

**Department of Economics and Business**

**Course of Marketing**

# **Moral and Physical disgust and their Marketing implications: a study on consumer behaviour**

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# Introduction

Disgust is one of the negative moral emotions presented in the CAD triad along with contempt and anger. While anger has been studied at large, disgust (and in particular its effects on the consumer decision process) has been less widely researched. Obtaining a proper understanding of the effects of disgust on the population can be beneficial both for policymakers trying to affect the public opinion as well as for managers who want to have profitable product campaigns and launches; moreover an understanding of disgust can give managers the ability to offset some negative effects that can be caused by this emotion while their company is facing a Company Social Responsibility crisis. In the field of marketing research disgust is known for eliciting different responses: studies show that in presence of disease cues, physical disgust elicits strong reactions in consumers who will then want to reduce the risks by purchasing well-known goods (Murray & Schaller; 2012); on the other hand Huang & Sengupta (2020) show that physical disgust, when activated by disease cues, leads customers towards atypical products by activating the Behavioural Immune System. Moreover, moral disgust can be elicited by contact with counterfeit products, since forged goods are often produced by exploiting illegal and immoral practices such as child labour (Martinez & Jaeger; 2015). Building on this knowledge, Amar et al.(2018) discovered that moral disgust towards counterfeit products can have a negative effect also on the original products that are being copied due to the second law of sympathetic magic, the law of similarity. While the existing research shows the correlation between physical disgust generated by disease avoidance behaviour and purchase intention, as well as the relation between moral disgust generated by counterfeits and consumer decision process; there is a gap in the literature regarding the effects of disgust on consumer behaviour when it is not generated by disease avoidance or counterfeits. The present research aims at providing an initial introduction to the most common emotion theories, as well as an in-depth explanation of the psychological bases on which the works of Huang & Sengupta and Amar et al. are developed, followed by the presentation of a study aimed at proving three hypotheses regarding physical disgust, moral disgust as well as the role of emotional sensitivity in the final consumer decision making process. The central questions on which this study is developed concern the effects of induced physical disgust (unrelated to disease avoidance) after a period of high infection risk such as the one created by the Covid-19 pandemic; the effects of induced moral disgust when it is unrelated to counterfeit goods and finally whether an increase in emotional sensitivity can lead to different outcomes in the previous two situations. Finally, after the presentation of these results, the last two sections of this document will focus on practical applications of the findings as well as limitations and possible future development of the research.

# Overview literature

## 1.Main theories of emotion

Since 1872 with Darwin's "The expression of emotions in man and animals", emotions have been the subject of multiple researches, theories and debates in the scientific community. The main theories which focus on the causes and the distinction of emotions are the Basic Emotions theory, whose main contributors are Izard (2011), Ekman and Cordaro (2011) and Levenson (2011); and the Appraisal theory, initially developed in the 1960s by Lazarus(1966) and Arnold(1960) and subsequently expanded by Roseman in 1991 and 2013<sup>1</sup>.

**Appraisal Theory** The Appraisal theory defines emotions not as states, but as processes that arise as a consequence of a person's reaction to relevant events such as incidents or personal changes. The Appraisal theory states that it's not the event itself that generates an emotion but the psychological response of the single individual, this means that the same event can cause different emotions in different people. According to Ire Roseman's Appraisal theory, emotions depend on 5 elements: agency, probability, power, situational state and motivational state. As shown in table 1, agency refers to what caused the outcome

(circumstance-caused, other-caused or self-caused), probability refers to whether the outcome was expected or not, power is divided in strong and weak reaction, situational state is divided in motive-consistent and motive-inconsistent (that is, positive or negative emotions) and motivational state is divided in appetitive

		Motive-Consistent		Motive-Inconsistent		
		Appetitive	Aversive	Appetitive	Aversive	
Circumstance-Caused	Unknown	Surprise				Weak
	Uncertain	Hope		Fear		
	Certain	Joy	Relief	Sorrow	Discomfort, Disgust	Strong
	Uncertain	Hope		Frustration		
	Certain	Joy	Relief			
Other-Caused	Uncertain	Liking		Disliking		Weak
	Certain			Anger		Strong
	Uncertain					
	Certain					
Self-Caused	Uncertain	Pride		Shame, Guilt		Weak
	Certain			Regret		Strong
	Uncertain					
	Certain					

↑  
agency

↑  
probability

↑  
power

← situational state

← motivational state

Table 1. Adapted from Roseman (1984).

(presence of a reward) and aversive (absence of a punishment). A valuable aspect of this Appraisal theory is that it takes into account most emotions, since small variations in one element cause different emotional responses. For example according to table 1, disgust is a weak negative reaction to a certain outcome caused by a circumstance that goes unpunished, while if the same outcome becomes uncertain the resulting emotion shifts from disgust to fear.

<sup>1</sup> Agnes M, Phoebe CE, Klaus RS, Nico HF. 2013. Appraisal Theories of Emotion: State of the Art and Future Development. Emotion Review. 5(2):119-124

**Basic Emotion Theory** Basic emotion theory, on the other hand, states the existence of particular emotions that can be defined as “basic” and are used to generate more complex emotions. Most experts of this theory agree that basic emotions must be discrete and have an established set of physical and neurological responses that became common through centuries of adaptation and natural selection: the common reaction to fear, the fight or flight response, has been established as common because it was the most effective at dealing with the situation that caused fear in individuals. While children, as well as adults during crises, experience “pure” versions of these basic emotions, in most individuals the emotions influence each other in order to create complex emotional behavior. Izard, Levenson, Ekman & Cordaro and Panksepp & Watt, who are the most prominent experts on basic emotion theory, created similar lists of emotions that can be considered basic, as shown in table 2.

Theoretically and empirically supported basic emotions according to each model			
IZARD	PANKSEPP & WATT	LEVENSON	EKMAN & CORDARO
Happiness	PLAY	Enjoyment	Happiness
Sadness	PANIC/GRIEF	Sadness	Sadness
Fear	FEAR	Fear	Fear
Anger	RAGE	Anger	Anger
Disgust		Disgust	Disgust
Interest	SEEKING	Interest	
Contempt?			Contempt
	LUST	Love	
	CARE	Relief	Surprise

**Table 2.** from *Four Models of Basic Emotions: A Review of Ekman and Cordaro, Izard, Levenson, and Panksepp and Watt*(2011) Jessica L. Tracy, Daniel Randels.

All experts consider disgust to be a basic emotion on the basis of the previously mentioned requirements since it manifests with distinct verbal and non-verbal responses, usually nausea and a desire to get away from the event that caused disgust, and is influenced by other emotions to create more complex behavior. Panksepp and Watt are the only ones who view disgust not as an emotion, but as a system that regulates physical needs much like pain or hunger.

## 2.Disgust

Darwin defines disgust as “something revolting, primarily in relation to the sense of taste, as actually perceived or vividly imagined; and secondarily to anything which causes a similar feeling, through the sense of smell, touch, and even of eyesight”<sup>2</sup>. Contemporary literature bases its definition of disgust on the RHM model, developed by Rozin, Haidt and McCauley(2008) according to which disgust started as a form of distaste used to avoid eating harmful substances and evolved over time to incorporate different domains. The

<sup>2</sup> Darwin, C.R. (1872), *The Expression of Emotions in Man and Animals*, John Murray, London (reprinted Chicago: University of Chicago Press, 1965)

model has been considered the gold standard for disgust analysis and recognizes 9 different elicitors of disgust. The first elicitor is food, in particular food that could carry diseases such as raw chicken or rotten food: Shimp & Stuart (2004) showed that portraying images of raw beef or chicken during an hamburger advertisement provoked disgust in the test subjects and reduced their willingness to buy the product. The second and third elicitors are body products and animals, which are both linked to the possibility of contracting diseases or infections via contact. Contact with strangers is the fourth elicitor and states that unknown individuals elicit stronger feelings of disgust than known people, such as friends and family, do (Peng et al., 2012). Death, hygiene, envelope violations (such as open wounds) and sex are the next four elicitors and provoke disgust by reminding individuals of their animal nature. The last elicitor consists in Moral offenses and protects the social order within a community while also safeguarding it from external threats.

**From the RHM model to the Functional model.** In the RHM model, disgust protects the body from disease via the Core Disgust, it protects the social order and standing of the individual via Interpersonal Disgust, diminishes the similarities between humans and other animals via the Animal Nature Disgust and finally protects social rules via the Moral Disgust. The RHM model doesn't take into consideration all aspects of disgust and is even based on questionable bases, first of all the belief that "anything that reminds us that we are animals elicits disgust" (Rozin et al., 2008, p. 761) due to the Animal Nature Disgust. To overcome this issue Tybur, Kurzban, Lieberman and Descioli (2013) developed a modified version of the RHM model, known as the functional model, which divides disgust in different categories. The functional model still believes that disgust evolved from a primitive form, that of Toxin Avoidance, to cover different aspects of human nature: Core, Interpersonal and most aspects of Animal Nature disgust are grouped together in the Pathogen Disgust, also known as Disease Avoidance, which prevents contact with disease-spreading organisms; the sexual elicitor of Animal Nature Disgust is in its own category of Sexual Disgust, which is responsible for refusing sexual contact with partners with a low sexual value, and finally Moral Disgust is common in both models with the only difference being that in the functional model it also has the objective of coordinating moral condemnations. Pathogen and Sexual disgust are also commonly known as physical disgust which encompasses all forms of disgust not covered by Moral disgust.

