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APPETITE FOR FAKES:

What drives consumers' choice?

CHOICE EXPERIMENT FOR THE DEMAND FOR COUNTERFEITS WORKSTREAM

December 2023

This survey has been commissioned to Ipsos European Public Affairs and Centerdata, by the EUIPO

CHOICE EXPERIMENT FOR THE DEMAND FOR COUNTERFEITS WORKSTREAM
FINAL REPORT

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Foreword

Through the European Observatory on Infringements of Intellectual Property Rights, the EUIPO has studied issues related to counterfeit goods for several years. One set of studies, carried out jointly with the Organisation for Economic Co-operation and Development (OECD), has focused on international trade in counterfeit goods, and especially imports of counterfeits into the EU from the rest of the world. These studies have shown that the scale of the problem is huge, with imports of counterfeits into the EU accounting for 5.8% of total imports, valued at 120 billion EUR. In parallel, the EUIPO has carried out a series of sectorial studies which estimate the losses suffered by legitimate industry, and the derived loss of government revenue, as a result of the presence of counterfeits in the marketplace in the EU. Together with Europol, the EUIPO has documented the connection between counterfeiting and other types of IP crime and other types of organised crime, such as money laundering, tax fraud and even human trafficking.

These studies have considered the scale and impact of counterfeiting on the level of the entire economy or individual sectors. Analyses of consumer's perceptions and behaviours have also been regularly carried out as part of the Youth scoreboards and IP perceptions studies.

In order to complete its understanding of the phenomenon, the Observatory has initiated a "Demand for Counterfeits" workstream. Some of the key questions this workstream is designed to address include: Which factors influence consumers? What triggers the purchase of the counterfeit (e.g. being on holiday abroad, difficult economic situation, price of the product, influence of family and friends)?

In early 2021, the Observatory established an Advisory Panel of experts to discuss various aspects of demand for counterfeits. The panel consists of experts, academics, representatives of business associations and consumer organisations. A major subject of discussion was what drives consumer purchases of counterfeit goods. Following a set of meetings held in late 2021, a number of relevant factors were identified, combining insights from other Observatory studies (such as the IP Perception Study and the Youth Scoreboard) with expertise from members of the Advisory Panel.

Given the complexities and lack of empirical data, a conventional econometric analysis of consumer motivation when buying (or not buying) counterfeits is extremely difficult. Therefore, it has been

decided to carry out a choice experiment, a method often used to study the effect of attribute levels on the subject's (here, a consumer's) stated preferences. In this case, the purpose is to investigate the factors that play a role in consumers' decision making when (not) buying counterfeits. This report presents the result of this analysis.

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The Advisory Panel for the Demand for Counterfeits workstream provided crucial input into the formulation of the research questions.

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Executive Summary

The aim of this study is to develop a fuller understanding of factors that drive the intentional demand for counterfeit goods. Counterfeit products are fakes or unauthorised replicas of the original product, usually illegally marked with logos and brands belonging to the company that sells the original.[1] Sometimes consumers also buy counterfeit goods unintentionally; in the latest EUIPO survey, 10% of those who had not intentionally bought counterfeits found after the purchase that the product they had bought was fake. More than 1/3 of consumers were unsure whether a product they had purchased was genuine[2]. However, such purchases are not governed by the type of decision mechanism analysed in this study and are therefore not included in this report.

Due to the rise of the internet and extended international supply chains, one currently finds counterfeit goods almost everywhere in the world, covering a wide range of product types. The Organisation for Economic Co-operation and Development (OECD) and the European Union Intellectual Property Office (EUIPO) estimate that trade in counterfeit and pirated goods amounted up to 2.5% of world trade in 2019, and constituted around 5.8% of all EU imports in that year, with an overall value of €120 billion.[3] There is widespread agreement that the illegal trade in counterfeit goods poses a significant and growing threat to economies worldwide, not only in terms of job and tax loss, but also given the potential harmful effects of counterfeit goods on health, the environment, safety and innovation.[4] To successfully tackle this issue, a fuller understanding of factors driving intentional consumer demand for these products is necessary, thus providing a basis for this study.

[1] EUIPO (2023). European Citizens and Intellectual Property: Perception, Awareness, and Behaviour - 2023. Available at euipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/reports/2023_IP_Perception_Study/2023_IP_Perception_Study_FullR_en.pdf

[2] Ibid., p. 39.

[3] OECD/EUIPO (2022), *Dangerous Fakes: Trade in Counterfeit Goods that Pose Health, Safety and Environmental Risks, Illicit Trade*, OECD Publishing, Paris, https://doi.org/10.1787/117e352b-en ; EUIPO & Europol (2022). Intellectual Property Crime Threat Assessment 2022, Publications Office of the European Union, Luxembourg.

[4] EUIPO (2021). Risks and damages posed by IPR infringement in Europe Awareness campaign 2021. Available at: https://euipo.europa.eu/tunnel-

To determine the key factors of intentional demand for counterfeit products, this study featured an online survey with an experimental component. Unlike traditional consumer surveys, which ask respondents to rate products or product features in isolation, this study presented the respondents with a series of shopping scenarios with various products that entailed different combinations of features. This enabled researchers to simulate real-world purchase decisions and determine which features are most important to consumers and how they trade-off between them. Specific factors analysed as part of this study can be broadly classified into product-specific factors (factors to do with features of interest of the counterfeit product), situation-specific factors (factors related to a situation in which a counterfeit product is purchased), and individual-level factors (relevant personal characteristics of the purchaser). Product-specific factors that were systematically varied as part of the study design included product type, brand, price, quality and the counterfeit's similarity to the original item[5]. Purchase situation-specific factors that were likewise systematically varied included product purchase channel, the perceived risk of punishment, and the perceived health/safety risks linked to the counterfeit product use. Purchasers' personal integrity, value consciousness and need to belong were individual-level factors observed in this study on the basis of personal data provided by the respondents.

The study was conducted online in 10 EU Member States among general population respondents aged 15 or older. Member States included in the study were Estonia, France, Germany, Greece, Italy, the Netherlands, Poland, Romania, Spain and Sweden. These Member States were selected for the survey to represent Western, Southern, Eastern and Northern Europe and also, due to their population size, a considerable portion of the total European population. In total, 20,389 interviews (minimum 2000 per country) were carried out as part of the study fieldwork, which took place online between 21 April and 5 May 2023.

The research conducted for this study shows that intentional demand for counterfeit products continues to be a relatively widespread phenomenon among EU consumers, even if, on average, EU consumers also hold a relatively negative opinion of these products. According to the self-reported behaviour in 10 EU Member States, about a third of EU respondents (34%) indicate to have

web/secure/webdav/guest/document_library/observatory/documents/Awareness_campaigns/spring_campaign_2021/2021_Spring_Campaign_en.pdf

[5] Refer to Table 2 for a full list of variations applied as part of the study.

knowingly purchased a counterfeit product at least once in the past. In this group, 5% say that they have often done this, and 24% indicate that they did this less than a year ago. Incidence of intentional counterfeit purchase behaviour is highest in Greece, where 55% admit to having knowingly purchased a counterfeit product at least once. The corresponding rate is lowest in France and Italy (both 19%). On a scale from (1) *negative* to (5) *positive*, general attitude towards counterfeits ranges from 2.3 in Italy and France to 2.8 the Netherlands and Poland.

Furthermore, the study found that consumers' purchase intentions for counterfeit products most strongly depend on personal characteristics: their need to belong[6], and their personal integrity[7] (where higher need to belong increases purchase intent for counterfeits and higher personal integrity decreases purchase intent for counterfeits). Consumers' intention to buy a counterfeit product also varies according to the type of product: people are most likely to consider purchasing low-engagement everyday items, represented by a bar of hand soap, followed by high-engagement items (investment item represented by a kettle and a "splurge" item represented by a pair of sunglasses, respectively)[8]. Finally, value consciousness[9] and brand type (everyday brand vs. high status brand) also play a role in purchase intent for counterfeit products, with more value conscious consumers less likely to show purchase intent for counterfeit products and everyday brands generating higher purchase intent than high-status brands. Other factors studied, while all statistically significant, were

[6] This characteristic was measured by means of a question asking respondents to indicate their agreement with a series of statements, e.g., "it is important that others like the products and brands I buy". For a full list of statements evaluated, refer to Q12 in Appendix A.

[7] This characteristic was measured by means of a question asking respondents to evaluate a series of behaviours, e.g., "getting too much change and not saying anything", as wrong or not wrong. For a full list of behaviours evaluated, refer to Q16 in Appendix A.

[8] Dual Process Theory, as introduced by Daniel Kahneman (2011), suggests that much of humans' behaviour is based on the automatic processing of information (often referred to as System 1 processing), and that humans only rarely engage in more deliberative processing (often referred to as System 2 processing). The study supposes that the majority of everyday purchases are done in System 1 decision-making mode. That said, System 2 decision-making mode may also be at play in certain situations, such as when consumers are faced with higher value or higher personal involvement items (e.g. with goods that can be seen as, so-called, 'investment pieces', or personal accessories that can be seen as 'personal splurges'). Low engagement item in the study was exemplified by a bar of hand soap, while the so-called 'investment piece' was exemplified by a kettle and a 'personal splurge' by a pair of sunglasses.

[9] This characteristic was measured on the extent of respondents' agreement with a series of statements (e.g., "I always check prices to be sure I get the best value for the money I spend"). For a full list of statements, refer to Q11 in Appendix A.

of relatively lower impact in terms of driving intentional consumer demand for counterfeit products. These less impactful factors included counterfeit product price level (25% vs. 50% of the original product price), perceived quality, perceived health/safety risks, perceived risk of punishment, and the purchase channel (online vs. offline).

The study also identified five unique consumer segments on the basis of their responses to the product and situation-related factors as well as the person-related characteristics (personal integrity, value consciousness and the need to belong). These groups primarily differ from one another in their intention to purchase counterfeit products, ranging from Segment 1 and Segment 2 with, relatively speaking, the highest intentions to purchase counterfeit products, to Segment 3, Segment 4, and Segment 5 which show low to zero intentions for purchasing counterfeit products.

Segment 1, with the highest intention to purchase counterfeit products, accounts for 18% of total consumers. It is the youngest of all segments, with 43% of all segment members under the age of 35, and the segment with the highest proportion of men (55%). This segment is characterised by a relatively strong need to belong and relatively lower levels of personal integrity and value consciousness compared to the other segments. The tendency of Segment 1 to purchase a counterfeit product depends on the characteristics of the counterfeit product, but not as strongly as with other segments. Notably, Segment 1 is the only segment that is more likely to purchase counterfeit sunglasses (spurge item) than a counterfeit kettle (investment item), which may be related to this segment's higher need to belong expressed through a preference for product types that can offer easy visibility and personal identification.

Largest of all segments, Segment 2 (37% of all consumers), shows no strong intention to buy counterfeit products, but also no clear rejection. Like Segment 1, this segment is characterised by relatively low personal integrity, but value consciousness and the need to belong are not strongly related to being a member in this segment. A bit older than Segment 1 (31% of segment members are under the age of 35), members of Segment 2 are influenced by product characteristics more than the other segments. More specifically, they stand out from the other segments for an outspoken preference for everyday (vs. high engagement) product types, everyday (vs. high-status) brands and for counterfeit products sold at lower prices.

Segments 3 (27% of all consumers), 4 (11% of all consumers) and 5 (7% of all consumers), which have low to no interest in buying counterfeit products, are, on average, older than the first two

segments. Compared to the latter, they also have higher levels of personal integrity and value consciousness, and a lower need to belong. More specifically, Segment 3 can be described as generally unwilling to purchase counterfeit products, although slightly more interested when it comes to an everyday product with no noticeable quality difference or visual difference from the original. Consumers within Segment 4 have a very low intention, on average, to purchase counterfeit products, which is influenced only to a very limited extent by product-specific and situation-specific factors. Finally, since Segment 5 expresses absolutely no interest in buying counterfeit products, characteristics of products and situations have no influence at all within this segment.

The segmentation findings suggest that different approaches/strategies are required to effectively target communications to motivate segments that are prone to purchase counterfeit products to change their behaviour. A more detailed discussion of possible communication approaches towards the various segments is provided in Chapter 4 of this report.

In conclusion, the results of this study indicate that understanding counterfeit purchasing drivers means, in the first place, understanding specific person-level values and psychological needs that drive these behaviours. That said, our findings show that intentions vary according to product, and that consumers also vary from one to another. Therefore, a contextualised understanding of counterfeit behaviours is needed, taking into account values and needs of people and understanding how behaviours shift according to product type.

1 Introduction

This study on the factors that explain why consumers intentionally purchase counterfeit goods, contributes to the EUIPO's overall mission of strengthening Intellectual Property Rights (IPR) across the European Union and beyond. Via its European Observatory on Infringements of Intellectual Property Rights (Observatory), bringing together public and private actors in the fight against piracy and counterfeiting, the EUIPO has studied issues related to counterfeit goods already for several years. In doing so, it mainly focused its quantitative research on the supply side of the phenomenon, i.e. the share of counterfeiting as part of the global economy and various sectors. On the demand side, EUIPO has carried out periodic surveys of EU residents in general (IP Perception studies) and surveys focusing on young Europeans (Youth Scoreboard). The present study seeks to augment this body of research and aims to improve the EUIPO's understanding of counterfeiting as part of its "Demand for Counterfeits" workstream by investigating individual and situation-specific as well as product-specific determinants of the intentional decision to buy counterfeit products through the use of a ratings-based conjoint survey experiment. Ratings-based conjoint experiments explain and predict preference for a specific product on the basis of its underlying features (such as price, brand name, etc.) and other relevant factors (such as the shopping context and individual purchaser characteristics).

The decision to conduct this study, as well as the choice of factors to be studies, was made in close cooperation with the Advisory Panel formed to support the Demand for Counterfeits workstream. This panel includes members drawn from Observatory stakeholders as well as academic experts and consumer organisations who provided valuable insights and feedback on the Terms of Reference for this study and to other activities within the workstream. The Terms of Reference for this study were presented (by written procedure) to the Advisory Panel and to the Economics & Statistics and the IP in the Digital World Working Groups of the Observatory during July-August 2022. The ToR were revised, taking into account suggestions received from the Working Groups and the Advisory Panel. The study was included in the 2023 Work Programme of the Observatory.

1.1 Research context

What drives intentional consumer purchases of counterfeit goods? This is the principal research question this study aims to answer. Counterfeit products are fakes or unauthorised replicas of the original product, usually illegally marked with logos and brands belonging to the company that sells the original.[10] They are, in brief, illegal copies of the original products.[11] Due to the rise of the internet and extended international supply chains, one currently finds counterfeit goods almost everywhere in the world. Counterfeit goods involve all types of goods ranging from jewellery and luxury products to everyday products such as toys and games, footwear, clothing, pharmaceuticals, food, beverages, cleaning products and so forth. They can either be sold online, on the street, or in the store. The Organisation for Economic Co-operation and Development (OECD) and the European Union Intellectual Property Office (EUIPO) estimate that trade in counterfeit and pirated goods amounted up to 2.5% of world trade in 2019, and constituted around 5.8% of all EU imports in that year, with an estimated overall value of €120 billion.[12] There is widespread agreement that the illegal trade in counterfeit goods poses a significant and growing threat to economies worldwide, not only in terms of job and tax loss, but also given the potential harmful effects of counterfeit goods on health, the environment, safety and innovation.[13]

In the literature, a common distinction is frequently made between "consumer as victim" and "consumer as willing collaborator".[14] As victims, consumers unintentionally buy counterfeit goods, believing that they are buying authentic items, whilst in reality they are not. The unintentional purchase of counterfeit goods, therefore, results from buyer's inability to differentiate between a counterfeit product and an original product. As willing collaborators, by contrast, consumers

[10] EUIPO (2023). European Citizens and Intellectual Property: Perception, Awareness, and Behaviour - 2023. Available at euipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/reports/2023_IP_Perception_Study/2023_IP_Perception_Study_FullR_en.pdf

[11] Or, as Rutter and Bryce (2008: 1146) put it, counterfeit goods are: "those goods which illegally imitate, copy, or duplicate a good or use a registered trademark without authorization and, therefore, infringe upon the legal right to copy of the right's owner." Rutter, J., Bryce, J. (2008). The Consumption of Counterfeit Goods: 'Here Be Pirates?', *Sociology, 42(6)*, 1146–1164.

[12] OECD/EUIPO (2022), *Dangerous Fakes: Trade in Counterfeit Goods that Pose Health, Safety and Environmental Risks, Illicit Trade*, OECD Publishing, Paris, https://doi.org/10.1787/117e352b-en ; EUIPO & Europol (2022), Intellectual Property Crime Threat Assessment 2022, Publications Office of the European Union, Luxembourg.

[13] Risks and damages posed by IPR infringement in Europe Awareness campaign 2021, EUIPO

[14] Mavlanova, T., Benbunan-Fich R. (2015). Counterfeit Products on the Internet: The Role of Seller-Level and Product-Level Information. *International Journal of Electronic Commerce, 15(2)*, 79–104.

intentionally buy counterfeit goods, knowing the item is fake, but purchasing it anyway. This results from a conscious decision-making process which excludes the possibility of consumers being confused about product authenticity.

