and 50 and above. There was no targeted group of people, meaning only students, or only people that are employed. In the same sense, people are not targeted for their race, nationality, cultural background, income levels, education nor part of the world they live in. They are given multiple options for all of the above, abolishing any exclusivity and discomfort while filling out the questionnaire.

The sampling was strictly done over social platforms (Facebook and LinkedIn), but also with institutions such as Universities and job connections. In some cases the questionnaire was sent on an individual basis over the two platforms, in others the participants were filling out the questionnaire after it was posted on the walls. There were also cases where the participants were spreading the questionnaires to their close friends and family members.

Scale cogency and measurements

Participants answered questions that were evaluated on the Likert-scale. The importance of the topic, involvement in the topic, ecological identity and future orientation / attitude for each participant were determined.

The importance of the topic

To measure the importance of the topic of individuals, two questions marked on the Likert-scale were used, which varies from 1 - very important to 6 - I do not want to answer

Involvement in the topic

To assess their involvement in the topic, the respondents indicated their position on four questions on a scale from 1 - I completely agree to 5 - I do not agree at all.

Ecological self-identity

To measure the ecological self-identity of the respondents, three questions were used on the Likert-type scale, which varies from 1- completely valid to 5 - not applicable at all and one question with possible answers from 1 - I will do my best to 6 - rather not mention.

Future Orientation / Attitude

The future orientation / attitude of each respondent was determined by four questions by declaring on a scale from 1-fully applicable to 5 - not applicable at all.

To make the results easier to interpret, a scale was recorded in which higher scores meant stronger acceptance of the item except for the question “There are many issues that concern me more than environmental and sustainability issues”. To make a statistical analysis, a calculation was performed for each question where the recorded value was multiplied by a value of 100 and the number of points on the Likert-scale for a given question. In order to get the final score for the importance of the topic, inclusion in the topic, ecological identity and future orientation / attitude, the obtained values were collected for each question that is an integral part of these views and divided by the number of questions.

Quantitative data analysis

The results of the research are included in the Statistical Package for Social Sciences (SPSS) version 23. Data are presented using the number and the corresponding percentage or using the average and standard deviation. The total scores of self-efficacy and emotion-provoking way of reading the article are presented using Boxplot diagrams.

Correlation analysis was used to assess the relationship between self-efficacy variables, emotion assessment variables, and their interrelationships. To assess the difference between the groups in the obtained score of individual variables, Analysis of variance (ANOVA) with the Bonferoni Post-Hoc test was used, and between the total scores of self-efficacy and emotion-induced Man-Whitney U test. The difference between the feelings of positive and negative emotions was determined using the Paired-Samples T Test. The difference between the categorical variables was determined by the Chi-square test. The data are presented in tables and graphs, and the statistical significance is at the level of $p < 0.05$.

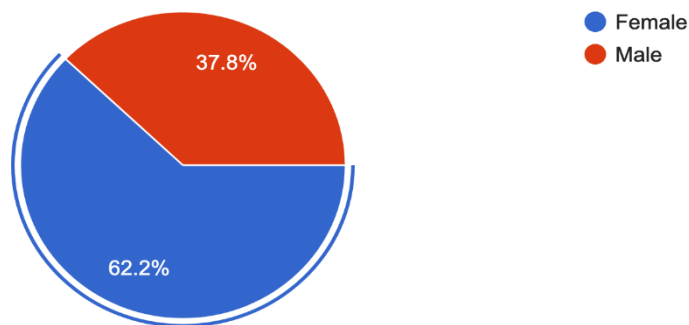
Results

Basic Socio-demographic data

334 respondents divided into three groups participated in the research (Group 1 = 112; Group 2 = 109; Group 3 = 103).

Mark which gender you are:

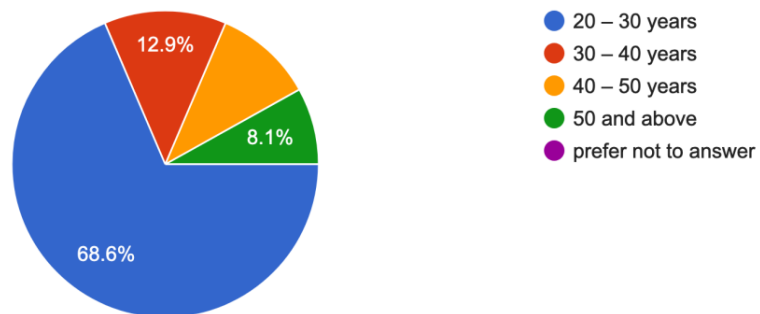
333 responses



Graph 1. presents the gender structure of the respondent

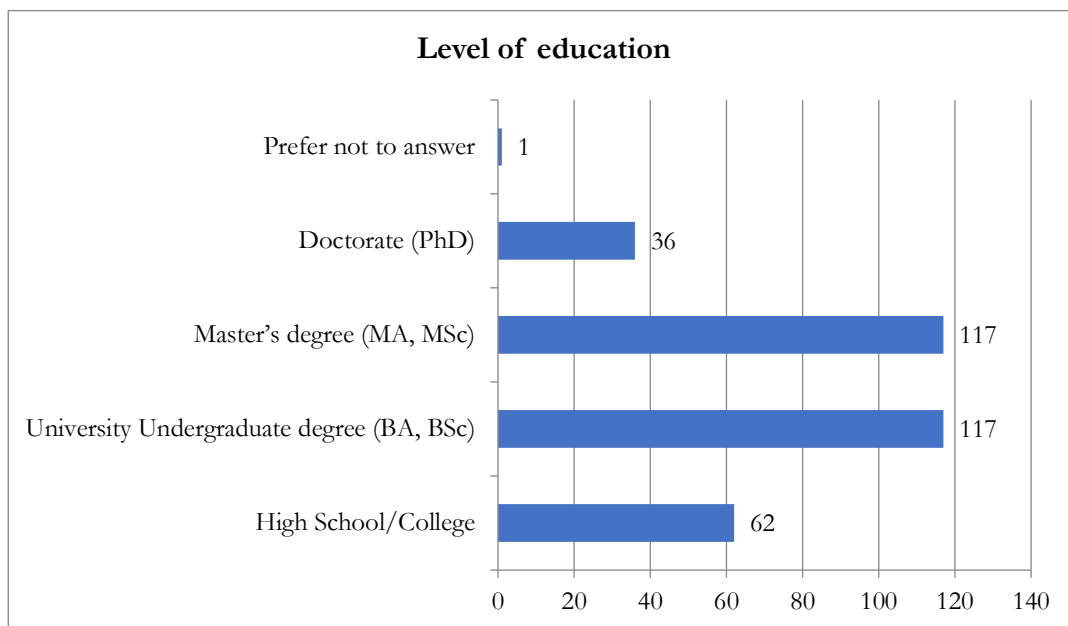
207 (62.2%) women and 126 (37.8%) men participated in the research (Graph 1) One respondent did not write data. The results of the Chi-square test showed a statistically significantly higher number of women ($\chi^2 = 19,703$; $df = 1$; $p = 0,000$) compared to men and a significant gender difference compared to the examined groups ($\chi^2 = 6,588$; $df = 2$; $p = 0.037$).

To what age group do you belong:
334 responses



The age structure of the respondents in the total sample is presented in Graph 2.

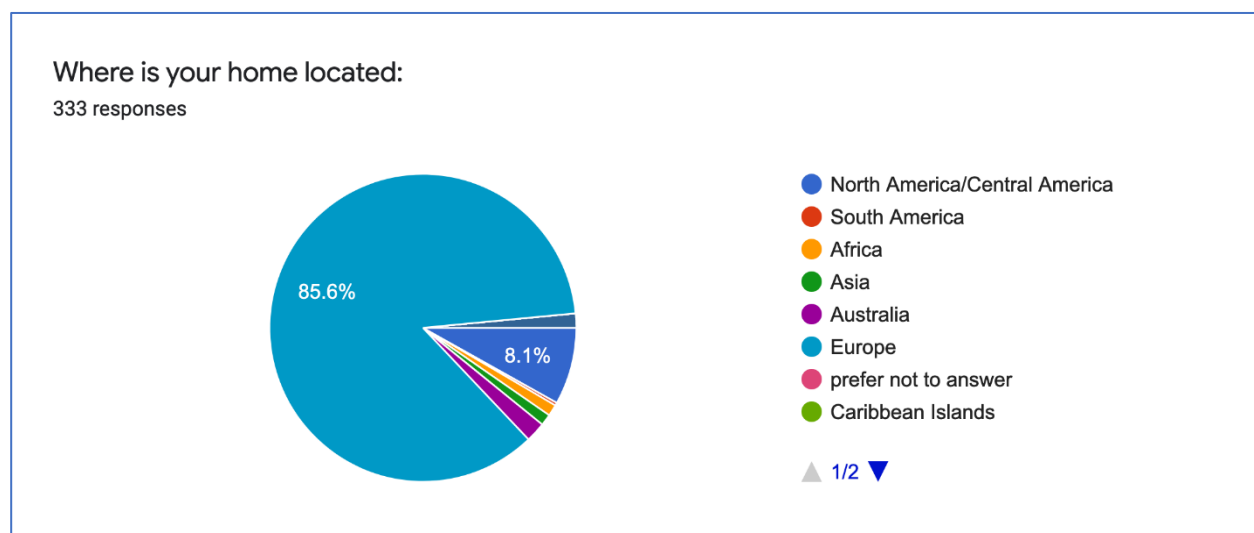
Most respondents (68.6%) are aged 20-30. There were 10.5% aged 40-50, while 8.1% were over 50 (Graph 2). The results of the Chi-square independence test did not determine a significant age difference in relation to the examined groups ($\chi^2 = 3,636$; $df = 6$; $P = 0.726$).



Graph 3. presents the level of education of the respondents.

The same number of respondents 117 (35%) had a university degree (BABS_c) and a master's degree (MA, MSc), 36 (11%) have a doctorate, and 62 (19%) have completed high school / college.. There was no significant difference in the educational level of the respondents in relation to the examined groups ($\chi^2 = 5.556$; $df = 8$; $P = 0.697$).

The place of residence of the respondents in the total sample is presented in Graph 4.



Graph 4. Place of residence in the total sample

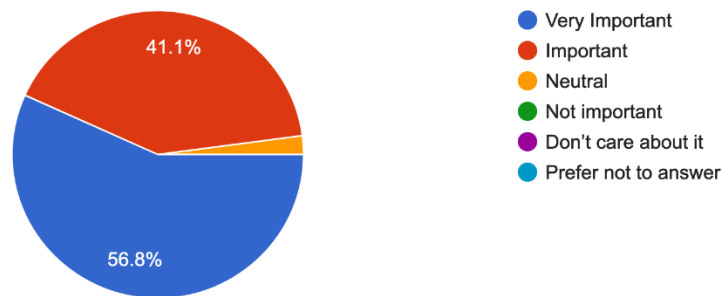
From Chart 4, we can see that as many as 85.6% of respondents live in Europe. 8.1% live in North America / Central America, 2.1% in Australia and less than 2% in other places.

There was no significant difference between the respondents by groups in relation to the place of residence ($\chi^2 = 13,173$; $df = 12$; $P = 0.357$).

Topic Importance

As it can be seen Graph 5 represents the importance of the environment in the total sample, and Graph 7 by groups

How important is the environment to you?
333 responses



Graph 5. Importance of the environment

For 56.8% the environment is very important, for 41.1% it is important and for 2.1% of respondents this issue is neutral (Chart 5).

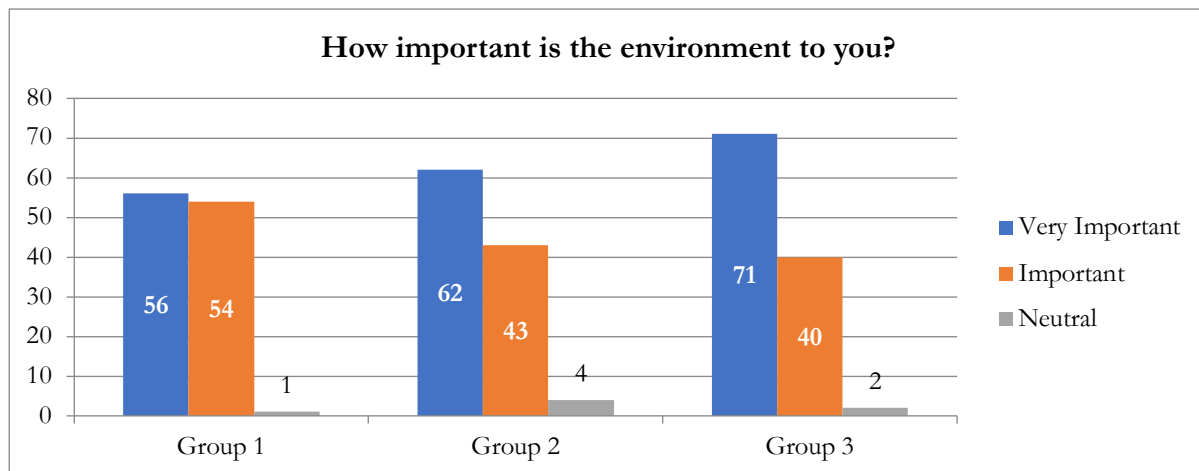
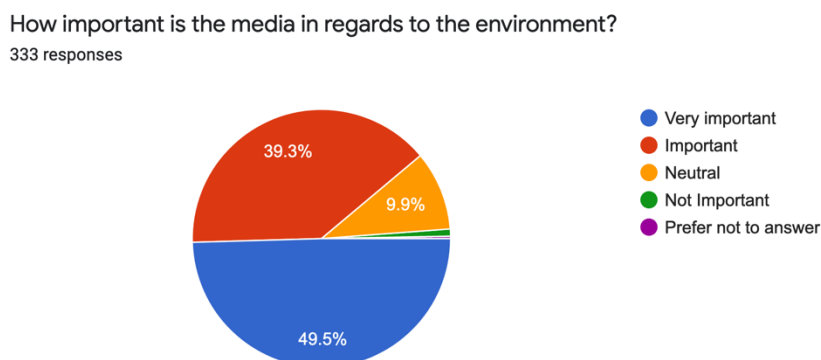


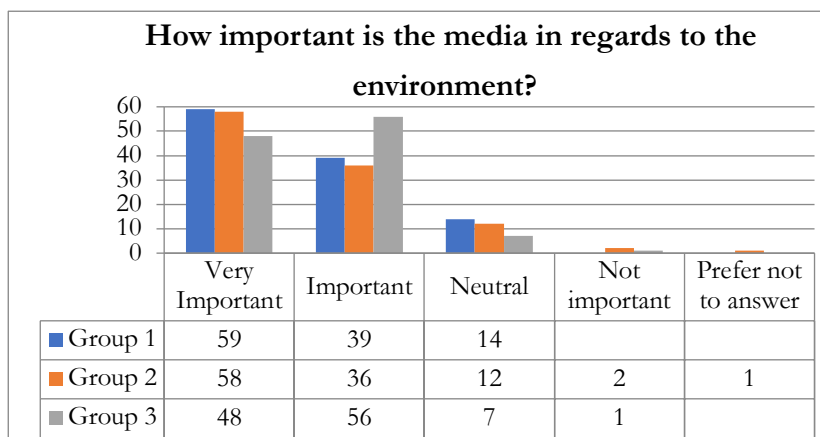
Figure 6. The importance of the environment in the observed groups

From Graph 6 we can see that in group 3 the largest percentage (62.8%) of respondents declare the importance of the environment as very important. And the smallest percentage (50.5%) was from Group 1. The neutral answer was in only 7 respondents. The importance of the media in terms of the environment in the total sample is presented in Graph 7, and by the examined groups in Graph 8.



