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## EMOTIONS ASSOCIATED WITH PLASTIC PACKAGING AMONG COLLEGE STUDENTS

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#### **Abstract**

This paper aimed at defining emotions associated with plastic packaging among college students. To accomplish this, 17 college students from different majors were interviewed with both a modified version of the Zaltman's Metaphor Elicitation Technique and in-depth interviews. Results showed that college students have a sense of helplessness towards plastic pollution as well as a pessimistic view of the future of the environment as they do not consider their personal actions as impactful as the actions companies and the government can make. Thus, future marketing efforts should focus on emphasizing the impact college students have.

**Keywords:** Zaltman's Metaphor Elicitation Technique, green gap, plastic pollution, emotions, college students

#### Resumen

Esta investigación tuvo como objetivo definir las emociones asociadas a los empaques de plástico entre los estudiantes universitarios. Para lograr esto, se entrevistó a 17 estudiantes universitarios de diferentes especialidades con una versión modificada de la técnica, Zaltman Metaphor Elicitation Technique y entrevistas a profundidad. Los resultados mostraron que los estudiantes universitarios tienen un sentido de impotencia hacia la contaminación por parte del plástico, así como una visión pesimista del futuro del medio ambiente ya que no consideran que sus acciones personales sean tan impactantes como las acciones que las empresas y el gobierno pueden realizar. Por lo tanto, las futuras iniciativas de mercadeo deben centrarse en enfatizar el impacto que los estudiantes universitarios tienen.

Palabras claves: "Zaltman's Metaphor Elicitation Technique", "green gap", contaminación de plástico, emociones, estudiantes universitarios

#### Introduction

Plastic is a widely used material in the manufacturing of goods, especially since it became mainstream after World War II (Chalmin, 2019). Plastic packaging specifically, has been one of the primary perpetrators of the "make, use, and dispose" economy which is characterized with consumerism harmful to the environment (Euromonitor, 2017). The unlimited consumption of plastic packaging across the supply chain has caused the current crisis of plastic pollution, with a generation of 141 million tons of plastic waste in this category alone (Geyer et al. 2017). Over time, there has been a surge in alternatives to plastic packaging that are less harmful to the environment as they take less time to biodegrade (Euromonitor, 2017). Still, plastic packaging is one of the most used materials because of its cost effectiveness, convenience, and ease of transportation both for the companies and consumers. This can be seen with the fact that by 2017, plastic packaging had a share of 63% of global packaging with 2.2 trillion units produced (Downey, 2017). This poses a threat to public health and the environment since only 9% of plastic has been recycled since 1980 (Geyer et. al 2017) while the rest ends in landfills and our ecosystems.

Nevertheless, consumers looking for a plastic-free society and the conscious consumer have been major global economic trends, yet the purchase rate of sustainable products is relatively low (Angus & Westbrook, 2019). This may be a result of what is known in literature as a "green gap" were there is a discrepancy between a strong awareness on environmental issues but little to no action in favor of the environment (Cho, 2019). This research aimed at explaining this "green gap" by exploring emotions associated to plastic packaging. The results were insights valuable in developing a message that promotes the reduction of plastic packaging consumption among college students and the purchase of ecofriendly alternatives. To accomplish this, two questions needed to be answered. These were: 1) What emotions are associated to plastic packaging? and 2) Which of these emotions are the most impactful in promoting the reduction of plastic packaging? Alongside these questions, the main objectives of this research were: 1) to gather college student's insights on plastic pollution, and 2) to evaluate their current actions in favor of the environment.

For this research, plastic packaging was defined by the top three most used formats: 1) flexible plastic, 2) PET bottles, and 3) thin wall containers which are mostly used for food packaging (Downey, 2018). On the other hand, the terms sustainable and ecofriendly alternatives may be used interchangeably and refers to packaging that may be reused or that is made from biodegradable materials (Conway-Branch, 2018). At the same time, college students, which are the focus group of this research,

are in both the Millennial and Gen Z age range. Millennials are those born between 1980 and 1995 while Gen Z are those born in 1996 till date (Swati, 2019).