This study is focused on obtaining a deeper understanding of *intentional* consumer demand for counterfeit products, which represents one of the key factors contributing to the growth of trade in counterfeit products. Specifically, within the European Union (EU) alone, 13% of Europeans report having bought counterfeit products intentionally in the last 12 months.[15] This despite the fact that a clear majority (79%) of EU consumers agree that buying counterfeit goods ruins businesses and jobs.[16] Latest findings, furthermore, indicate that important differences in counterfeiting behaviour exist across European countries.[17] In addition, youngsters between 15 and 24 years old are twice as likely to (admit) buy(ing) counterfeit goods in the last 12 months compared to the EU average (26% vs. 13%).[18]

Existing literature suggests a wide array of factors that may influence consumer decisions to buy counterfeit goods, as discussed in more detail in section 1.3. These range from socio-demographic factors (e.g., age, gender, income level, education, cultural norms, national habits regarding counterfeit purchasing, etc.) to purchase-situation factors[19], such as time of the year (holiday period

[15] EUIPO (2023). European Citizens and Intellectual Property: Perception, Awareness, and Behaviour - 2023. Available at euipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/reports/2023_IP_Perception_Study/2023_IP_Perception_Study_FullR_en.pdf

[16] *Ibid* 6

[17] According to the EUIPO's Intellectual Property: Perception, Awareness, and Behaviour study (2023), the incidence of self-declared purchases of counterfeit goods varies widely across countries, ranging from 24% in Bulgaria, to 8% in Finland. Besides Bulgaria, intentional purchase of counterfeits is higher than the EU average by at least five points in Spain (20%), Ireland (19%), Luxembourg (19%), and Romania (18%).

[18] EUIPO (2023). European Citizens and Intellectual Property: Perception, Awareness, and Behaviour - 2023. Available at euipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/reports/2023_IP_Perception_Study/2023_IP_Perception_Study_FullR_en.pdf

[19] Chaudhry, P.E., Stumpf, S.A. (2011). Consumer Complicity with Counterfeit Products. *Journal of Consumer Marketing, 28(2)*, 139–151; Whee, C.-H., Tan, S.-J., Cheok, K.-H. (1995). Non-Price Determinants of Intention to Purchase Counterfeit Goods. *International Marketing Review, 12(6)*, 19–46. For an overview, see Penz E., Schlegelmilch, B.B., Stöttinger, B.

vs. at work), place of purchase (with research demonstrating that counterfeiting is more likely to happen online instead of offline as well as in (local) counterfeit markets[20]). Besides these, also characteristics of counterfeit products themselves impact consumer decision-making on whether or not to buy these goods. One important product characteristic is obviously the price of the product, with expensive products not only more likely to be faked, but also to be bought, as this is (often falsely) perceived by some consumers as an opportunity to save money.[21] Other counterfeit product characteristics that stimulate the consumption of these goods involve the type of product (e.g. luxury, fashion, pharmaceuticals, etc), the product's popularity, as well as the degree of deception (i.e. to what extent does a product look real) and availability[22], among others.

The current study adds to this body of work by investigating the *relative* importance of and *interplay* between various determinants of intentional demand for counterfeit goods, making use of a ratings-based conjoint survey experiment. Ratings-based conjoint experiments, in brief, explain and predict preference for a specific product on the basis of its underlying features (such as price, brand name, etc.) and other relevant factors (such as the shopping context and individual purchaser characteristics).

1.2 Research objectives

The main research objective to investigate the relative importance of determinants of intentional demand for counterfeit goods, can be broken down into three sets of factors that influence the decision to purchase counterfeit goods and that this study aims to take a closer look at:

- *Individual-level factors:* factors at the level of the individual consumer (e.g. age, gender, cultural norms, moral status, education, etc.) that can influence the purchase of counterfeit

(2009). Voluntary Purchase of Counterfeit Products: Empirical Evidence From Four Countries. *Journal of International Consumer Marketing, 21(1)*, 67–84.

[20] Rutter, J., Bryce, J. (2008). The Consumption of Counterfeit Goods: 'Here Be Pirates?', *Sociology, 42(6)*, 1146–1164.

[21] Albers-Miller, N. (1999). Consumer Misbehaviour: Why People Buy Illicit Goods. *Journal of Consumer Marketing, 16(3)*, 273– 287; Bian, X., Moutinho, L. (2011). Counterfeits and Branded Products: Effects of Counterfeit Ownership. *Journal of Product and Brand Management, 20(5)*, 379–393; Wiedmann, K.P., Hennings, N., Siebels, A. (2007).

[22] Nia, A., Zaichowsky, J.L. (2000). Do Counterfeits Devalue the Ownership of Luxury Brands*? Journal of Product and Brand Management, 9(7)*, 485–497.

goods; these include also *country-level factors:* factors at the level of the country (e.g. GDP per capita, income inequality, national consumer habits regarding fake goods) that may impact counterfeiting behaviour;

- *Purchase-situation factors:* factors relating to the situation in which / location where the product is being sold (e.g. sales channel, whether the original product is present or not etc.) and that may influence counterfeiting;
- *Product-specific factors:* factors at the level of the specific product (e.g. price, brand, product type etc.) that may trigger the purchase of counterfeit goods.

The objectives of the study are (i) to investigate to what extent these factors determine counterfeit demand, and (ii) how these different factors relate to one another (i.e. what is their relative influence). In discussion with the EUIPO, the study was limited to the behaviour and the associated motivations of the intentional counterfeit buyers.[23]

The study was conducted online among the general population of 15 years and older in 10 European Union (EU) Member States: Estonia, France, Germany, Greece, Italy, the Netherlands, Poland, Romania, Spain and Sweden.

The remainder of Chapter 1 includes a literature review, presented in section 1.3. A detailed description of the methodology that was adopted in this study is presented in Chapter 2 and study results are discussed in Chapter 3. Study conclusions can be found in Chapter 4 of the report.

1.3 Literature review

To inform our research design, a literature review was conducted to identify the key determinants of individual demand for counterfeit products as validated by past research. In selecting the determinants to be included in the experiment, a consideration was given to both their relative importance, as reported in the literature, and their actionability for the EUIPO.

[23] Initially, the study also had the goal of exploring to what extent and how the impact of these factors differs according to whether we are dealing with intentional or unintentional decisions to buy counterfeit goods. However, in the course of the project and in consultation with the EUIPO, it was decided to focus the study exclusively on the intentional counterfeit goods buying process, as the unintentional process does not involve a conscious consumer decision or the intention to purchase the counterfeit goods.

Our literature review is based on two recent, scientific review articles of counterfeiting research on demand side which our literature search (e.g., Web of Science) identified as most relevant for the purpose of this study, namely:

- Baruönü Latif, Ö., Kaytaz Yiğit, M., & Kirezli, Ö. (2018). A review of counterfeiting research on demand side: Analysing prior progress and identifying future directions. *The Journal of World Intellectual Property, 21*(5-6), 458-480.

- Elsantil, Y. G., & Hamza, E. G. A. (2021). A review of internal and external factors underlying the purchase of counterfeit products. *Academy of Strategic Management Journal, 20*(1), 1-13.

Both studies provide an analytic overview of demand-side counterfeit studies that examined factors behind intentional consumer motivations for buying counterfeit goods. Baruönü & Kirezli's (2018) article summarises the main findings of 65 scientific articles published in the 37 years preceding the publication, providing not only the list of various factors that play a role in counterfeit purchase intentions but also the direction of impact between each factor and the counterfeit purchase intentions. Elsantil & Hamza (2021) article also provides a review of factors that drive the purchase of counterfeits vs. original products and presents a model which shows that the purchase of counterfeit products is a combination of internal (consumer-related) factors and external (product-related) factors. In developing this model, the authors include 82 existing studies for their review.

Factor	Hypothesised impact on the counterfeit demand
Product-specific factors	
Type	Product types that typically generate higher consumer engagement generate lower demand for counterfeit products compared to products that are typically bought with less engagement.[24]
Brand[25]	High-status brands generate higher demand for counterfeits than lower status brands.
Price	Lower price (of the counterfeit) generates higher demand for counterfeits than higher price.
Quality	Higher quality (of the counterfeit) results in higher demand for counterfeits than lower quality.
Similarity to the original	Higher degree of similarity to the original product generates higher demand for counterfeits than lower degree of similarity to the original product.
Purchase situation-specific factors:	
Perceived risk of punishment	Higher perception of risk reduces consumer demand for counterfeits compared to lower perception of risk.
Perceived health and safety risk	Higher perception of risk reduces consumer demand for counterfeits compared to lower perception of risk.
Purchase channel	Online channels generate higher demand for counterfeits than offline channels.

[24] Dual Process Theory, as introduced by Daniel Kahneman (2011), suggests that much of humans' behaviour is based on the automatic processing of information (often referred to as System 1 processing), and that humans only rarely engage in more deliberative processing (often referred to as System 2 processing). The study supposes that the majority of everyday purchases are done in System 1 decision-making mode. That said, System 2 decision-making mode may also be at play in certain situations, such as when consumers are faced with higher value or higher personal involvement items (e.g. with goods that can be seen as, so-called, 'investment pieces', or personal accessories that can be seen as 'personal splurges').

[25] In addition to the factors listed above, familiarity with the original brand was included as a control variable in our study, to rule out that differences in purchase intentions for lower vs. higher status brands (if any) are actually explained by the lower-status brands being more familiar, on average.

Individual-specific factors:[26]	
Personal integrity	Consumers with a higher sense of personal integrity are less likely to purchase counterfeit goods compared to those with a lower sense of personal integrity.
Value consciousness	Consumers with high levels of value consciousness are more likely to purchase counterfeit goods compared to their less value conscious peers.
Need to belong[27]	Consumers with higher need to belong/normative susceptibility are more likely to purchase counterfeit goods compared to their peers who have a lower need to belong/normative susceptibility.

Table 1: Selected factors and their hypothesised impact on counterfeit demand

A detailed summary of the various factors discussed in the studies is included in Appendix 2. Provided above are the factors that were selected for further exploration in the experiment, and their hypothesised impact on the consumer demand for counterfeits. The factors were selected on the basis of there being extensive support in the literature reviewed that they positively correlate and explain purchasing behaviour for counterfeit products and on the grounds of being helpful to understand drivers of counterfeit purchase. This approach resulted in a total of 11 factors that were classified into three categories according to the type of determinant and are included in the research design which is discussed in the next section.

[26] Additional individual-specific factors discussed with the EUIPO were age (consumers of younger age are more likely to purchase counterfeits than consumers of older age) and prior purchase of counterfeit products (consumers who have purchased counterfeit products in the past are more likely to purchase them again). Both factors were removed from later analysis to avoid correlation with other factors and difficulty in interpreting results. Need to belong variable was added as a stand-alone factor in later analysis due to its prominence in the literature reviewed.

2 Research design

As introduced earlier, a ratings based conjoint experiment was chosen in this study for examining the determinants of demand for counterfeit goods. Ratings-based conjoint experiments explain and predict preference for a specific product on the basis of its underlying features (such as price, brand name, etc.) and other relevant factors (such as the shopping context and individual purchaser characteristics): a complete list of determinants used for this study is shown in Table 1. The technique asks individuals to rate their preference for various hypothetical goods, which are described in detail by several factors. Unlike traditional consumer surveys, which ask respondents to rate products or product features in isolation, conjoint analysis presents the respondents with a series of product vignettes (see example in Figure 2) that entail different combinations of features. This enables researchers to simulate real-world purchase decisions and determine which features are most important to consumers and how they trade-off between them.

2.1 Online survey experiment

To be able to assess the individual contribution of the factors of interest on purchase intentions for counterfeit products, a set of vignettes was developed for a 15-minute online survey experiment (see section 2.2 for the online sampling design). Each vignette consisted of a counterfeit product image and a description of the purchase situation. Characteristics of the product and the situation were systematically varied. Table 2 provides an overview of all manipulated factors and their factor levels.

The vignettes were developed using specialised software. This software used an algorithm to find an efficient conjoint design, that is, a configuration of vignettes which enables estimation of the individual effects of the manipulated factors using a minimum number of vignettes. The design is balanced (i.e., each factor level appears equally often within each factor) and (near-)orthogonal (i.e., correlations between factors are zero or very close to zero; see Annex C for more detail).

The study used 96 vignettes in total. Perceived risk of punishment and perceived health/safety risk were special factors. To avoid risk-related information carry-over from one profile to the next, these factors were manipulated between-subjects rather than within-subjects, i.e., each respondent was exposed to one of the following four scenarios:

- Low risk of punishment, low health/safety risks
- Low risk of punishment, high health/safety risks
- High risk of punishment, low health/safety risks
- High risk of punishment, high health/safety risks

To avoid fatigue, each respondent evaluated only 12 vignettes (out of the 96 vignettes in total). Respondents were randomly assigned to one of eight respondent groups. Each vignette was evaluated by approximately 250 respondents (per Member State).

Factor	Factor levels	Operationalisation	Type of manipulation
Type of product	1 Everyday 2 Investment 3 Splurge	Bar of soap Kettle Sunglasses	Within-subjects: image, product description
Brand	1 Everyday 2 High-status	The brand names used in the study are not disclosed for reporting purposes to avoid brand-specific information disclosure.[28]	Within-subjects: image, product description
Price	1 Low 2 High	25% of the original product's price 50% of the original product's price	Within-subjects: product description
Quality of product	1 Low 2 High	"You expect the product to be of somewhat lower quality than the original" "You expect the product to be of the same quality as the original"	Within subjects: product description
Similarity to original	1 Low 2 High	"Visually, you notice some small differences in the product versus the original" "Visually, the product looks identical to the original"	Within-subjects: image, product description

[28] Real brands were selected for this study, which represented a lower priced (everyday) and higher priced (high-status) brand in each of the three product categories (soap, kettles, sunglasses).

Factor	Factor levels	Operationalisation	Type of manipulation
Perceived risk of punishment	1 No warning 2 Warning	- "Please note that in some EU countries it is illegal to buy counterfeit goods"	Between-subjects: (no) warning before the exposure to the counterfeit product vignettes
Perceived health/safety risks	1 No Warning 2 Warning	- "Please note that the ingredients / components present in the counterfeit products may not comply with the relevant industry standards and could expose users to health and safety risks"	Between-subjects: (no) warning before the exposure to the counterfeit product vignettes
Purchase channel	1 Online 2 Offline	"You come across this product on a major e-commerce website in your country" "You come across this product in a major shopping centre in your city or city closest to where you live"	Within-subjects: product description

Table 2: Product-specific and situation-specific factors and their operationalisation

2.1.1 Questionnaire

The questionnaire for the survey experiment included five major parts. First, a brief introduction to the survey was provided to all respondents, explaining the study objectives[29] and assuring them of their confidentiality. Second, a screener section assessed respondents' eligibility. Third, qualified respondents were exposed to a series of vignettes featuring the original products (see section 2.1.1.1 for more information). Fourth, respondents were exposed to a series of vignettes featuring counterfeit versions of the same products (see section 2.1.1.2 for more information). Fifth, a final section of the

[29] No reference to the counterfeit products was made in the introduction section. For a full text of the introduction, please refer to Annex A, which entails the full text of the questionnaire.

survey gathered additional information relating to the personal characteristics of the respondents (see section 2.1.1.3 for more information).

2.1.1.1 Exposure to the original products

Not all products, even if original, appeal equally to everyone. Moreover, respondents may struggle to assess their purchase intent for counterfeit products if they lack information and at least some familiarity with the original product counterparts. To take this into account, after a screener section, all respondents were shown the same set of six vignettes featuring the original versions of all counterfeit products to be shown later (two brands in each of three product categories, with original prices). As part of this exposure, respondents were asked to indicate, on 9-point Likert scales, their (1) initial impression of the product (*negative-positive*, *unattractive-attractive*), (2) purchase intention (*definitely not-definitely so*) and (3) brand familiarity (*never heard of it-know it very well*) for every original product. Doing so established a baseline against which we could compare purchase intentions for the counterfeit products.

Figure 1 below provides a series of screenshots for the original products shopping section of the survey from the respondent's point of view. The first screenshot provided in Figure 1 displays the shopping scenario introduction which preceded a series of vignettes featuring the original products. The second screenshot in Figure 1 provides an example of a specific vignette, which featured product picture, product name (inclusive of brand name[30]) and country-specific product price information.

[30] White boxes in Figure 1 were placed to withhold product brand information for reporting purposes only.