Graph 7. The importance of the media in terms of the environment

For half of the respondents, the media are very important in terms of the environment, for 39.3% they are important. For 9.9% of respondents the importance of the media is neutral, only for 3 respondents they are irrelevant. One respondent did not want to give an answer (Graph 7)



Graph 8. The importance of the media in terms of the environment by the examined groups

For more than half of the Group 1 and Group 2 respondents, the role in terms of the environment is very important, while for half of the Group 3 respondents it is important.

Involvement in the topic

The percentage of respondents' responses to non-segments of involvement in the topic is presented in Table 1. Most respondents (33.5%) agree that they have a strong personal interest in environmental and sustainability issues, and a high percentage (31.7%) fully agree, while only 6.3% disagree. The largest number of respondents (57.1%) fully agree that making the right decisions about the environment and sustainability for society is vital, while only 10.5% of respondents disagree with this statement. Most respondents (32.1%) agree to spend time thinking about environmental and sustainability issues. A large number of 99 respondents (29.7%) are neutral on this issue, while only 2.1% disagree at all. That there are many problems that concern respondents more than environmental and sustainability issues is fully agreed by 15.9% of respondents and 28.7% agree. More than a third of respondents (35.9%) have a neutral position on this issue, and only 3.6% of respondents disagree (Table 1).

Table 1 Topic Involvement					
	Totally agree 1	2	3	4	Strongly disagree 5
I have a strong personal interest in environmental and sustainability issues	31.7	33.5	20.4	8.1	6.3
Making the right decisions about the environment and sustainability for the Society is vital.	57.1	23.7	3.0	5.7	10.5
I spend time thinking about environmental and sustainability issues.	21.0	32.1	29.7	15.0	2.1
There are many problems that concern me more than environmental and Sustainability issues	15.9	27.8	35.9	16.8	3.6

Table 1. presents the results of the Topic Involvement of the respondents

Section ID: Environmental Self-identity

On the scale 1- Totally applies to 5- Does not apply at all respondents expressed views on their environmental identity.

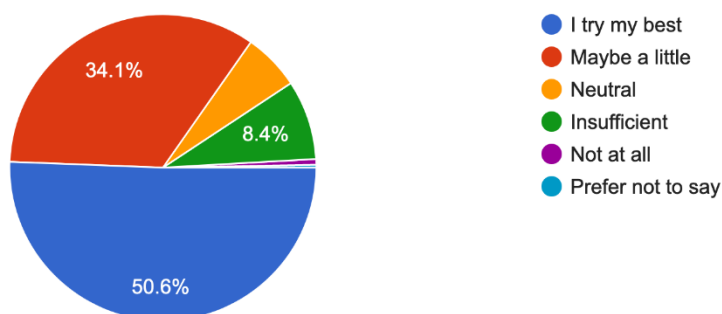
Table 2 Environmental Self-identity					
	Totally agree 1	2	3	4	Strongly disagree 5
Environmentally friendly behavior is an important part of who I am	25.2	39.6	21.9	9.6	3.6
I consider myself a very Eco-friendly individual	14.1	39.9	29.7	14,4	1.8
I engaged in an environmental friendly initiative before	19.5	25.5	23.4	20.1	11.4

Table 2. presents the results of the ecological identity of the respondents

Environmentally friendly behavior is an important part of who I am fully valid for a quarter of respondents. For most respondents (39.6%) it applies, while the statement does not apply at all for only 12 (3.6%) respondents. 14.1% of respondents consider themselves to be very ecological. 39.9% of respondents claim that they are ecological persons, 29.7% do not have an opinion, while for 1.8% of respondents it does not apply at all. One patina of respondents fully participated in the environmental initiative, while one quarter participated 11.4% of respondents did not participate at all (Table 2).

On a daily bases, how much do you contribute with your personal way of life to "saving the planet" and to a healthier life for everyone?

334 responses



Graph 9. Everyday contribution to my personal way of life "saving the planet" and a healthier way of life

Over half of the respondents (50.6%) do their best by daily contributing to their personal way of life "saving the planet" and a healthier way of life, slightly more than a third (34.1%) believe that they may contribute little. while 8.4% of respondents think it is insufficient and 6% are neutral on this issue (Graph 9).

Category FU: Future Orientation / Attitude

Most (41.4%) respondents consider themselves optimistic, while a quarter of respondents are neutral. 73% of respondents think about the future every day, while 3.9% do not agree with this statement at all. In order to achieve future results, 18.9% of respondents are completely ready to sacrifice their current happiness, and 38% are ready, and only 3.3% of respondents are not ready at all. When urgent matters need to be resolved, 16.5% of respondents are generally fully active, 31.1% are active, while only 5.7% are not active at all (Table 3).

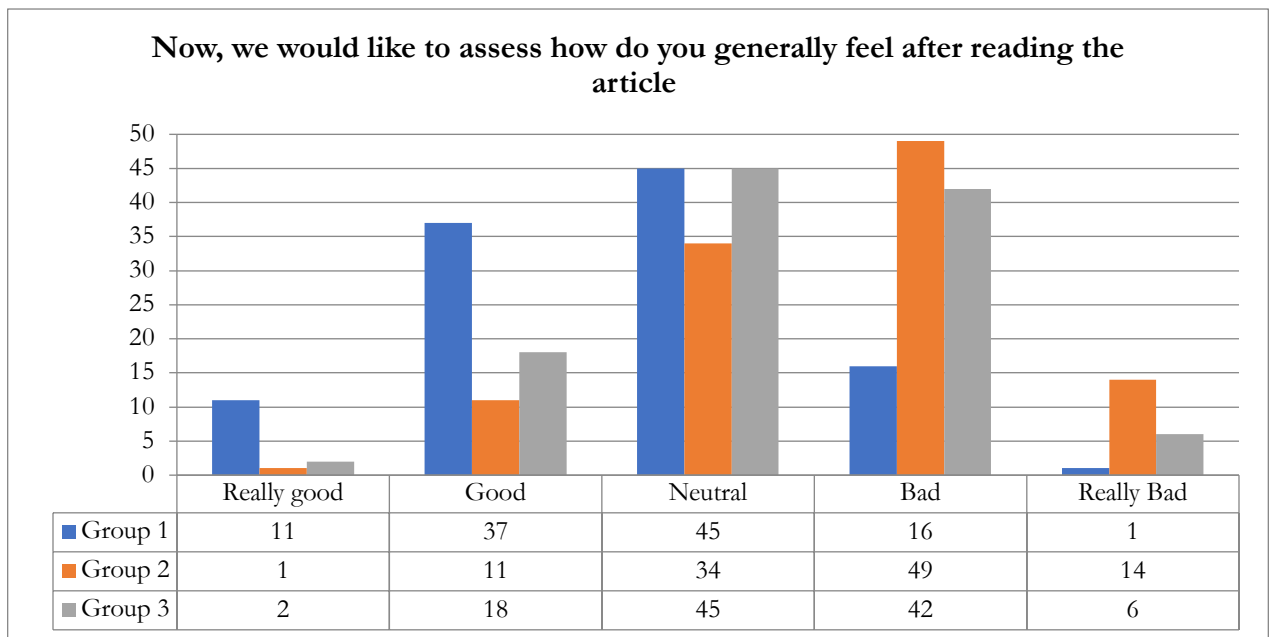
Table 3 Future Orientation/ Attitude					
	Totally agree 1	2	3	4	Strongly disagree 5
Would you consider yourself an optimistic person?	16.8	41.4	24.9	12,0	4.8
I think about the future on a daily basis	36.5	36.5	17.4	5,7	3.9
I am ready to sacrifice my immediate, current happiness or well-being in order to achieve future results	18.9	38.0	27.5	12,3	3.3
I mainly act when immediate matters need to be dealt with	16.5	31.1	29.9	16,8	5.7

Table 3. presents the results of Future Orientation / Attitude

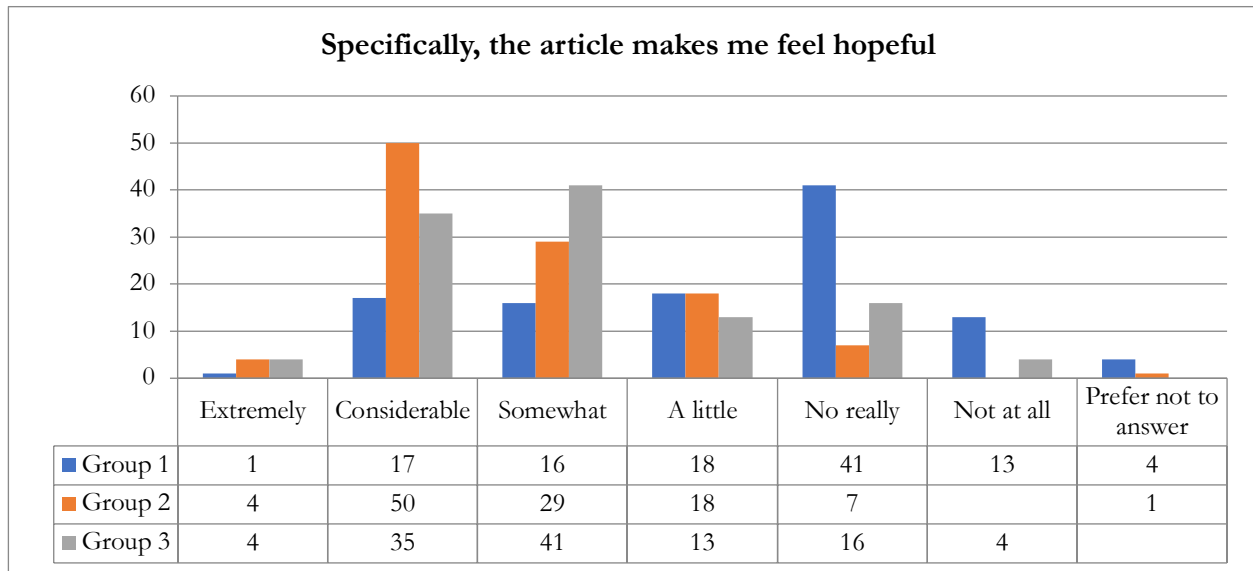
Article material

Respondents' feelings after reading the article are presented in Graph 10

After reading the article, most respondents in group 1 (40.9%) and group 3 (39.8%) feel neutral, while most respondents (45%) group 2 feel bad. A third of respondents in group 1 feels good, and only one respondent feels very bad.



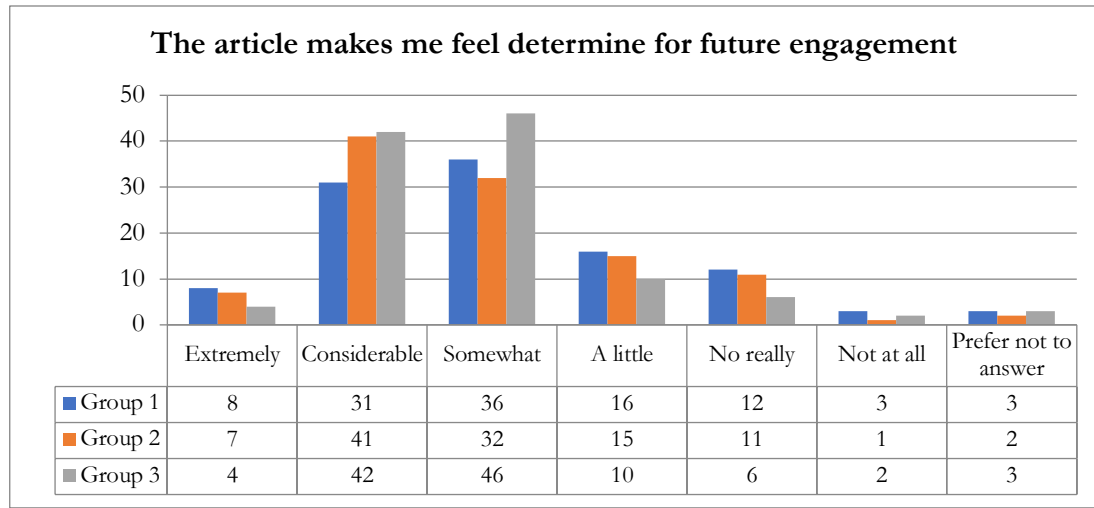
Graph 10. Respondents' feelings after reading the article



Feelings of hope after reading the article are presented in Graph. 11

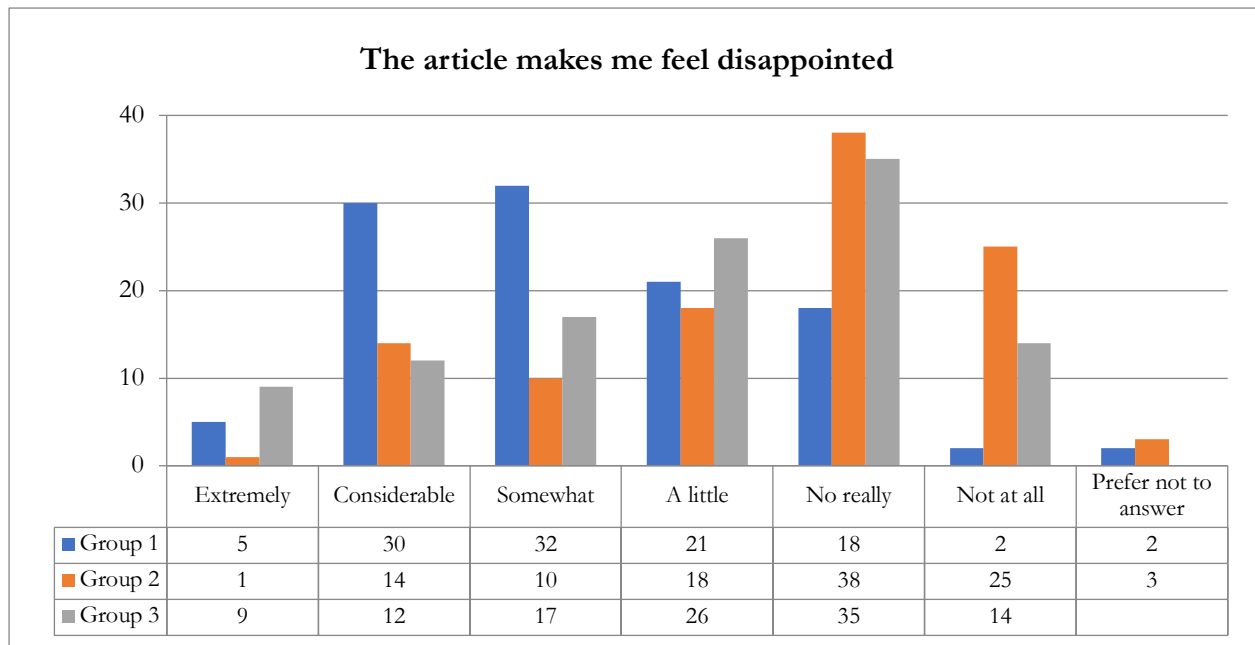
For 41 respondents (37.3%) in group 1, the article does not give hope, and for 11.8% of respondents it does not give hope at all. For only one respondent, the article gives extreme hope, and for 17 (15.5%) it gives significant hope. In group 2, 45.9% of articles significantly give hope, and one respondent did not want to answer. For the majority of respondents 41 (36.3%) of group 3, the article gives some hope, but for 31% it gives significant hope. In group 2, one respondent did not want to answer, while in group 1 there were four (Chart 11).