#### **Literature Review**

Environmental awareness is a variable that has been studied vastly in the recent years (Arli et al., 2018; Ivanova et al., 2019; Xu et al., 2019), mostly based on the Theory of Planned Behavior by Ajzen. To understand environmental awareness and its relation to an increase, reduction or neutrality of action in favor of the environment, the focus has been on the cognitive awareness of consumers, which is how much they know on the subject (Ham et al., 2016). However, the affective component, which in recent studies has been shown to be more important in decision making has been understudied (Deloitte, 2019). This could translate to the "green gap" mentioned before, where the consumer is "aware" of environmental issues like plastic pollution, but the lack of emotional connection prevents the actual purchase of ecofriendly products or reducing plastic packaging usage.

According to Deloitte, the most valuable data that can be gathered for brand loyalty is emotional data. They developed a figure for understanding this process where Shared Values and Rational Thinking are the initial step for approaching a brand, but Emotions build "loyalty, advocacy and preference" (2019). This supports the idea that, indeed, the cognitive aspect of awareness is important, but the emotional aspect creates greater value for a company and consumers since it creates loyal customers.

Emotions are even considered a need as seen on The Elements of Value Diagram by Almquist et al. (2016). They expanded the Maslow hierarchical table which is a five-tier model of human needs to 30, comprised of the categories: functional, emotional, life changing, and social impact. This model presents a hierarchy of importance were the lower end needs must be satisfied to progress to the upper end of the hierarchy. In this sense, the emotional aspect of this hierarchy is on the second level of the pyramid, over the more basic functional attributes. On the same line, emotions have different categories which can be summarized in the Hierarchical Model of consumer emotions by Laros and Steenkamp (2015). The most basic emotions are: 1) anger, 2) fear, 3) sadness, and 4) shame, on the negative spectrum; and 1) contentment, 2) happiness, 3) love and 4) pride, on the positive spectrum. Understanding these different emotions and how they relate to environmental awareness is crucial for further advertising research and promotion (Laros & Steenkamp, 2005).

On the other hand, the emotions and values that are used for promotion of different products and issues should not be chosen lightly, as targeting the wrong emotions may result in causing the opposite desired behavior (Luan, 2016). The relevance of developing the right promotion tools and publicity messaging is that they can help tackle plastic pollution. This happens specifically through advertising which is defined as "a way of communication to convince an audience for taking purchase decisions about a product or service and delivering information to viewers" (Niazi et al., 2011, p. 114). The way advertising works according to the traditional hierarchy-of-effects model is that advertising exposure leads to brand cognition, and cognition about the ad, which then leads to the attitude toward the ad and the brand until the purchase intent (Mendelson & Bolls, 2002, as cited by Niazi et al., 2011). Advertising functions by using the media to persuade or influence behavior, which is what is needed for consumers to transition from plastic packaging to more ecofriendly alternatives, like scraps, compostable, and easily recyclable packaging (Boztepe, 2012).

### Methodology

This research followed a qualitative approach, whereby in-depth interviews were conducted. The methodology for this research was based on a modified version of Dr. Gerald Zaltman, Zaltman's Metaphor Elicitation Technique (ZMET). The primary focus of this instrument is to identify what emotions participants associate to a certain concept on an unconscious level (Christensen & Olson, 2002). It uses images as metaphors to emotions, that combines with nine steps, along with questions, in order to form a mental map that gives insights on participants feelings and emotions (Zaltman, 1995). For this research, three of the nine steps were eliminated, reducing them to six steps. The first step eliminated involved evaluating images on a sensory level with things like smell, color, and sound. This information is more pertinent for a company evaluating a specific product like detergent for example, rather than such a large category like plastic packaging. The other two steps that were also eliminated aimed at interviews were the participants collect the images themselves rather than the interviewer presenting the same images to all participants, as was the case for this research.

Pre-Test: An online questionnaire was developed to select and validate the images for the primary study instrument. The purpose was to determine what images better represented the emotions that would be explored in the interviews. The questions read: Which of the following images better represents x emotion (example: anger, fear, joyfulness, etc.) with a total of 39 questions. The questionnaire was distributed

through social media groups and the requirements were: 1) to be aged between 18 and 40 years old; and 2) to be an active student at the University of Puerto Rico, Rio Piedras Campus. A total of 24 college students participated.

In-depth interviews: The interviews conducted for this research were about an hour each, through the Google Meet platform and consisted of both the ZMET dynamic and in-depth questions. The in-depth questions assessed awareness, actions in favor of the environment, motivations to become more environmentally friendly, and what obstacles they faced for achieving that. For promotion, the call for participants was distributed through Facebook pages and WhatsApp. As a result, 17 college students participated in these interviews.