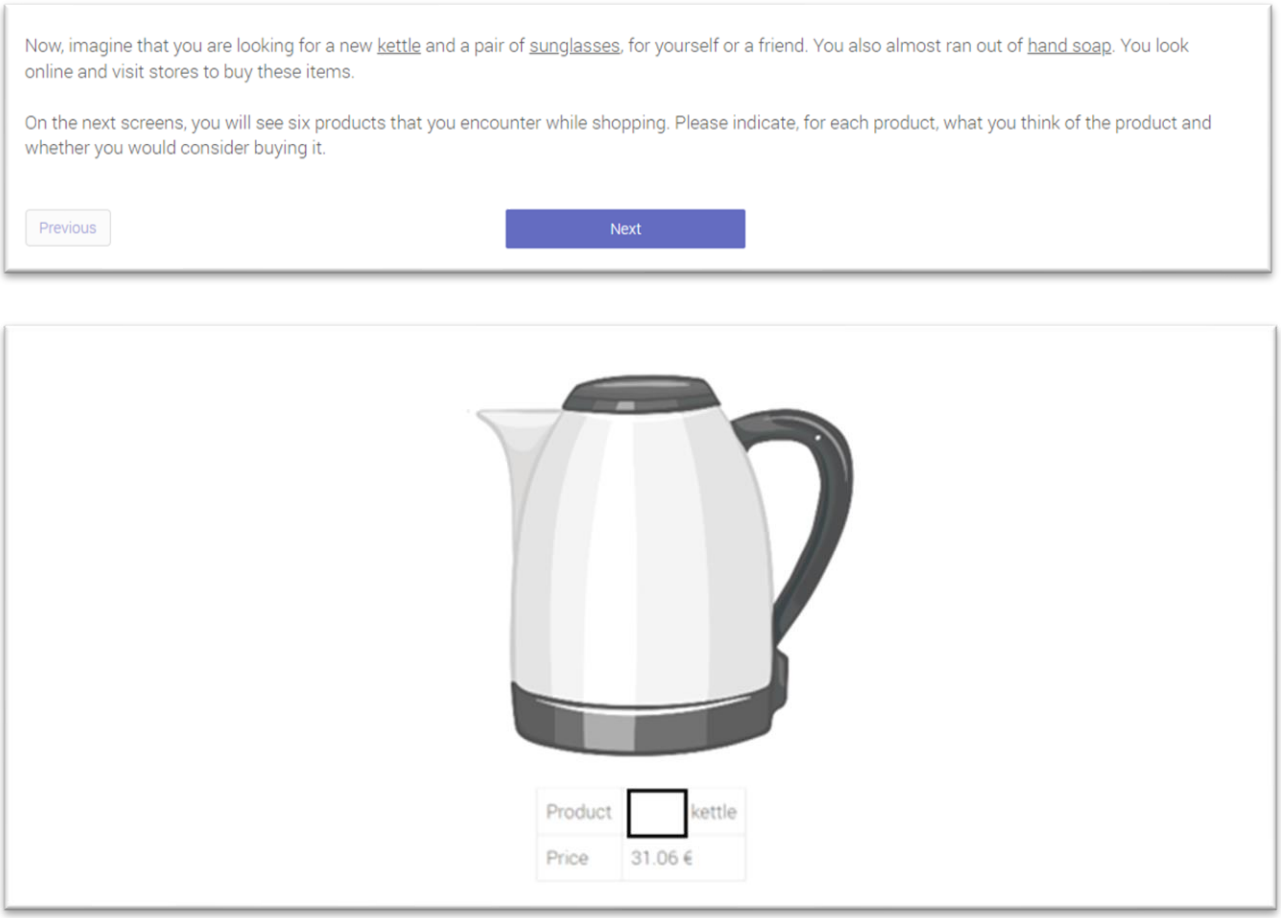


Figure 1: Shopping scenario introduction and a vignette featuring an original product

2.1.1.2 Exposure to the counterfeit products

Having assessed the original product vignettes, respondents were again asked to evaluate a series of products they may encounter while shopping (either online or offline). They were informed that all products they would see in this part were counterfeit products[31], and that, each time, they would receive information about the product (shown in a picture), the price and where they encountered the product. Then, depending on the group of assignment, some respondents were randomly exposed to (1) a warning message stressing the potential health and/or safety risks associated with counterfeits (2) a warning message stating that counterfeit purchases are illegal in some EU Member

[31] It was explained that "a counterfeit product is a fake version of an original product. It looks the same and is usually marked with the brand or logo of the original product, without the permission of the company that sells the original."

States, (3) both warning messages or (4) no warning message. After these messages, all respondents were shown a series of vignettes. For each purchase situation, respondents indicated, on 9-point Likert scales, their (1) initial impression of the product (*negative-positive*, *unattractive-attractive*) and (2) purchase intention (*definitely not-definitely so*) for the counterfeit product.

Figure 2 below provides a series of screenshots for the counterfeit goods shopping section of the survey from the survey respondent's point of view. The first screenshot provided in Figure 2 is a warning that was shown first to all respondents, alerting them to the counterfeit nature of all products (along with a definition of a counterfeit product). The second screenshot captures the subsequent shopping scenario message that was seen by all respondents. The third screenshot in Figure 2 provides an example of a further warning that was seen by a subset of respondents in a specific between-subjects treatment condition. Final screenshot displays an example of a counterfeit product vignette. As can be seen, each counterfeit product vignette featured a product picture, product name (inclusive of brand name), country-specific product price information, purchase channel, the perceived similarity of the counterfeit product to the original, and, finally, the perceived quality of the counterfeit product.

In the next part, you will again see a number of products that you may encounter while shopping.

All products that you will see in this part are **counterfeit products.** A counterfeit product is a fake version of an original product. It looks the same and is usually marked with the brand or logo of the original product, without the permission of the company that sells the original.

Previous Next

Now, imagine again that you are looking for a new kettle and a pair of sunglasses, for yourself or a friend. You also plan to buy hand soap.

On the next screens, you will be presented with 12 situations in which you might buy these products (all **counterfeit products**). Each time, you will receive information about the product (shown in a picture), the price, and where you encounter it.

Please indicate, in each situation, what you think of the product and whether you would consider buying it. Please examine the product and situation carefully before providing your answers.

Previous Next

Please note that the ingredients / components present in the counterfeit products may not comply with the relevant industry standards and could expose users to health and safety risks.

Please note that in some EU countries it is illegal to buy counterfeit goods.

Previous Next

Product	sunglasses
Price	39.42€
Situation	You come across this product on a major e-commerce website in your country. Visually, the product looks identical to the original. After reading the online reviews, you expect the product to be of the same quality as the original product.

Figure 2: Counterfeit shopping scenario introduction and a vignette featuring a counterfeit product

2.1.1.3 Personal characteristics of the respondents

Person-specific characteristics that may impact counterfeit purchase intent were measured in the last section of the questionnaire. This section collected information about respondents' personal integrity, value consciousness and need to belong, using adapted scales found in the existing literature.[32] Finally, to collect more background information on the respondent sample, we assessed respondents' prior experience with as well as their general attitude towards counterfeit products. The complete questionnaire can be found in Annex A.

2.2 Sampling

The survey experiment was conducted online and covered the general population (15+) in 10 EU Member States, representing a balanced geographical spread. The Member States were selected to represent Western, Southern, Eastern and Northern Europe while also, due to their population size, representing a considerable portion of the total European population. Quotas were set to ensure that the sample was nationally representative on gender, age and region. The sample was recruited from Ipsos' non-probability volunteer online access panels in all ten Member States.

In each Member State, at least 2,000 respondents completed the experiment, with N = 20,389 in total (see Table 3 for the net sample size per country). As part of the experiment, all respondents were randomly assigned into eight groups which represented four between-subjects treatment conditions.

[32] Value consciousness scale was adapted from Lichtenstein et al., 1990. Need to belong/normative susceptibility scale was adapted from Bearden et al., 1989. Prior purchase of counterfeits scale was adapted from EUIPO Perception study and Tom et al., 1998. Personal integrity scale was adapted from Vitell & Muncy, 2005.

Country	Sample size
Estonia (EE)	2,051
France (FR)	2,029
Germany (DE)	2,018
Greece (EL)	2,087
Italy (IT)	2,031
The Netherlands (NL)	2,022
Poland (PL)	2,025
Romania (RO)	2,049
Spain (ES)	2,015
Sweden (SE)	2,062

Table 3: Net sample size per Member State

Table 4 provides an overview of the (unweighted) sample characteristics and Table 5 of the weighted sample characteristics, which aligns the sample data with the population proportions based on the population statistics of gender, crossed with age and geographical region for each target country.

	TOT	EE	FR	DE	EL	IT	NL	PL	RO	ES	SE
Gender											
Female	48.6%	46.5%	47.8%	49.1%	50.4%	48.1%	49.6%	48.0%	48.5%	48.7%	49.4%
Male	51.3%	53.1%	52.2%	50.9%	49.2%	51.9%	50.5%	52.1%	51.2%	51.3%	50.2%
Other	0.1%	0.3%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.2%	0.0%	0.2%
Prefer not to answer	0.1%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.3%
Age											
15-34 years	27.1%	26.7%	28.5%	25.8%	26.2%	23.4%	29.5%	27.7%	27.0%	24.8%	31.8%
35-54 years	33.1%	33.0%	30.8%	30.2%	36.5%	32.7%	30.4%	34.5%	35.8%	36.3%	30.2%
55+	39.8%	40.3%	40.7%	44.1%	37.3%	43.9%	40.2%	37.8%	37.2%	38.9%	38.0%
Financial situation											
% (very) difficult to make ends meet	31.9%	27.9%	35.0%	26.7%	47.3%	31.9%	16.5%	44.4%	31.0%	29.6%	27.8%
% (very) easy to make ends meet	28.1%	23.5%	25.9%	32.3%	8.3%	24.8%	50.4%	36.2%	17.2%	24.6%	37.9%

Table 4: Sample description (unweighted)

	TOT	EE	FR	DE	EL	IT	NL	PL	RO	ES	SE
Gender											
Female	48.6%	49.1%	47.8%	49.0%	48.0%	48.3%	49.4%	47.8%	48.2%	48.6%	49.7%
Male	51.2%	50.4%	52.2%	51.0%	51.6%	51.7%	50.6%	52.2%	51.5%	51.4%	49.8%
Other	0.1%	0.4%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.2%	0.0%	0.1%
Prefer not to answer	0.1%	0.1%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.1%	0.0%	0.3%
Age											
15-34 years	27.6%	32.5%	28.5%	26.4%	24.6%	23.4%	29.8%	27.9%	27.0%	24.9%	30.6%
35-54 years	33.0%	33.3%	31.0%	30.5%	33.8%	33.0%	30.5%	34.5%	36.2%	36.2%	30.8%
55+	39.5%	34.3%	40.5%	43.1%	41.6%	43.6%	39.7%	37.6%	36.8%	38.9%	38.6%
Financial situation											
% (very) difficult to make ends meet	31.8%	27.7%	35.1%	26.6%	47.7%	31.8%	16.4%	44.3%	30.9%	29.5%	27.7%
% (very) easy to make ends meet	28.1%	23.3%	25.9%	32.3%	8.6%	25.0%	50.5%	36.3%	17.2%	24.6%	37.9%

Table 5: Sample description (weighted)

2.3 Fieldwork

The online experiment was conducted in the 10 EU Member States, between 21 April and 5 May 2023. A total of 20,389 interviews were completed across all countries (please see Table 3 or a full country list and survey completion totals per country). The experiment was executed using Computer- Assisted Web Interviewing (CAWI) in all countries.

2.4 Weighting and data analysis approach

To ensure representativeness of the country samples, the descriptive results presented in the tables and figures in the results section were weighted to the population proportions based on the population statistics of gender, crossed with age and geographical region for each target country

(see Table 5). Given that quotas were set on these indicators, the deviations observed were limited (min. weight = 0.62, max. weight = 1.72).

In order to examine which of the included factors are most important in explaining respondents' intent to buy counterfeit products, multilevel regression analyses were performed. The models estimate the individual contribution of each factor to respondents' intention to buy a counterfeit product ("Would you consider buying this product if you were looking for [hand soap, a kettle, sunglasses]?", assessed on a scale from (1) *definitely not* to (9) *definitely so*), while controlling for country differences. In addition, multilevel latent class regression analyses were performed to identify consumer segments based on their purchase intentions for counterfeit products and the role of the factors of interest therein. Annex C provides a more detailed description of the statistical models.

Additional sociodemographic analysis (by country, gender and age) is performed on the general attitudes towards counterfeit products (Section 3.1) and on the consumer segments (Section 3.3.4). Prior purchase of counterfeit goods (Section 3.2) is analysed by country. The remainder of results is presented on a total survey level.

3 Results

This chapter presents the results of the conjoint experiment. We first provide insight into consumers' general attitudes towards counterfeit products (Section 3.1) as well as their prior purchase behaviour (Section 3.2). Section 3.3 presents the results of the conjoint experiment to analyse the determinants of consumers' intention to purchase counterfeit products, overall (Section 3.3.2), per product (Section 3.3.3) and per consumer segment (Section 3.3.4). All differences described in the text in this chapter are statistically significant, unless otherwise noted.

As mentioned earlier, the total survey results are supplemented by the additional sociodemographic analysis where appropriate. Specifically, general attitudes towards counterfeit products (Section 3.1) and consumer segments (Section 3.3.4) are reviewed by country, gender and age. Prior purchase of counterfeit goods (Section 3.2) is analysed by country.

3.1 General attitudes towards counterfeit products

The study reveals a variety of consumer attitudes towards the counterfeit products. Most importantly, consumers were found to be most divided on whether purchasing counterfeit products is acceptable when they feel the original product is overpriced and/or when they cannot afford to purchase the original brand: in such cases, about a third (32%) find it acceptable to buy a counterfeit product, about a third (36%) find it unacceptable and about a third (32%) have no strong opinion. In contrast, consumers are most unified in agreeing that buying counterfeit products harms the companies that manufacture and sell the original product (67% agree with this).

Overall, consumers were found to be generally negative towards counterfeits, with some notable differences between countries and socio-demographic groups. The attitude towards counterfeit products is least negative among consumers in the Netherlands and Poland, and most negative in France and Italy. Further, consumers in the youngest age group (18-34) have a less negative attitude compared to consumers in the 35-55 age group, who in turn have a less negative attitude towards counterfeit products compared to the eldest 55+ age group. Furthermore, males have a

slightly more negative attitude towards counterfeits than females, as do consumers who report being in a better financial situation compared to consumers in a worse financial situation.

Consumers' general attitude towards counterfeit products was assessed using an 8-item scale, including positive (e.g., "It is acceptable to purchase a counterfeit product when you cannot afford to purchase the original brand") as well as negative (e.g., "Buying counterfeit products poses a threat to health and safety") statements about counterfeit products. Figure 3 shows the results across all Member States.

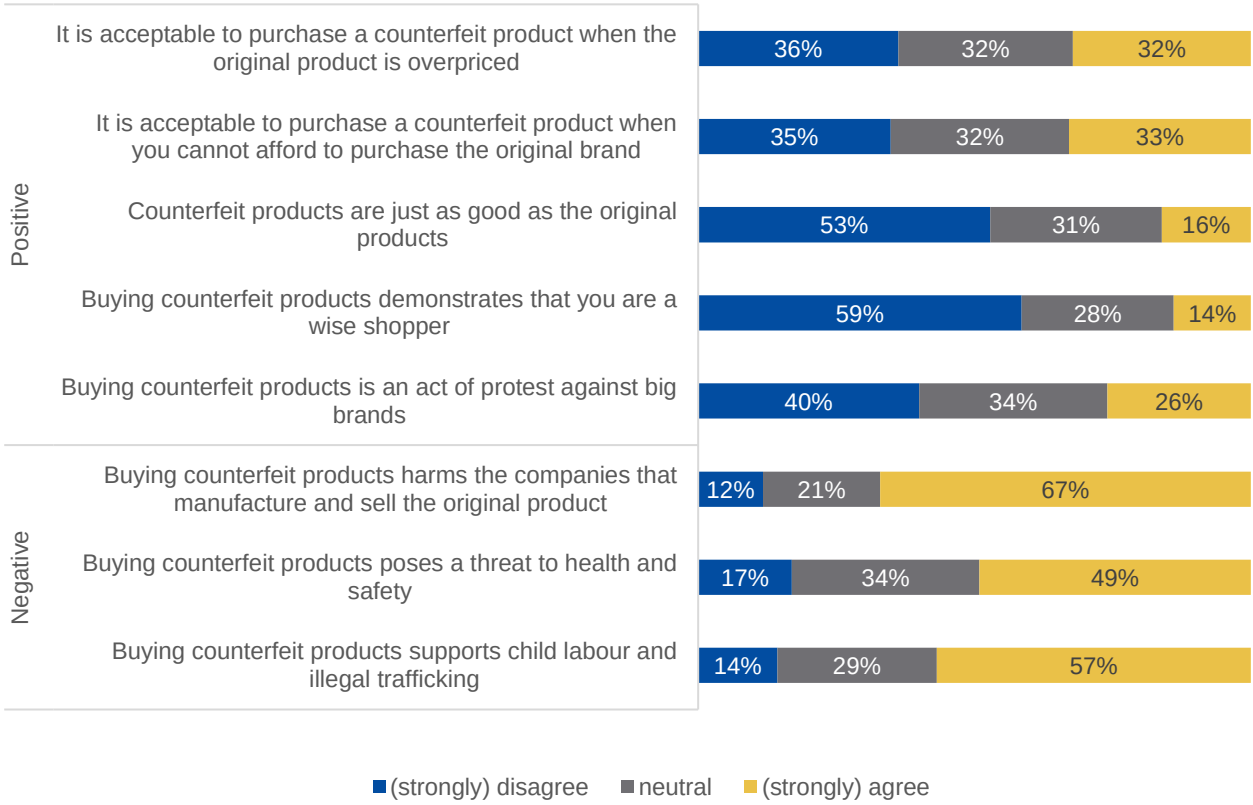
The results show that consumers differ on whether purchasing counterfeit products is acceptable when they feel the original product is "overpriced" and/or cannot afford to purchase the original brand: In such cases, about a third (32%) find it acceptable to buy a counterfeit product, about a third (36%) find it unacceptable and about a third (32%) have no strong opinion. About 1 in 8 respondents (16%) think that counterfeit products are just as good as the original products, and about a quarter of the respondents (26%) view the purchase of counterfeit products as an act of protest against major brands. The vast majority of respondents (67%) agree that buying counterfeits harms the companies that manufacture and sell the original products (12% disagree). Half of the respondents (49%) believe that buying counterfeit products poses a threat to health and safety (17% do not believe this) and more than half (57%) believe that buying counterfeit products supports illegal child labour (14% do not).