Respondents' determination after reading the article is presented in Graph 12.



Graph 12 Determination for future engagement after reading the article

Determination for future engagement after reading the article is somewhat increased for most respondents in group 1 (33%) and group 3 (40.7%), but in group 2 the article significantly increases the determination for future engagement (37.6%). In groups 1 and 3, three respondents did not want to give an answer, and in group 2 there were two respondents (Graph 12).

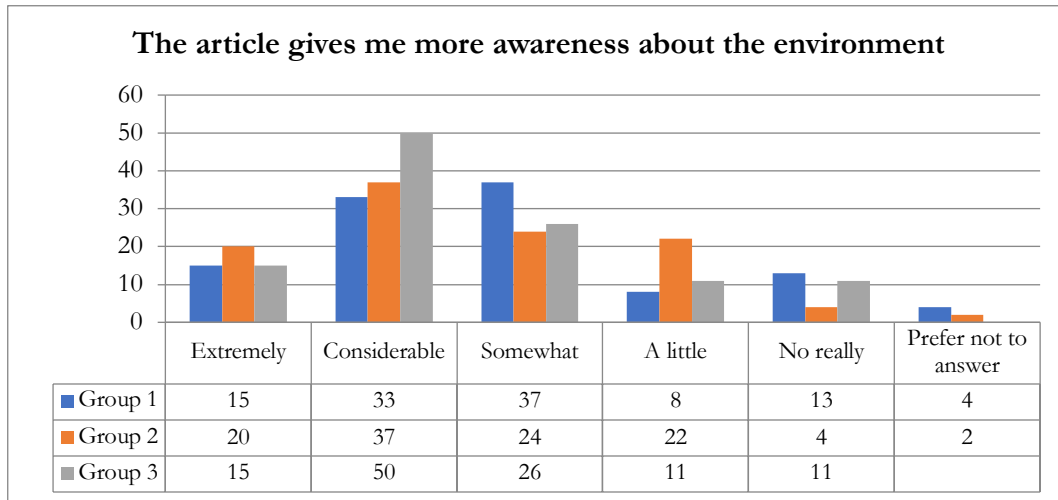


Graph 13 Disappointment of respondents after reading the article

Most respondents in group 1 felt somewhat significant disappointment (29.1% and 27.3% respectively), while in group 2 and group 3 there were the most respondents (34.9% and 31% respectively) whose disappointment was No really (Chart 13).

The environmental awareness provided by the article is presented in Graph 14.

Most respondents (33.6%) of group 1 believe that the article gives him or her some more awareness of the environment, while 30% thinks that it gives him or her significant awareness. In group 2 and group 3, the article significantly gives more information about the environment for the majority of respondents (33.9% and 44.2%, respectively). Four respondents from group 1 and two respondents from group 2 did not want to answer (Graph 14).



Graph 14. Environmental awareness

Self-efficacy

Table 4. presents the average values of the obtained scores for the examined attitudes of self-efficacy in the examined groups and in the total sample.

Table 4. Values of obtained scores for examined self-efficacy attitudes in the examined groups and in the total sample (Mean $\pm$ Standard Deviation)				
	Group 1	Group 2	Group 3	Total
Topic Importance	90.4 $\pm$ 9.6	90.7 $\pm$ 9.9	90.9 $\pm$ 8.9	90.7 $\pm$ 9.5
Topic involvement	74.5 $\pm$ 13.1	73.6 $\pm$ 14.9	72.0 $\pm$ 15.1	73.4 $\pm$ 14.4
Environmental Self-identity	75.5 $\pm$ 12.3	75.9 $\pm$ 12.6	76.4 $\pm$ 12.7	75.9 $\pm$ 12.5
Future Orientation/ Attitude	69.0 $\pm$ 13.0	69.0 $\pm$ 14.4	67.0 $\pm$ 15.2	68.3 $\pm$ 14.2

Based on the obtained results (Table 4), the importance of the topic stands out with the highest average score of 90.7 ± 9.5 . The environment is very important for the majority of respondents and the value of the score is uniform and exceeds 90 in all three groups. Involvement in the topic

is the lowest in group 3 (72.0 ± 15.1), the highest in group 1 (74.5 ± 13.1). Ecological self-identity is highest in the respondents of group 3 (76.4 ± 12.7) and the lowest in group 1 subjects (75.5 ± 12.3). Future orientation / attitude is the least pronounced of all examined items and averages 68.3 ± 14.2 . It is lowest in the subjects of group 3 (67.0 ± 15.2), while in the other two groups it is the same (69.0).

Subsequent results of the Bonferroni test did not show a significant difference ($P > 0.05$) between the groups in any of the examined items.

The correlation between self-efficacy indicators in the observed groups is presented in Table 5.

The importance of the topic and involvement in the topic are significantly positively related to environmental identity in all three examined groups. The greater the importance of the topic and the greater the involvement in the topic, the greater the ecological self-identity of the respondents. Respondents with a more pronounced ecological self-identity give more importance to the environment and are more involved in environmental issues in all three groups examined. For the group in which the problem is presented, the future orientation / attitude of the respondents is statistically significantly related to the importance of the topic, i.e. the more important the environment and the more important the media in terms of the environment, the better the future orientation / attitude of the respondents. In the groups in which the application of the solution is indicated and the possibility of solving the problem, the future orientation / attitude of the respondents is significantly related ($p < 0.01$) to inclusion in the topic and ecological self-identity, i.e. greater involvement in the topic and stronger ecological identity are associated with better future orientation / attitude (Table 5).

Table 5 Correlation between self-efficacy indicators in the observed groups (Spearman correlation coefficient Ro (P))			
	Topic involvement	Environmental Self-identity's	Future Orientation/ Attitude
Group 1			
Topic Importance	0.201* (0.035)	0.259** (0.006)	0.235* (0.013)
Topic involvement	1	0.275** (0.003)	0.152 (0.110)
Environmental Self-identity's		1	0.170 (0.073)
Group 2			
Topic Importance	0.206* (0.33)	0.310** (0.001)	0.071 (0.464)
Topic involvement	1	0.517** (0.000)	0.373** (0.000)
Environmental Self-identity's		1	0.276** (0.004)
Group 3			
Topic Importance	0.178 (0.059)	0.189* (0.046)	0.044 (0.646)
Topic involvement	1	0.450** (0.000)	0.449** (0.000)
Environmental Self-identity's		1	0.399** (0.000)
*. Correlation is significant at the 0.05 level (2-tailed).			
**. Correlation is significant at the 0.01 level (2-tailed).			

The values of the obtained scores for the feelings of the respondents after reading the article in the examined groups and in the total sample are presented in Table 6

Table 6 Values of the obtained scores for the feeling of the respondents after reading the article in the examined groups and in the total sample (Mean $\pm$ Standard Deviation)				
	Group 1	Group 2	Group 3	Total
Now, we would like to assess how do you generally feel after reading the article	72.9 $\pm$ 14.8 ^{b,c}	56.9 $\pm$ 14.6	61.9 $\pm$ 14.3 ^b	63.9 $\pm$ 16.0
Specifically, the article makes me feel hopeful	53.8 $\pm$ 20.1	74.3 $\pm$ 15.3 ^a	69.7 $\pm$ 17.2 ^a	65.9 $\pm$ 19.7
The article makes me feel determine for future engagement	69.6 $\pm$ 19.5	72.3 $\pm$ 17.8	72.7 $\pm$ 16.9	71.6 $\pm$ 18.1
The article makes me feel disappointed	67.4 $\pm$ 18.6 ^{b,c}	49.8 $\pm$ 15.0	57.8 $\pm$ 16.4 ^b	58.3 $\pm$ 17.2
The article gives me more awareness about the environment	71.4 $\pm$ 22.8	76.0 $\pm$ 19.2	76.0 $\pm$ 19.5	74.5 $\pm$ 20.1
One-Way ANOVA; a-statistically significant difference compared to Group 1; b-statistically significant difference compared to Group 2; c-statistically significant difference compared to Group 3;				

After reading the article, statistically significantly stronger feelings were had by respondents belonging to group 1 (72.9 $\pm$ 14.8), and the weakest by respondents belonging to group 2 (56.9 $\pm$ 14.6). The article gives the most hope to the respondents of group 2 (74.3 $\pm$ 15.3), and significantly the least to the respondents of group 1 (53.8 $\pm$ 20.1). For future engagement, the article determined almost the same respondents of group 2 (72.3 $\pm$ 17.8) and group 3 (72.7 $\pm$ 16.9) and slightly less respondents of group 1 (69.6 $\pm$ 19.5). Significantly most disappointed with the article were the respondents of group 1 (67.4 $\pm$ 18.6), while the least disappointed were the respondents of group 2 (49.8 $\pm$ 15.0). The article gave the least awareness of the environment to the respondents of group 1 (71.4 $\pm$ 22.8), while the respondents of group 2 and group 3 (76.0 $\pm$ 19.2 and 76.0 $\pm$ 19.5 respectively) had the same results (Table 6).

The results of the paired t-test showed significantly greater disappointment in group 1 ($t_{109} = -5,048$; $P = 0.000$) and significantly higher hope in group 2 ($t_{108} = 9.521$; $P = 0.000$) and group 3 ($t_{112} = 3.991$; $P = 0.000$).

The correlation of indicators of evoked emotions in respondents in the observed groups is presented in Table 7.

Feelings after reading an article that only presents a problem are significantly negatively correlated with the respondents' hopes ($R_o = -0.351$, $P = 0.000$) and significantly positive with disappointment ($R_o = 0.379$, $P = 0.000$). The greater feeling that appeared after reading the article that only states the problem caused the respondents significantly less hope and significantly greater disappointment. Hope and determination were significantly positively related ($R_o = 0.385$, $P = 0.000$), i.e. respondents who felt more hope felt more determination for future engagement ($R_o = 0.270$, $P = 0.005$). The more disappointed the respondents were, the more they felt determined for future engagement. Respondents with more environmental awareness showed significantly greater determination about future engagement ($R_o = 0.490$, $P = 0.000$) and were significantly more disappointed ($R_o = 0.313$, $P = 0.001$). The feelings of the respondents who read the article that indicates a part of the applied solutions, i.e. that indicates concern are significantly associated with less hope ($R_o = -0.434$, $P = 0.001$), greater disappointment ($R_o = 0.449$, $P = 0.001$) and significantly lower awareness on the environment ($R_o = -0.231$, $P = 0.001$). Respondents in this group to whom the article gives hope are significantly better for future engagement ($R_o = 0.476$, $P = 0.001$) and have greater environmental awareness ($R_o = 0.449$, $P = 0.001$), but are less disappointed ($R_o = 0.449$, $P = 0.001$). Respondents who were more disappointed by this article were more determined for

future engagement ($R_o = 0.449$, $P = 0.001$). Determination after reading an article that provides a solution in the future is very strongly negatively associated with hope and positively with disappointment (Table 7).

Table 7. Correlation of indicators of evoked emotions in respondents in the observed groups (Spearman's correlation coefficient R_o (P))				
	Hope	Determination	Disappointment	More environmental awareness
Group 1				
Feeling	-0.351** (0.000)	0.185 (0.055)	0.379** (0.000)	0.150 (0.117)
Hope	1	0.385** (0.000)	-0.158 (0.099)	0.186 (0.051)
Determination		1	0.270** (0.005)	0.490** (0.000)
Disappointment			1	0.313** (0.001)
Group 2				
Feeling	-0.434** (0.000)	-0.100 (0.303)	0.449** (0.000)	-0.231* (0.016)
Hope	1	0.476** (0.000)	-0.197* (0.040)	0.444** (0.000)
Determination		1	0.107 (0.267)	0.556** (0.000)
Disappointment			1	0.076 (0.429)
Group 3				
Feeling	-0.589* (0.000)	-0.178 (0.059)	0.463** (0.000)	0.151 (0.111)
Hope	1	0.461** (0.000)	-0.337** (0.000)	0.396** (0.000)
Determination		1	0.105 (0.266)	0.398** (0.000)
Disappointment			1	0.101 (0.288)
**. Correlation is significant at the 0.01 level (2-tailed).				
*. Correlation is significant at the 0.05 level (2-tailed).				

Correlation between self-efficacy indicators and emotions in the observed groups are represented in table 8 .