**Physical disgust and green behaviour.** The marketing literature focuses on aspects of disgust that a consumer might be more likely to encounter during their decision buying process: according to Douglas (1966), consumers can become disgusted by a product when it doesn't meet their expectations in terms of physical characteristics, such as being delivered in a damaged packaging (White et al., 2016) or having an unusual consistency. Physical disgust is also elicited via improbable contamination: when a product enters in contact with a disgusting substance, its perceived value decreases in the eyes of the customer as they deem it to be contaminated. The negative effect of disgust on value is controlled by the first two rules of Sympathetic Magic, the law of contagion and the law of similarity. The law of similarity states that products

resembling one another, such as milk and its vegan substitutes (Adise et al.,2015), share their core characteristics and elicit similar responses from customers even if their ingredients or materials are nothing alike. In an effort to reduce the effects of the law of similarity on products, producers can (and in some cases have to) present their product under a different name: that is why in 2003 the European Union published the Regulation (EU) 1308/2013 (CMO) stating that in order to prevent customer confusion and to reduce the effects of the law of similarity, only products derived from animal milk could be labelled as “milk”, this is why vegan milk substitutes aren’t sold anymore as “Almond milk” or “soy milk” but as “almond beverage” or “soy beverage”.

According to the law of contagion, touching or being close to a disgusting element devalues an object and reduces the customers’ willingness to pay, in fact research shows that the law of contagion reduces the willingness of buying second-hand clothes (Rozin et al.,2000) because some customers are disgusted by the idea of wearing a stranger’s clothes. While disgust generated by the law of contagion can protect individuals from potentially dangerous products, it also prevents them from adopting more green and eco-friendly behaviours: in “It might be ethical, but I won’t buy it: Perceived contamination of, and disgust towards, clothing made from recycled plastic bottles” by Meng & Leary (2019) it is shown that customers are unwilling to buy clothes made from recycled plastic since the idea of having products made from plastic in contact with their skin elicits disgust, while the same customers have no issues with recycled products, such as shopping bags, which are not in direct contact with their skin. Another example is the one shown above in which customers prefer fast fashion with respect to second-hand clothing since the value of used clothes is reduced when they realize that those products have been worn by strangers. An important aspect of physical disgust is that its effects can be mitigated by ignorance: Menegaky et al.(2008) explain that consumers had no issues in drinking “recycled water” or eating vegetables irrigated with it, but disgust prevented them for eating or drinking when they were made aware that “recycled water” is actually treated wastewater, a product that is considered to be essential in increasing the amount of freshwater available globally.

**Moral disgust.** At first glance, morality is such a fundamental aspect of humanity that relating it to one or more emotional responses seems an oversimplification, nonetheless many studies have recently started to draw a strong correlation between moral choices and emotions, with experts in moral philosophy such as Hume (1748) and Prinz (2007) stating that morality is by its very nature emotional. Disgust is one of the fundamental emotions affecting morality according to Haidt’s intuitionist theory (2001) which states that emotions draw the first moral judgments upon observation and critical reasoning only happens in a second moment, moral disgust explains why we as a society deem some acts intrinsically immoral even if they don’t cause harm to others, such as consensual incest or touching a corpse. Moral disgust, recognized both by the RHM model and the Functional model, has often been studied as part of the moral hostility triad, also known as CAD, along with moral anger and moral contempt. In order to better understand how moral disgust affects the decision making process of customers, we have to differentiate it from the other two elements of the

CAD triad: Shweder, Munch, Mahapatra & Park (1997) researched how different situations evoked specific reactions of contempt, anger or disgust. According to their results, moral anger is the predominant reaction to violations of the “ethics of autonomy”, that is, acts that physically harm others or violate their rights, such as stealing from helpless people or parents hitting a child in public, a vivid example of moral anger is the reaction to the recent death of George Floyd in the USA due to police brutality which inspired the BLM movement. Moral contempt is generated by the violation of the “ethics of community” which consist in public violations of group norms, such as children disrespecting their teachers and the elderly or employees unrightfully complaining about their bosses, another example of moral contempt is the one generated by seeing someone not giving their seat to elderly people or pregnant women on public transport. Finally moral disgust is the result of the violation of the “ethics of divinity” which covers all those acts that attack the sanctity of the body or regard particular eating behaviours and taboos, such as seeing people eating rotten food or touching a corpse or even discovering that an acquaintance is involved in an incestuous relationship, the most recognized example of moral disgust is the Greek tragedy of “Oedipus at Colonus”, in which Oedipus blinds himself and goes into exile out of moral disgust for having had an incestuous relationship with his mother. It is not easy to determine which moral response will be evoked by a particular act, as human reactions can vary on the basis of various aspects as shown by Rozin et al. (1999): different people from either the USA or Japan were shown a number situations depicting different violations of the ethics of divinity, autonomy or community and were asked to react both with words and a facial expression; while many reactions followed the CAD triad, there were few notable differences between the expected response and the one recorded by the study in different cultures: if in the american sample disrespecting an elder was seen as a violation of the ethics of community, the same situation was seen by the japanese sample as a breach of the ethics of autonomy since in the japanese culture elders can be considered to have a right to be respected by younger people, moreover both cultures deemed the act of skipping a queue a violation of the ethics of community while the testers deemed it to be a breach of the ethics of autonomy.

**Moral anger and moral disgust.** The previous examples show how difficult it can be to understand what reaction a situation should elicit, an issue presented even in “Oedipus at Colonus”: should people prove moral anger for Oedipus for murdering his father or should he be excused since he was unaware of what he was doing? This question is the start of Pascale Sophie Russell and Roger Giner-Sorolla’s (2011) research on the core differences between moral anger and moral disgust, which focused on the aspects of taboo and harm much like Gutierrez and Giner-Sorolla (2007), but now also took into consideration intentionality: they presented 241 participants with different situations portraying either high or low levels of taboo behaviour (eating human flesh vs eating sheep flesh), harm to others (serving the meat to a guest vs eating the meat themselves) and intentionality (taking that type of meat by mistake vs choosing it intentionally). The results showed that while high levels of taboo behaviour led to moral disgust and high levels of harm led to moral anger, intentionality greatly increased moral anger leaving moral disgust virtually unaffected, thus leading to



the conclusion that taboo behaviour leads to moral disgust regardless of intentionality, while moral anger is the result of intentional harm to others. Russell and Giner-Sorolla's research on the differences between the two moral emotions was expanded one year later by Gutierrez, Giner-Sorolla and Vasiljevic (2012) who linked disgust terminology to three situations: basic disgust, which includes physical disgust; bodily moral disgust, which involves violations of the ethics of divinity mentioned above (eating human meat, touching a corpse) and finally socio-moral disgust which covers all those acts that can be defined as despicable, such as exploiting poor people or betraying someone's trust. Their study showed interesting results: most of the people were presenting a face depicting anger in situations eliciting socio-moral disgust (a reaction that is expected from violations of the ethics of autonomy predicted in the CAD hypothesis) while also using disgust terminology to describe their emotional state. This led the researchers to believe that while breaches in the ethics of autonomy usually present themselves with reactions of moral anger, moral disgust terminology is often used as a valid substitute when reacting to situations violating trust or equal treatment thus making plausible the theory that violations of the ethics of community can also elicit moral disgust in addition to the expected moral anger. Gutierrez and Giner-Sorolla (2007) on the other hand, studied why taboo breaking situations that should elicit only moral disgust are often linked to moral anger in an effort to understand why for some individuals violent homophobic behaviour was the reaction to witnessing or becoming aware of someone's homosexuality. Gutierrez and Giner-Sorolla portrayed different experiments regarding situations infringing on the ethics of divinity presented by the CAD hypothesis in which they explicitly stated that the situation was either private and consensual or involved harm for one of the parties. In the situations involving harm and taboo breaking behaviour, the subjects reacted with depictions of anger, since they perceived that harm was done to others and it was more significant than the act itself. In the harmless case people reacted either with disgust (as expected) or with anger, but since this time there was no immediate excuse for anger behaviour (the acts involved no harm and were both private and consensual) the individuals used the "presumption of harm" as a post hoc justification for their response. Presumption of harm was depicted by participants as symbolic rather than physical, stating that the object harmed was not an individual but a community, morality or even the natural order itself, moreover presumption of harm was only used as a justification for proving anger instead of disgust when the situation was stated to involve no harm whatsoever. The implications of this research are various: first of all that presumption of harm can be (and is often) used as a complex justification for unexpected moral anger, then that presumption of harm partially explains (but doesn't justify at all) anger in some individuals witnessing violations of general moral norms or personal symbolic values such as homosexuality even if these violations cause no harm and are completely consensual, and finally that "The discovery of lesser but significant increases in anger when a harmless taboo violation was described indicates that, although such a scenario may arouse disgust as the prevailing response, it also brings up some degree of anger when compared with a harmless act that does not involve violating a taboo". One of the most recent studies on moral disgust, by Giner-Sorolla, Kupfer &

Sabo (2018), tries to draw a better separation between moral anger and disgust since the researches presented above showed that the line between the two moral emotions is subtle and that situations that should elicit one response often evoke the other, if not both at the same time. In this study, Giner-Sorolla, Kupfer & Sabo analyze moral disgust according to the integrative functional theory framework consisting of appraisal, associative, self-regulation and communicative functions: moral disgust's communicative function consists in making other people aware of what is immoral or rotten, while also presenting one's own moral compass by condemning such immoral actions or situations: if an individual doesn't publicly condemn immoral behaviour, its peers may deem their moral reputation as "contaminated" by association; the self-regulation function covers the Animal Nature Disgust of the original RHM model but most importantly helps individuals to fit in a defined group or society. The associative function states that unrelated disgust elicitors such as bad smells or bugs can affect negatively moral decisions and finally the appraisal function focuses on why situations that elicit moral anger often cause moral disgust as well. Their theory states the existence of "bad character disgust" according to which moral disgust can be elicited by violations of ethics of community such as stealing, cheating or lying as long as those violations reveal that a character has a tainted morality. Their results also show, as previous researches did, that disgust can be elicited by socio-moral violations concurrently with moral anger, especially in individuals with high disgust sensitivity. It is important to state though that Giner-Sorolla, Kupfer & Sabo's studies show that bodily-moral disgust (the one elicited by violations of purity such as cannibalism) is elicited not only if the subject commits the immoral action, but also if such action is merely imagined, while socio-moral disgust (the one elicited by cheating or lying) is only elicited by committing an immoral action, while subjects are excused if the actions are only imagined.