Respondents' responses to the eight statements were combined into a single score[33], reflecting their general attitude towards counterfeit products on a scale from (1) *negative* to (5) *positive*. On average, consumers' attitude towards counterfeit products tends to be negative (scores below the mid-point of the scale; see Figure 3). There are significant differences across Members States in consumers' attitude towards counterfeit products. The attitude towards counterfeit products is least negative among consumers in Greece, the Netherlands and Poland, and most negative in France and Italy (see Figure 4).

An additional socio-demographic analysis reveals that attitudes towards counterfeit products are also significantly related to age, gender and financial situation (see Figure 5). More specifically,

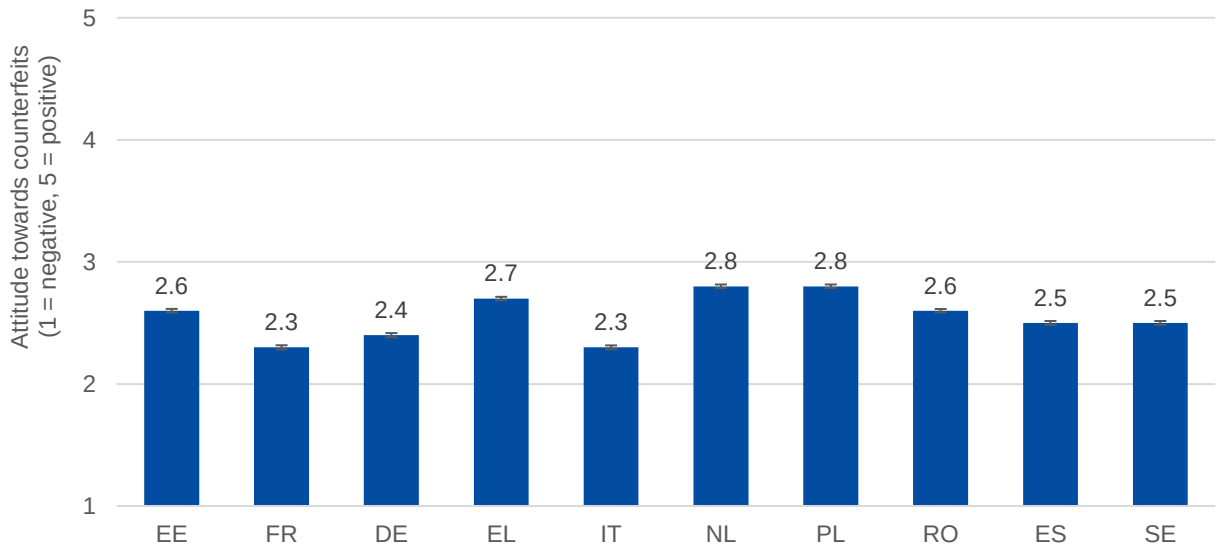
[33] Responses to the negative statements were reverse-coded, such that higher levels reflect more positive attitudes towards counterfeit products.

consumers in the youngest age group (18-34) have a less negative attitude (*M* = 2.80 on a 5-point scale) compared to consumers in the 35-55 age group (*M* = 2.54), who in turn have a less negative attitude towards counterfeit products compared to the eldest age group (55+, *M* = 2.40). Furthermore, males have a slightly (but statistically significantly) more negative attitude (*M* = 2.58) towards counterfeits than females (*M* = 2.53), and consumers who report being in a better financial situation (who find it easy or very easy to make ends meet; *M* = 2.48) have a slightly more negative attitude compared to consumers in a worse financial situation (*M* = 2.58).



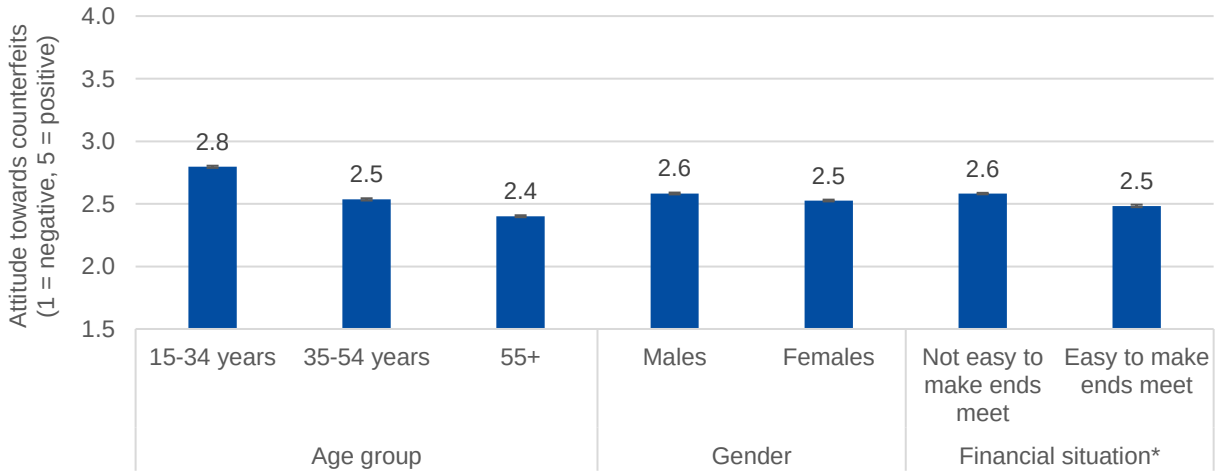
Question: To what extent do you agree or disagree with the following statements? *Base = all respondents, N = 20,389*

Figure 3: General attitudes towards counterfeit products.



Respondents' responses to eight statements (see Figure 3) were combined into a single score, reflecting their general attitude towards counterfeit products on a scale from (1) *negative* to (5) *positive*. *Base = all respondents, n = 2,051 (EE), n = 2,029 (FR), n = 2,018 (DE), n = 2,031 (IT), n = 2,022 (NL), n = 2,025 (PL), n = 2,049 (RO), n = 2,015 (ES), n = 2,062 (SE).*

Figure 4: Country differences in general attitudes towards counterfeit products



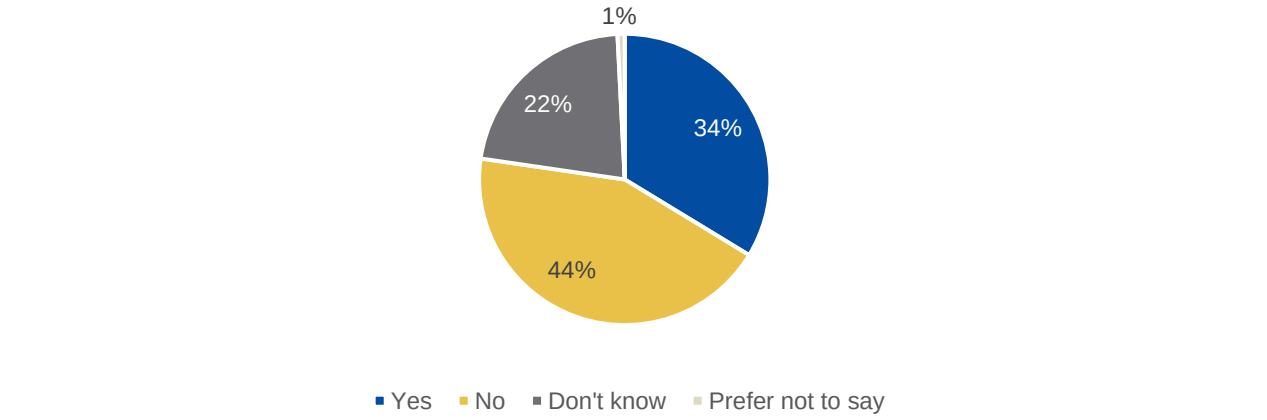
Respondents' responses to eight statements (see Figure 3) were combined into a single score, reflecting their general attitude towards counterfeit products on a scale from (1) *negative* to (5) *positive*.
*Financial situation was measured on a 5-point scale from (1) *very difficult* to (5) *very easy* to make ends meet. In the figure, "easy to make ends meet" reflects responses (4) *easy* and (5) *very easy*; "not easy to make ends meet" reflects responses (1) *very difficult*, (2) *difficult* and (3) *neither easy nor difficult*.
Base = all respondents, N = 20,389 (15-34 years: n = 5,532, 35-54 years: n = 6,738, 55+: n = 8,119; males: n = 9,905, females: n = 10,451; not easy to make ends meet: n = 14,669, easy to make ends meet: n = 5,720).

Figure 5: Individual differences in general attitudes towards counterfeit products

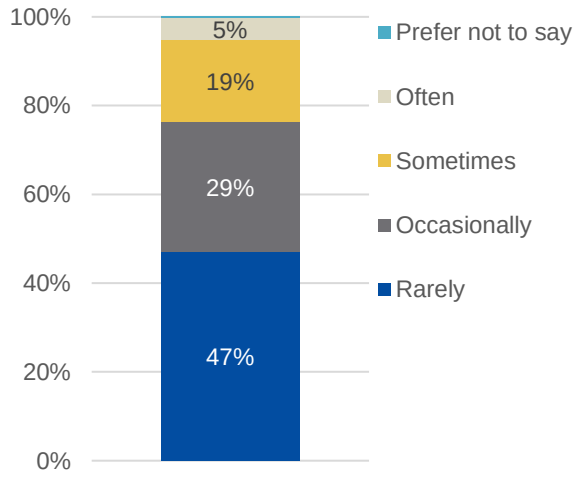
3.2 Prior purchase of counterfeit goods

About a third of all respondents (34%) report to have knowingly purchased a counterfeit product at least once in the past. In this group, 5% say that they have often done this, and 24% indicate that they did this less than a year ago. Incidence of intentional counterfeit purchase behaviour is highest in Greece, where 55% admit having knowingly purchased a counterfeit product at least once. The corresponding rate is lowest in France and Italy (19%).

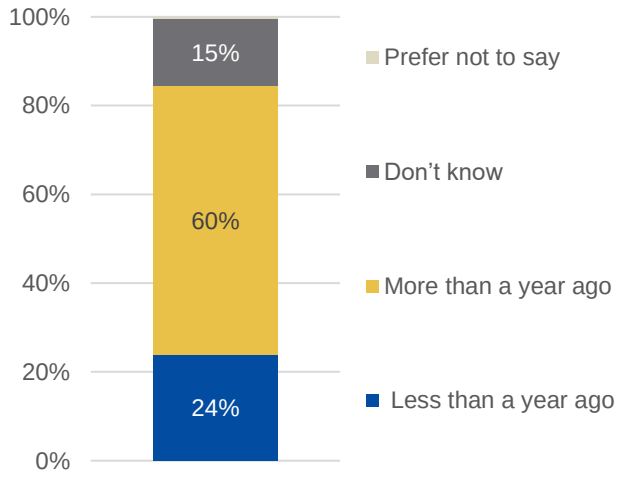
In the survey, it was explained to respondents that counterfeit products are fake versions of original products ("[A counterfeit product] looks the same and is usually marked with the brand or logo of the original product, without the permission of the company that sells the original."). After this, about a third of all respondents (34%) reported to have knowingly purchased a counterfeit product at least once (see Figure 6, top part). Among this group, 5% say that they have often done this (Figure 6, bottom left), and 24% indicate that they did it less than a year ago (Figure 6, bottom right). Most respondents who indicate that they have purchased a counterfeit product at least once report to have done this rarely (47%), and more than a year ago (60%).



Question: Have you ever knowingly purchased a counterfeit product (meaning you knew the product you bought was fake)? *Base = all respondents, N = 20389*



Question: How often have you knowingly purchased a counterfeit product? *Base = respondents who (report to) have knowingly purchased a counterfeit product at least once, n = 6.838*



Question: When was the last time you knowingly purchased a counterfeit product? *Base = respondents who (report to) have knowingly purchased a counterfeit product at least once, n = 6.838*

Figure 6: Prior purchase of counterfeit products

Table 6 shows the findings per Member State. Most notably, in Greece, more than half of the respondents (55%) report to having knowingly purchased a counterfeit product in the past. Moreover, compared to most other Member States, a relatively high proportion of the Greek respondents who say they have purchased a counterfeit product at least once, report to have done this more often than “rarely” or “occasionally”. In France and Italy, the fewest respondents report to have knowingly purchased a counterfeit product in the past (19% in both France and Italy), and most of those who report to have done so indicate that they have done it rarely (57% and 54%) and more than a year ago (68% and 70%). Finally, in the Netherlands and Poland, while the percentage of respondents who report to have knowingly purchased a counterfeit product at least once is around the sample

average, within that group relatively many (compared to most other Member States) did this more often than “rarely” or “occasionally”.

	TOT	EE	FR	DE	EL	IT	NL	PL	RO	ES	SE
Knowingly purchased counterfeit											
Yes	33.7%	39.3%	19.0%	24.3%	54.9%	19.3%	34.3%	37.0%	38.5%	38.1%	32.2%
No	43.6%	28.5%	59.4%	59.9%	30.0%	58.3%	46.6%	31.5%	31.7%	44.4%	46.3%
Don’t know	21.9%	31.6%	20.9%	14.9%	14.0%	21.1%	18.5%	30.8%	29.3%	17.2%	20.6%
Prefer not to say	0.8%	0.6%	0.7%	1.0%	1.0%	1.3%	0.6%	0.8%	0.5%	0.4%	1.0%
Frequency of purchase*											
Rarely	47.0%	58.4%	42.9%	57.3%	36.8%	53.9%	40.7%	37.9%	45.6%	44.7%	62.5%
Occasionally	29.2%	18.9%	39.5%	26.3%	33.1%	29.0%	31.0%	31.4%	31.7%	31.8%	21.1%
Sometimes	18.7%	16.8%	12.0%	12.4%	24.2%	10.7%	22.6%	25.5%	17.8%	19.8%	12.5%
Often	4.8%	5.3%	4.6%	3.5%	5.9%	5.9%	5.4%	5.1%	4.3%	3.3%	3.6%
Prefer not to say	0.4%	0.5%	1.0%	0.4%	0.1%	0.6%	0.3%	0.1%	0.6%	0.4%	0.3%
Time of last purchase*											
Less than a year ago	24.0%	22.0%	27.9%	18.4%	26.7%	17.2%	28.4%	26.1%	30.6%	23.2%	13.6%
More than a year ago	60.4%	59.3%	61.6%	68.4%	58.6%	69.8%	58.3%	49.2%	48.6%	65.1%	75.9%
Don’t know	15.2%	18.3%	9.9%	13.0%	14.5%	11.9%	13.0%	24.1%	20.6%	11.1%	10.1%
Prefer not to say	0.4%	0.4%	0.6%	0.2%	0.2%	1.0%	0.3%	0.7%	0.3%	0.7%	0.5%

* Assessed only in respondents who indicated they have knowingly purchased a counterfeit in the past.

Table 6: Country differences in prior purchase of counterfeit products

3.3 Determinants of intention to purchase counterfeit products

This section presents the results of the conjoint experiment. In Section 3.3.1, we first examine respondents’ evaluation of the original products to understand their base level of interest in the original versions of counterfeit products to be seen later. Next, in Section 3.3.2, we analyse the overall determinants of consumers’ intention to purchase counterfeit products. In section 3.3.3, we present the analysis of these determinants by product type. Finally, in Section 3.3.4, we analyse the determinants of consumers’ intention to purchase counterfeit products per consumer segment. All differences described in the text in this chapter are statistically significant, unless otherwise noted.

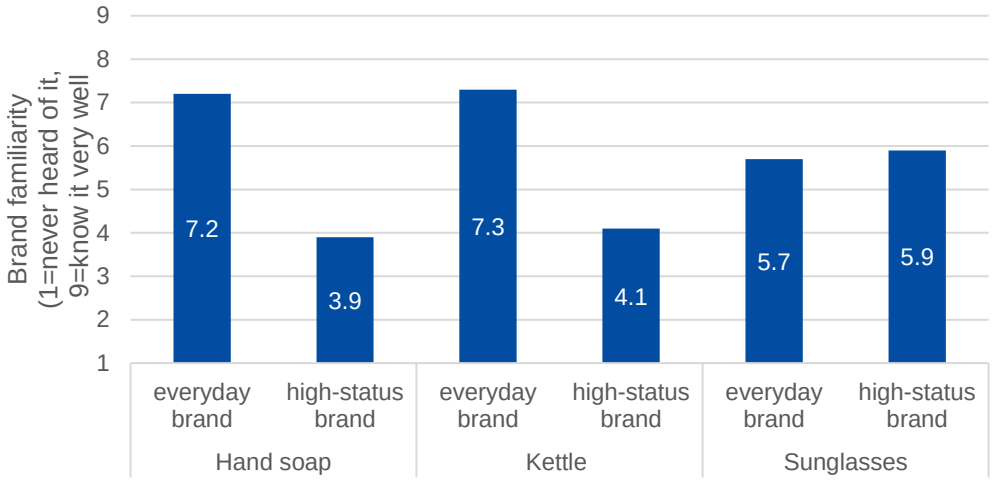
3.3.1 Evaluation of the original products

On average, consumers are most likely to consider purchasing hand soap bars, followed by, respectively, kettles and sunglasses. In case of hand soap bars and kettles, everyday brands generate higher purchase consideration than high-status brands, whereas purchase consideration for sunglasses is about the same for both brands. These differences may partly be explained by product price, with less expensive items generating higher purchase consideration than more expensive items. Additionally, as expected, consumers are more likely to show higher purchase consideration for products that they are more familiar with and of which they have a better impression. Indeed, in case of hand soap and kettles, consumers are significantly more familiar with the everyday brand than with the higher-status brand, which could partially explain the more positive attitudes towards and purchase intentions for everyday brands within these categories.