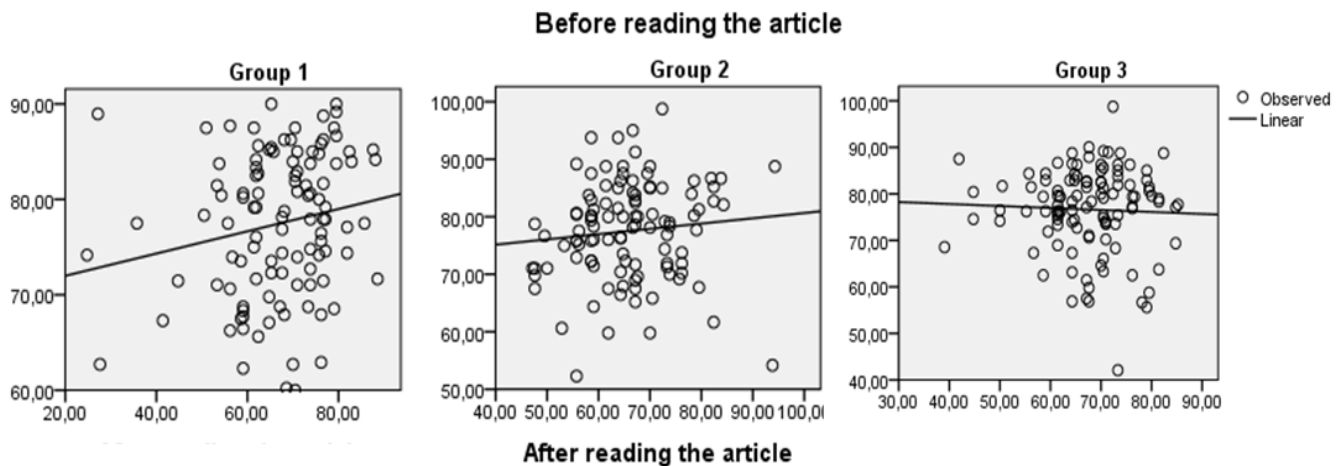
Table 8 Correlation between self-efficacy indicators and emotions in the observed groups (Spearman correlation coefficient Ro (P))					
	Feelings	Hope	Determination	Disappointment	Environmental awareness
Group 1					
TI	0.184 (0.054)	0.011 (0.907)	0.033 (0.731)	0.004 (0.964)	0.039 (0.683)
TIN	0.167 (0.082)	0.134 (0.164)	0.139 (0.150)	0.166 (0.085)	0.153 (0.113)
ES	0.055 (0.568)	0.067 (0.489)	0.132 (0.172)	0.105 (0.227)	-0.035 (0.717)
FO	0.096 (0.317)	0.040 (0.680)	0.136 (0.158)	-0.018 (0.855)	0.248 (0.009)
Group 2					
TI	-0.208 (0.030)	0.291 (0.002)	0.351 (0.000)	-0.130 (0.179)	0.254 (0.008)
TIN	-0.275 (0.004)	0.257 (0.007)	0.213 (0.027)	-0.270 (0.005)	0.258 (0.007)
ES	-0.305 (0.001)	0.329 (0.001)	0.215 (0.026)	0.010 (0.030)	0.052 (0.597)
FO	-0.122 (0.210)	0.204 (0.034)	0.069 (0.480)	0.022 (0.819)	0.169 (0.080)
Group 3					
TI	-0.110 (0.247)	0.128 (0.178)	0.201 (0.033)	-0.063 (0.507)	0.066 (0.488)
TIN	0.143 (0.130)	-0.002 (0.985)	0.207 (0.028)	-0.086 (0.363)	0.066 (0.585)
ES	0.071 (0.455)	0.074 (0.441)	0.030 (0.756)	-0.013 (0.888)	-0.032 (0.732)
FO	0.005 (0.958)	0.070 (0.476)	-0.045 (0.638)	0.121 (0.200)	0.110 (0.247)
TI-Topic Importance; TIN-Topic involvement; ES-Environmental Self-identity; FO-Future Orientation/ Attitude; Bolding values are statistically significant					

The only significant correlation between the first and second part of the survey in the group of respondents who read an article that only presents a problem, is between future orientation and attitude and environmental awareness. Respondents who had a better future orientation / attitude towards the environment also had a greater awareness of the environment ($R_o = 0.248$; $P = 0.009$). Respondents who found this topic more important after reading the article indicating some of the applied solutions felt significantly greater hope ($R_o = 0.291$; $P = 0.002$), greater determination for future engagement ($R_o = 0.351$; $P = 0.000$) and greater awareness of environment ($R_o = 0.254$; $P = 0.008$), but their feelings ($R_o = -0.208$; $P = 0.030$) and their disappointments were lower. The only disappointment was not significantly correlated. hope ($R_o = -0.257$; $P = 0.007$), determination for future engagement ($R_o = 0.213$; $P = 0.027$), and had more environmental awareness ($R_o = 0.258$; $P = 0.007$), but with significantly less emotion and Respondents who had higher environmental self-awareness had significantly greater hope and determination for future engagement, and significantly less feelings and disappointments. Respondents of this group who had better future orientation / attitude towards the environment also felt greater hope. a group of respondents who read an article that provides opportunities to solve in the future a significant p The positive correlation was the importance of the topic and involvement in the topic with determination for future engagement, i.e. respondents who are interested in the topic and the more involved in the topic were more determined for future engagement (Table 8).

The correlation analysis between environmental self-efficacy before reading the article and emotions after reading the article in the examined groups is presented in Graph 15.

From Chart 15, we see a significant positive correlation between environmental self-efficacy before reading an article and emotion after reading an article that only presents a

problem. In the respondents who read the article that indicates a part of the applied solutions, the correlation was positive, but weak, while in the respondents who read the article in which the possibilities of solving in the future are presented, it was slightly negative ($r = -0.024$).

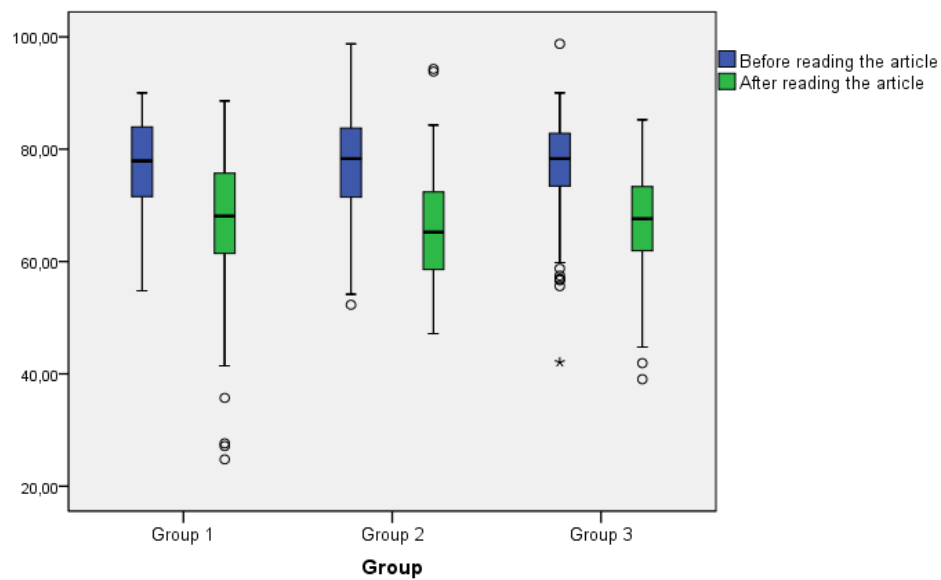


Graph 15 Correlation analysis between environmental self-efficacy before reading the article and emotions after reading the article in the examined groups

Graph 16 presents the distribution of the value of the total score of environmental self-efficacy of an individual before reading the article and the emotions caused after reading the article.

From Graph 16, which presents the distribution of values of the total score of environmental self-efficacy of an individual before reading the article and the emotions caused after reading the article, we see higher values before reading the article.

The results of the Mann-Whitney U test showed significantly lower values of the total score after reading the text, in Group 1 ($Z = -7.111$; $P = 0.000$), Group 1 ($Z = -8.188$; $P = 0.000$) and Group 3 ($Z = -7.231$; $P = 0.000$).



Graph 16 Distribution of values of the total score of ecological self-efficiency of an individual before reading an article and evoked emotions after reading an article

Conclusion and Discussion

This study aimed to investigate the extent to which Constructive Journalism and the concept of circular economics are related to ecology. To compare the elements of constructive journalism based on emotions and solutions, we included three different aspects of the text, where the first and third texts were of opposite content.

As global topics, Constructive Journalism and the concept of circular economy deserve a large sample and choice of respondents regardless of education, age, gender and part of the world in which they live. The survey included 334 respondents who did not differ significantly in age, educational level and place of residence between the surveyed groups.

The influence of journalism is noticeable in all segments of people's lives. Given the current problems related to global environmental pollution and the aspiration of individuals to reduce pollution and manage waste, there is a need for a connected operation of the Circular Economy and Constructive Journalism. People need to believe that their actions can have a noticeable impact on their environment and that there is a belief that their contribution is significant to society. By strengthening the concept of the Circular Economy, journalism in people can increase environmental self-awareness and enhance a sense of self-efficacy. In this paper, the segments of self-efficacy emphasize the importance of the topic, which is important for over 90% of respondents. The environment is very important for more than half of the survey participants, and only for 2.1% of respondents the issue is neutral. In terms of the environment, the media is very important for almost half of the respondents, while every tenth respondent thought that the importance was neutral. This is very important for the success of the application of circularity through the construction of collective awareness of the impact of everyday practice on our lives, but also on future generations. The media increases self-efficiency. Constructive

Journalism can be seen as an “alternative reporting pattern” that complements the classic “objective journalism” (Meier 2018).

Involvement in the topic (moderator of great importance) is very important. More than 60% of respondents have a strong personal interest in environmental and sustainability issues, and more than half fully agree that making the right decisions about the environment and sustainability for society is vital. One in three respondents claims to spend time thinking about environmental issues, however for 45% of respondents there are many problems that concern them more than environmental and sustainability issues.

Within the social sciences, there is a growing interest in measuring various aspects of personal ecological self-identity that show the concern of the individual and the public for the environment. Ecological self-identity is defined as “an individual’s perception of himself as a type of person who behaves in an environmentally friendly way” (Van der Werff et al. 2013). For 65% of respondents, environmental behavior is important, more than half of the respondents consider themselves to be very environmentally friendly, and 45% have previously participated in an environmental initiative. It is very important that more than half of the respondents do their best to "save the planet" with their personal way of life and a healthier life for all, and more than a third may make a little effort. Given that ecological self-identity through worldview directly or indirectly affects environmental behavior and is very important for environmental intentions and behaviors, the influence of journalism is very important especially in promoting environmental actions.

Future orientation / attitude is very important for the Circular Economy, because success depends on future activities. Nearly 60% of respondents think they are an optimistic person and are willing to sacrifice their current happiness or well-being to achieve future results, over 70% think about the future every day, and slightly less than half of respondents mostly act when things need to be resolved.

In addition to presenting problems, Constructive Journalism wants to look to the future, explore possible solutions and show perspectives and hope. Constructive news reporting will increase positive emotions such as optimism and hope, while reducing negative emotions that include fear, exclusion, anger, etc. (Fredrickson, 2001).

In my research, the effect of three different articles were examined, the first of which only presents the problem, the second indicates a part of the applied solutions and the third amounts to the possibility of solving in the future. The text that only presents the problem caused different emotions in the respondents than the texts that indicate a part of the applied solutions and the possibilities of solving in the future. Respondents who read an article that only poses a problem and is only a concern for the environment had significantly stronger feelings, less hope and were more disappointed than those who read the other two articles. These respondents were less prepared for determination for future actions and had less awareness of the environment than the respondents of the other two groups. In the group of respondents who read the article that indicates a part of the applied solutions, hope was the most common, they showed the least feelings and were the least disappointed in relation to other respondents. Respondents who read the third article outlining future solutions had the same determination for future engagement and the same environmental awareness as respondents who read the text on applied solutions. However, these respondents expressed more feelings, less hope and were more disappointed.

Hope and disappointment in this paper were negatively related which is to be expected because emotions are incompatible (Fredrickson, 2001). An article that only presents a problem provokes negative emotions much more strongly, while an article that points out a part of the problem and an article that points out a part of the applied solutions provokes positive emotions much more strongly. It has been confirmed in the literature that readers of solutions-focused articles feel “inspired” and “more optimistic” (Curri & Hammonds. 2014). In a study conducted by van Venrooj et al. (2021) unconstructive news has led to a greater increase in negative emotions than news based on solutions. Readers of solutions-focused articles feel more "inspired" and "optimistic" (Curry and Hammonds, 2014).

Constructive journalism can also be applied to children. In a study in which children aged 8 to 13 read a story that contains constructive elements and a story that does not contain constructive news, they caused lower levels of negative emotional responses and provided more inspiration for engagement than non-constructive news (Kleemans et al. 2017).

In a study conducted by McIntire (2017), she found that news that represents solutions to social problems in a newspaper story causes less negative feelings in readers and has more favorable attitudes towards solving the problem than when no solution or ineffective solution is mentioned. Reading about an effective solution, however, did not affect the readers' intentions in behavior or actual behavior. The results of this paper show greater determination for the future engagement of readers who have read an article that indicates a part of the applied solutions and an article that presents the possibility of solutions in the future than those who read an article that only presents a problem.

Both tested elements of Constructive Journalism showed that most of the respondents have self-awareness about preserving the environment and positive and negative emotions that

appear after reading the article. For the adult population, environmental self-efficacy is more important than the emotions evoked by a journalistic article. Therefore, Constructive Journalism should be based on the basic values of traditional journalism.

Ecological self-identity was somewhat higher among respondents who read an article outlining possible solutions in the future, while involvement in the topic and future orientation was lowest. There was no significant difference in the examined attitudes between the groups.

This research showed that self-efficacy on environmental protection is stronger than the emotions that appear after reading the text. Constructive Journalism aims to achieve certain effects on the audience - at the micro level of users, at the meson level of attachment to the media house and at the macro level of progress of society.

Respondents with higher environmental self-efficacy felt significantly more emotions when reading the article that presents the problem than respondents whose environmental self-awareness is lower. Ecological self-awareness only slightly increased the emotions of the respondents who read an article that indicates a part of the applied solutions, while the respondents who read the article which presents the possibilities of solving in the future were completely unrelated. Self-efficacy is very important because it can provoke a chain reaction by uniting individuals into small groups, from which small communities are formed, etc. Self-efficacy can be a powerful tool as a result of a constructive approach to media reporting.

This paper recommends further examination of constructive journalism, especially among children and young people, as it may influence future behavior and involvement in practical solutions. The paper presents information that speaks about the possible active role of journalists in shaping their news in a way that informs and influences its readers.

The article that presents the problem without a solution caused strong feelings in the reader, more awareness of the environment, but the least hope. For readers of the article, the article that indicates a part of the applied solutions in the first place has more awareness of the environment, hope and determination for future engagement, while disappointment is the least. An article that gives the possibility of a solution in the future in the first place causes readers to be more aware of the environment and makes them determined for future engagement, but it also causes the least disappointment.

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Figures list:

Figure 1: Circular Economy

Figure 2: Visualized Diagram

Rogers, R. (1996). Cities for a small planet. *World Heritage Review*, (3),

Appendix

Analysis Output for Basic Socio-demographic data

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	207	62,0	62,2	62,2
	Male	126	37,7	37,8	100,0
	Total	333	99,7	100,0	
Missing	System	1	,3		
Total		334	100,0		

Test Statistics

	Gender
Chi-Square	19,703 ^a
df	1
Asymp. Sig.	,000

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 166,5.

To what age group do you belong:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20 - 30 years	229	68,6	68,6	68,6
	30 - 40 years	43	12,9	12,9	81,4
	40 - 50 years	35	10,5	10,5	91,9
	50 and above	27	8,1	8,1	100,0
	Total	334	100,0	100,0	

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3,636 ^a	6	,726
Likelihood Ratio	3,603	6	,730
Linear-by-Linear Association	,335	1	,563
N of Valid Cases	334		

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 8,81.

Level of education:

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid High School/College	62	18,6	18,6	18,6
University Undergraduate degree (BA, BSc)	117	35,0	35,1	53,8
Master's degree (MA, MSc)	117	35,0	35,1	88,9
Doctorate (PhD)	36	10,8	10,8	99,7
prefer not to answer	1	,3	,3	100,0
Total	333	99,7	100,0	
Missing System	1	,3		
Total	334	100,0		

Chi-Square Tests

VAR00001	Value	df	Asymp. Sig. (2-sided)
1,00 Pearson Chi-Square	5,556 ^a	8	,697
Likelihood Ratio	6,329	8	,610
Linear-by-Linear Association	2,980	1	,084
N of Valid Cases	333		

a. 3 cells (20,0%) have expected count less than 5. The minimum expected count is ,33.