## **2. Disgust in marketing**

After an in-depth evaluation on what elicits disgust and its psychological effects, this study will focus on its value as an emotion in marketing. The marketing literature states that disgust is mainly a negative emotion and experiments using it as an alternative to guilt in non-profit advertisement (Allred & Amos, 2017) showed it as ineffective: subjects showed a higher level of empathy, an aspect that in the long run could lead to cultural change, but at the same time became less willing to donate to the organization since they activate the aversive motivation system which generates revulsion towards the ad and by extension the organization itself. This research will focus on two particular aspects of disgust, the first one concerning physical disgust and the second socio-moral disgust: as previously explained, physical disgust has a negative effect on the willingness of customers to adopt a more eco-friendly behaviour, but it also heightens disease avoidance behaviour and affects customers' willingness to adopt new products they aren't familiar with (Huang & Sengupta, 2020), especially in a period during which customers are on high alert such as a pandemic.

Socio-moral disgust, on the other hand, affects the customer decision process in situations where customers are proposed with a buying choice which may be deemed immoral either in its message, as shown by D&G's 2018 backlash in China after a series of ads considered racist; or in its origin, such as animal fur coats or counterfeit products. This section of the research will focus on counterfeit products and on how counterfeiting lowers not only the value of the forged product, but also that of the original one (Amar et al., 2018). But why do people use emotions to make decisions that affect their lives when they could think about them rationally?

**Heuristics.** The human is a rational being capable of analyzing each situation critically before making the best decision possible. While this statement sounds true in theory, humans in real life aren't capable of understanding every single aspect of a decision: according to the dual process theories of cognition, or DPT, (Daniel Kahneman, 2003) humans have two cognitive systems, System 1 which is fast, automatic, hard to control and consumes low amounts of energy and System 2 which is slower, directly controlled by humans and consumes higher amounts of energy. Using system 2 for every decision would consume unreasonable amounts of energy, it is moreover illogical to believe that humans are able to conjure all the information needed for a decision in a reduced time period: Herbert Simon (1991) states that humans are only capable of "bounded rationality", that is, we are constrained by the limits of our minds as well as the specific environments in which we are operating. There often isn't a strategy able to calculate what the optimal decision in a situation is in a reasonable amount of time, this is why the human psyche has to infer what the best possible situation may be by using only a limited amount of data in a short time period. This inference process is guided by what Todd & Gigerenzer (1999) define as "fast and frugal heuristics"; a heuristic is defined as "a mental shortcut that helps us make decisions and judgments quickly without having to spend a lot of time researching and analysing information" (Dale, 2015). In their book *Simple heuristics that make us smart*, Todd & Gigerenzer stipulate the existence of an adaptive toolbox of heuristics that can be used in day-to-day situations without having to analyze every single aspect or possible consequence of a decision and they divide heuristics in four main classes on the basis of number of alternatives and value of information given. Ignorance-based decision making refers to heuristics concerning a decision between two options made on the basis of a single piece of information, the most used heuristic in this class is the recognition heuristic: if a decision maker has to choose between two objects and recognizes one of them, they will infer that the recognized object is more valuable than the unknown one (Gigerenzer & Goldstein, 2011). The other classes of heuristics recognized are one-reason decision making, in which information about two options is confronted until there is one difference between the two; elimination heuristics, which use information not to choose the best option but to progressively remove the worst one and satisficing heuristics in which people set a subjective requirement for accepting an option and then stop looking for other options as soon as they find a suitable one. From a marketing point of view the three most important heuristics for decision-buying behaviour are the heuristics of availability, representativeness and that of anchoring and

adjustment, which are also between the heuristics that produce more commonly bias: the heuristic of availability states that a situation is more common the easier it is for the subject to recall an event referring to such situation, this is why most people are afraid of dying in a plane crash or in a terrorist attack while the real probability of these events happening is relatively low. The heuristic of representativeness lets people make decisions on the basis of how much a situation fits a particular model or mental prototype, if for example after tossing a coin three times the result has always been heads, people will infer that the next time the coin will land on tails to even things out, while in reality every toss is completely independent from the other. Finally the heuristic of anchoring and adjustment consists in starting from a known situation or event, the so called anchor, and then basing one's decisions on adjusting the present situation to the anchor one.

**Counterfeiting and morality.** Counterfeits are “reproduced copies that are identical to the legitimate articles including packaging, trademarks, and labeling” (Ang et al., 2001, p. 219) and are considered to be a rampant issue in today's economy by the European Commission, yet more and more people are turning towards counterfeit products while being aware of the possible risks associated with those products, why? In this research the focus will be put on non-deceptive counterfeiting, that is, situations in which the consumer is completely aware that they're buying a product that is not original as opposed to deceptive counterfeiting in which the consumer is unaware that the product they are buying is a counterfeit. According to previous research, consumers often rely on counterfeits due to their lower price (Hamelin et al., 2013), and when price isn't a concern individuals whose peers previously bought other illicit products, (De Matos et al., 2007;), or are more materialistic and susceptible to other people's opinions (Ang et al., 2001; Fernandes, 2013; Kozar and Marcketti, 2011; Penz and Stöttinger, 2005) are more willing to buy counterfeit products themselves. Martinez & Jaeger (2015) focused on whether morality and moral integrity affected people's buying decisions when dealing with counterfeits, and worked with a sample of 225 individuals. Their research showed that subjects with higher levels of moral awareness deemed the action of buying counterfeit sunglasses as morally wrong, it is important to state that another research (Moore & Chang, 2006) showed that morality didn't influence decisions in the case of pirated software, possibly because pirating software is a more common occurrence in today's world. Moreover, they discovered that while moral guilt affected moral judgement but not purchase intention, moral anger and by extension socio-moral disgust, didn't affect moral judgement but negatively impacted purchase intentions; finally the research stated that the higher the participant's moral awareness was, the higher their levels of moral guilt and anger were. According to another research by Amar et al. (2018), contact with counterfeit products lowers the willingness to pay for not only the forged products themselves, but also for the corresponding original one: since individuals deem counterfeit products to be immoral, being in contact with a counterfeit can elicit moral disgust, especially with regards to individuals with higher levels of moral awareness. Moral disgust affects the original products in different ways: with regards to luxury brands, higher-class customers tend to avoid a brand when they understand that lower-class customers own counterfeits of such brand (Amaral and Loken, 2016); more

importantly since the quality of counterfeits is expected to be lower than that of originals, customers might hold lower performance expectations and in return perceive a lower product efficiency since those expectations become self-fulfilling. Amar et al. (2018) suppose that due to the law of contagion, those lowered expectations also affect original products since the counterfeits and the originals are considered similar by customers; in order to prove their thesis they conduct a series of tests with interesting results: contact with a counterfeit item made subjects more open to disgust; then using a counterfeit product (in this case a ball point pen) in a task lowered the perceived effectiveness of the same original product in a subsequent and unrelated task, even if subjects were made aware that the second pen was not a counterfeit finally stating that subjects with higher moral sensitivity were more affected by the contagion effect of the counterfeits. On the basis of these results they suggest that managers must be aware of overly directing the public attention on how unethical counterfeiting is, since increasing awareness of the problem can induce a perceived loss of performance, quality and then value with regards to the original products. This research will try to understand if moral disgust alone is able to influence the purchasing behaviour of customers without them making the counterfeiting connection consciously.

**Disease avoidance and physical disgust.** Diseases are threats to human survival, that is why a functioning immune system is essential for survival, whenever a person is ill their immune system activates increasing the body's temperature in an effort to cleanse the organism from the disease. While it is true that many potentially harmful organisms can't survive high temperatures for an extended period of time, the same can be said for most of the useful organisms living inside the body: activating one's immune system is a costly process that can leave the body weakened. In order to reduce the chances of contracting a contagious illness, humans have developed another type of immune system, the Behavioural Immune System, or BIS, (Murray and Schaller 2016; Schaller 2016) which consists in groups of emotions, behaviours and motivations that help people avoid potentially infectious situations. If for example an individual coughs in front of us, the BIS will likely activate not only a disease avoidance motivation; but also an emotional reaction, in the form of pathogen disgust previously explained in the Functional disgust model and a physical response, that of moving away from the person coughing. An important aspect of the Behavioural Immune System is that it is extremely sensitive and is victim of the "smoke detector effect": since its objective is to reduce potential threats, it activates even in situations related to diseases but still non-infectious, this happens because the cost of mistakenly overestimating a threat (considering dangerous an innocuous object) is extremely lower than the cost of underestimating it and potentially getting sick. This means that individuals who are more worried about diseases will be less willing to interact not only with infected people, but with all people in general (Sawada, Auger, Lydon 2018). How is the BIS activated? What are its contextual cues? Pathogen disgust activates the BIS whenever the human enters in contact with visual, tactile or olfactory cues that an inanimate object or a living being are potential carriers of disease: anything from moisture, soft and squishy sections on food, the smell of decomposition or even marks or lesions (Kurzban & Leary, 2001)