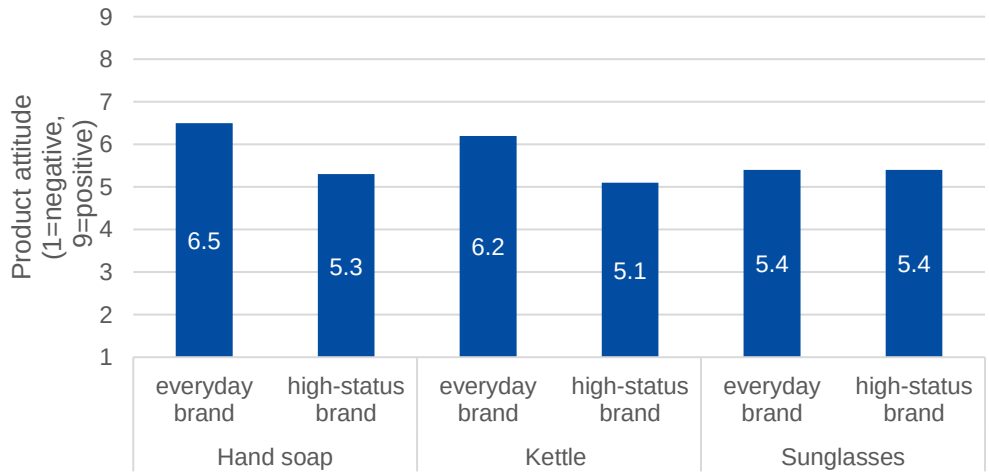
On average, attitudes and purchase intentions are highest for the hand soap bars (5.88 and 5.27 on a scale[34] from 1 to 9, respectively), slightly lower for the kettles (5.61 and 4.71, respectively) and again slightly lower for the sunglasses (5.42 and 4.29, respectively). These differences might be partially explained by the differences in the purchase prices of the product types. These findings also show that there is (at least some) interest among consumers in the original products.

As expected, brand familiarity and product attitudes predict purchase intentions: consumers are more likely to show purchase interest in branded products that they know and have positive attitudes towards. Interestingly, in the case of hand soap and kettles, consumers are significantly more familiar with the everyday brand than with the higher-status brand (see Figure 7), which could (partially) explain the more positive attitudes towards and purchase intentions for everyday brands within these categories (we will return to this issue in the next section).

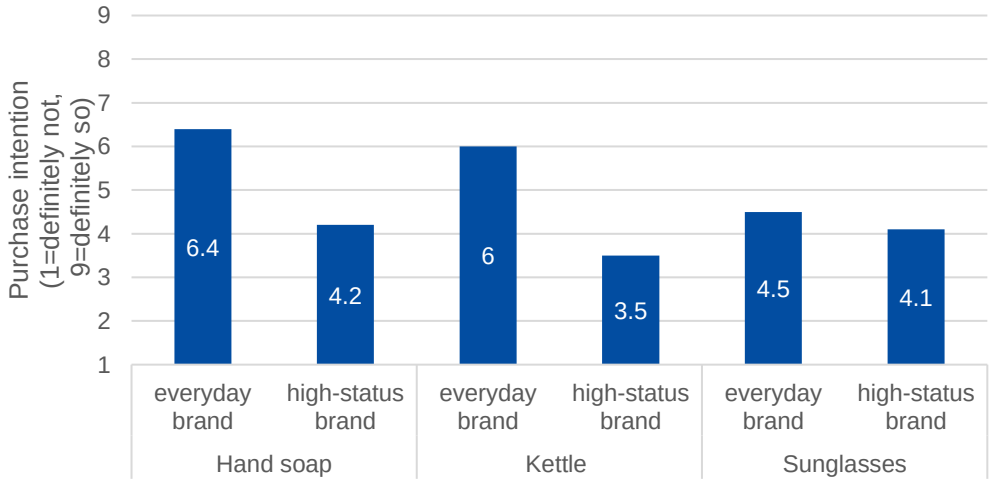
[34] For each purchase situation, respondents indicated, on 9-point Likert scales, their (1) initial impression of the product (*negative-positive*, *unattractive-attractive*) and (2) purchase intention (*definitely not-definitely so*) for the counterfeit product.



Question: How familiar are you with the brand ["brandname"]? Base = all respondents, N = 20,389



Question: What is your impression of this product? Base = all respondents, N = 20,389



Question: Would you consider buying this product if you were looking for [hand soap/a kettle/sunglasses]? Base = all respondents, N = 20,389

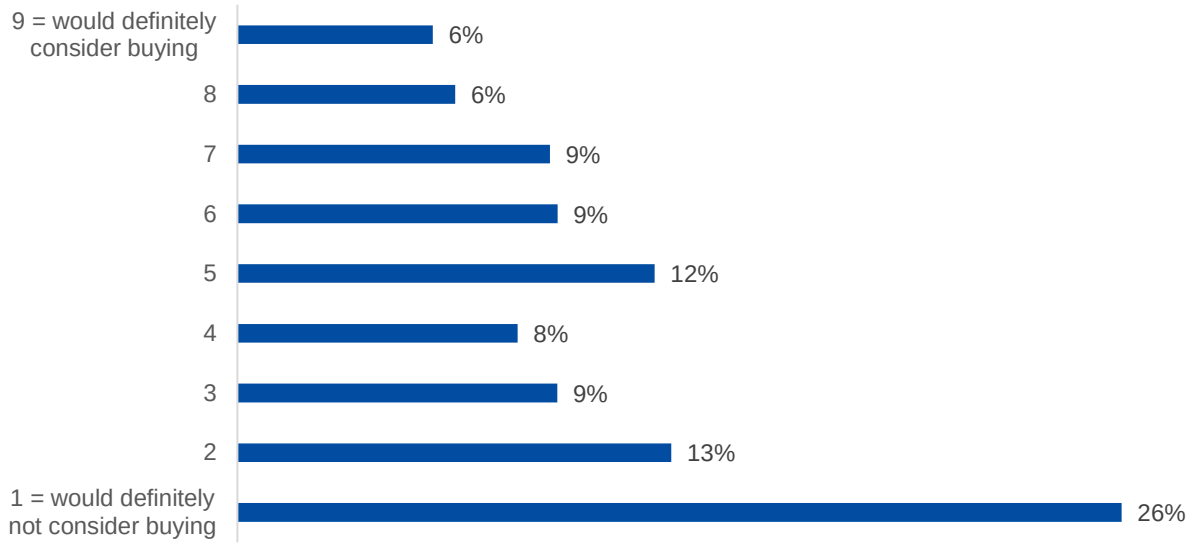
Figure 7: Brand familiarity and evaluation of the original products

3.3.2 Intention to purchase counterfeit products

We found that all factors studied have a statistically significant influence on consumers' purchase intentions although their relative impact varies significantly. More specifically, purchase intentions for counterfeit products most strongly depend on consumers' need to belong and their personal integrity (where higher need to belong increases purchase intent for counterfeits and higher personal integrity decreases purchase intent for counterfeits). Next, consumers' intention to buy a counterfeit product also varies according to the type of product: people are most likely to consider purchasing counterfeit hand soap bar, followed by the counterfeit kettle and sunglasses, respectively. Finally, value consciousness and brand type also play a role in purchase intent for counterfeit products, with more value conscious consumers being less likely to show purchase intent for counterfeit products and everyday brands generating higher purchase intent than high-status brands.

The findings suggest that consumers are more interested in lower priced vs. higher priced counterfeit product types, and in everyday brands vs. high-status brands of counterfeit products. While we see a largely similar pattern with the original products, the difference in the degree of interest is smaller for the counterfeit versions than for the original versions of the products. Therefore, relatively speaking, the counterfeit versions of high-status (vs. everyday) brands attract more consumer interest than the original versions of high-status (vs. everyday) brands. Likewise, relatively speaking, the counterfeit versions of higher priced (vs. lower priced) product types attract more interest than the original versions of higher priced (vs. lower priced) product types.

In the experiment, respondents were exposed to a set of vignettes, each consisting of counterfeit product image and a description of the purchase situation. For each vignette, respondents indicated their purchase intention ("Would you consider buying this product if you were looking for [hand soap, a kettle, sunglasses]?") on a scale from (1) *definitely not* to (9) *definitely so*. Figure 8 shows that respondents reported that they would *definitely not* consider buying the counterfeit product in 26% of the cases (respondents x vignettes). The majority of responses (56%) are on the negative side of the scale, indicating low interest in the counterfeit products in general. About a quarter of the responses (26%) of the responses are on the positive side of the scale, with respondents reporting that they would definitely consider buying the counterfeit product in 6% of the cases.



Question: Would you consider buying this product if you were looking for a [hand soap/kettle/sunglasses]? *Base = all respondents and vignettes: N = 20,389 respondents x 12 vignettes = 244,668 observations*

Figure 8: Intention to purchase the counterfeit good

Multilevel regression analyses were performed to analyse the individual effects of product-specific, situation-specific and person-specific factors on the purchase intentions for counterfeit products. In addition to these factors, familiarity with the original brand was included as a control variable, to rule out that differences in purchase intentions for everyday vs. high-status brands (if any) are actually explained by the everyday brands being more familiar, on average. Finally, the analyses control for country differences in baseline purchase intentions (e.g., in some Member States, respondents report higher purchase intentions for counterfeit products than in other Member States).

Table 6 shows the statistical results, which are visualised in
Figure 9 to Figure 11. Figure 12 provides a visual summary of the findings. Each bar in Figure 11 reflects a comparison between two levels of a certain factor (e.g., 50% vs. 25% of the original product's price). The figure also shows the direction of the effect – positive (above zero) or negative (below zero). The effect size (bar height) can be compared across the factors: higher bars (positively or negatively) reflect a stronger influence of the particular factor on purchase intentions.

Factors	Outcome variable: purchase intention		
	Unstandardised coefficient	Standardised Coefficient	Sig.
Product-related factors			
Product type: Kettle and sunglasses vs. hand soap[35]	-0.54	-0.10	***
Product type: Sunglasses vs. Kettle	-0.30	-0.05	***
Brand: high-status vs. everyday	-0.28	-0.05	***
Price: 50% vs. 25% of original product's	-0.14	-0.03	***
Quality: same vs. somewhat lower as	0.14	0.03	***
Similarity: looks identical to vs. small differences with original product	0.06	0.01	***
Situation-related factors			***
Channel: online vs. physical store	-0.04	-0.01	***
Risk of punishment: warning vs. no warning	-0.13	-0.02	***
Health/safety risk: warning vs. no warning	-0.12	-0.02	***
Person-related factors			***
Value consciousness (1 = low, 5 = high)	-0.28	-0.07	***
Need to belong (1 = low, 5 = high)	0.57	0.22	***
Personal integrity (1 = low, 5 = high)	-0.61	-0.19	***
Control variables			
Brand familiarity (1 = low, 5 = high)	0.18	0.19	***

Table 7: Effects on purchase intention: Results of the multilevel regression analysis[36]

[35] In the statistical model, the three product types were captured by two orthogonal contrasts, one comparing the two high-involvement products (kettle and sunglasses) with the low-involvement product (hand soap) and one comparing the two high-involvement products (kettle vs. sunglasses). Based on the model parameters, we could predict counterfeit purchase intentions for each of the three product types (see Figure 8).

[36] Results of multilevel regression analyses with purchase intention ("Would you consider buying this product if you were looking for [hand soap, a kettle, sunglasses?]"), assessed on a scale from (1) *definitely not* to (9) *definitely so*, as outcome variable. The unstandardised coefficients are easiest to interpret, but cannot be compared across all factors. For the product and situation-related factors, unstandardised coefficients represent the change in purchase intentions (on the scale from 1 to 9) as a result of moving from one factor level to the other (e.g., from everyday to high-status brand, from somewhat lower quality to same quality, or from no warning to warning), keeping everything else constant. For person-related factors, which are measured on 5-point scales (1 = low, 5 = high), unstandardised coefficients represent the change in purchase intentions as a result of a one-unit increase on the 5-point scale. The standardised coefficients are more difficult to interpret (e.g., a standardised coefficient of -0,10 indicates that an increase of one standard deviation in the specific factor results

The results in Table 6 show that all factors have a statistically significant influence on respondents' purchase intentions for the counterfeit products. Purchase intentions most strongly depend on respondents' need to belong and personal integrity (see Figure 12). On average, respondents with a relatively high need to belong report a substantially higher intention to purchase the counterfeit products (M = 4.58 on a 9-point scale, see Figure 11), compared to respondents with a relatively low need to belong (M = 3.41). Conversely, respondents with a relatively low level of personal integrity (M = 4.49) express significantly more interest in the counterfeit products compared to respondents with a relatively high level of personal integrity (M = 3.49).

After the need to belong and personal integrity, purchase intentions for counterfeit products are most strongly influenced by the product type (see Figure 12). Respondents generally express higher levels of purchase interest in a counterfeit hand soap (*M* = 4.35 on a 9-point scale, see Figure 9) than in a counterfeit kettle (*M* = 3.96), which in turn generates higher purchase intentions compared to counterfeit sunglasses (*M* = 3.67). Purchase intentions are also higher for everyday brands (*M* = 4.13) than for higher-status brands (*M* = 3.86), on average. Note, however, that these effects might be explained by aspects that are inherent to the different product and brand types, such as differences in price (e.g., hand soap is generally less expensive than a kettle or a pair of sunglasses, and everyday brands are less expensive than high-status brands). We will return to this issue at the end of this section.

in a 0,10 standard deviation decrease in purchase intention, on average), but can be compared across the factors, to determine the relative contribution of each factor to purchase intentions. Asterisks in column "Sig" denote statistical significance: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$. Country effects are not reported in the table.

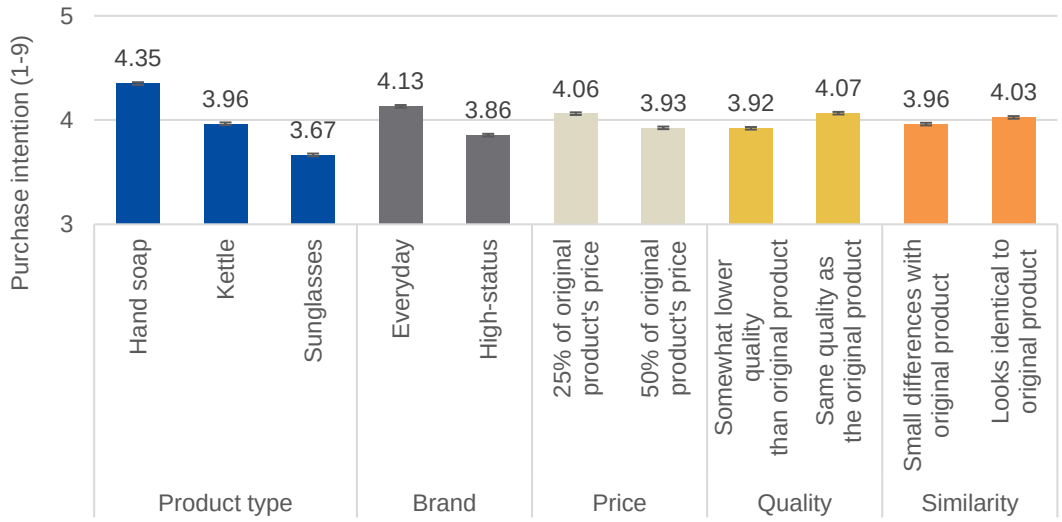


Figure 9: Model-predicted purchase intentions for counterfeit products, per product-related factor

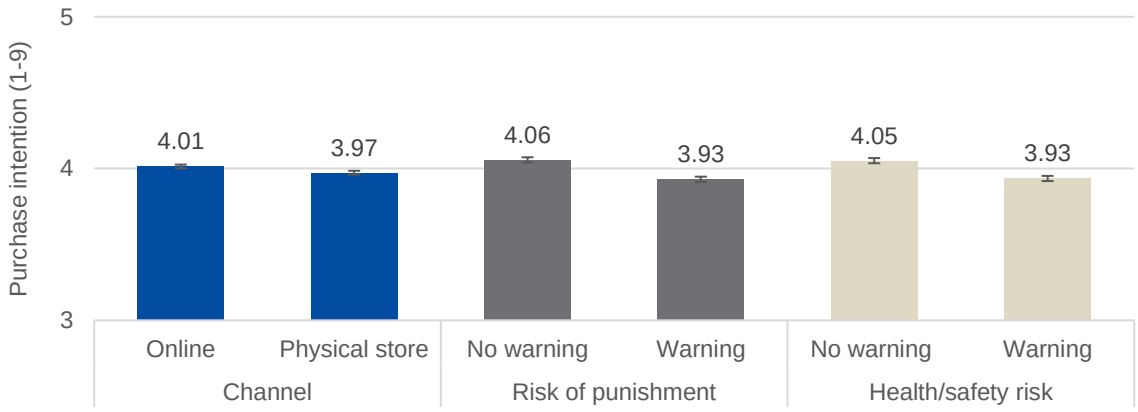


Figure 10: Model-predicted purchase intentions for counterfeit products, per situation-related factor

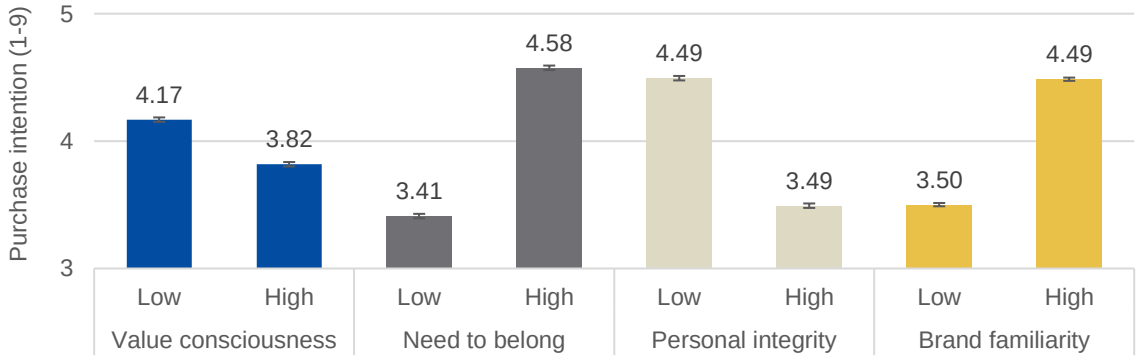


Figure 11: Model-predicted purchase intentions for counterfeit products, per person-related factor[37]

[37] Predicted purchase intentions at one standard deviation below ("low") and above ("high") the mean of each person-related factor.