Where is your home located:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	North America/Central America	27	8,1	8,1	8,1
	South America	1	,3	,3	8,4
	Africa	4	1,2	1,2	9,6
	Asia	4	1,2	1,2	10,8
	Australia	7	2,1	2,1	12,9
	Europe	285	85,3	85,6	98,5
	Other	5	1,5	1,5	100,0
	Total	333	99,7	100,0	
Missing	System	1	,3		
Total		334	100,0		

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13,173 ^a	12	,357
Likelihood Ratio	20,442	12	,059
Linear-by-Linear Association	,646	1	,422
N of Valid Cases	333		

a. 15 cells (71,4%) have expected count less than 5. The minimum expected count is ,32.

Analysis Output for Topic Importance

How important is the environment to you?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	189	56,6	56,8	56,8
	Important	137	41,0	41,1	97,9
	Neutral	7	2,1	2,1	100,0
	Total	333	99,7	100,0	
Missing	System	1	,3		
Total		334	100,0		

How important is the media in regards to the environment?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	165	49,4	49,5	49,5
	Important	131	39,2	39,3	88,9
	Neutral	33	9,9	9,9	98,8
	Not important	3	,9	,9	99,7
	Prefer not to answer	1	,3	,3	100,0
	Total	333	99,7	100,0	
Missing	System	1	,3		
Total		334	100,0		

How important is the media in regards to the environment?

Group			Frequency	Percent	Valid Percent	Cumulative Percent
Group 1	Valid	Very Important	59	52,7	52,7	52,7
		Important	39	34,8	34,8	87,5
		Neutral	14	12,5	12,5	100,0
		Total	112	100,0	100,0	
Group 2	Valid	Very Important	58	53,2	53,2	53,2
		Important	36	33,0	33,0	86,2
		Neutral	12	11,0	11,0	97,2
		Not important	2	1,8	1,8	99,1
		Prefer not to answer	1	,9	,9	100,0
		Total	109	100,0	100,0	
Group 3	Valid	Very Important	48	42,5	42,9	42,9
		Important	56	49,6	50,0	92,9
		Neutral	7	6,2	6,3	99,1
		Not important	1	,9	,9	100,0
		Total	112	99,1	100,0	
	Missing	System	1	,9		
	Total		113	100,0		

Analysis Output for Topic involvement

I have a strong personal interest in environmental and sustainability issues

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	106	31,7	31,7	31,7
2	112	33,5	33,5	65,3
3	68	20,4	20,4	85,6
4	27	8,1	8,1	93,7
5	21	6,3	6,3	100,0
Total	334	100,0	100,0	

Making the right decisions about the environment and sustainability for the Society is vital.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	190	56,9	57,1	57,1
2	79	23,7	23,7	80,8
3	10	3,0	3,0	83,8
4	19	5,7	5,7	89,5
5	35	10,5	10,5	100,0
Total	333	99,7	100,0	
Missing System	1	,3		
Total	334	100,0		

I spend time thinking about environmental and sustainability issues.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	70	21,0	21,0	21,0
2	107	32,0	32,1	53,2
3	99	29,6	29,7	82,9
4	50	15,0	15,0	97,9
5	7	2,1	2,1	100,0
Total	333	99,7	100,0	
Missing System	1	,3		
Total	334	100,0		

There are many problems that concern me more than environmental and Sustainability issues

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	53	15,9	15,9	15,9
	2	93	27,8	27,8	43,7
	3	120	35,9	35,9	79,6
	4	56	16,8	16,8	96,4
	5	12	3,6	3,6	100,0
	Total	334	100,0	100,0	

Analysis Output for Environmental Self-identity's

Environmentally friendly behavior is an important part of who I am

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	84	25,1	25,2	25,2
	2	132	39,5	39,6	64,9
	3	73	21,9	21,9	86,8
	4	32	9,6	9,6	96,4
	5	12	3,6	3,6	100,0
	Total	333	99,7	100,0	
Missing	System	1	,3		
	Total	334	100,0		

I consider myself a very Eco-friendly individual

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	47	14,1	14,1	14,1
	2	133	39,8	39,9	54,1
	3	99	29,6	29,7	83,8
	4	48	14,4	14,4	98,2
	5	6	1,8	1,8	100,0
	Total	333	99,7	100,0	
Missing	System	1	,3		
	Total	334	100,0		

I engaged in an environmental friendly initiative before

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	65	19,5	19,5	19,5
	2	85	25,4	25,5	45,0
	3	78	23,4	23,4	68,5
	4	67	20,1	20,1	88,6
	5	38	11,4	11,4	100,0
	Total	333	99,7	100,0	
Missing	System	1	,3		
Total		334	100,0		

On a daily bases, how much do you contribute with your personal way of life to "saving the planet" and to a healthier life for everyone?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I try my best	169	50,6	50,6	50,6
	Maybe a little	114	34,1	34,1	84,7
	Neutral	20	6,0	6,0	90,7
	Insufficient	28	8,4	8,4	99,1
	Not at all	2	,6	,6	99,7
	Prefer not to say	1	,3	,3	100,0
	Total	334	100,0	100,0	

Analysis Output for Future Orientation/ Attitude

Would you consider yourself an optimistic person?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	56	16,8	16,8	16,8
	2	138	41,3	41,4	58,3
	3	83	24,9	24,9	83,2
	4	40	12,0	12,0	95,2
	5	16	4,8	4,8	100,0
	Total	333	99,7	100,0	
Missing	System	1	,3		
Total		334	100,0		

I think about the future on a daily basis

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	122	36,5	36,5	36,5
2	122	36,5	36,5	73,1
3	58	17,4	17,4	90,4
4	19	5,7	5,7	96,1
5	13	3,9	3,9	100,0
Total	334	100,0	100,0	

I am ready to sacrifice my immediate, current happiness or well-being in order to achieve future results

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	63	18,9	18,9	18,9
2	127	38,0	38,0	56,9
3	92	27,5	27,5	84,4
4	41	12,3	12,3	96,7
5	11	3,3	3,3	100,0
Total	334	100,0	100,0	

I mainly act when immediate matters need to be dealt with

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	55	16,5	16,5	16,5
2	104	31,1	31,1	47,6
3	100	29,9	29,9	77,5
4	56	16,8	16,8	94,3
5	19	5,7	5,7	100,0
Total	334	100,0	100,0	

Analysis Output for Article material

Specifically, the article makes me feel hopeful					
Group		Frequency	Percent	Valid Percent	Cumulative Percent
Group 1	Valid	Extremely	1	,9	,9
		Considerable	17	15,2	16,4
		Somewhat	16	14,3	30,9
		A little	18	16,1	47,3
		No really	41	36,6	84,5
		Not at all	13	11,6	96,4
		Prefer not to answer	4	3,6	100,0
	Total	110	98,2	100,0	
	Missing System	2	1,8		
	Total	112	100,0		
Group 2	Valid	Extremely	4	3,7	3,7
		Considerable	50	45,9	49,5
		Somewhat	29	26,6	76,1
		A little	18	16,5	92,7
		No really	7	6,4	99,1
		Prefer not to answer	1	,9	100,0
	Total	109	100,0	100,0	
		Extremely	4	3,5	3,5
Group 3	Valid	Considerable	35	31,0	34,5
		Somewhat	41	36,3	70,8
		A little	13	11,5	82,3
		No really	16	14,2	96,5
		Not at all	4	3,5	100,0
	Total	113	100,0	100,0	

The article makes me feel determine for future engagement

Group		Frequency	Percent	Valid Percent	Cumulative Percent
Group 1	Valid	Extremely	8	7,1	7,3
		Considerable	31	27,7	35,8
		Somewhat	36	32,1	68,8
		A little	16	14,3	83,5
		No really	12	10,7	94,5
		Not at all	3	2,7	97,2
		Prefer not to answer	3	2,7	100,0
		Total	109	97,3	100,0
	Missing	System	3	2,7	
	Total		112	100,0	
Group 2	Valid	Extremely	7	6,4	6,4
		Considerable	41	37,6	44,0
		Somewhat	32	29,4	73,4
		A little	15	13,8	87,2
		No really	11	10,1	97,2
		Not at all	1	,9	98,2
		Prefer not to answer	2	1,8	100,0
		Total	109	100,0	100,0
Group 3	Valid	Extremely	4	3,5	3,5
		Considerable	42	37,2	40,7
		Somewhat	46	40,7	81,4
		A little	10	8,8	90,3
		No really	6	5,3	95,6
		Not at all	2	1,8	97,3
		Prefer not to answer	3	2,7	100,0
		Total	113	100,0	100,0

The article makes me feel disappointed

Group		Frequency	Percent	Valid Percent	Cumulative Percent
Group 1	Valid	Extremely	5	4,5	4,5
		Considerable	30	26,8	31,8
		Somewhat	32	28,6	60,9
		A little	21	18,8	80,0
		No really	18	16,1	96,4
		Not at all	2	1,8	98,2
		Prefer not to answer	2	1,8	100,0
		Total	110	98,2	100,0
	Missing	System	2	1,8	
	Total		112	100,0	
Group 2	Valid	Extremely	1	,9	,9
		Considerable	14	12,8	13,8
		Somewhat	10	9,2	22,9
		A little	18	16,5	39,4
		No really	38	34,9	74,3
		Not at all	25	22,9	97,2
		Prefer not to answer	3	2,8	100,0
		Total	109	100,0	100,0
Group 3	Valid	Extremely	9	8,0	8,0
		Considerable	12	10,6	18,6
		Somewhat	17	15,0	33,6
		A little	26	23,0	56,6
		No really	35	31,0	87,6
		Not at all	14	12,4	100,0
		Total	113	100,0	100,0

The article gives me more awareness about the environment

Group		Frequency	Percent	Valid Percent	Cumulative Percent
Group 1	Valid	Extremely	15	13,4	13,6
		Considerable	33	29,5	43,6
		Somewhat	37	33,0	77,3
		A little	8	7,1	84,5
		Not at all	13	11,6	96,4
		Prefer not to answer	4	3,6	100,0
	Total	110	98,2	100,0	
	Missing	System	2	1,8	
	Total	112	100,0		
Group 2	Valid	Extremely	20	18,3	18,3
		Considerable	37	33,9	52,3
		Somewhat	24	22,0	74,3
		A little	22	20,2	94,5
		Not at all	4	3,7	98,2
		Prefer not to answer	2	1,8	100,0
	Total	109	100,0	100,0	
Group 3	Valid	Extremely	15	13,3	13,3
		Considerable	50	44,2	57,5
		Somewhat	26	23,0	80,5
		A little	11	9,7	90,3
		Not at all	11	9,7	100,0
		Total	113	100,0	100,0

Analysis Output for Self-efficacy

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Topic Importance	Group 1	112	90,4018	9,63614	,91053	88,5975	92,2061	41,67	100,00
	Group 2	109	90,6728	9,93321	,95143	88,7869	92,5587	58,33	100,00
	Group 3	113	90,9292	8,94743	,84170	89,2615	92,5969	41,67	100,00
	Total	334	90,6687	9,48289	,51888	89,6480	91,6894	41,67	100,00
Topic involvement	Group 1	111	74,5045	13,08981	1,24243	72,0423	76,9667	40,00	100,00
	Group 2	108	73,6111	14,89580	1,43335	70,7697	76,4526	30,00	100,00
	Group 3	113	71,9912	15,06741	1,41742	69,1827	74,7996	30,00	95,00
	Total	332	73,3584	14,37314	,78883	71,8067	74,9102	30,00	100,00
Environmental Self-identity's	Group 1	112	75,4687	12,33641	1,16568	73,1589	77,7786	42,50	100,00
	Group 2	107	75,9424	12,64076	1,22203	73,5196	78,3652	49,17	100,00
	Group 3	112	76,4435	12,67815	1,19797	74,0696	78,8173	40,83	100,00
	Total	331	75,9517	12,51971	,68815	74,5980	77,3054	40,83	100,00
Future Orientation/ Attitude	Group 1	112	69,0179	13,02872	1,23110	66,5784	71,4574	35,00	100,00
	Group 2	108	68,9815	14,40014	1,38565	66,2346	71,7284	25,00	100,00
	Group 3	113	66,9912	15,22949	1,43267	64,1525	69,8298	25,00	100,00
	Total	333	68,3183	14,23853	,78027	66,7834	69,8532	25,00	100,00

ANOVA

				Sum of Squares	df	Mean Square	F	Sig.
Topic Importance	Between Groups	(Combined)		15,649	2	7,825	,087	,917
		Linear Term	Unweighted	15,647	1	15,647	,173	,678
			Weighted	15,646	1	15,646	,173	,678
			Deviation	,004	1	,004	,000	,995
	Within Groups		29929,460	331	90,421			
	Total		29945,110	333				
Topic involvement	Between Groups	(Combined)		363,941	2	181,970	,880	,416
		Linear Term	Unweighted	353,721	1	353,721	1,711	,192
			Weighted	354,324	1	354,324	1,714	,191
			Deviation	9,616	1	9,616	,047	,829
	Within Groups		68016,406	329	206,737			
	Total		68380,346	331				
Environmental Self-identity's	Between Groups	(Combined)		53,216	2	26,608	,169	,845
		Linear Term	Unweighted	53,203	1	53,203	,338	,562
			Weighted	53,203	1	53,203	,338	,562
			Deviation	,014	1	,014	,000	,993
	Within Groups		51672,010	328	157,537			
	Total		51725,227	330				
Future Orientation/ Attitude	Between Groups	(Combined)		301,340	2	150,670	,742	,477
		Linear Term	Unweighted	231,045	1	231,045	1,138	,287
			Weighted	231,689	1	231,689	1,141	,286
			Deviation	69,651	1	69,651	,343	,558
	Within Groups		67006,918	330	203,051			
	Total		67308,258	332				

Bonferroni

Dependent Variable	(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Topic Importance	Group 1	Group 2	-,27100	1,27941	1,000	-3,3495	2,8075
		Group 3	-,52742	1,26788	1,000	-3,5782	2,5234
	Group 2	Group 1	,27100	1,27941	1,000	-2,8075	3,3495
		Group 3	-,25642	1,27661	1,000	-3,3282	2,8154
	Group 3	Group 1	,52742	1,26788	1,000	-2,5234	3,5782
		Group 2	,25642	1,27661	1,000	-2,8154	3,3282
Topic involvement	Group 1	Group 2	,89339	1,94338	1,000	-3,7829	5,5697
		Group 3	2,51335	1,92146	,575	-2,1102	7,1369
	Group 2	Group 1	-,89339	1,94338	1,000	-5,5697	3,7829
		Group 3	1,61996	1,93488	1,000	-3,0359	6,2758
	Group 3	Group 1	-2,51335	1,92146	,575	-7,1369	2,1102
		Group 2	-1,61996	1,93488	1,000	-6,2758	3,0359
Environmental Self-identity's	Group 1	Group 2	-,47362	1,69673	1,000	-4,5565	3,6093
		Group 3	-,97470	1,67725	1,000	-5,0107	3,0613
	Group 2	Group 1	,47362	1,69673	1,000	-3,6093	4,5565
		Group 3	-,50108	1,69673	1,000	-4,5840	3,5818
	Group 3	Group 1	,97470	1,67725	1,000	-3,0613	5,0107
		Group 2	,50108	1,69673	1,000	-3,5818	4,5840
Future Orientation/Attitude	Group 1	Group 2	,03638	1,92173	1,000	-4,5878	4,6605
		Group 3	2,02671	1,89997	,861	-2,5451	6,5985
	Group 2	Group 1	-,03638	1,92173	1,000	-4,6605	4,5878
		Group 3	1,99033	1,91756	,900	-2,6238	6,6044
	Group 3	Group 1	-2,02671	1,89997	,861	-6,5985	2,5451
		Group 2	-1,99033	1,91756	,900	-6,6044	2,6238