indicate the possibility to infect others. In their research, Oaten et al. (2009) carry out a series of tests in order to prove 14 hypotheses correlating disgust to disease avoidance behaviour and their results show that disgust indeed serves as a form of disease-avoidance mechanism in humans with regards to a particular stimulus, but also that such stimulus isn't physically required in order to evoke disgust since due to socialization after a breach of disease-avoidant norms such as washing your hands, the human mind is able to elicit disgust by conjuring the image of the physical disgusting stimulus, for example bacteria. It's for this reason that objects such as plastic cockroaches elicit disgust even if they don't carry diseases themselves (Rozin et al., 1986). Objects and situations can be flagged as disgusting using one of three methods: the Garcia effect flags food as disgusting if the individual feels ill after consuming it; evaluative conditioning connects previously neutral stimuli to strong disgust reactions, the sight of lumpy milk for example might not cause disgust until the individual tries to drink it for the first time but from now on lumpy milk will be linked to the disgusting taste; finally the third method is through the law of contagion, a disgusting object can turn related items disgusting even if they would be otherwise considered neutral. Moreover, Curtis et al. (2011) explain that those disgust cues can be socially learned and passed down generations from parents to children. Pathogen disgust cues affect the purchase decision process of consumers: since individuals tend to perceive products they encounter more often as typical of their category via a process of frequency of instantiation (Loken and Ward, 1990), a research by Huang & Sengupta (2020) shows that typical products are unconsciously associated with many people and that since disease avoidance behaviour creates a desire to avoid large groups of people, it also shifts the consumer's choice towards less typical products. The researchers proposed that only objects with a nature strongly linked to a high risk of infection (for example food or frequently touched items) would be subject to the effects of disease avoidance behaviour. The study proposes that since the BIS leads individuals to avoid large groups of people when activated and since it activates frequently via the smoke detector effect, typical objects will subconsciously trigger the Behavioural Immune System and become less appealing than products that are more atypical. Their findings show that subjects who were put in an infectious disease related situation were more willing to choose an atypical option with respect to subjects whose initial situation involved a non-infectious disease, moreover they found out that previous hand-washing mitigated the effect of disease cues. These results are apparently in contrast with the Conformity effect discovered by Murray & Schaller (2012) which states that disease threats often cause greater opinion conformity across individuals. Huang & Sengupta(2020) explain this difference by stating that while disease avoidance cues lead individuals towards atypical products in order to reduce infection risk, the conformity effect is safety-seeking and thus leads individuals not necessarily to the least infectious option, but to the one perceived as less risky in general (not only in terms of infection, but also in terms of quality). If an option is perceived as superior it will be chosen regardless of how typical it is. Study 2 of this research will try to understand whether customers will be more willing to buy atypical products

while under the effect of general physical disgust, which is strictly linked to disease avoidance behaviour, during a pandemic even if infection risk is not clearly stated.

## Research

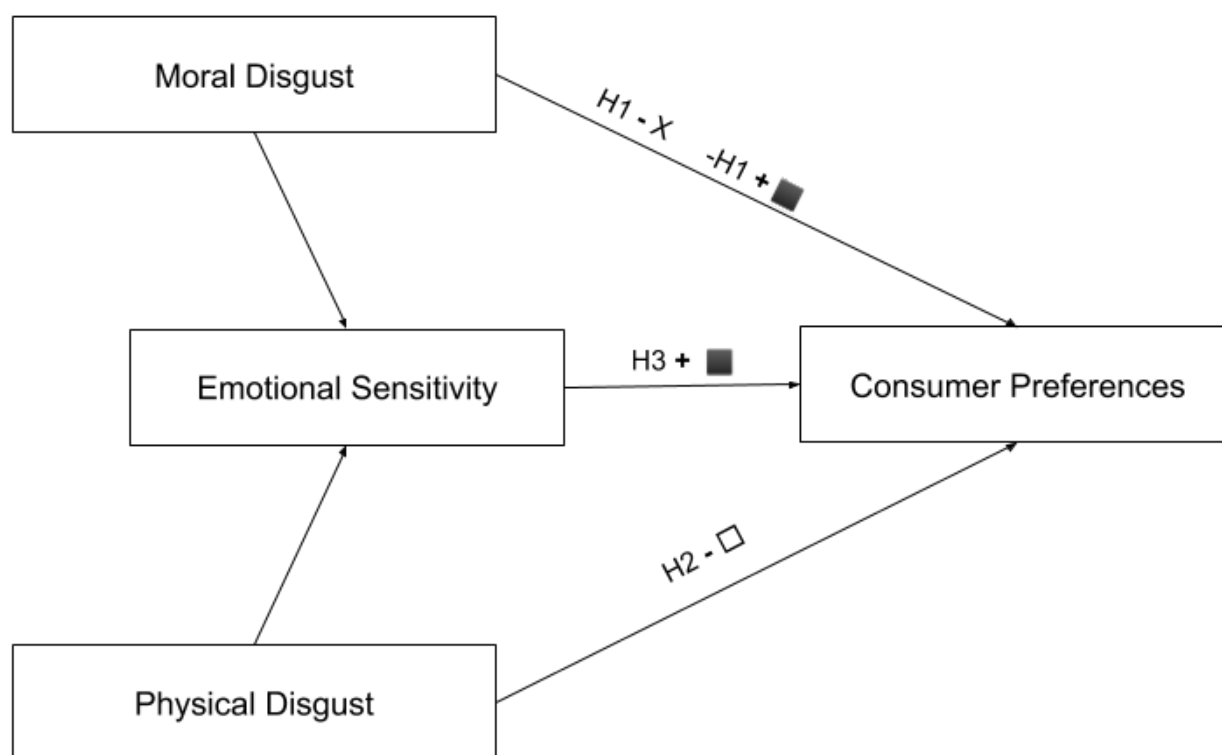
### 1.Hypotheses.

As stated above, this research has the objective of exploring two different hypotheses which relate physical and moral disgust to consumer behaviour and consumer buying decisions.

H1: Induced physical disgust reduces the value of the most common option even if the disease avoidance mechanism is not triggered.

H2: Moral disgust decreases the value of known products even if a counterfeiting scenario is not presented.

H3: Higher levels of emotional sensitivity augment the effects of moral and physical disgust.



**Notes:** + Positive Relationship, - Negative relationship, ■ Hypothesis Supported, □ Hypothesis Partially Supported, X Hypothesis Not Supported

**Table 3.** Overview of hypothesized relationships

### 2.Sample and procedure.

Data was collected from a sample via an online survey created with *Qualtrics Survey Software*, which randomly delivered to the sample one of three different versions of the same survey: one related to moral disgust, one related to physical disgust and a control group. The survey was written in Italian and delivered via mail and social media to Italians since it presented a comparison between Made-in-Italy products and ones produced abroad. This method of data collection is one of the most popular and effective since it allows

for quick and efficient diffusion with low or non-existent costs (Ilieva et al., 2002; Wilson and Laskey, 2003), A total of 249 people took part in the study but only 144 of them completed the survey and were considered valid data, most of the individuals who left the survey were part of the “moral disgust” study group, which was expected since the survey on moral disgust required more effort in order to be completed as will be shown in the next section. The lack of a valid amount of data on moral disgust forced us to send a second version of the survey which only led to the moral disgust group. Of the 144 people, 69 were male and the remaining 75 were female, with ages ranging from 16 to 75 years (mean age:36,51; SD:14,68 years). Table 4 provides more detailed data about the subjects divided in the three different groups.

	Male	Male%	Female	Female%	Max age	Min age	Mean age	SD
Physical	18	35,294117	33	64,705882	66	18	38,35	15,76
Moral	22	55	18	45	75	18	38,65	14,35
No disgust	29	54,716981	24	45,283019	74	16	33,13	13,44
Total	69	47,916666	75	52,083333	75	16	36,51	14,68

**Table 4.** A more detailed analysis of the demographic characteristics of each sample group who took part in the study.

**Survey.** The individuals were not made aware before completing the questionnaire of the object of the survey and questions unrelated to the hypotheses tested were also added in order to keep them from understanding the true nature of the questionnaire, though they were made aware beforehand that the survey was also completely anonymous. The survey was divided in 3 main sections: the first section was used to induce physical or moral disgust to the respective groups and required the individuals to write a detailed report on a situation in their lives in which they felt strong physical or moral disgust, since it has been proven that emotional memory is responsible for the fact that thinking about a past memory can trigger the emotions that are related to such memory (Lerner & Keltner, 2001). The question asked them to specify what caused the disgust in the first place, which kinds of sensations and emotions they felt in that moment and finally how they reacted. In this first section the control group was asked to describe their daily commute to work or school. After at least 30 seconds, the individuals were allowed to proceed to the next section of the survey. The second section provided the subjects with nine situations in which they were asked to select which option they preferred between the two given products. The first product was always made in Italy, while the second was produced from a non italian company. The nine categories analyzed were: biscuits, coffee, sparkling water, beer, chocolate, fruit juice, chips, sportswear, and finally luxury. It is important to state that some foreign brands used in this study were more generally known and available in italian supermarkets than others. The third and final task asked individuals to select on a seven-point Likert-type scale ranging from 1 (not at all) to 7 (completely) how much the study made them feel happy, angry, anxious, stressed, troubled, nervous, and restless; this last section allowed us to divide the individuals on the base of their level of emotional sensibility. Once the individuals completed these tasks they were