Participants: As seen in Table I titled Sociodemographic Factors (see Appendix A), the participants were aged 18 to 29 years old, pursuing a bachelor or master's degree and in freshman to senior year. In terms of requirements, they remained the same as the ones presented in the online questionnaire, with the only distinction of not being allowed to participate in both the interviews and the questionnaires.

## **Results and Findings**

## ZMET Dynamic

A modified version of ZMET was used to answer the first research question: what emotions are associated with plastic packaging? As seen in Table 2 titled Negative emotions and messages in ZMET Interviews (see Appendix B), the emotions that participants associated the most with plastic packaging were mostly on the negative affect spectrum of the hierarchy of consumer emotions (Laros & Steenkamp, 2005). These emotions are categorized in feelings of anger, fear, sadness and shame. As seen on the in-depth interview questions, college students had a strong environmental awareness and, therefore, had a bigger emotional burden of what is happening with plastic pollution.

The first category of emotions, anger, had a strong presence in participants answers and showed that they had a general anger towards themselves and others. This category is comprised of seven subsets of emotions which are: anger, frustration, irritation, unfulfillment, discontent, envy and jealousy. The anger towards others was related to others being unaware or uninterested in plastic pollution. Participants mostly had the sense of frustration and anger of being unable to change other people's behavior. On the other hand, there was also an internalized anger over not

always making the best decisions for themselves as they questioned, why did I buy that item? Or are my decisions enough when others are not doing their part?

The second category, fear, revealed that college students constantly think about the repercussions of plastic packaging and account their responsibilities as a reason they sometimes ignore plastic pollution. In this category the emotions worry, and tension were mostly related to them explaining that their jobs, university and extracurricular activities take most of their time and, therefore, plastic packaging is a result of no advance planning. Nervousness reflected that consumers are demanding accountability from the government and companies. The image that was presented to depict this feeling was a man in a suit which could be the epitome of these two entities they identify as mostly responsible for plastic pollution. Lastly, panic and scare were feelings that were linked to a fear of what may happen in the future and observing the damages made to the environment by the current consumerism practices.

Third, feelings of sadness were the most predominant in participants, with nostalgia and helplessness being the most repeated emotions. Nostalgia, which was depicted by the image of a clock was associated with the phrase of "the clock is ticking and we must act now" followed by "it's just a matter of time before there is no turning back" on most answers. This showed an apocalyptic view of the future of the environment which can be confirmed by the second most repeated choice which was helplessness. This helplessness was a call for help for themselves and nature since participants felt like they are "drowning" in this enormous issue of plastic pollution and feel left alone. At the same time, they feel guilt since they lament not doing more in favor of the environment and feel pointed at by some environmental activists as one participant stated.

Finally, there was a strong sense of shame between participants both for themselves and how others act, with them still buying plastic packaging and observing how some politicians ignore environmental issues.

On the other hand, there was sought to answer the second research question which was, what emotions are the most impactful in promoting the reduction of plastic packaging? As seen in Table III titled Positive emotions and messages in ZMET Interviews (see Appendix C), the emotions on the positive affect spectrum of the hierarchy model could be more effective than the negative emotions participants already associate with plastic pollution. For example, participants chose images representing positive emotions as the opposite of what they associate to plastic packaging. At the same time, the only instance when positive emotions were

presented by participants was to mention that being unaware of what is happening in terms of plastic pollution could make people at peace or prideful. Therefore, college students current state of helplessness and guilt could be what is limiting more proactive actions in favor of the environment since they question these personal actions as enough. Even though facts on plastic pollution and climate change should keep being presented, this should be accompanied by more uplifting messages with examples on how they can do more and inspire their surroundings.

### In Depth Interviews

A term that has been vastly explored is the "Green Gap", which as discussed before refers to a discrepancy between strong environmental awareness and little to no action in favor of the environment. To assess this phenomenon, plastic packaging awareness as well as actions in favor of the environment were explored through indepth interviews. Results showed that in general, college students had a strong awareness towards plastic packaging consumption and its negative effect on the environment. They acknowledged that plastic packaging is widely used in this modern era and that, in general, it makes life more convenient. However, college students questioned the tradeoff between making something convenient short-term vs the lasting impact it has on nature because of plastic pollution. They mostly concluded that it does more harm than good and that it is a threat to public health. They pointed out that the industry needs to evolve and that there are more ecofriendly alternatives that companies can incorporate into their manufacturing process.