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Now, we would like to assess how do you generally feel after reading the article	Group 1	110	72,8788	14,77992	1,40921	70,0858	75,6718	33,33	100,00
	Group 2	109	56,8807	14,55990	1,39459	54,1164	59,6450	33,33	100,00
	Group 3	113	61,9469	14,34223	1,34920	59,2736	64,6202	33,33	100,00
	Total	332	63,9056	15,96952	,87644	62,1815	65,6297	33,33	100,00
Specifically, the article makes me feel hopeful	Group 1	110	53,7662	20,10339	1,91678	49,9672	57,5652	14,29	100,00
	Group 2	109	74,3119	15,28018	1,46358	71,4109	77,2130	14,29	100,00
	Group 3	113	69,6587	17,19515	1,61758	66,4536	72,8637	28,57	100,00
	Total	332	65,9208	19,65625	1,07878	63,7987	68,0429	14,29	100,00
The article makes me feel determine for future engagement	Group 1	109	69,5937	19,45020	1,86299	65,9009	73,2865	14,29	100,00
	Group 2	109	72,3460	17,84658	1,70939	68,9577	75,7343	14,29	100,00
	Group 3	113	72,6928	16,92006	1,59171	69,5390	75,8466	14,29	100,00
	Total	331	71,5580	18,08680	,99414	69,6024	73,5137	14,29	100,00
The article makes me feel disappointed	Group 1	110	67,4026	18,57413	1,77097	63,8926	70,9126	14,29	100,00
	Group 2	109	49,8034	19,97870	1,91361	46,0103	53,5965	14,29	100,00
	Group 3	113	57,7750	20,77133	1,95400	53,9034	61,6466	28,57	100,00
	Total	332	58,3477	21,00559	1,15283	56,0799	60,6155	14,29	100,00
The article gives me more awareness about the environment	Group 1	110	71,4286	22,97806	2,19087	67,0863	75,7708	14,29	100,00
	Group 2	109	76,0157	19,23329	1,84222	72,3641	79,6673	14,29	100,00
	Group 3	113	75,9798	19,49298	1,83375	72,3464	79,6131	28,57	100,00
	Total	332	74,4836	20,68284	1,13512	72,2507	76,7166	14,29	100,00

ANOVA								
				Sum of Squares	df	Mean Square	F	Sig.
Now, we would like to assess how do you generally feel after reading the article	Between Groups	(Combined)		14669,528	2	7334,764	34,600	,000
		Linear Term	Unweighted	6661,260	1	6661,260	31,423	,000
			Weighted	6548,737	1	6548,737	30,892	,000
			Deviation	8120,791	1	8120,791	38,308	,000
	Within Groups		69743,959	329	211,988			
	Total		84413,487	331				
Specifically, the article makes me feel hopeful	Between Groups	(Combined)		25504,273	2	12752,136	40,978	,000
		Linear Term	Unweighted	14078,185	1	14078,185	45,239	,000
			Weighted	13882,492	1	13882,492	44,610	,000
			Deviation	11621,781	1	11621,781	37,345	,000
	Within Groups		102383,605	329	311,196			
	Total		127887,878	331				
The article makes me feel determine for future engagement	Between Groups	(Combined)		633,770	2	316,885	,968	,381
		Linear Term	Unweighted	532,867	1	532,867	1,629	,203
			Weighted	528,026	1	528,026	1,614	,205
			Deviation	105,744	1	105,744	,323	,570
	Within Groups		107319,865	328	327,195			
	Total		107953,635	330				
The article makes me feel disappointed	Between Groups	(Combined)		17013,632	2	8506,816	21,690	,000
		Linear Term	Unweighted	5166,601	1	5166,601	13,173	,000
			Weighted	5046,381	1	5046,381	12,867	,000
			Deviation	11967,252	1	11967,252	30,513	,000
	Within Groups		129035,052	329	392,204			
	Total		146048,685	331				
The article gives me more awareness about the environment	Between Groups	(Combined)		1535,474	2	767,737	1,803	,166
		Linear Term	Unweighted	1154,565	1	1154,565	2,712	,101
			Weighted	1144,295	1	1144,295	2,688	,102
			Deviation	391,180	1	391,180	,919	,338
	Within Groups		140059,682	329	425,713			
	Total		141595,156	331				

Multiple Comparisons

Bonferroni

Dependent Variable	(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Now, we would like to assess how do you generally feel after reading the article	Group 1	Group 2	15,99805*	1,96774	,000	11,2631	20,7330
		Group 3	10,93189*	1,95017	,000	6,2392	15,6245
	Group 2	Group 1	-15,99805*	1,96774	,000	-20,7330	-11,2631
		Group 3	-5,06617*	1,95470	,030	-9,7697	-,3626
	Group 3	Group 1	-10,93189*	1,95017	,000	-15,6245	-6,2392
		Group 2	5,06617*	1,95470	,030	,3626	9,7697
Specifically, the article makes me feel hopeful	Group 1	Group 2	-20,54569*	2,38413	,000	-26,2826	-14,8088
		Group 3	-15,89243*	2,36284	,000	-21,5781	-10,2068

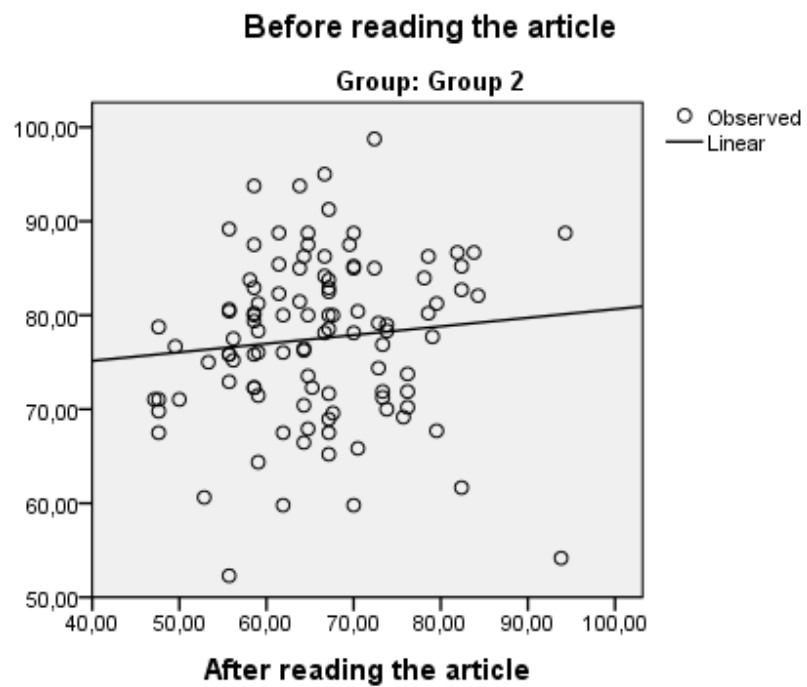
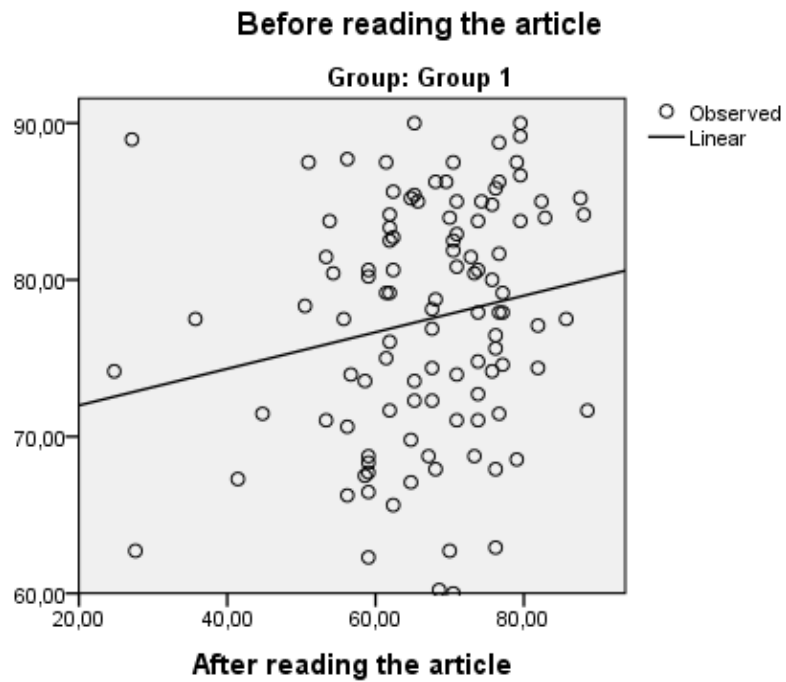
The article makes me feel determine for future engagement	Group 2	Group 1	20,54569*	2,38413	,000	14,8088	26,2826
		Group 3	4,65327	2,36832	,151	-1,0456	10,3521
	Group 3	Group 1	15,89243*	2,36284	,000	10,2068	21,5781
		Group 2	-4,65327	2,36832	,151	-10,3521	1,0456
	Group 1	Group 2	-2,75229	2,45022	,786	-8,6483	3,1437
		Group 3	-3,09908	2,42844	,608	-8,9427	2,7445
	Group 2	Group 1	2,75229	2,45022	,786	-3,1437	8,6483
		Group 3	-,34679	2,42844	1,000	-6,1904	5,4968
	Group 3	Group 1	3,09908	2,42844	,608	-2,7445	8,9427
		Group 2	,34679	2,42844	1,000	-5,4968	6,1904
	Group 1	Group 2	17,59919*	2,67651	,000	11,1588	24,0396
		Group 3	9,62763*	2,65261	,001	3,2447	16,0106
The article makes me feel disappointed	Group 2	Group 1	-17,59919*	2,67651	,000	-24,0396	-11,1588
		Group 3	-7,97156*	2,65876	,009	-14,3693	-1,5738
	Group 3	Group 1	-9,62763*	2,65261	,001	-16,0106	-3,2447
		Group 2	7,97156*	2,65876	,009	1,5738	14,3693
	Group 1	Group 2	-4,58716	2,78850	,303	-11,2971	2,1228
		Group 3	-4,55120	2,76360	,302	-11,2012	2,0988
The article gives me more awareness about the environment	Group 2	Group 1	4,58716	2,78850	,303	-2,1228	11,2971
		Group 3	,03595	2,77002	1,000	-6,6295	6,7014
	Group 3	Group 1	4,55120	2,76360	,302	-2,0988	11,2012
		Group 2	-,03595	2,77002	1,000	-6,7014	6,6295

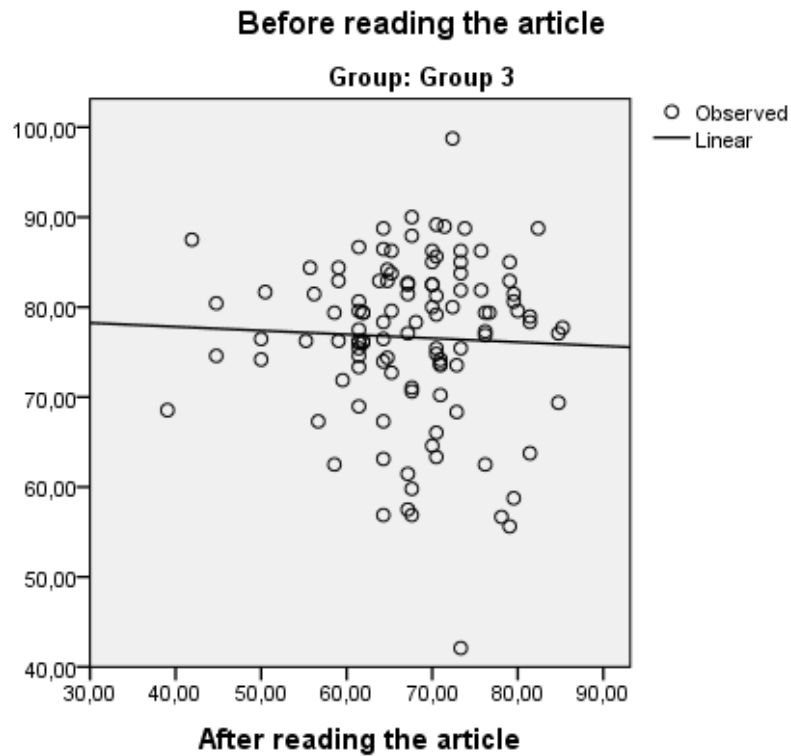
*. The mean difference is significant at the 0.05 level.