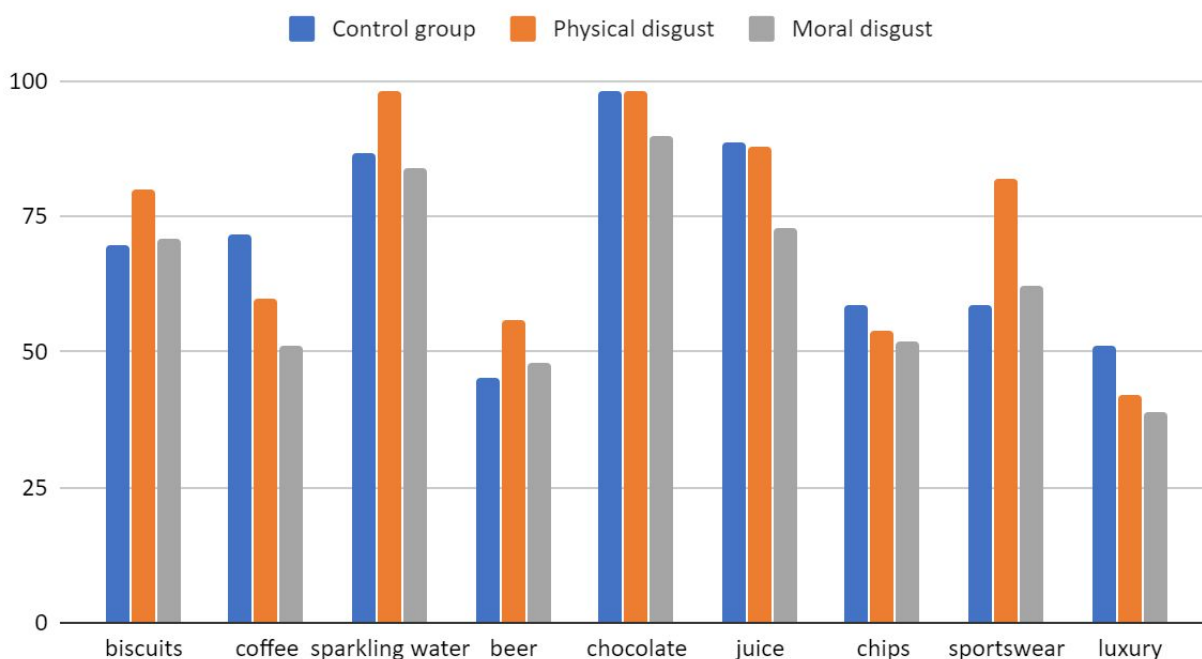


asked some temporal purchase questions unrelated to the study and finally they had to input some demographic variables (gender, age and occupation) and were given a space to provide feedback. Only once the survey was completed they were told that “The objective of this study is to analyze how particular emotions can influence consumers’ choices, in particular with respect to more or less familiar brands”.

### 3.Results

The graph portrayed in table 5 presents the percentages of people who preferred Italian products that were more widely known rather than foreing products.

Percentage of individuals who preferred the Italian option



**Table 5.** Graphical illustration of the data collected from each group

It is important to note that the data on physical disgust is equal to the control group with regards to both the chocolate and juice categories, which presented two of the lesser known international options, these categories were also the ones in which the overall moral disgust response widely diverged from the control group’s. Another interesting result is given by the sportswear option in which physically disgusted individuals greatly preferred made in Italy products rather than a recognized international brand. Multiple tests were conducted in order to analyze the different hypotheses as well as the reliability of the data collected, and table 6 presents the results of two Chi-square analyses testing whether the results obtained from the physical disgust and moral disgust groups were significantly different from the ones obtained from the control group.

	biscuits	coffee	sparkling water	beer	chocolate	juice	chips	sportswear	luxury
Control group	69,81132	71,69811	86,79245	45,28301	98,11320	88,67924	58,49056	58,49056	50,94339
Physical disgust	80	60	98	56	98	88	54	82	42
Moral disgust	71	51	84	48	90	73	52	62	39

	Alpha	p-value	0,05?	0,1
Control group				
Ph disgust	18,74865514	0,016261	Reject the hp	
Moral disgust	13,4223174	0,098193	Can't reject	Reject the hp

**Table 6.** Percentage values of the graph from table 5 and results of Chi-squared analysis using the CG as the expected values

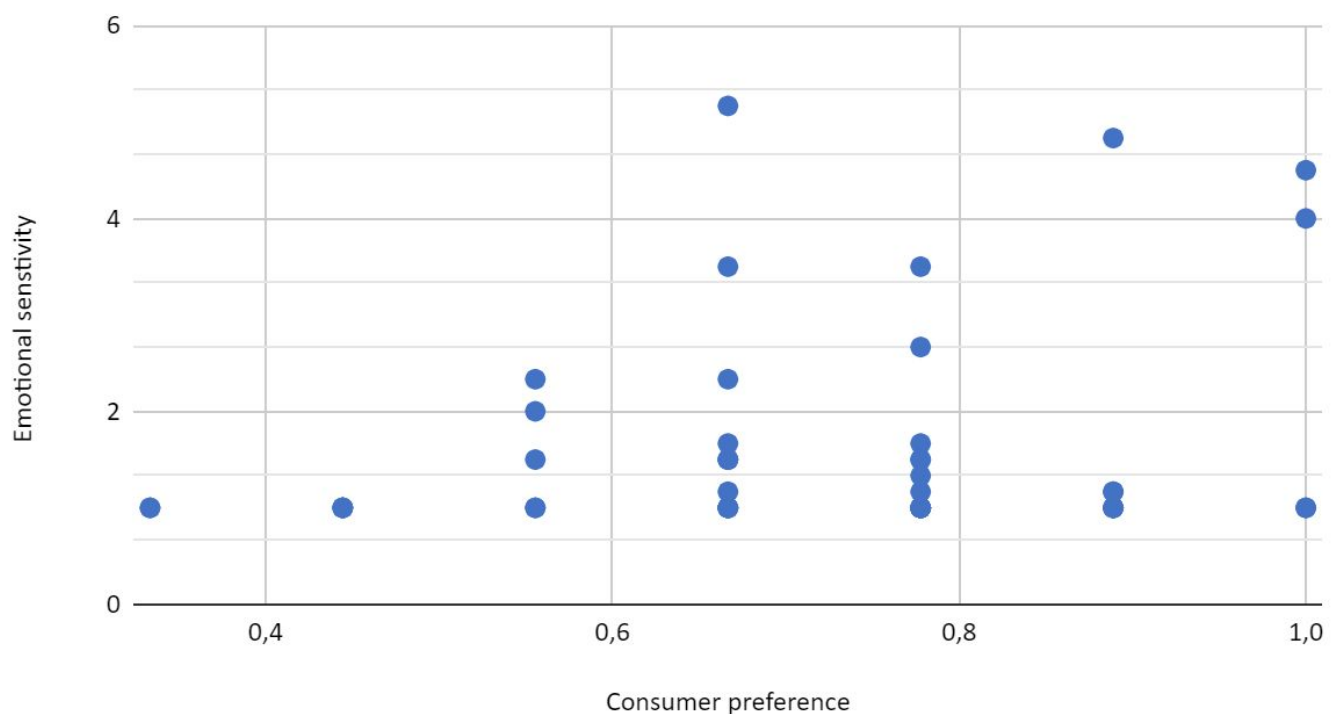
The data clearly shows that at a 0,05 confidence interval physical disgust cannot be considered comparable to the control group (p-value: 0,016) while the moral disgust data barely fits within the 0,1 confidence interval (p-value: 0,0981). This shows that while physical disgust clearly modifies the consumer choice, the effect of moral disgust is weaker. Moreover, physical disgust led more people towards familiar and domestic products rather than unfamiliar foreign ones (Mean: 0,717; SD: 0,163), this data is in stark contrast with Huang & Sengupta's findings on typical and atypical products during a pandemic stating that the preference should shift towards lesser known and more atypical products and it also disproves H1. This result can be explained in two different ways: the conformity effect presented by Murray & Schaller leads to the belief that customers might prefer the least risky product not only in terms of typicality but also in terms of quality and that on the basis of that, the benefits of choosing a known product outweigh the risks of such product being touched by multiple individuals. Another explanation is that during the period in which the test was given (late September 2020), the Covid-19 pandemic was stabilizing in Italy, the lockdown had been officially lifted on the 4th of May and the subjects lowered their attention to possibly infectious behaviour which in turn made their Behavioural Immune System less sensitive. With the decrease in BIS sensibility, the Atypicality effect portrayed by Huang & Sengupta might have become weaker, leading consumers back to their usual purchase habits.

The results obtained from the moral disgust group showed that the differences with respect to the control group were only significant at a 0,1 confidence interval and the graphs in table 5 also state that moral disgust led to an overall lower adoption of known domestic products in favour of foreign ones (Mean: 0,638; SD: 0,196). Once again the chocolate and juice categories are among the ones showing the largest disparities between the two groups taken into account while the largest disparity appears in the coffee category, which