On the other hand, when evaluating college students' actions in favor of the environment they mentioned many examples but underestimated them. When asked what actions you are doing in pro of the environment, reducing plastic water bottles usage was their most recurrent action in favor of the environment. Some other actions were recycling, composting, using reusable produce bags and reusing the plastic they already had. Some however, said that they do not do anything in favor of the environment while the ones that did do something in favor of the environment mostly started their answer with "not much, except...". At the same time, they constantly referred to the macro problem of plastic pollution which relates to public policy and lack of access to recycling facilities. Many said that they used to recycle but stopped after the 2017 hurricane Maria since that area was neglected by their municipalities.

In terms of what would motivate college students to purchase more ecofriendly alternatives to plastic packaging, the most cited factor was pricing. When participants were asked what would motivate them to buy more ecofriendly alternatives to plastic packaging, it was undoubtedly important that the price was the same or only a bit higher. As much as they had an altruistic response to this question, were they mentioned that they wanted as cited by one of the participants "have the satisfaction of being one of the people that do what they can in their capacity for the environment", they could not omit that their college budget was limited. Some factors that were less emphasized were quality and the fact that some of the counterparts to plastic packaging are superior as they do not emit harmful chemicals into food.

Meantime, obstacles for being more ecofriendly were: 1) being accustomed to convenience, and 2) lack of access to alternatives. Participants made the effort in the past to purchase certain products, especially food, package free or with biodegradable packaging but found a limited availability. Participants mentioned that while in some cases they had the alternative of bringing their own water bottle to places, they decide to grab the one in plastic packaging. In addition, the social setting also influences if they bring reusable or biodegradable packaging to places since sometimes family members and friends may feel intimidated by these actions.

#### **Conclusions**

Future marketing efforts to promote the reduction of plastic packaging usage and the increase in sales of environmentally friendly alternatives should focus on increasing positive feelings and empowerment to consumers. The visuals of the different media outlets should present how all the individual actions add up to make a collective positive impact on the environment. On the other hand, private and public institutions must present themselves as allies in this huge effort as consumers already feel helpless Alongside these marketing efforts, both companies and the government should implement measures in which using reusable products, recycling, reducing plastic packaging consumption, and buying more environmentally friendly products is more feasible.

#### Limitations

This research had several limitations while leaving opportunities for further exploration. The first limitation was that the study was developed exclusively with

students at the University of Puerto, Rico-Rio Piedras Campus. Considering its demographics and public system, students could have offered different responses than those in private institutions and different academic levels. At the same time, the 2020 Covid-19 brought a more complicated workload for students which may have unmotivated potential participants like those from other majors that were not represented. Covid-19 also caused the interviews to be adapted to the virtual format instead of being face-to-face. Lastly most of the participants were at the bachelor level and little participants were in the master's programs while none were from the doctoral programs.

#### **Future Research**

In terms of future research, there could be a follow up with consumers after they see commercials and other outlets with a more positive and uplifting approach to plastic packaging reduction to see if this helped bridge the "Green-Gap". In addition, there is a great deal of opportunities to modify the ZMET method for a multitude of studies regarding plastic consumption and other environmental issues.

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# Appendix A

 Table I

 Sociodemographic Information

Participant Number	Age	Faculty	Gender	Date of Admission	Study year	Bachelor, Masters or Ph.D
1	24	Business Administration	M	2013	4th+	Bachelor
2	23	Business Administration	F	2014	4th+	Bachelor
3	22	Architecture	F	2015	4th+	Bachelor
4	21	Natural Sciences	F	2016	4th+	Bachelor
5	21	Business Administration	F	2016	4th+	Bachelor
6	22	Education	F	2016	4th+	Bachelor
7	22	Social Sciences	M	2015	4th+	Bachelor
8	21	Humanities	F	2016	4th+	Bachelor
9	21	Business Administration	M	2017	4th+	Bachelor
10	21	Business Administration	F	2016	4th+	Bachelor
11	23	Business Administration	F	2014	4th+	Bachelor
12	21	Business Administration	M	2017	3rd	Bachelor
13	21	Social Sciences	F	2017	4th+	Bachelor
14	20	Social Sciences	M	2017	3rd	Bachelor
15	29	Education	F	2017	3rd	Masters
16	18	Natural Sciences	F	2019	1st	Bachelor
17	24	Social Sciences	F	2013	4th+	Bachelor