Paired Samples Test

Group			Paired Differences					t	df	Sig. (2-tailed)
			Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
						Lower	Upper			
Group 1	Pair 1	Specifically, the article makes me feel hopeful - The article makes me feel disappointed	-13,63636	28,33363	2,70151	-18,99066	-8,28207	-5,048	109	,000
Group 2	Pair 1	Specifically, the article makes me feel hopeful - The article makes me feel disappointed	24,50852	26,87361	2,57403	19,40635	29,61068	9,521	108	,000
Group 3	Pair 1	Specifically, the article makes me feel hopeful - The article makes me feel disappointed	11,88369	31,65173	2,97754	5,98407	17,78331	3,991	112	,000

Analysis Output for Correlation analysis

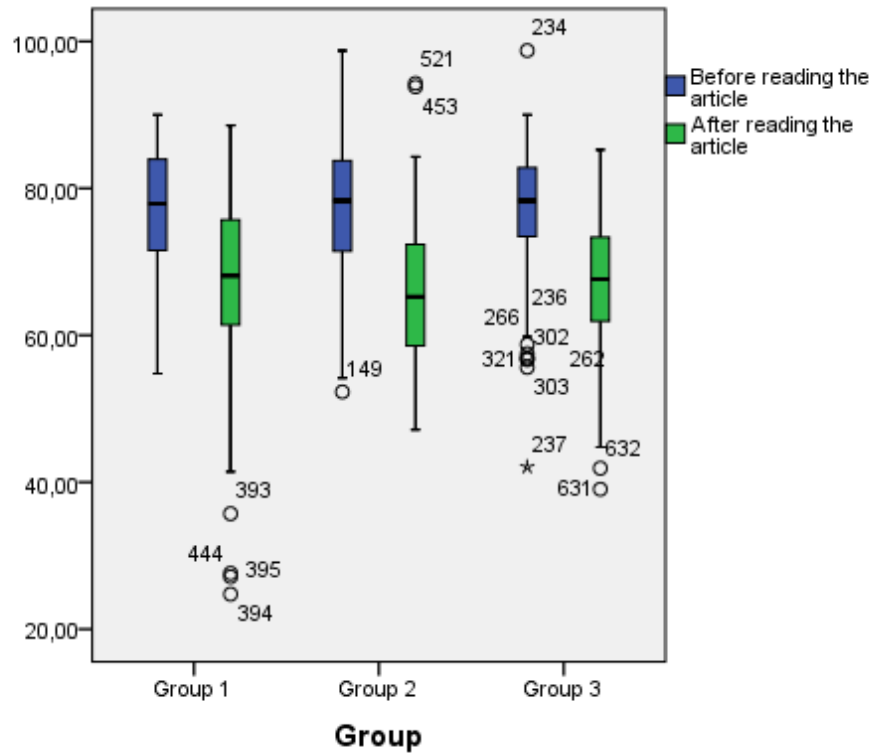




Test Statistics

Group		Score
Group 1	Mann-Whitney U	2693,000
	Wilcoxon W	8688,000
	Z	-7,111
	Asymp. Sig. (2-tailed)	,000
Group 2	Mann-Whitney U	2043,500
	Wilcoxon W	8038,500
	Z	-8,188
	Asymp. Sig. (2-tailed)	,000
Group 3	Mann-Whitney U	2798,500
	Wilcoxon W	9239,500
	Z	-7,231
	Asymp. Sig. (2-tailed)	,000

a. Grouping Variable: VAR00001



Correlations

Group				Feeling	Hope	Determination	Disappointment	More environmental awareness
Group 1	Spearman's rho	Topic Importance	Correlation Coefficient	,184	,011	,033	,004	,039
			Sig. (2-tailed)	,054	,907	,731	,964	,683
			N	110	110	109	110	110
Group 2	Spearman's rho	Topic Importance	Correlation Coefficient	-,208	,291	,351	-,130	,254
			Sig. (2-tailed)	,030	,002	,000	,179	,008
			N	109	109	109	109	109
Group 3	Spearman's rho	Topic Importance	Correlation Coefficient	-,110	,128	,201	-,063	,066
			Sig. (2-tailed)	,247	,178	,033	,507	,488
			N	113	113	113	113	113

Correlations

Group				Feeling	Hope	Determination	Disappointment	More environmental awareness
Group 1	Spearman's rho	Topic involvement	Correlation Coefficient	,167	,134	,139	,166	,153
			Sig. (2-tailed)	,082	,164	,150	,085	,113
			N	109	109	108	109	109
Group 2	Spearman's rho	Topic involvement	Correlation Coefficient	-,275	,257	,213	-,270	,258
			Sig. (2-tailed)	,004	,007	,027	,005	,007
			N	108	108	108	108	108
Group 3	Spearman's rho	Topic involvement	Correlation Coefficient	,143	-,002	,207	-,086	-,066
			Sig. (2-tailed)	,130	,985	,028	,363	,485
			N	113	113	113	113	113

Correlations

Group								
Group 1	Spearman's rho	Environmental Self-identity's	Correlation Coefficient	,055	,067	,132	,105	-,035
			Sig. (2-tailed)	,568	,489	,172	,277	,717
			N	110	110	109	110	110
Group 2	Spearman's rho	Environmental Self-identity's	Correlation Coefficient	-,305	,329	,215	-,210	,052
			Sig. (2-tailed)	,001	,001	,026	,030	,597
			N	107	107	107	107	107
Group 3	Spearman's rho	Environmental Self-identity's	Correlation Coefficient	,071	-,074	,030	-,013	-,033
			Sig. (2-tailed)	,455	,441	,756	,888	,732
			N	112	112	112	112	112

Correlations

Group								
Group 1	Spearman's rho	Future Orientation/Attitude	Correlation Coefficient	,096	,040	,136	-,018	,248
			Sig. (2-tailed)	,317	,680	,158	,855	,009
			N	110	110	109	110	110
Group 2	Spearman's rho	Future Orientation/Attitude	Correlation Coefficient	-,122	,204	,069	,022	,169
			Sig. (2-tailed)	,210	,034	,480	,819	,080
			N	108	108	108	108	108
Group 3	Spearman's rho	Future Orientation/Attitude	Correlation Coefficient	,005	,068	-,045	-,121	,110
			Sig. (2-tailed)	,958	,476	,636	,200	,247
			N	113	113	113	113	113

Correlations

Group			Topic Importance	Topic involvement	Environmental Self-identity's	Future Orientation/ Attitude
Group 1	Topic Importance	Correlation Coefficient	1	,201*	,259**	,235*
		Sig. (2-tailed)		,035	,006	,013
		N	112	111	112	112
	Topic involvement	Correlation Coefficient	,201*	1	,275**	,152
		Sig. (2-tailed)	,035		,003	,110
		N	111	111	111	111
	Environmental Self-identity's	Correlation Coefficient	,259**	,275**	1	,170
		Sig. (2-tailed)	,006	,003		,073
		N	112	111	112	112
	Future Orientation/ Attitude	Correlation Coefficient	,235*	,152	,170	1
		Sig. (2-tailed)	,013	,110	,073	
		N	112	111	112	112
Group 2	Topic Importance	Correlation Coefficient	1	,206*	,310**	,071
		Sig. (2-tailed)		,033	,001	,464
		N	109	108	107	108
	Topic involvement	Correlation Coefficient	,206*	1	,517**	,373**
		Sig. (2-tailed)	,033		,000	,000
		N	108	108	107	107
	Environmental Self-identity's	Correlation Coefficient	,310**	,517**	1	,276**
		Sig. (2-tailed)	,001	,000		,004
		N	107	107	107	106
	Future Orientation/ Attitude	Correlation Coefficient	,071	,373**	,276**	1
		Sig. (2-tailed)	,464	,000	,004	
		N	108	107	106	108
Group 3	Topic Importance	Correlation Coefficient	1	,178	,189*	,044
		Sig. (2-tailed)		,059	,046	,646
		N	113	113	112	113
	Topic involvement	Correlation Coefficient	,178	1	,450**	,449**
		Sig. (2-tailed)	,059		,000	,000
		N	113	113	112	113
	Environmental Self-identity's	Correlation Coefficient	,189*	,450**	1	,399**
		Sig. (2-tailed)	,046	,000		,000
		N	112	112	112	112
	Future Orientation/ Attitude	Correlation Coefficient	,044	,449**	,399**	1
		Sig. (2-tailed)	,646	,000	,000	
		N	113	113	112	113

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

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

Correlations

Group			Feeling	Hope	Determination	Disappointment	More environmental awareness
Group 1	Feeling	Correlation Coefficient	1,000	-,351**	,185	,379**	,150
		Sig. (2-tailed)	.	,000	,055	,000	,117
		N	110	110	109	110	110
	Hope	Correlation Coefficient	-,351**	1,000	,385**	-,158	,186
		Sig. (2-tailed)	,000	.	,000	,099	,051
		N	110	110	109	110	110
	Determination	Correlation Coefficient	,185	,385**	1,000	,270**	,490**
		Sig. (2-tailed)	,055	,000	.	,005	,000
		N	109	109	109	109	109
	Disappointment	Correlation Coefficient	,379**	-,158	,270**	1,000	,313**
		Sig. (2-tailed)	,000	,099	,005	.	,001
		N	110	110	109	110	110
Group 2	More environmental awareness	Correlation Coefficient	,150	,186	,490**	,313**	1,000
		Sig. (2-tailed)	,117	,051	,000	,001	.
		N	110	110	109	110	110
	Feeling	Correlation Coefficient	1,000	-,434**	-,100	,449**	-,231*
		Sig. (2-tailed)	.	,000	,303	,000	,016
		N	109	109	109	109	109
	Hope	Correlation Coefficient	-,434**	1,000	,476**	-,197*	,444**
		Sig. (2-tailed)	,000	.	,000	,040	,000
		N	109	109	109	109	109
	Determination	Correlation Coefficient	-,100	,476**	1,000	,107	,556**
		Sig. (2-tailed)	,303	,000	.	,267	,000
		N	109	109	109	109	109
Group 3	Disappointment	Correlation Coefficient	,449**	-,197*	,107	1,000	,076
		Sig. (2-tailed)	,000	,040	,267	.	,429
		N	109	109	109	109	109
	More environmental awareness	Correlation Coefficient	-,231*	,444**	,556**	,076	1,000
		Sig. (2-tailed)	,016	,000	,000	,429	.
		N	109	109	109	109	109
	Feeling	Correlation Coefficient	1,000	-,589**	-,178	,463**	-,151
		Sig. (2-tailed)	.	,000	,059	,000	,111
		N	113	113	113	113	113
	Hope	Correlation Coefficient	-,589**	1,000	,461**	-,337**	,396**
		Sig. (2-tailed)	,000	.	,000	,000	,000
		N	113	113	113	113	113
Group 3	Determination	Correlation Coefficient	-,178	,461**	1,000	,105	,398**
		Sig. (2-tailed)	,059	,000	.	,266	,000
		N	113	113	113	113	113
	Disappointment	Correlation Coefficient	,463**	-,337**	,105	1,000	,101
		Sig. (2-tailed)	,000	,000	,266	.	,288
		N	113	113	113	113	113
	More environmental awareness	Correlation Coefficient	-,151	,396**	,398**	,101	1,000
		Sig. (2-tailed)	,111	,000	,000	,288	.
		N	113	113	113	113	113

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

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

Correlations

Group			Topic Importance	Topic involvement	Enviro nmental Self- identit y's	Future Orient ation/ Attitud e	Feelin g	Hope	Deter minati on	Disapp ointme nt	More enviro nmental aware ness
Group 1	Topic Importance	Correlation Coefficient	1	,201*	,259**	,235*	,175	-,037	,000	,035	,044
		Sig. (2-tailed)		,035	,006	,013	,068	,703	,997	,716	,647
		N	112	111	112	112	110	110	109	110	110
	Topic involvement	Correlation Coefficient	,201*	1	,275**	,152	,137	-,218*	-,010	,140	,112
		Sig. (2-tailed)	,035		,003	,110	,156	,023	,920	,148	,247
		N	111	111	111	111	109	109	108	109	109
	Environme ntal Self- identity's	Correlation Coefficient	,259**	,275**	1	,170	,040	,115	,111	,099	,001
		Sig. (2-tailed)	,006	,003		,073	,679	,231	,252	,305	,994
		N	112	111	112	112	110	110	109	110	110
	Future Orientatio n/ Attitude	Correlation Coefficient	,235*	,152	,170	1	,059	,055	,088	-,034	,177
		Sig. (2-tailed)	,013	,110	,073		,538	,569	,366	,725	,064
		N	112	111	112	112	110	110	109	110	110
	Feeling	Correlation Coefficient	,175	,137	,040	,059	1	-,363**	,194*	,394**	,135
		Sig. (2-tailed)	,068	,156	,679	,538		,000	,043	,000	,159
		N	110	109	110	110	110	110	109	110	110
	Hope	Correlation Coefficient	-,037	-,218*	,115	,055	-,363**	1	,461**	-,072	,235*
		Sig. (2-tailed)	,703	,023	,231	,569	,000		,000	,456	,013
		N	110	109	110	110	110	110	109	110	110
	Determina tion	Correlation Coefficient	,000	-,010	,111	,088	,194*	,461**	1	,350**	,508**
		Sig. (2-tailed)	,997	,920	,252	,366	,043	,000		,000	,000
		N	109	108	109	109	109	109	109	109	109
	Disappoint ment	Correlation Coefficient	,035	,140	,099	-,034	,394**	-,072	,350**	1	,320**
		Sig. (2-tailed)	,716	,148	,305	,725	,000	,456	,000		,001
		N	110	109	110	110	110	110	109	110	110
	More environme ntal aware ness	Correlation Coefficient	,044	,112	,001	,177	,135	,235*	,508**	,320**	1
		Sig. (2-tailed)	,647	,247	,994	,064	,159	,013	,000	,001	
		N	110	109	110	110	110	110	109	110	110
Group 2	Topic Importance	Correlation Coefficient	1	,206*	,310**	,071	-,175	,310**	,378**	-,076	,301**
		Sig. (2-tailed)		,033	,001	,464	,069	,001	,000	,432	,001
		N	109	108	107	108	109	109	109	109	109
		Correlation Coefficient	,206*	1	,517**	,373**	-,297**	,228*	,048	-,221*	,146

Group 3	Topic involvement	Sig. (2-tailed)	,033		,000	,000	,002	,018	,619	,022	,131
		N	108	108	107	107	108	108	108	108	108
	Environmental Self-identity's	Correlation Coefficient	,310**	,517**	1	,276**	-,289**	,357**	,169	-,181	,036
		Sig. (2-tailed)	,001	,000		,004	,003	,000	,082	,062	,716
		N	107	107	107	106	107	107	107	107	107
	Future Orientation/ Attitude	Correlation Coefficient	,071	,373**	,276**	1	-,147	,209*	,032	-,025	,063
		Sig. (2-tailed)	,464	,000	,004		,128	,030	,741	,800	,519
		N	108	107	106	108	108	108	108	108	108
	Feeling	Correlation Coefficient	-,175	-,297**	-,289**	-,147	1	-,377**	-,058	,448**	-,177
		Sig. (2-tailed)	,069	,002	,003	,128		,000	,546	,000	,066
		N	109	108	107	108	109	109	109	109	109
	Hope	Correlation Coefficient	,310**	,228*	,357**	,209*	-,377**	1	,399**	-,147	,373**
		Sig. (2-tailed)	,001	,018	,000	,030	,000		,000	,128	,000
		N	109	108	107	108	109	109	109	109	109
	Determination	Correlation Coefficient	,378**	,048	,169	,032	-,058	,399**	1	,157	,406**
		Sig. (2-tailed)	,000	,619	,082	,741	,546	,000		,103	,000
		N	109	108	107	108	109	109	109	109	109
	Disappointment	Correlation Coefficient	-,076	-,221*	-,181	-,025	,448**	-,147	,157	1	,084
		Sig. (2-tailed)	,432	,022	,062	,800	,000	,128	,103		,388
		N	109	108	107	108	109	109	109	109	109
	More environmental awareness	Correlation Coefficient	,301**	,146	,036	,063	-,177	,373**	,406**	,084	1
		Sig. (2-tailed)	,001	,131	,716	,519	,066	,000	,000	,388	
		N	109	108	107	108	109	109	109	109	109
	Topic Importance	Correlation Coefficient	1	,178	,189*	,044	-,114	,137	,147	-,129	-,042
		Sig. (2-tailed)		,059	,046	,646	,228	,149	,121	,173	,662
		N	113	113	112	113	113	113	113	113	113
	Topic involvement	Correlation Coefficient	,178	1	,450**	,449**	,150	-,028	-,051	-,227*	-,121
		Sig. (2-tailed)	,059		,000	,000	,113	,767	,592	,016	,201
		N	113	113	112	113	113	113	113	113	113
	Environmental Self-identity's	Correlation Coefficient	,189*	,450**	1	,399**	,040	-,086	,063	-,025	-,092
		Sig. (2-tailed)	,046	,000		,000	,677	,367	,512	,797	,334
		N	112	112	112	112	112	112	112	112	112
	Future Orientation/ Attitude	Correlation Coefficient	,044	,449**	,399**	1	,023	,096	-,022	-,189*	,036
		Sig. (2-tailed)	,646	,000	,000		,809	,310	,815	,044	,707
		N	113	113	112	113	113	113	113	113	113
	Feeling	Correlation Coefficient	-,114	,150	,040	,023	1	-,586**	-,168	,445**	-,158
		Sig. (2-tailed)	,228	,113	,677	,809		,000	,075	,000	,094
		N	113	113	112	113	113	113	113	113	113
	Hope	Correlation Coefficient	,137	-,028	-,086	,096	-,586**	1	,452**	-,385**	,410**

	Sig. (2-tailed)	,149	,767	,367	,310	,000		,000	,000	,000
	N	113	113	112	113	113	113	113	113	113
Determina	Correlation	,147	-,051	,063	-,022	-,168	,452**	1	,091	,364**
tion	Coefficient									
	Sig. (2-tailed)	,121	,592	,512	,815	,075	,000		,338	,000
	N	113	113	112	113	113	113	113	113	113
Disappoint	Correlation	-,129	-,227*	-,025	-,189*	,445**	-,385**	,091	1	,038
ment	Coefficient									
	Sig. (2-tailed)	,173	,016	,797	,044	,000	,000	,338		,691
	N	113	113	112	113	113	113	113	113	113
More	Correlation	-,042	-,121	-,092	,036	-,158	,410**	,364**	,038	1
environme	Coefficient									
ntal	Sig. (2-tailed)	,662	,201	,334	,707	,094	,000	,000	,691	
awarenes										
s	N	113	113	112	113	113	113	113	113	113

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

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

(Stimulus material)

Article I



As concerns over the huge impact on the environment and human health welfare grow, the future seems unpredictable for the meat industry

What is the environmental impact of our current farming model?