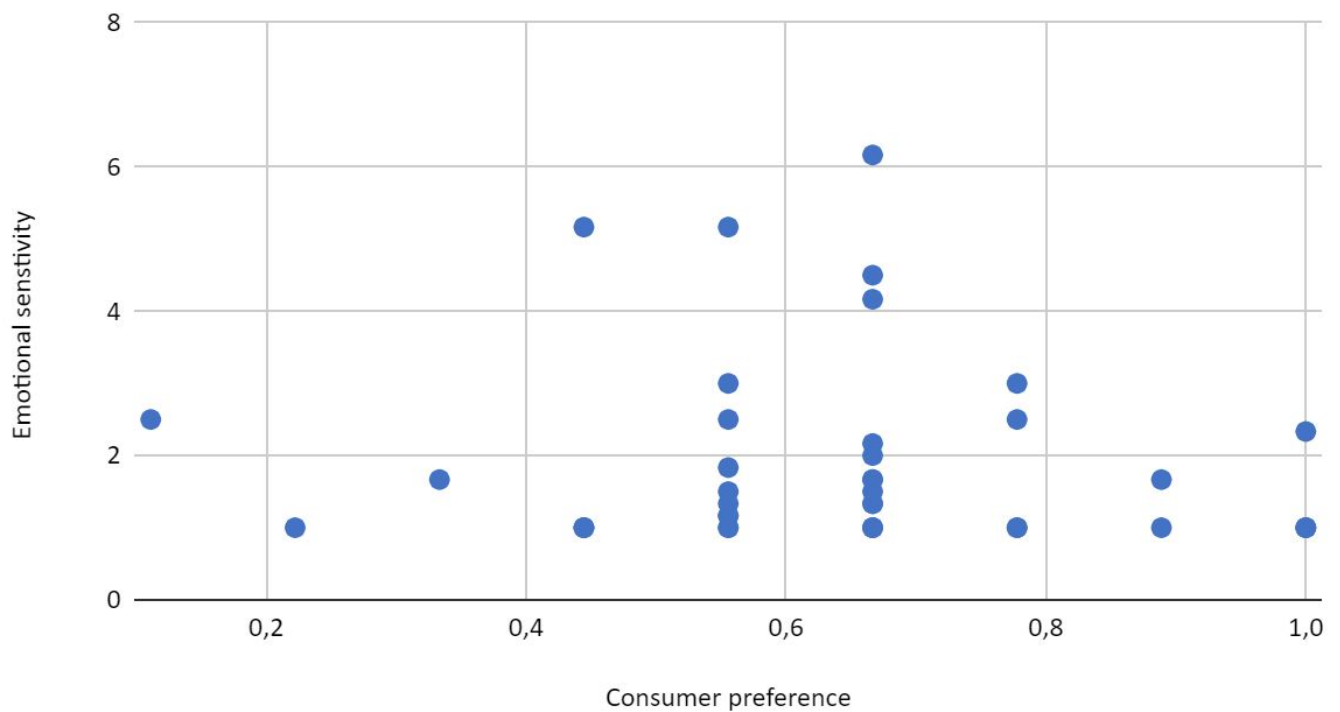
asked the consumers to choose between two widely recognized brands of coffee. These results are consistent with the literature, in particular Martinez & Jaeger and Amar et al., which states that morality and moral disgust lower the value of original products since they resent the negative effect of counterfeits, on the base of this data H2 is partially confirmed. It is important to note in fact that all the categories in which the subjects preferred the foreign products are either categories with high levels of counterfeiting (such as luxury) or categories for which supermarkets and discount stores, such as Coop or Carrefour, offer their own cheap alternatives (in particular juice, chocolate and coffee). The literature also presents a more significant correlation between moral disgust and the decrease in perceived value than the one recorded by this survey, the main explanation of this result may be linked to the nature of our survey: while Amar et al. connected moral disgust to counterfeits and then counterfeits to the original products, our research linked directly moral disgust to the original products since the subjects were not instructed in any way to consider counterfeiting while answering the questions provided.

A scatter plot of the preferences between made in Italy products and foreign ones with respect to the emotional sensibility of the subjects (presented in table 7) shows another interesting detail:

Relation between sensitivity and decisions in Ph



## Relation between sensitivity and decisions in Mo



**Table 7.** Scatter plots presenting the relationship between emotional sensitivity and preferences for each subject in the disgust samples.

while there is no clear linear correlation between the two variables, the graph shows that individuals who scored higher on the moral sensibility test preferred the made in Italy products in the case of Physical Disgust and gravitated more towards the middle of the distribution in the case of Moral Disgust. The literature already stated that higher moral sensibility influenced the effects of disgust on consumers, so it was necessary to evaluate the correlation between made in Italy preference and each emotion. The correlation coefficients between these variables are shown in table 8 and confirm what was previously stated: emotional sensibility shows a partial positive correlation (0,208) with made in Italy preferences when focusing on the physical disgust sample, in particular with respect to feelings of anxiety (0,22), nervousness (0,206), and troubleness (0,202), there is also almost no correlation between preferences and happiness (0,01). With regards to the moral disgust sample, the coefficients show a very weak negative correlation (-0,075) between emotions and preferences: with the only exception being happiness (0,107), all the other emotions, especially nervousness (-0,128) stress(-0,117) and anxiety(-0,115), showed a negative effect on Italian products.

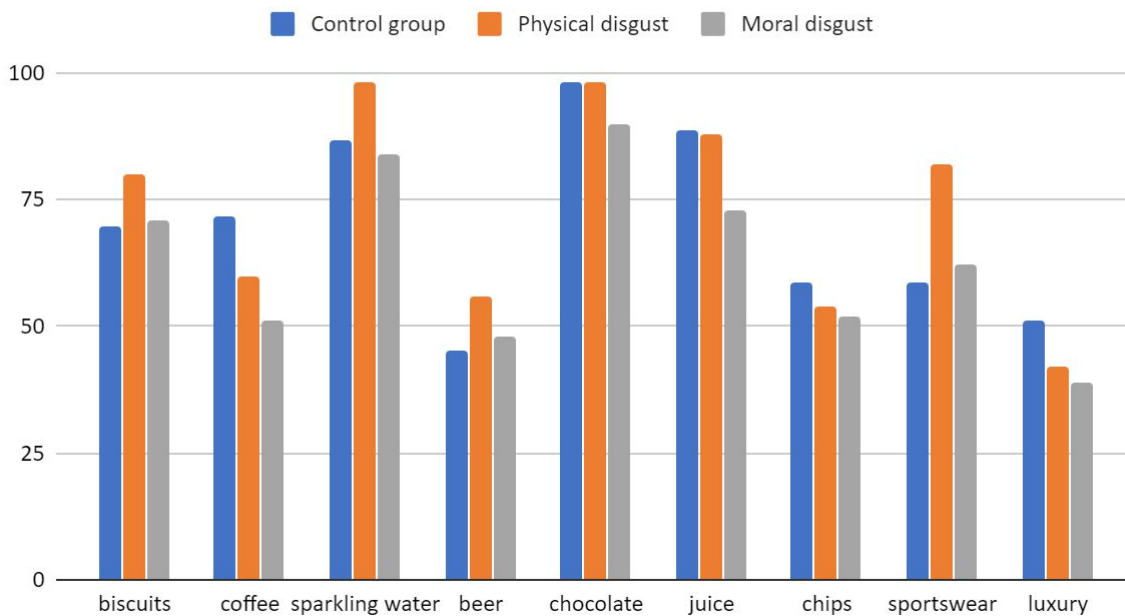
Physical D	Mean	SD	Corr
MII Preference	0,7167755991	0,1637729918	
Overall emotion	1,759103641	1,001423557	0,2086339215
Overall no happy	1,591503268	1,076162795	0,2235350069
Nervous	1,666666667	1,290994449	0,2067052873
Stressed	1,647058824	1,411715685	0,1837521389
Anxious	1,764705882	1,582254534	0,2264989923
Angry	1,37254902	1,057559158	0,1338387862
Troubled	1,62745098	1,310889535	0,2025533696
Restless	1,470588235	1,064949598	0,1424035543
Happy	2,764705882	1,680336101	0,011400171

Moral D	Mean	SD	Corr
MII Preference	0,6388888889	0,1961161351	
Overall emotion	2,089285714	1,203817189	-0,07542217195
Overall no happy	1,95	1,338238839	-0,09950785543
Nervous	1,775	1,386519346	-0,1283481794
Stressed	2,175	1,517208976	-0,1172924999
Anxious	1,95	1,568111718	-0,1158010695
Angry	2,125	1,883633967	-0,0674824897
Troubled	1,95	1,663329993	-0,004366878845
Restless	1,725	1,300640868	-0,09773052114
Happy	2,925	1,525635639	0,1071226369

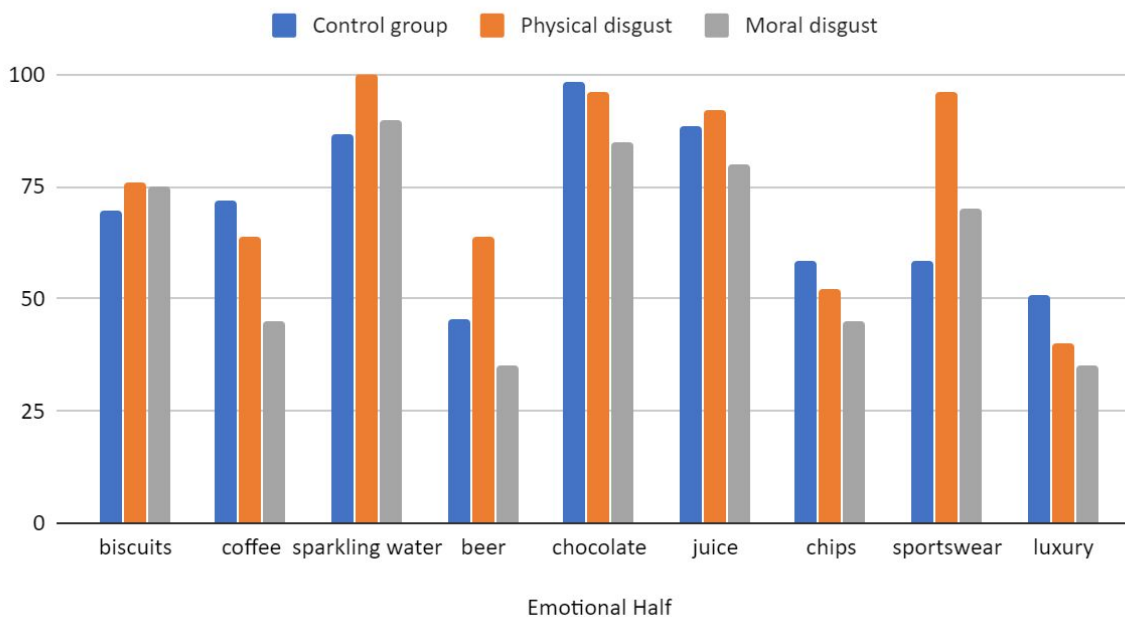
**Table 8.** Correlation coefficients between every emotion recorded and preference towards made in Italy.