After the product type, respondents' value consciousness and product brand are the next two most impactful determinants of purchase intention for counterfeit products. Specifically, value-conscious consumers – i.e., consumers who are looking for the best value for money (the best price-quality ratio) – are *less* interested in purchasing the counterfeit products (*M* = 3.82) compared to less value-conscious consumers (*M* = 4.17; see Figure 11). Meanwhile, low-status brands are more likely to generate purchase intention for counterfeit products than high-status brands (*M*= 4.13 vs. *M* =3.86).

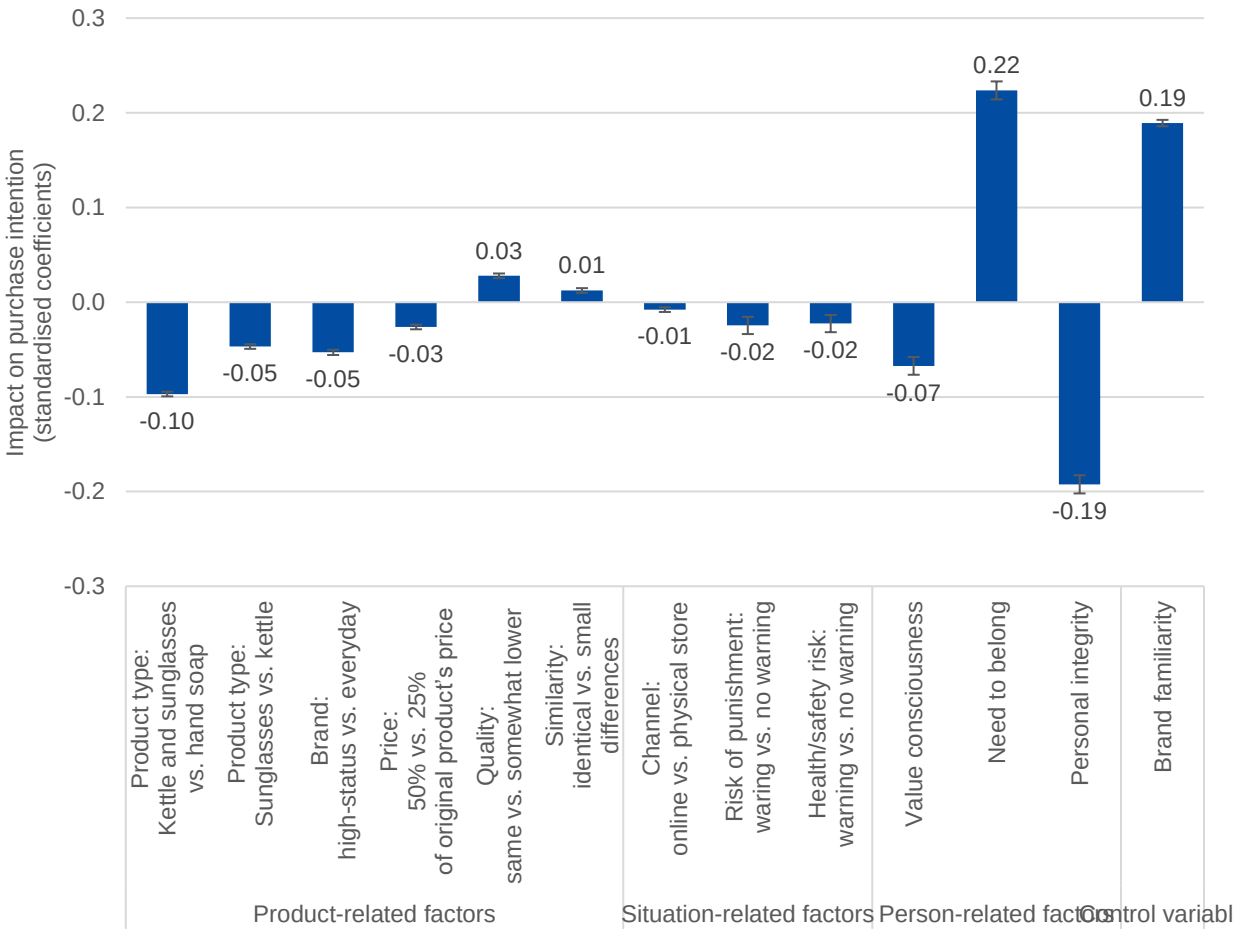


Figure 12: Relative influence of factors on purchase intentions for counterfeit products[38]

Less impactful still are the effects of price level (25% vs. 50% of the original product price), perceived quality, perceived health/safety risks and perceived risk of punishment, that are all of similar size

[38] Error bars represent 95% confidence intervals.

(see Figure 12). These effects are statistically significant (i.e., unlikely to be due to chance), but smaller than the effects of the aforementioned factors. Purchase intentions are slightly lower, on average, if the counterfeit is sold at 50% (vs. 25%) of the original product's price, perceived as having somewhat lower (vs. the same) quality as the original product (
Figure 9), and if respondents are warned (vs. not warned) about potential health/safety risks or informed (vs. not) that buying counterfeits is illegal in some Member States (Figure 10). The effects of perceived purchase channel and visual similarity are small. The information that respondents encountered the counterfeit product on a major e-commerce website vs. in a major shopping centre and small visual changes, such as a change in the position of the brand logo compared to the original product, hardly impacted purchase intentions (see
Figure 9 and Figure 10).

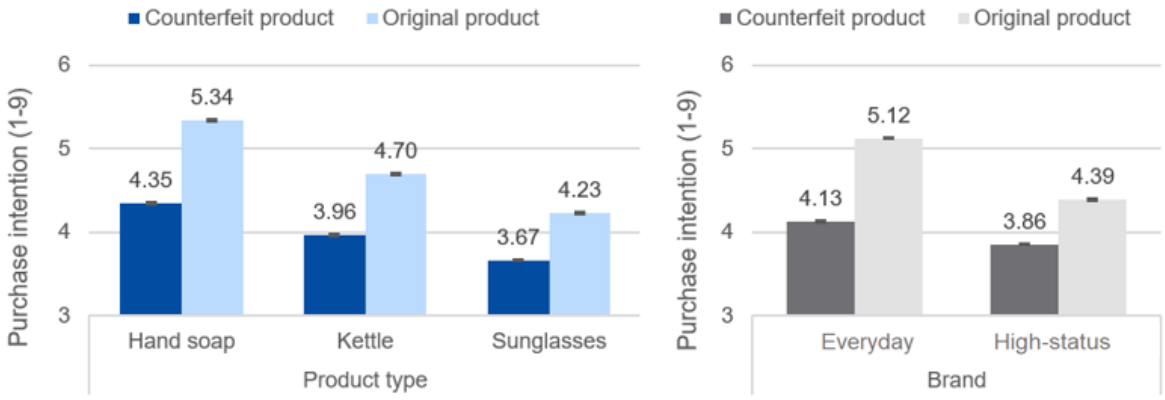


Figure 13: Model-predicted purchase intentions for counterfeit vs. original product and brand types

The findings suggest that consumers are more interested in counterfeit hand soaps than in counterfeit kettles or sunglasses, and more interested in counterfeit versions of everyday vs. high-status brands. However, these effects need not be specific to counterfeit products. Consumers may be more likely to purchase hand soaps (vs. kettles or sunglasses) and everyday (vs. high-status) brands in general, potentially because of the lower price of everyday products. Supporting this, the results in Section 3.3.1 already revealed higher purchase interest in the original versions of these products.

In a follow-up analysis, we directly compared the influence of the product and brand type on the reported purchase intentions for counterfeits vs. the original product versions. The findings, presented in Figure 13, reveal that, overall, purchase intentions were higher for the original products

than for counterfeit versions. Furthermore, and interestingly, while respondents were generally more interested in the soap bars (vs. the kettles and sunglasses) and the everyday brands (vs. the higher-status brands), the differences are smaller for the counterfeit versions than for the original versions of the products (see Figure 13). For instance, the drop in purchase interest going from higher-status to everyday brands is much larger for the original products (M = 4.39 vs. M = 5.12; a difference of 0.73) than for their counterfeit versions (M = 3.86 vs. 4.13; a difference of 0.27). In other words, *relatively speaking*, the counterfeit versions of higher-status (vs. everyday) brands attracted more interest than the original versions of higher-status (vs. everyday) brands. A similar pattern of results is observed for the different product types. That is, the drop in purchase interest going from hand soap to kettles to sunglasses is larger for the original products than for the counterfeit versions, meaning that, *relatively speaking*, the counterfeit versions of higher (vs. lower) priced product types generated more purchase interest than the original versions of higher (vs. lower) priced product types.

3.3.3 Differences across products

The impact of various factors that influence counterfeit demand varies by product type and brand. Our analysis indicates that the overall pattern of results is fairly robust across products and brands, but that there are some noteworthy interplays with product type and brand. Most notably, for the high-status brands, consumers become less interested in purchasing counterfeit product as their price increases, but for everyday brands consumers become slightly more interested in purchasing counterfeit products as their price increases. The latter could be explained by the fact that consumers may start worrying about product quality when they see steeper price discounts on the relatively inexpensive counterfeit product types. Further, the analysis also suggests that value conscious consumers, who are less interested in purchasing counterfeit products, tend to get more reluctant with more expensive product types compared to less expensive product types. Also, as one would predict, the positive effect of the need to belong on purchase intentions is considerably stronger for the sunglasses – the product that is consumed most conspicuously – compared to other product types. Furthermore, consumers with a relatively high level of personal integrity are especially reluctant to purchase counterfeit products in purchase situations including counterfeits of everyday (vs. high-status) brands.

Another follow-up analysis, which examined interplays between the factors, revealed that the effects of various factors significantly differ across the products and brands that were used in the experiment.[39]
Table 8 therefore shows the effects of the factors for each of the product and brand types separately. Figure 14 visualises the findings.

From the product and situation-related factors, the effect of price varies most notably across the specific products used (see Figure 14). For the higher-status brands, the price effects are negative, which means that, on average, respondents' intention to purchase these counterfeit products was lower if their price was 50% rather than 25% of the original product's price. As regards the everyday brands, the results reveal a small positive price effect for the hand soaps and kettles, meaning that respondents' intention to purchase these products was slightly higher if their price was 50% (vs. 25%) of the original product's price. Note that, as in reality, (original) product prices were lower for hand soaps and kettles than for sunglasses and lower for low-status than for high-status brands. It could be that, when counterfeits of relatively inexpensive products were offered at low prices (i.e., 25% vs. 50% of the original product's price), respondents started to doubt the quality of the product, resulting in a lower purchase tendency.

The effects of the other product and situation-related factors are always in the same direction, only their strength varies across the different products (see Figure 14). The differences are small in absolute terms, however. All in all, these factors do not seem to have a considerable impact on purchase intentions for counterfeits products, neither overall nor for any of the product and/or brand types in specific.

The results further reveal that the strength of the effects of the person-related factors, which had a relatively strong impact on purchase intentions, considerably differs across products. The negative effect of value consciousness is significantly stronger for the kettle (high-status brand) and the sunglasses, which are the products with the highest prices. It thus seems that value-conscious consumers are less interested in purchasing the counterfeit products compared to less value-

[39] The effects of price, perceived risk of punishment, channel, value consciousness, need to belong, personal integrity and brand familiarity significantly depended on the product type ($p < 0.001$) and brand type ($p < 0.01$). The effects of perceived quality and perceived health and/or safety risks significantly differed across product types ($p < 0.05$), but not across brand types ($p > 0.33$). The effect of perceived similarity did not differ across product and brand types ($p = 0.260$ and $p = 0.142$, respectively).

conscious consumers, particularly if the counterfeit's price is relatively high (hence not seen as good value for money).

As one would predict, the positive effect of the need to belong on purchase intentions is considerably stronger for the sunglasses – the product that is consumed most conspicuously – compared to the kettle and the hand soap, and stronger for high-status compared to low-status brands. Furthermore, compared to consumers with a relatively low level of personal integrity, consumers with a relatively high level of personal integrity are much less likely to be interested in purchasing counterfeit products, and this negative effect of personal integrity seems even stronger in purchase situations including counterfeits of low-status (vs. high-status) brands.

All in all, these results show that the pattern of results is fairly robust across products and brands.

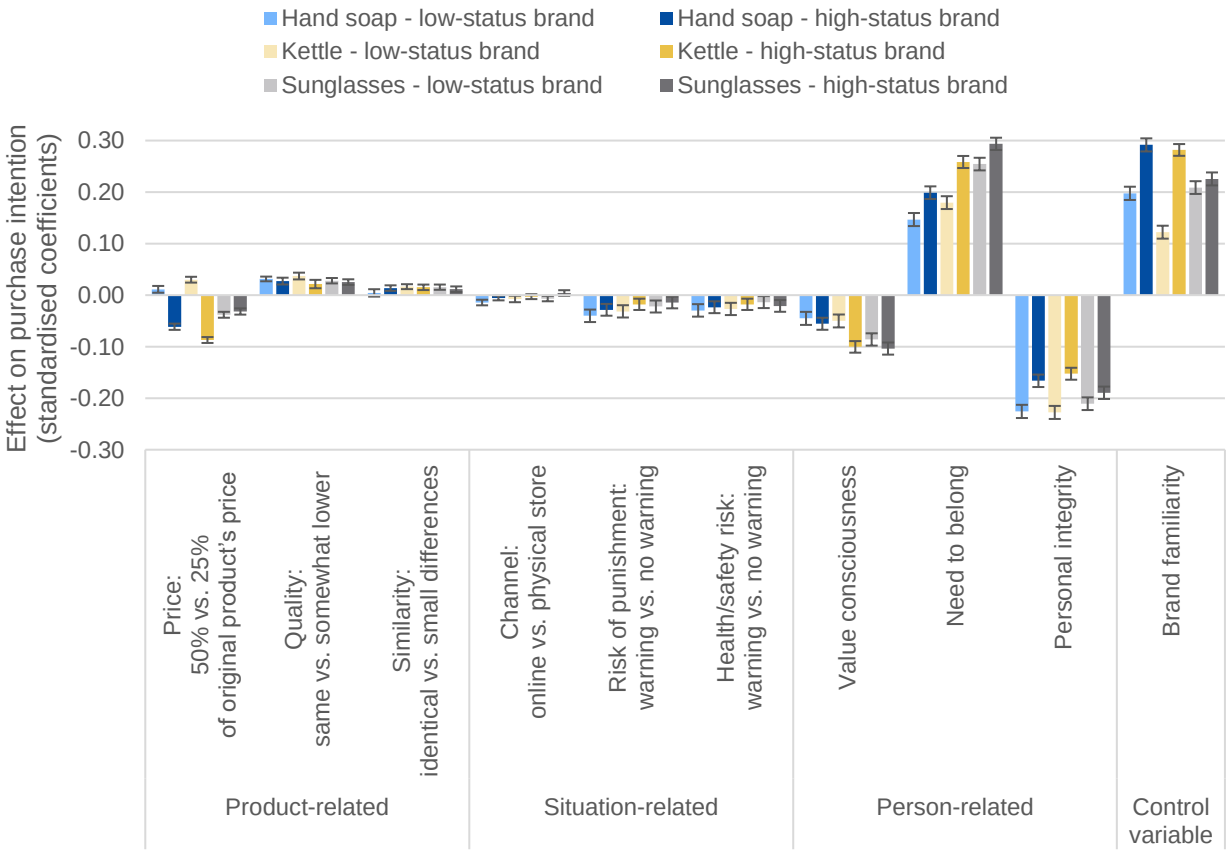


Figure 14: Relative influence of factors on purchase intentions for counterfeit products: differences across product and brand types[40]

[40] This figure shows the relative contribution of each of the factors of interest on purchase intentions, for each of the products used in the experiment separately. Each bar reflects a comparison between two levels of a certain factor (e.g., 50% vs. 25% of the original product's price). The bars also show the direction of the effect – positive (above zero) or negative (below zero). The effect size (bar height) can be compared across the factors: higher bars (positively or negatively) reflect a stronger influence of the particular factor on purchase intentions. Error bars represent 95% confidence intervals.