The planet faces growing water constraints as our freshwater reservoirs and aquifers dry up. On some estimates farming accounts for about 70% of water used in the world today, but a 2013 study found that it uses up to 92% of our freshwater, with nearly one-third of that related to animal products. According to the UN's Intergovernmental Panel on Climate Change, agriculture, forestry and other land use accounts for 24% of greenhouse gases. According to the UN's Intergovernmental Panel on Climate Change, agriculture, forestry and other land use accounts for 24% of greenhouse gases.

What impact does meat have on human health?

There are a number of concerns about the impacts of industrial meat production on our own health, beyond the environmental issues. Bacterial infections that can be transmitted to humans, such as salmonella and campylobacter, can spread through large farms. The ability of these pathogens to enter the environment around farms and slaughterhouses, and to make humans ill, is a major modern worry.

Article II



Meat Sustainability, human health and environmental safety in secure hands of the Circular Economic Module

For decades now, the world has been polluted in various ways and forms, most of which are man-made. No exclusion to that matter is meat production and its negative sides. While it causes pollution and reduction of water, increase of CO₂ emissions, and decline of human and animal health.

But, with the rise of various technologies the present and future are bright. Circular Economy has caught the eye of UNIDO and was incorporated in The United Nations Sustainable development Goals program. Many of the UNIDO projects address various building blocks of CE. Those include resource efficiency and cleaner manufacturing of products, while other provide recycling and reuse of products. While the pollution of water had its surge, the salvage and different ways of filtrations, restore the best water particles for a safer re-usage.

Over 1/3 of Food productions is left to rotten with the estimation of 300 million tons of meat thrown away. These numbers are already declining with various implementations such as reduction of meat consumptions. Meat-free and meat-reduced diets are benefiting the ecosystem a lot, and are slashing global emissions by 1.32 billion tons of carbon dioxide equivalents. Implementation of packaging of different foods that are designed for durability, reuse and remanufacture is also radically decreasing pollution.

Article III



Optimistic reduction of meat cost for the benefit of human health and the environment?

While concerns over meat production and its impact on human health and environment exist, there are signs of hope in the horizon!

Tackling the environmental and health impact of our current farming model with an optimist tomorrow

The planet faces growing water constraints as our freshwater reservoirs and aquifers dry up. On some estimates farming accounts for about 70% of water used in the world today, but a 2013 study found that it uses up to 92% of our freshwater, with nearly one-third of that related to animal products.

However, closing the loop in water management can be of great benefits in the economic, social and environmental spectrum. This can be done with water reuse alleviating pressure by substituting abstraction, and qualitatively, relieving pressure of discharge from Wastewater Treatment Plants to sensitive areas, extending the life-cycle and resource productivity of the water itself.

Using the *Circular Economic model*, there will be regeneration of food production, its quality and improvement of the surrounding ecosystem. Employing farming techniques such as agroforestry and permaculture, regenerative farmers will use organic rather than synthetic fertilizers and undertake activities such as rotational grazing, in which the management of animal can boost the productivity of the land, and crop rotation, where a range of crops can be grown on the same piece of land across the growing seasons.

Online Questionnaire (Google forms)



Section 1 of 13

Fundamentals of Constructive Journalism in Circular Economy Reporting

By Igor Drašković – M.Sc. student at the University of Vienna, Department for Communication Science

Section 2 of 13

Fundamentals of Constructive Journalism in Circular Economy Reporting

As a master student at the University of Vienna at the department of Communication Science, I am conducting a research to discover the effect of constructive (positively-oriented) journalism on the masses, in the environmental sphere, specifically circular economy.

You are presented with general questions related to environmental sustainability, your experiences in the field of environmental protection, as well as your opinion and emotions related to the short article, which will be provided later on in the survey. Please contribute your participation to this research and take approximately between 5-7 minutes to complete this questionnaire.

Participation in the research is voluntary. You can give up at any time without having to explain the reasons why you do not want to continue filling out the questionnaire. The research is anonymous and all supplements obtained in this way will be used exclusively for research purposes.

After section 2 Continue to next section

Section 3 of 13

Basic Socio-demographic data

This part of the questionnaire contains questions related to the basic data about you, which we need for a more accurate statistical analysis. We remind you that participation in the research is anonymous and that based on this information, your identity cannot be revealed. Please read each question carefully and circle one of the offered answers or write the answer where there is space for it.

...

Mark which gender you are:

- ☐ Female
- ☐ Male

To what age group do you belong:

- ☐ 20 – 30 years
- ☐ 30 – 40 years
- ☐ 40 – 50 years
- ☐ 50 and above
- ☐ prefer not to answer

...

Level of education:

- ☐ Primary School
- ☐ High School/College
- ☐ University Undergraduate degree (BA, BSc)
- ☐ Master's degree (MA, MSc)
- ☐ Doctorate (PhD)
- ☐ prefer not to answer

Where is your home located:

- ☐ North America/Central America
- ☐ South America
- ☐ Africa
- ☐ Asia
- ☐ Australia
- ☐ Europe
- ☐ Option 7
- ☐ Caribbean Islands
- ☐ Pacific Islands
- ☐ Other
- ☐ prefer not to answer

Section 4 of 13

Topic Importance



With the following questions, we try to examine your general opinion and experience with environmental protection, and its importance status in your eyes.



How important is the environment to you?

- ☐ Very Important
- ☐ Important
- ☐ Neutral
- ☐ Not important
- ☐ Don't care about it
- ☐ Prefer not to answer

How important is the media in regards to the environment?

- ☐ Very important
- ☐ Important
- ☐ Neutral
- ☐ Not Important
- ☐ Prefer not to answer

Section 5 of 13

Topic involvement



This section will allow you to answer questions regarding your involvement in regards to the environment

I have a strong personal interest in environmental and sustainability issues

	1	2	3	4	5	
Totally agree	☐	☐	☐	☐	☐	Strongly disagree

I spend time thinking about environmental and sustainability issues.

	1	2	3	4	5	
Quite often	☐	☐	☐	☐	☐	Never

There are many problems that concern me more than environmental and Sustainability issues

	1	2	3	4	5	
Totally agree	☐	☐	☐	☐	☐	Strongly Disagree

On a daily bases, how much do you contribute with your personal way of life to "saving the planet" and to a healthier life for everyone?

- ☐ I try my best
- ☐ Maybe a little
- ☐ Neutral
- ☐ Insufficient
- ☐ Not at all
- ☐ Prefer not to say

Section 7 of 13

Category FU: Future Orientation/ Attitude

Description (optional)

Would you consider yourself an optimistic person?

	1	2	3	4	5	
Extremely optimistic	☐	☐	☐	☐	☐	I am a pessimist

I think about the future on a daily basis

	1	2	3	4	5	
Totally applies	☐	☐	☐	☐	☐	Doesn't apply at all

I am ready to sacrifice my immediate, current happiness or well-being in order to achieve future results

	1	2	3	4	5	
Totally applies	☐	☐	☐	☐	☐	Doesn't apply at all

I mainly act when immediate matters need to be dealt with

	1	2	3	4	5	
Totally applies	☐	☐	☐	☐	☐	Doesn't apply at all

After section 7 Continue to next section ▼

Section 8 of 13

Article material



Now you will be given a choice between one of three short articles related to the environment. Please choose one option between 1 to 3 . Read the articles carefully. This will follow up with a few questions related to the article and your opinion on it.

The following three numbers will determine the article you will be given

- ☐ 1
- ☐ 2
- ☐ 3

Section 12 of 13

You are almost there!



Article feedback



Now, we would like to assess how do you generally feel after reading the article

- ☐ Really good
- ☐ Good
- ☐ Neutral
- ☐ Bad
- ☐ Really Bad
- ☐ Prefer not to answer



Specifically, the article makes me feel hopeful

- ☐ Extremely
- ☐ Considerable
- ☐ Somewhat
- ☐ A little
- ☐ No really
- ☐ Not at all
- ☐ Prefer not to answer



The article makes me feel determine for future engagement

- ☐ Extremely
- ☐ Considerable
- ☐ Somewhat
- ☐ A little
- ☐ No really
- ☐ Not at all
- ☐ Prefer not to answer

The article makes me feel disappointed

- ☐ Extremely
- ☐ Considerable
- ☐ Somewhat
- ☐ A little
- ☐ Not really
- ☐ Not at all
- ☐ Prefer not to answer

The article gives me more awareness about the environment

- ☐ Extermely
- ☐ Considerable
- ☐ Somewhat
- ☐ A little
- ☐ Not really
- ☐ Not at all
- ☐ Prefer not to say

After section 12 Continue to next section

Section 13 of 13

Conclusion



"Thank you for your feedback. We really appreciate your time and effort in filling in the questionnaire. Once again, the results will be strictly confidential and implanted in the boundaries of the research. If you have any questions related to the research you can contact me at this email address: drakovicigor09@gmail.com."

Abstract

In recent decades the evolution of Journalism has had a great leap forward. Its new waves of constructivism and positive thinking gave inclusion to the unsung hero, the public! With the rise of Constructive journalism, arose probably one of the most controversial and contemporary issues there are , and that is environmental sustainability. Their overlapping synergy form a crucial topic of environmental reporting. The research I have conducted incorporates the elements of constructive journalism with the environmental concept, known as the Circular economy. It is an inevitable bond between newly incorporated media concept and a global issue that touches us all. The methodological approaches used in my research was an online questioner (performed in google forms). The goal was to understand and see the impact of constructive elements in two of three articles in the questionnaire. However at the same time digging deep into human psychology, and how different emotions and self-efficacy can have a pre and post impact on an individual decision or in this case his/hers future environmental involvement.

The survey included 334 respondents who did not differ significantly in age, educational level and place of residence between the surveyed groups. When it comes to emotions, an article that only presented a problem provoked negative emotions much more strongly, while an article that points out a part of the problem and an article that points out a part of the applied solutions provoked positive emotions much more strongly. This research showed that self-efficacy on environmental protection is stronger than the emotions that appear after reading the text. Respondents with higher environmental self-efficacy felt significantly more emotions when reading the article that presents the problem than respondents whose environmental self-

awareness is lower. Self-efficacy can be a powerful tool as a result of a constructive approach to media reporting.

Keywords: Constructive Journalism, Circular economy, emotions, environmental reporting, sustainability, Future-orientation, Self-efficacy

Zusammenfassung

In den letzten Jahrzehnten hat die Entwicklung des Journalismus einen großen Sprung nach vorne gemacht. Seine neuen Wellen des Konstruktivismus und des positiven Denkens brachten den unbesungenen Helden, die Öffentlichkeit, mit ein! Mit dem Aufstieg des konstruktiven Journalismus entstand wahrscheinlich eines der umstrittensten und aktuellsten Themen überhaupt, und das ist die ökologische Nachhaltigkeit. Ihre übergreifenden Synergien bilden ein zentrales Thema der Umweltberichterstattung. Die von mir durchgeführte Forschung verbindet die Elemente des konstruktiven Journalismus mit dem Umweltkonzept, das als Kreislaufwirtschaft bekannt ist. Es ist eine unausweichliche Verbindung zwischen einem neu eingeführten Medienkonzept und einem globalen Thema, das uns alle betrifft. Die in meiner Forschung verwendeten methodischen Ansätze waren ein Online-Fragebogen (durchgeführt in Google-Formularen). Ziel war es, die Wirkung konstruktiver Elemente in zwei von drei Artikeln des Fragebogens zu verstehen und zu sehen. Aber gleichzeitig tief in die menschliche Psychologie eintauchen und wie unterschiedliche Emotionen und Selbstwirksamkeit einen Einfluss vor und nach einer individuellen Entscheidung oder in diesem Fall auf sein/ihr zukünftiges Umweltengagement haben können.

An der Befragung nahmen 334 Befragte teil, die sich in Alter, Bildungsstand und Wohnort zwischen den befragten Gruppen nicht signifikant unterschieden. Wenn es um Emotionen geht, löste ein Artikel, der nur ein Problem darstellte, viel stärker negative Emotionen aus, während ein Artikel, der auf einen Teil des Problems hinweist, und ein Artikel, der einen Teil der angewandten Lösungen aufzeigt, viel stärker positive Emotionen hervorrief. Diese Forschung zeigte, dass die Selbstwirksamkeit zum Umweltschutz stärker ist als die Emotionen, die nach dem Lesen des Textes auftreten. Befragte mit einer höheren Umweltselbstwirksamkeit

empfanden signifikant mehr Emotionen beim Lesen des Artikels, der das Problem darstellt, als Befragte mit einem geringeren Umweltselbstbewusstsein. Durch einen konstruktiven Umgang mit Medienberichterstattung kann Selbstwirksamkeit ein mächtiges Instrument sein.

Schlüsselwörter: Konstruktiver Journalismus, Kreislaufwirtschaft, Emotionen, Umweltberichterstattung, Nachhaltigkeit, Zukunftsorientierung, Selbstwirksamkeit