After these results displayed a clear correlation between emotional sensibility and preferences, we conducted a repetition of all the tests using only the most sensitive half of each group. This new filtering provided interesting results, as it further increased the value of the options that were preferred in the initial results: the categories in which Italian products were preferred more than in the control group now present an even higher level of preference (the mean preference in the physical disgust sample increased from 0,716 to 0,756), while the categories in which foreign products were more commonly chosen now present an even lower value of preference for Italian products (in the moral disgust sample the mean slightly decreased from 0,638 to 0,622). Table 9 shows a comparison between the two studies conducted, the upper graph is the one presented in table 5 while the lower one shows the new percentages computed using only the data from the most sensible half of the subjects.

## Percentage of individuals who preferred the Italian option



## Percentage of sensible individuals who chose Italian products



**Table 9.** Comparison between the results of the two tests.

A new chi square test (Table 10) provided a more clear overview of the effects of using the reduced samples: while comparing physical disgust with the control group the p-value at 8 degrees of freedom was lower than 0,0001 and the comparison between control group and moral disgust resulted in a p-value of 0,0012. These new p-values mean that the data from the control group is significantly different from both sets of data obtained from the two types of disgust even at the 0,5 confidence interval and further prove the effects of moral and physical disgust on consumer preferences. H3 is thus confirmed since an higher level of emotional sensibility augmented the effects of disgust on consumer choice.

Emotional Half	biscuits	coffee	sparkling water	beer	chocolate	juice	chips	sportswear	luxury
Control group	69,8113	71,69811	86,79245	45,28301	98,11320	88,67924	58,49056	58,49056	50,94339
Physical disgust	76	64	100	64	96	92	52	96	40
Moral disgust	75	45	90	35	85	80	45	70	35

Emotional Half	alpha	p-value	0,05?
Control group			
Physical disgust	38,41669965	>0,0001	Reject
Moral disgust	25,74889589	0,0012	Reject

**Table 10.** Results of the new Chi-square analyses

## 4. Practical Implications

Regarding the practical implications of this study, both policymakers and managers can benefit from this knowledge. Disproving H1 means that consumers are already over the phase of the pandemic in which the Behavioural Immune System is more susceptible to triggering and the implications from Huang & Sengupta's research are no longer useful: their findings suggest that a period of high disease avoidance, in particular the Covid-19 pandemic since their research was conducted in the period at which the population alert was at its peak, is ideal for managers who are planning to launch a product that can be considered more atypical due to the fact that disease cues will lead customers away from familiar goods which are unconsciously linked to more people and towards more niche goods. Moreover, Huang & Sengupta (2020) suggested that the effects of the pandemic on atypical products would linger long after the end of the lockdown, showing as evidence an article from Bloomberg<sup>3</sup> stating how the lockdown in the UK significantly increased the purchases of atypical food ingredients such as Kimchi, and cocktails such as Tequila. Finally our findings seem to confirm another supposition made by the two researchers: they believe that since during the pandemic social distancing was not simply an automatic defense system mandated by the BIS but it was also socially mandated by most global governments, the end of the lockdown would lead to an increased desire for socialization, which will cause an unconscious shift towards products linked to many potential consumers and thus once again increase the relative demand for typical products. The confirmation of H2 strengthens the conclusions reached in the research conducted by Amar et al. (2018) according to which companies conducting an aggressive campaign against counterfeiting might generate the opposite effect of the one expected. This kind of campaign will undoubtedly increase the counterfeit

<sup>3</sup> <https://www.scmp.com/news/world/europe/article/3083322/britons-beat-coronavirus-lockdown-blues-sewingtequila-and-kimchi>

awareness of consumers thus generating in them moral disgust; as this research showed, moral disgust leads customers away from more known products since the law of similarity transfers part of the disgust felt towards counterfeits to their original counterparts. On the other hand, a government campaign aimed at reducing counterfeit purchase which focuses not on the specific products, but on the immoral and often illegal practices used in the production of counterfeit good (such as the one proposed by Martinez & Jaeger in 2015) might be able to offset the minimal effects of moral disgust reported in our analysis in which counterfeits were not mentioned, while also increasing moral awareness in the population.

Finally H3 confirms that emotional sensitivity can augment the effects disgust has on the consumer decision making process, this means that disgust can be considered a valuable emotion when trying to influence public behaviour as well as consumer buying behaviour. As a consequence, it might be in the policy makers' best interest to use either moral or physical disgust in the public service announcements of a campaign aiming at the reduction of child labour or at increasing the percentage of individuals who recycle since people who are more susceptible to disgust will be heavily influenced by the message portrayed in campaigns on topics that already elicit disgust. On the other hand, Managers should pay close attention to the level of awareness and sensibility of their companies since at higher levels disgust can negatively affect the firms not only on the base of advertisement, but also on the base on company policies (Xie et al.; 2014), in particular with regards to environmentally unfriendly behaviour. Environmental irresponsibility generates the negative emotions of the CAD triad (contempt, anger and disgust) in consumers with specific characteristics such as high empathy, a strong moral integrity, high emotional sensitivity or an interest in social justice, and generates negative reactions such as boycotting, negative word of mouth and complaints which can negatively affect a firm's reputation in the eyes of all the other potential customers. Moreover Xie et al. confirmed that consumers are more than willing to actively engage in actions that can either harm a company they deem irresponsible (such as negative word of mouth, boycotts and even complaints towards the authorities) or can benefit a company they believe is responsible (praise, positive word of mouth and investments in the firm). In this case managers should try to reduce the environmentally irresponsible choices they make in order to avoid the generation of moral disgust, since there is an asymmetry between the positive and negative reactions customers have with regards to Corporate Social Responsibility crises, and that it is much easier to negatively affect a firm's reputation with a bad decision than to obtain and maintain a good performance and reputation via continuous green choices. In case the damage has already been done managers should immediately try to mitigate the effects of moral disgust in sensible individuals by admitting their responsibilities, apologizing and most importantly by quickly initiating remedial actions. These actions not only can decrease moral disgust in individuals, but can also generate gratitude and respect towards a firm that is actively trying to find a remedy to its errors.



## **5.Limitations and future research**

The main limitations of this research were the sample size and its localization. While the initial sample size of 249 individuals was optimal, the reduction to 144 complete answers created some difficulties with the reliability of some analyses, in particular the ones in which we used only the most sensible half of the samples, thus reducing the actual number of answers to approximately 20 for each category, we suspect that the results that would have been obtained with a larger sample could have been both slightly different and more accurate. Moreover some individuals in the disgust groups didn't clearly understand the requirements of the first section of the survey and gave less detailed answers which might have affected their levels of influenced disgust, in a future research the subjects might be presented with disgusting situations, either physical or moral, in order to better influence their emotional state before collecting new data. A greatly positive aspect of the sample considered was its variety, both in terms of the age distribution between the subjects and their division on the base of gender identity. As previously shown in table 3, all samples have a mean age in the mid thirties and present a standard deviation of 15 years; moreover the number of answers given by males or females is not skewed in favor of one gender or the other, it is thus unlikely that the results achieved in this research are dependant on either the age or gender identity of the subjects.

The second limitation of this research is its localization, since the study was only conducted on Italian individuals using domestic products, the results might depend on nationality. Future research should extend the study to other countries with regards to their domestic products and compare the results with the ones reported in this paper in order to obtain a more complete understanding of the possible national differences that can affect the consumer decision making process with respect to their emotional state.

Future research could focus on understanding whether the increase in the purchase of typical products after the lockdown is due to the Conformity effect presented by Murray & Schaller, or due to the desire to increase sociality generated by the artificial social distancing rules developed by the governments, as hypothesized by Huang & Sengupta.

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## Intro

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Grazie in anticipo per la tua partecipazione al presente studio che si compone di tre distinte parti. Nella prima ti verrà chiesto di scrivere un breve testo, nella seconda ti verrà chiesto di fare alcune scelte, e infine nell'ultima parte ti verranno chieste una serie di domande relative a te.

La durata complessiva stimata del presente studio è di circa 5 minuti.

I dati raccolti saranno trattati in maniera completamente anonima, non ci sono risposte giuste o sbagliate, siamo semplicemente interessati alle tue opinioni.

Per qualsiasi eventuale domanda potete contattare

## Disgusto Fisico

### Writing Task

Il disgusto fisico indica un forte senso di avversione associato a riluttanza o altre manifestazioni fisiche come nausea o vomito, che possono verificarsi in maniera immediata in presenza di determinati odori, sapori e visioni (es. ambienti sporchi, insetti) e comporta il desiderio di allontanarsi da essi.

Per favore, pensa a un episodio della tua vita passata in cui hai provato un forte senso di **disgusto fisico**. Nello scrivere questo testo cerca di essere più specifico possibile, inserendo:

**la causa che ha fatto scaturire il disgusto  
quali sensazioni ed emozioni hai provato  
come ti sei comportato**

Sarà possibile passare alla domanda successiva dopo 30 secondi.



**These page timer metrics will not be displayed to the recipient.**

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Click Count: *0 clicks*

La prima parte è completata.

Adesso ti verrà chiesto di scegliere tra alcuni brand.

Quali di questi due brand di biscotti preferisci?

per favore, clicca sulla tua marca preferita di biscotti tra le due proposte.



Quali di questi due brand di caffè preferisci?

per favore, clicca sulla tua marca preferita di caffè tra le due proposte.