Factors	Hand soap		Kettle		Sunglasses	
	Every-day	High status	Every-day	High status	Every-day	High status
Product-related factors						
Price: 50% vs. 25% of original product's price	0.011	-0.061	0.030	-0.087	-0.038	-0.032
Quality: same as vs. somewhat lower than original product	0.031	0.027	0.037	0.022	0.028	0.025
Similarity: looks identical to vs. small differences with original product	(0.004)	0.014	0.016	0.015	0.015	0.012
Situation-related factors						
Channel: online vs. physical store	-0.014	-0.006	-0.007	(-0.003)	-0.007	(0.004)
Risk of punishment: warning vs. no warning	-0.040	-0.028	-0.031	-0.018	-0.022	-0.014
Health/safety risk: warning vs. no warning	-0.030	-0.023	-0.027	-0.018	-0.013	-0.021
Person-related factors						
Value consciousness	-0.045	-0.056	-0.050	-0.100	-0.086	-0.104
Need to belong	0.147	0.199	0.180	-0.258	0.254	0.294
Personal integrity	-0.226	-0.166	-0.228	-0.153	-0.211	-0.189
Control variables						
Brand familiarity	0.198	0.292	0.122	0.282	0.209	0.226

Table 8: Effects on purchase intention, per product: Results of the multilevel regression analysis (standardised coefficients)[41]

[41] Results of multilevel regression analyses with purchase intention ("Would you consider buying this product if you were looking for [hand soap, a kettle, sunglasses?]"), assessed on a scale from (1) *definitely not* to (9) *definitely so*, as outcome variable. Standardised coefficients can be compared across the factors, to determine the relative contribution of each factor to purchase intentions. Coefficients between brackets are not statistically significant ($p > 0.05$). All other coefficients are significant at $p < 0.001$. Country effects are not reported in the table.

3.3.4 Differences across consumers

Five groups of consumers, so-called consumer segments, were identified on the basis of their responses to the product and situation-related factors as well as person-related characteristics (personal integrity, value consciousness and the need to belong). These groups range from Segment 1 (highest intention to purchase counterfeit products) to Segment 5 (zero intention to purchase counterfeit products).

Segment 1, with the highest intention to purchase counterfeit products, accounts for 18% of total consumers. It is the youngest of all segments, with 43% of all segment members under the age of 35, and the segment with the highest proportion of men (55%). This segment is characterised by a relatively strong need to belong and relatively low levels of personal integrity and value consciousness. In line with their strong need to belong, this is the only segment that is more likely to purchase counterfeit sunglasses than a counterfeit kettle. Largest of all segments, Segment 2 (37% of all consumers), shows no strong intention to buy counterfeit products, but also no clear rejection. This segment is characterised by relatively low personal integrity, but value consciousness and the need to belong are not strongly related to being a member in this segment. A bit older than Segment 1 (31% of segment members are under the age of 35), members of Segment 2 stand out for their outspoken preference for low-status vs. high-status brands and for counterfeit products sold at lower prices.

Segments 3 (27% of all consumers), 4 (11% of all consumers) and 5 (7% of all consumers), which have low to no interest in buying counterfeit products, are, on average, older than the first two segments. Compared to the latter, they have also higher levels of personal integrity and value consciousness, and a lower need to belong. More specifically, Segment 3 can be described as generally unwilling to purchase counterfeit products, although slightly more interested when it comes to an everyday product with no noticeable quality difference or visual difference from the original. Consumers within Segment 4 have a very low intention, on average, to purchase counterfeit products, which is influenced only to a very limited extent by product and situation characteristics. Finally, since Segment 5 express absolutely no interest in buying counterfeit products, characteristics of products and situations have no influence at all within this segment.

Finally, we examine differences among consumers in their tendency to purchase counterfeit goods (and the influence of the product and situation-related factors on this tendency). To this end, a latent class multilevel regression analysis was performed. The statistical model identifies a number of (unobserved) consumer segments with different responses to the product and situation-related characteristics, and simultaneously predicts segment membership based on consumer characteristics. More specifically, we examine if segments of consumers exist that react differently to information about the price, quality, risks, etc. when exposed to counterfeit products, and if and how the segments are associated with the consumer characteristics of interest (value consciousness, the need to belong, personal integrity) as well as socio-demographic characteristics (age, gender, financial situation, etc.).[42]
Table 9 provides the statistical results, which are visualised in Figure 15 and Figure 16.

Five consumers segments are identified, which are ordered in the table and figures from the segment with the highest intention to purchase counterfeit products (Segment 1) to the segment with zero intention to purchase counterfeit products (Segment 5). The first consumer segment, consisting of 18% of the consumer sample, has a relatively high intention to purchase counterfeit products (M = 6.77, on average, on a scale from 1 to 9; see
Table 9, top). The second segment's average purchase intention is around the mid-point of the scale (M = 4.78), showing no strong intention to buy counterfeit products, but also no clear rejection. With 37% of the sample, this is the largest segment. The third (M = 2.74, 27% of the sample) and fourth (M = 1.51, 11% of the sample) segments are increasingly less likely to purchase counterfeit products. Finally, the fifth segment, which makes up 7% of the sample, shows absolutely no interest in purchasing counterfeit products (M = 1.00, on average, on a scale from 1 to 9).

Figure 15 shows the relationships between person-related factors (value consciousness, need to belong and personal integrity) and the likelihood of belonging to the segment, for each of the five consumer segments. The bars show the direction of the relationship – positive (above zero) or negative (below zero). The strength of the relationship (bar height) can be compared across the segments: higher bars (positively or negatively) reflect a stronger influence of the particular person-related factor on the likelihood of segment membership. Error bars represent one standard error above and below the mean.

[42] Value consciousness, the need to belong, personal integrity are included in the model as predictors of segment membership. Socio-demographic factors are included only for segment profiling.

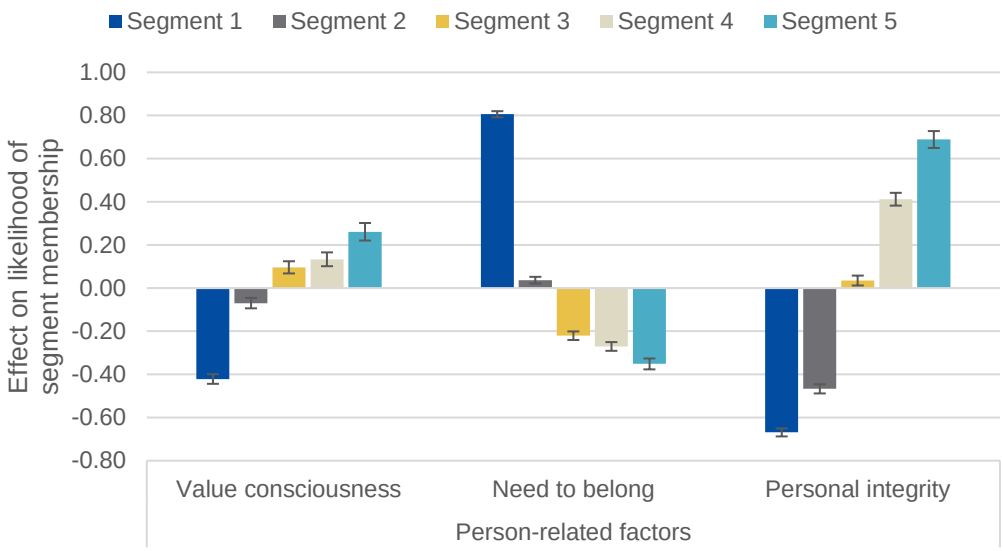


Figure 15: Effects of the person-related factors on the likelihood of segment membership

Which segment a consumer is most likely to belong to significantly depends on the consumer's level of value consciousness, need to belong and personal integrity (see Figure 15). Segment 1, with the highest intention to purchase counterfeit products, is characterised by a relatively strong need to belong (*M* = 3.33 on a scale from 1 to 5; see also Table 10) and relatively low levels of personal integrity (*M* = 3.37) and value consciousness (*M* = 3.93). Personal integrity is also strongly negatively associated with membership of Segment 2: Consumers with lower levels of personal integrity are more likely to belong to this segment. Value consciousness and the need to belong are not strongly related to membership of Segment 2 (scores are around the sample mean; see Table 10). Segments 3, 4 and 5, which have low to no interest, respectively, in buying counterfeit products, are characterised by increasingly higher levels of personal integrity (*M* = 3.98, *M* = 4.16, and *M* = 4.27) and value consciousness (*M* = 4.15, *M* = 4.18, *M* = 4.23), and an increasingly lower need to belong (*M* = 2.32, *M* = 2.26, *M* = 2.18).

The identified segments vary in their reaction to characteristics of counterfeit products and purchase situations (see Figure 16), although the differences are sometimes small in absolute terms. We discuss the most important differences.

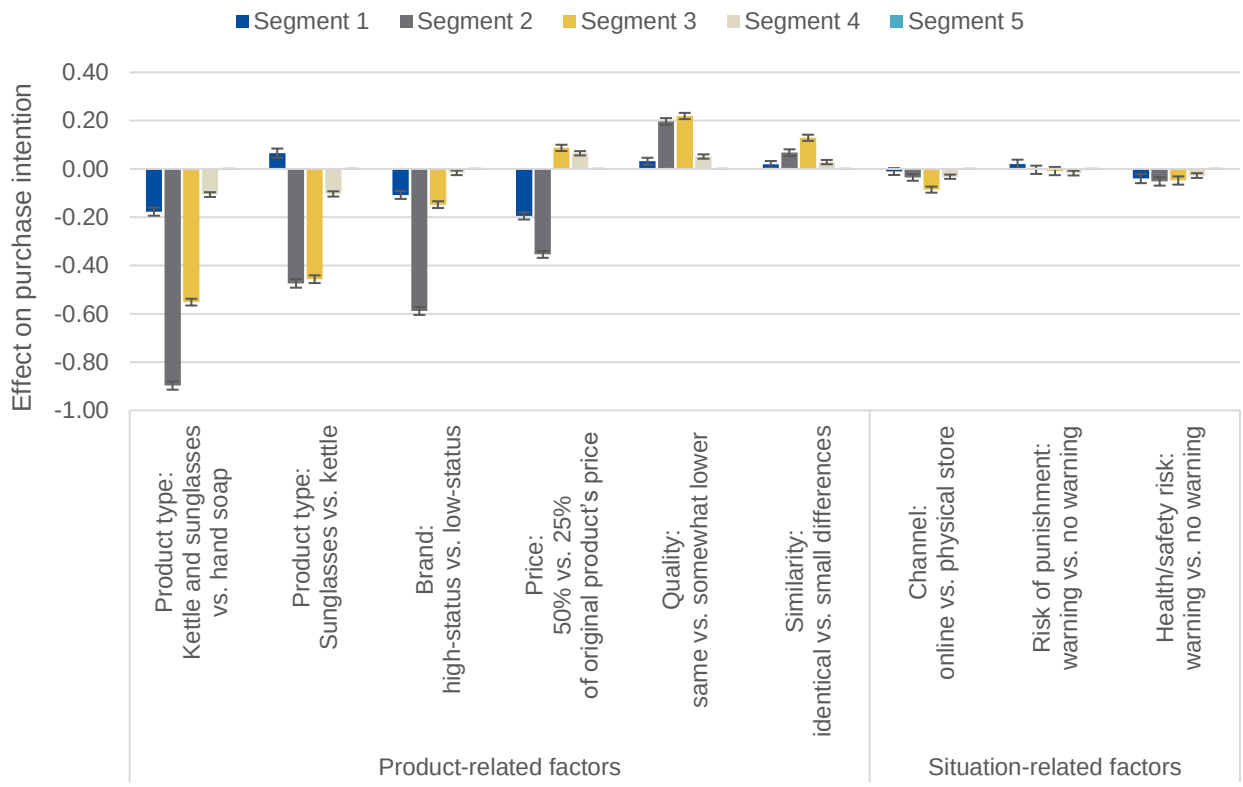


Figure 16: Differences in the influence of the product and situation-related factors across segments[43]

[43] This figure shows the relative contribution of each of the factors of interest on purchase intentions, for each of identified segments. Each bar reflects a comparison between two levels of a certain factor (e.g., 50% vs. 25% of the original product's price). The bars also show the direction of the effect – positive (above zero) or negative (below zero). The effect size (bar height) can be compared across the factors: higher bars (positively or negatively) reflect a stronger influence of the particular factor on purchase intentions. Error bars represent one standard error above and below the mean.

Factors	Segment					*Diff. across segments?*
	1	2	3	4	5	
Segment size	18%	37%	27%	11%	7%	
Purchase intention (1 = definitely not, 9 = definitely so)	6.77	4.78	2.74	1.51	1.00	Y
Effects per segment						
Product-related factors						
Product type: Kettle and sunglasses vs. hand soap	-0.177^{c}	-0.897^{a}	-0.552^{b}	-0.106^{d}	0.000^{e}	Y
Product type: Sunglasses vs. kettle	0.065^{d}	-0.474^{a}	-0.457^{a}	-0.104^{b}	0.000^{c}	Y
Brand: high-status vs. everyday	-0.108^{b}	-0.589^{a}	-0.148^{b}	-0.016^{c}	0.000^{c}	Y
Price: 50% vs. 25% of original product's price	-0.195^{b}	-0.354^{a}	0.087^{c}	0.065^{c}	0.000^{d}	Y
Quality: same as vs. somewhat lower than original product	0.032^{b}	0.197^{c}	0.219^{c}	0.051^{b}	0.000^{a}	Y
Similarity: looks identical to vs. small differences with original product	0.018^{ab}	0.067^{c}	0.129^{d}	0.028^{b}	0.000^{a}	Y
Situation-related factors						
Channel: online vs. physical store	-0.011^{bc}	-0.035^{b}	-0.086^{a}	-0.032^{b}	0.000^{c}	Y
Risk of punishment: warning vs. no warning	0.020^{a}	-0.004^{a}	-0.009^{a}	-0.017^{a}	0.000^{a}	N
Health/safety risk: warning vs. no warning	-0.040^{a}	-0.052^{a}	-0.048^{a}	-0.028^{a}	0.000^{b}	Y
Control variables						
Brand familiarity	0.296^{e}	0.268^{d}	0.115^{c}	0.018^{b}	0.000^{a}	Y
Effects on likelihood to belong to segment						
Person-related factors						
Value consciousness	-0.421^{a}	-0.070^{b}	0.096^{c}	0.134^{c}	0.261^{d}	Y
Need to belong	0.806^{d}	0.037^{c}	-0.221^{b}	-0.271^{b}	-0.351^{a}	Y
Personal integrity	-0.669^{a}	-0.467^{b}	0.035^{c}	0.412^{d}	0.689^{e}	Y

Table 9: Results of the latent class multilevel regression analysis: Consumer segments in responses to counterfeit product and situation factors[44]

[44] Results of a multilevel latent class regression analysis with purchase intention ("Would you consider buying this product if you were looking for [hand soap, a kettle, sunglasses?]"), assessed on a scale from (1) *definitely not* to (9) *definitely so*,

The tendency of Segment 1 to purchase a counterfeit product depends on the characteristics of the counterfeit product, but not as strongly as within other segments (Figure 16, dark blue bars). Segment 1 is the only segment that is more likely to purchase counterfeit sunglasses than a counterfeit kettle, consistent with the relatively high need to belong of consumers within this segment. Price matters (although not as much as for Segment 2), but a somewhat lower quality or small visual differences with the original product do not discourage this segment to purchase counterfeit products.

As regards the influence of product and situation-related factors on purchase intentions, segments 2 and 3 are fairly similar. The purchase intentions of Segment 2 are most strongly influenced by product characteristics (Figure 16, dark grey). Both segments are more likely to purchase a counterfeit hand soap than a counterfeit kettle, which they are in turn more likely to purchase than counterfeit sunglasses. The major difference between segments 2 and 3 – apart from the fact that Segment 2 has a higher intention, overall, to purchase the counterfeit products – is that Segment 2 has a much more outspoken preference for everyday (vs. high-status) brands and for counterfeit products sold at lower prices. Segment 2 thus seems reasonably willing to buy counterfeit products, particularly if it concerns an inexpensive counterfeit version of an everyday product as hand soap, which they expect to serve them as well as the original product. Segment 3 is generally unwilling to purchase counterfeit products, but is slightly more interested when it comes to an everyday product with no noticeable quality difference or visual difference from the original.