## Appendix B

Table II	
Negative emotions and messages on ZMET Interviews	

Emotion	Most predominant message	Times repeated	
Angry	Angry at people that do not want to make a change.  The instance of the control of the cont	Times repeated 5: Interviews, 4, 5, 7, 8 and 11.	
Aligiy	<ul> <li>Trying to communicate "listen, this is bad, and we need to do something about it".</li> </ul>		
Frustrated	<ul> <li>Frustration that other people do not want to do their part.</li> </ul>	Times repeated 6: Interviews, 5, 8, 10,	
	<ul> <li>Frustrated at the exploitation of finite resources and plastic pollution.</li> </ul>	12, 13 and 14.	
	Almost to the point of no return.		
	<ul> <li>People that are conscious of plastic pollution and are constantly worried.</li> </ul>		
	<ul> <li>The government feels a pressure from both citizens and companies. They decide to put companies' profitability over citizens wellbeing.</li> </ul>		
Irritated	<ul> <li>When people are frustrated, they do not think things through and take decisions that are not conscious and may be impulsive, like consuming plastic packaging.</li> </ul>	Times repeated 8: Interviews, 2, 7, 8, 9, 11, 13, 15 and	
	<ul> <li>Irritated at other people using plastic packaging.</li> </ul>	17.	
	<ul> <li>Analyzing what other people are doing in terms of consuming plastic packaging.</li> </ul>		
Unfulfilled	<ul> <li>Thinking about decisions, about whether to buy things in plastic packaging.</li> </ul>	Times repeated 7: Interviews, 4, 5, 6,	
	This decision may not mean anything because you are doing it alone.	11, 12, 13 and 14.	
	<ul> <li>Seeing themselves banish just like nature.</li> </ul>		
	Someone close to death, who is defeated.		
Discontented	Looking in retrospect on why I bought that item.	Times repeated 7: Interviews, 1, 5, 7, 8, 11, 14 and 15.	
Jealous	<ul> <li>One person monitoring the other to see if they realize the current danger.</li> </ul>	Times repeated 2: Interviews, 1 and 9.	
Scared	Scared about what may happen.	Times repeated 5: Interviews, 8, 11, 12, 14 and 15.	

Envious	"Monitoring other people that use plastic packaging."	Times repeated 6: Interviews, 1, 2, 3, 8, 13 and 17.
	Amazed at the amount of plastic being used.	Times repeated 6:
Panicky	<ul> <li>Surprised at the damages being caused to the environment.</li> </ul>	Interviews, 7, 8, 11, 12, 15 and 17.
	Human beings fell a frustration because of being conscious of the consequences of our actions regarding plastic packaging consumption.	Times repeated 6: Interviews, 2, 3, 6, 7, 9 and 10.
	<ul> <li>Pollution on a global level because of the way we manufacture things.</li> </ul>	
Name	Waste affecting the ocean, forests, and nature.	
Nervous	The government is seen in a predicament as citizens are demanding more careful measures to prevent the further destruction of the environment.	
	• Entrepreneurs using a ridiculous amount of plastic. They have been hiding the truth from consumers.	
	Someone communicating where we have gotten to, the failure that now needs to be communicated.	
	You are worried about other people judging you.	Times repeated 9:
Worried	<ul> <li>When you realize that you should have been worried and not ignore certain things.</li> </ul>	Interviews, 1, 5, 7, 9, 11, 13, 14, 15 and 17.
	Worried about plastic pollution around the world.	·
	<ul> <li>When people are in stressful events like reunions and seminars, they leave tired immediately and buy what is readily available.</li> </ul>	Times repeated: Interviews, 1, 2, 3, 4, 6, 10, 11 and 16.
Tense	<ul> <li>Job, university, and responsibilities make it hard to organize yourself and find a way to contribute.</li> </ul>	
	Themselves seeing new "ecofriendly" products that do not offer great benefits to the environment.	
Depressed	Not present.	N/A
	When people reflect on taking care of the environment with available information, they can take decisions in pro of the environment.	Times repeated 4: Interviews, 2, 5, 9 and 14.
Sad	<ul> <li>A person exploring plastic as an opportunity when it first started.</li> </ul>	
	Some people are trying to do better for the environment but are left alone.	