The logo for Nespresso, featuring the word "NESPRESSO" in a bold, black, sans-serif font. The "N" is stylized with a curved underline.The logo for illy, featuring the word "illy" in a red, cursive, lowercase font.☐☐

Quali di questi due brand di bibita gasata preferisci?

per favore, clicca sulla tua marca preferita di bibita gasata tra le due proposte.

The logo for S. Pellegrino, featuring a red five-pointed star above the words "S. PELLEGRINO" in a blue, serif, uppercase font.☐The logo for Perrier, featuring the word "perrier" in a green, lowercase, serif font with a registered trademark symbol.☐

Quali di questi due brand di birra preferisci?

per favore, clicca sulla tua marca preferita di birra tra le due proposte.

The logo for Corona, featuring a yellow crown above the word "Corona" in a blue, serif, uppercase font.☐The logo for Nastro Azzurro, featuring the words "NASTRO AZZURRO" in a red, uppercase, serif font. The word "AZZURRO" has a blue ribbon graphic integrated into the letter "A".☐

Quali di questi due brand di cioccolato preferisci?

per favore, clicca sulla tua marca preferita di cioccolato tra le due proposte.

☐☐

Quali di questi due brand di succo di frutta preferisci?

per favore, clicca sulla tua marca preferita di succo di frutta tra le due proposte.

☐☐

Quali di questi due brand di patatine preferisci?

per favore, clicca sulla tua marca preferita di patatine tra le due proposte.

☐☐

Quali di questi due brand di abbigliamento sportivo preferisci?

per favore, clicca sulla tua marca preferita di succo di abbigliamento sportivo tra le due proposte.



Quali di questi due brand di lusso preferisci?

per favore, clicca sulla tua marca preferita di lusso tra le due proposte.

BVLGARI

CHANEL



La seconda parte è terminata, adesso ti verranno chieste alcune domande sulle sensazioni che ti ha provocato il seguente studio.

Considerando i vari task che ti sono stati chiesti nel presente studio, per favore indica in che misura ti senti ...

	Per Niente						Moltissimo
	1	2	3	4	5	6	7
Inquieto	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Per Niente 1	2	3	4	5	6	Moltissimo 7
Irrequieto	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Arrabbiato	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stressato	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nervoso	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ansioso	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Contento	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Disgusto morale

### Writing Task

Il disgusto morale indica un forte senso di avversione e ripugnanza associate a determinati comportamenti, idee o categorie di persone contrarie al proprio codice etico o a quello della società in cui si vive (es. violenze, incesti, disonestà etc.) con le quali non si vuole avere a che fare e comportano il desiderio di allontanarsi da essi.

Per favore, pensa a un episodio della tua vita passata in cui hai provato un forte senso di **disgusto morale**. Nello scrivere questo testo cerca di essere più specifico possibile, inserendo:

**la causa che ha fatto scaturire il disgusto**  
**quali sensazioni ed emozioni hai provato**  
**come ti sei comportato**

Sarà possibile passare alla domanda successiva dopo 30 secondi.

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La prima parte è completata.

Adesso ti verrà chiesto di scegliere tra alcuni brand.

Quali di questi due brand di biscotti preferisci?

per favore, clicca sulla tua marca preferita di biscotti tra le due proposte.

☐☐

Quali di questi due brand di caffè preferisci?

per favore, clicca sulla tua marca preferita di caffè tra le due proposte.

☐☐

Quali di questi due brand di bibita gasata preferisci?

per favore, clicca sulla tua marca preferita di bibita gasata tra le due proposte.



Quali di questi due brand di birra preferisci?

per favore, clicca sulla tua marca preferita di birra tra le due proposte.



Quali di questi due brand di cioccolato preferisci?

per favore, clicca sulla tua marca preferita di cioccolato tra le due proposte.



Quali di questi due brand di succo di frutta preferisci?

per favore, clicca sulla tua marca preferita di succo di frutta tra le due proposte.



Quali di questi due brand di patatine preferisci?

per favore, clicca sulla tua marca preferita di patatine tra le due proposte.



Quali di questi due brand di abbigliamento sportivo preferisci?

per favore, clicca sulla tua marca preferita di succo di abbigliamento sportivo tra le due proposte.



Quali di questi due brand di lusso preferisci?

per favore, clicca sulla tua marca preferita di lusso tra le due proposte.



BVLGARI

CHANEL



La seconda parte è terminata, adesso ti verranno chieste alcune domande sulle sensazioni che ti ha provocato il seguente studio.

Considerando i vari task che ti sono stati chiesti nel presente studio, per favore indica in che misura ti senti ...

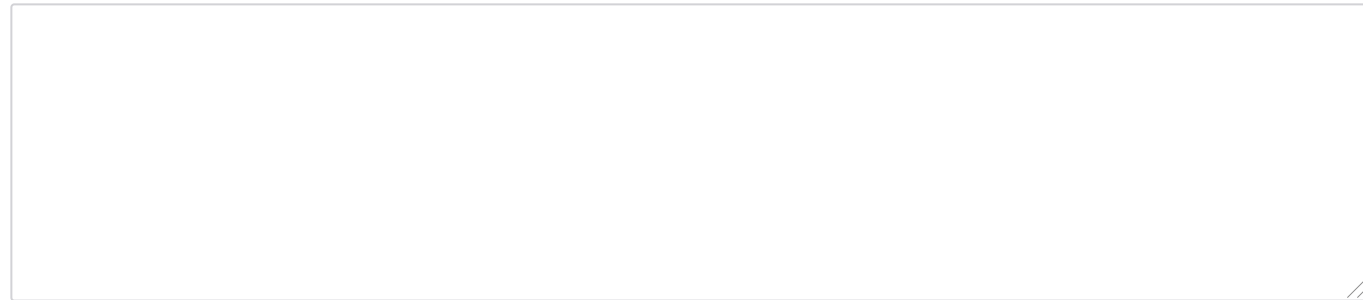
	Per Niente						Moltissimo
	1	2	3	4	5	6	7
Nervoso	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ansioso	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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Irrequieto	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Inquieto	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Arrabbiato	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### Controllo

### Writing Task

Per favore, scrivi nello spazio sottostante un breve testo (massimo 5 frasi) in cui descrivi il percorso che solitamente segui per andare a scuola/lavoro.

Sarà possibile passare alla domanda successiva dopo 30 secondi.



**These page timer metrics will not be displayed to the recipient.**

First Click: *0 seconds*

Last Click: *0 seconds*

Page Submit: *0 seconds*

Click Count: *0 clicks*

La prima parte è completata.

Adesso ti verrà chiesto di scegliere tra alcuni brand.

Quali di questi due brand di biscotti preferisci?

per favore, clicca sulla tua marca preferita di biscotti tra le due proposte.



Quali di questi due brand di caffè preferisci?

per favore, clicca sulla tua marca preferita di caffè tra le due proposte.

The logo for Nespresso, featuring the word "NESPRESSO" in a bold, black, sans-serif font. The "N" is stylized with a horizontal line through it.☐The logo for illy, featuring the word "illy" in a red, cursive, lowercase font.☐

Quali di questi due brand di bibita gasata preferisci?

per favore, clicca sulla tua marca preferita di bibita gasata tra le due proposte.

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☐☐

Quali di questi due brand di succo di frutta preferisci?

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☐☐

Quali di questi due brand di patatine preferisci?

per favore, clicca sulla tua marca preferita di patatine tra le due proposte.

☐☐

Quali di questi due brand di abbigliamento sportivo preferisci?

per favore, clicca sulla tua marca preferita di succo di abbigliamento sportivo tra le due proposte.



Quali di questi due brand di lusso preferisci?

per favore, clicca sulla tua marca preferita di lusso tra le due proposte.



La seconda parte è terminata, adesso ti verranno chieste alcune domande sulle sensazioni che ti ha provocato il seguente studio.

Considerando i vari task che ti sono stati chiesti nel presente studio, per favore indica in che misura ti senti ...

	Per Niente 1	2	3	4	5	6	Moltissimo 7
Contento	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Arrabbiato	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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Nervoso	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Irrequieto	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Tempral DISCOUNT**

Ora ti verranno chieste alcune domande riguardati le tue personali preferenze ...

Preferiresti ...

100 euro domani  
☐

110 euro tra 90 giorni  
☐

Preferiresti ...

100 euro domani  
☐

120 euro tra 90 giorni  
☐

Preferiresti ...

100 euro domani  
☐

130 euro tra 90 giorni  
☐

Preferiresti ...

100 euro domani  
☐

140 euro tra 90 giorni  
☐

Preferiresti ...

100 euro domani  
☐

150 euro tra 90 giorni  
☐

Preferiresti ...

100 euro domani  
☐

160 euro tra 90 giorni  
☐

Preferiresti ...

100 euro domani  
☐

170 euro tra 90 giorni  
☐

**Manipulation Checks**

Lo studio è quasi completato

In che misura questo studio ti ha fatto sentire fisicamente disgustato?

Per Nulla

1

☐

2

☐

3

☐

4

☐

5

☐

6

☐

Molto

7

☐

In che misura questo studio ti ha fatto sentire moralmente disgustato?

Per Nulla

1

☐

2

☐

3

☐

4

☐

5

☐

6

☐

Molto

7

☐

## DEMO

Qual è il tuo genere?

Maschile

☐

Femminile

☐

Quanti anni hai?

Qual è la tua occupazione?

Hai qualche commento sullo studio?

Grazie mille per la tua collaborazione e partecipazione.

L'obiettivo di questo studio è quello di analizzare come alcune emozioni possano influenzare le scelte di consumo e in particolare la preferenza verso brand più o meno familiari.

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