Miserable	• There is a struggle when deciding if it is worth it to buy something in plastic packaging. Recycling or not, etc.	Times repeated 4: Interviews 5, 7, 13
	"Sometimes you do not know what to do."	and 15.
	When I get tired of people overusing plastic packaging.	
	<ul> <li>Screaming for help as a metaphor for when as humans we realize and we are already drowning, and you are just waiting for someone to save you. That would also be nature screaming for help.</li> </ul>	Times repeated 13: Interviews, 1, 2, 4, 5, 7, 9, 10, 11, 12, 13, 14, 15 and 17.
Helpless	A danger because of not doing anything for the environment and now it is too late.	
	• The ocean is screaming for help since it is so contaminated with plastic.	
	The government has left us to die and has not given a clear response on what they plan to do to help.	
	The clock is ticking, and we must act now.	Times repeated 14:
Nostalgia	• Is just a matter of time that this way of making revenue is over because the clock is ticking.	Interviews, 1, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 15, 16 and
	"Things have only gotten worse with time."	12, 13, 13, 10 and 17.
	• "It is only a matter of time till we reach a limit with plastic packaging consumption. For society, the environment and nature it's just a matter of time before we see the enormous consequences of our consumption."	
	Fingers pointing at the buyer.	Times repeated 5:
Guilty	<ul> <li>Not everyone can change or find it easy to do so, me included.</li> </ul>	Interviews, 1, 7, 10, 13 and 16.
	Some environment activists only judge and point at the person instead of educating.	
	• I want to do something, but I do not know how.	Times repeated 9:
Ashamed	<ul> <li>Ashamed of one's decision of buying plastic packaging.</li> </ul>	Interviews, 3, 4, 6, 8, 10, 11, 13, 14 and 15.
	<ul> <li>Someone is hiding the truth from us and that is affecting ecosystems.</li> </ul>	and 13.
	We are blinded from the truth and consume plastic massively.	
	Politicians and citizens are ignoring global warming.	
Humiliated	No message.	Times repeated 2: Interviews 5 and 17.

# Appendix C

## Table III

Positive emotions and messages on ZMET Interviews

Emotion	Most predominant message	Times repeated
Content	One can be content when doing actions in favor of the environment.	Times repeated 2: Interviews, 4 and 12.
Fulfilled	No message.	Times repeated 1: Interview 6.
Peaceful	If nature is at peace we are at peace.	Times repeated 1: Interview 16.
Optimistic	One person is aware of plastic pollution while others ignore it or vice versa. They are trying to be optimistic and spread that awareness.	Times repeated 5: Interviews, 1, 2, 3, 6 and 14.
Encouraged	No message.	Times repeated 2: Interviews, 3 and 4.
Hopeful	No message.	Times repeated 1: Interview 16.
Нарру	Happy because of making positive changes.	Times repeated 1: Interview 16.
Pleased	Celebrating you did something good for the environment.	Times repeated 2: Interviews, 4 and 16.
Joyful	No message.	N/A.
Relieved	Plastic is a relief because of the convenience it brings.	Times repeated 2: Interviews, 3 and 12.
Thrilled	Not present.	N/A.
Enthusiastic	Not present.	N/A.
Sexy	No message.	Times repeated 2: Interviews 6 and 12.

Romantic	Not present.	N/A
Passionate	A superhero or a generation of people that are trying to do a change.	Times repeated 3: Interviews 10, 12, 16.
Loving	Not present.	Times repeated 2: Interviews, 9 and 16.
Sentimental	Plastic packaging can be bought unintentionally when purchasing a gift from someone.	Times repeated 4: Interviews, 2, 3, 6 and 16.
Warm-hearted	When you do the right thing, you feel peace because you protected future generations.	Times repeated 3: Interviews, 2, 4 and 6.
Pride	When entrepreneurs first discovered plastic, it was a victory for them in terms of revenues, but they never considered the consequences of their actions.	Times repeated 2: Interviews, 3 and 9.