Segment 4 is somewhat similar to Segment 3 in terms of the direction of the influence of product characteristics, but all effects are much less strong within Segment 4. Consumers within this segment have a very low intention, on average, to purchase counterfeit products, which is influenced only to a very limited extent by product and situation characteristics (see Figure 16, pale yellow bars). Finally, since segment 5 expresses absolutely no interest in buying counterfeit products, characteristics of products and situations have no influence at all within this segment.

as outcome variable. The product and situation-related factors are included in the model as predictors of purchase intentions for counterfeit products. The person-related factors are included as predictors of segment membership. The coefficients presented are unstandardised coefficients. The coefficients can be compared across segments: the (overall) statistical significance of the differences in the coefficients across segments is indicated in the last column (yes/no). Coefficients with different superscripts – a, b, c, etc. – (row-wise) are significantly different from each other (at $p < 0.05$).

	Segment 1	Segment 2	Segment 3	Segment 4	Segment 5	Overall
Segment size	18%	37%	27%	11%	7%	
Purchase intention (1 = definitely not, 9 = definitely so)	6.77	4.78	2.74	1.51	1.00	3.98
Value consciousness (1 = low, 5 = high)	3.93	4.05	4.15	4.18	4.23	4.08
Need to belong (1 = low, 5 = high)	3.33	2.61	2.32	2.26	2.18	2.60
Personal integrity (1 = low, 5 = high)	3.37	3.65	3.98	4.16	4.27	3.79
Age category						
15 – 24 years	20%	15%	8%	5%	3%	12%
25 – 34 years	23%	16%	12%	9%	7%	15%
35 – 44 years	22%	16%	14%	13%	12%	16%
45 – 54 years	15%	17%	18%	18%	17%	17%
55 – 65 years	10%	18%	21%	25%	25%	18%
66 years and older	10%	18%	27%	31%	36%	21%
Gender						
Male	55%	49%	46%	45%	46%	49%
Female	45%	51%	54%	55%	54%	51%
Other	0%	0%	0%	0%	0%	0%
Financial situation (1 = very difficult, 5 = very easy [to make ends meet])	2.93	2.91	3.01	3.04	3.07	2.97
Member State						
Estonia	6%	11%	12%	12%	9%	10%
France	9%	10%	10%	10%	10%	10%
Germany	10%	9%	10%	10%	14%	10%
Greece	12%	12%	9%	8%	5%	10%

Italy	10%	8%	10%	13%	14%	10%
The Netherlands	10%	12%	10%	6%	8%	10%
Poland	11%	11%	10%	8%	9%	10%
Romania	11%	9%	10%	12%	11%	10%
Spain	12%	9%	9%	10%	10%	10%
Sweden	8%	10%	11%	10%	9%	10%

Table 10: Segment profiles

Finally, Table 10 reveals the socio-demographic profiles of each of the segments, Most notably, age steadily increases from Segment 1 to segment 5. Segment 1 is the youngest consumer segment, with 43% under the age of 35 (compared to 10% in segment 5). Segment 5 is the oldest segment, with more than 6 in 10 members aged 55 or older (compared to 20% in Segment 1). Furthermore, segment 1 consists of slightly more men (55%) than women (45%), while segments 3, 4 and 5 contain slightly more women than men. Finally, there are no strong differences in the financial situation (here, measured as the ease or difficulty to make ends meet) across the segments.

4 Conclusion

This study investigated the relative importance of determinants of intentional demand for counterfeit goods using a ratings-based conjoint survey experiment. The specific objectives of the study were (i) to investigate to what extent various product-level, individual-level and purchase-situation factors determine counterfeit demand, and (ii) how these different factors relate to one another (i.e. what is their relative influence). The study was conducted online among the general population of 15 years and older in 10 European Union (EU) Member States: Estonia, France, Germany, Greece, Italy, the Netherlands, Poland, Romania, Spain and Sweden. A total of 20,389 interviews were completed.

The research conducted for this study shows that intentional demand for counterfeit products continues to be a relatively widespread phenomenon among EU consumers, even if, on average, EU consumers also hold a relatively negative opinion of these products. According to the self-reported behaviour in 10 EU Member States, about a third of EU respondents (34%) indicate to have knowingly purchased a counterfeit product at least once in the past. In this group, 5% say that they have often done this, and 24% indicate that they did this less than a year ago. Incidence of intentional counterfeit purchase behaviour is highest in Greece, where 55% admit to having knowingly purchased a counterfeit product at least once. The corresponding rate is lowest in France and Italy (both 19%). On a scale from (1) *negative* to (5) *positive*, general attitude towards counterfeits ranges from 2.3 in Italy and France to 2.8 the Netherlands and Poland.

The study results indicate that all individual-level, purchase situation and product-specific factors that were included in the study explain customers' purchase intentions, although their relative impact varies significantly. Purchase intentions for counterfeit products most strongly depend on consumers' personal characteristics: their need to belong[45], and their personal integrity[46] (where higher need to belong increases purchase intent for counterfeits and higher personal integrity decreases purchase intent for counterfeits). In addition, consumers' intention to buy a counterfeit

[45] This characteristic was measured by means of a question asking respondents to indicate their agreement with a series of statements, e.g., "it is important that others like the products and brands I buy". For a full list of statements evaluated, refer to Q12 in Appendix A.

[46] This characteristic was measured by means of a question asking respondents to evaluate a series of behaviours, e.g., "getting too much change and not saying anything", as wrong or not wrong. For a full list of behaviours evaluated, refer to Q16 in Appendix A.

product also varies according to the type of product: people are most likely to consider purchasing low engagement everyday item represented by a bar of hand soap, followed by high engagement items (investment item represented by a kettle and a splurge represented by a pair of sunglasses, respectively)[47]. Finally, value consciousness[48] and brand type (everyday vs. high status brand) also play a role in purchase intent for counterfeit products, with more value conscious consumers being less likely to show purchase intent for counterfeit products and everyday brands generating higher purchase intent than high-status brands. Other factors studied, while all statistically significant, were of relatively lower impact in terms of driving intentional consumer demand for counterfeit products. These less impactful factors included counterfeit product price level (25% vs. 50% of the original product price), perceived quality, perceived health/safety risks, perceived risk of punishment, and the purchase channel (online vs. offline).

The findings suggest that consumers are more interested in lower priced vs. higher priced counterfeit product types, and in everyday brands vs. high-status brands of counterfeit products. While we see a largely similar pattern with the original products, the difference in the degree of interest is smaller for the counterfeit versions than for the original versions of the products. Therefore, relatively speaking (if one accounts for this generally higher interest in cheaper vs. more expensive product types in the analysis), the counterfeit versions of high-status (vs. everyday) brands attract more consumer interest than the original versions of high-status (vs. everyday) brands. Likewise, relatively speaking, the counterfeit versions of higher priced (vs. lower priced) product types attract more interest than the original versions of higher priced (vs. lower priced) product types.

Furthermore, although our analysis indicates that the overall pattern of results is fairly robust across products and brands, findings do differ depending on the type of counterfeit product and brand. Most

[47]Dual Process Theory, as introduced by Daniel Kahneman (2011), suggests that much of humans' behaviour is based on the automatic processing of information (often referred to as System 1 processing), and that humans only rarely engage in more deliberative processing (often referred to as System 2 processing). The study supposes that the majority of everyday purchases are done in System 1 decision-making mode. That said, System 2 decision-making mode may also be at play in certain situations, such as when consumers are faced with higher value or higher personal involvement items (e.g. with goods that can be seen as, so-called, 'investment pieces', or personal accessories that can be seen as 'personal splurges'). Low engagement item in the study was exemplified by a bar of hand soap, while the so-called 'investment piece' was exemplified by a kettle and a 'personal splurge' by a pair of sunglasses.

[48] This characteristic was measured on the extent of respondents' agreement with a series of statements (e.g., "I always check prices to be sure I get the best value for the money I spend"). For a full list of statements, refer to Q11 in Appendix A.

notably, for the high-status brands, consumers become less interested in purchasing counterfeit product as their price increases, but for everyday brands consumers become slightly more interested in purchasing counterfeit products as their price increases. The latter could be explained by the fact that consumers may start worrying about product quality when they see steeper price discounts on the relatively inexpensive counterfeit product types. Further, the analysis also suggests that value conscious consumers, who are less interested in purchasing counterfeit products, tend to get more reluctant with more expensive product types compared to less expensive product types. Also, as one would predict, the positive effect of the need to belong on purchase intentions is considerably stronger for the sunglasses – the product that is consumed most conspicuously – compared to other product types. Furthermore, consumers with a relatively high level of personal integrity are especially reluctant to purchase counterfeit products in purchase situations including counterfeits of everyday (vs. high-status) brands.

The study also identified five unique consumer segments on the basis of their responses to the product and situation-related factors as well as their person-related characteristics (personal integrity, value consciousness and the need to belong). These groups primarily differ from one another in their intention to purchase counterfeit products, ranging from Segment 1 and Segment 2 with, relatively speaking, the highest intentions to purchase counterfeit products, to Segment 3, Segment 4, and Segment 5 which show low to zero intentions for purchasing counterfeit products.

Segment 1, with the highest intention to purchase counterfeit products, accounts for 18% of total consumers. It is the youngest of all segments, with 43% of all segment members under the age of 35, and the segment with the highest proportion of men (55%). This segment is characterised by a relatively strong need to belong and relatively low levels of personal integrity and value consciousness. The tendency of Segment 1 to purchase a counterfeit product depends on the characteristics of the counterfeit product, but not as strongly as with other segments. Notably, Segment 1 is the only segment that is more likely to purchase counterfeit sunglasses (splurge item) than a counterfeit kettle (investment item), which may be related to this segment's higher need to belong, expressed through a preference for product types that can offer easy visibility and personal identification.

Largest of all segments, Segment 2 (37% of all consumers), shows no strong intention to buy counterfeit products, but also no clear rejection. This segment is characterised by relatively low personal integrity, but value consciousness and the need to belong are not strongly related to being

a member of this segment. A bit older than Segment 1 (31% of segment members are under the age of 35), members of Segment 2 are influenced more by product characteristics than the other segments. More specifically, they stand out from the other segments for an outspoken preference for everyday (vs. high engagement) product types, everyday (vs. high-status) brands and for counterfeit products sold at lower prices (25% vs 50% of the original product's price).

Segments 3 (27% of all consumers), 4 (11% of all consumers) and 5 (7% of all consumers), which have low to no interest in buying counterfeit products, are, on average, older than the first two segments. Compared to the latter, they also have higher levels of personal integrity and value consciousness, and a lower need to belong. More specifically, Segment 3 can be described as generally unwilling to purchase counterfeit products, although slightly more interested when it comes to an everyday product with no noticeable quality difference or visual difference from the original. Consumers within Segment 4 have a very low intention, on average, to purchase counterfeit products, which is influenced only to a very limited extent by product-specific and situation-specific factors. Finally, since Segment 5 expresses absolutely no interest in buying counterfeit products, characteristics of products and situations have no influence at all within this segment.

From a targeted communications perspective, Segments 1 and 2 represent a group of consumers that is most likely to purchase a counterfeit product and is therefore a primary target audience for any campaigns aimed at reducing the intentional demand for counterfeit products. As stated earlier, Segment 1 is described by a relatively high need to belong. Influencers may be able to tap into this need, due to their social status and position, and based on how consumers relate to influencers. Therefore, anti-counterfeiting messages delivered by influencers may have the power to shape purchasing decisions for this Segment. Another consideration to bear in mind is that Segment 1 is characterised by a relatively low level of personal integrity, which suggests that, compared to the other segments, consumers in Segment 1 may be more accepting of behaviours that others would describe as "wrong" or ethically inappropriate. This may therefore mean that Segment 1 may be less influenceable on the grounds of ethics compared to the other segments. Additionally, as the only segment that is more likely to purchase sunglasses (a "splurge" item) over a kettle (an "investment" item), this segment may also benefit from messaging that focuses on product types that can offer easy visibility and personal identification.

Segment 2, being the largest of all segments and the second most likely to consider purchasing counterfeit products, also presents a communications opportunity. Within this segment, high

preference of everyday (vs. high-status) brands and everyday product types may indicate an opportunity for an awareness raising campaign focused on these types of products.

Given the low intentional demand for counterfeit products shown by Segments 3, 4, and 5, communication to these segments should focus on reinforcing their existing purchasing decisions and behaviours and/or educating them about how to recognise counterfeit products, so as to reduce any unintentional purchasing of counterfeit goods.

In conclusion, the results of this study indicate that understanding counterfeit purchasing drivers means, in the first place, understanding specific person-level values and psychological needs that drive these behaviours. That said, our findings show that intentions vary according to product, and that consumers also vary from one another. Therefore, a contextualised understanding of counterfeit behaviours is needed, taking into account values and needs of people and understanding how behaviours shift according to product type.

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List of Tables and Figures

Tables

Figures

Glossary

DE	Germany
EE	Estonia
EL	Greece
ES	Spain
EU	European Union
EUIPO	European Union Intellectual Property Office
FR	France
IPR	Intellectual Property Rights
IT	Italy
NL	Netherlands
OECD	Organization for Economic Co-operation and Development
PL	Poland
RO	Romania
SE	Sweden
TOT	Total

Annexes

Annex A Questionnaire

22-082948-01 EUIPO Counterfeits

Empirical experiment to determine the relative importance of various counterfeit product attributes with consumers

DCE online questionnaire

Text in blue provides scripting instructions

Text in black is shown to respondents

Text in green refers to other documents

Text in purple refers to timers

SURVEY OVERVIEW

Topic	Description
Data Collection Method	Online data collection (CAWI) via the panels , Gen pop 15+
Data Collection device	Device agnostic
Multi country	10 countries
Languages for fieldwork	National language(s) of the countries covered by the survey
Interview duration	15 minutes

QUOTA / KEY VARIABLES AND RANDOMISATION

Country of residence

PROG: create hidden variable **COUNTRY.** Allocate respondents based on country of residence.

Nbr	Country	Languages	Sample size MAIN
1	Estonia	Estonian	2000
2	France	French	2000
3	Germany	German	2000
4	Greece	Greek	2000
5	Italy	Italian	2000
6	The Netherlands	Dutch	2000
7	Poland	Polish	2000
8	Romania	Romanian	2000
9	Spain	Spanish	2000
10	Sweden	Swedish	2000

Group (each group will see a different set of vignettes)
PROG: WITHIN EACH COUNTRY, RANDOMLY ASSIGN ALL RESPONDENTS INTO EIGHT EQUAL GROUPS BASED ON LEAST FILLED METHOD

Group	Vignettes (each group will evaluate 12 vignettes)	Perceived risk of punishment (x6)	Perceived health/safety risk (x7)	Sample size (per country) MAIN
1	1-12	1 (low)	1 (low)	250
2	13-24	1 (low)	1 (low)	250
3	25-36	1 (low)	2 (high)	250
4	37-48	1 (low)	2 (high)	250
5	49-60	2 (high)	1 (low)	250
6	61-72	2 (high)	1 (low)	250
7	73-84	2 (high)	2 (high)	250
8	85-96	2 (high)	2 (high)	250

Part 0: General introduction

Base: All respondents

[Start: timer_intro]

Thank you for your interest in this study. We are inviting you to take part in this survey about shopping. This research is implemented by Centerdata and Ipsos on behalf of a client.

The survey consists of two parts. In the first part, we will ask you to imagine that you are looking for certain products. You will be presented with different situations in which you might buy these products. In each situation, we ask you what you think of the product and whether you would buy it. In the second part, you will be asked more general questions about yourself and your shopping behaviour. The survey takes approximately 15 minutes to complete.

Your response will be strictly confidential. The client for this research will not receive any information that would allow you to be identified, such as your name. Your response will be grouped together with the responses provided by all the participants.

[Stop: timer_intro]

Part 1: Screener/Quota Tracking

Base: All respondents

[Start: timer_screeners]

First, we ask you some general questions about yourself.

Q1 (Age):
[Standard Screener: DO NOT MODIFY OR TRANSLATE]
YEAR/MONTH. What is your date of birth?
YEAR
_1910 1910
…
_2015 2015
MONTH
_1 January
_2 February
_3 March
_4 April
_5 May
_6 June
_7 July
_8 August
_9 September
_10 October
_11 November
_12 December

[Standard Screener: DO NOT MODIFY OR TRANSLATE]
QUOTAGERANGE [Hidden]. Hidden Question - QUOTAGERANGE "this is a dummy question that will hold age breaks" for the quotas that should be defined by the PM; it CAN be edited and lines can
be added to meet survey objectives.
_15_24 **"15”24"**
_25_34 **"25-34",**
_35_44 **"35-44",**
_45_54 **"45-54",**
_55_65 **"55-65"**
_66_99 **“66 and older”**

[PROG: TERMINATE IF LESS THAN 15]
[Standard Screener: DO NOT MODIFY OR TRANSLATE]
RESP_AGE [Hidden]. Hidden Question - RESP_AGE "this is a dummy question that will hold age"
USE RESP_AGE [Hidden] response list

Q2 (Gender): Are you …
[PROG: SINGLE RESPONSE]

1. Female
2. Male
3. Other
4. Prefer not to answer

Q3 (Region): In which region do you live?
[PROG: SINGLE RESPONSE]
[PROG: insert country specific <REGION LIST Excel> NUTS2 regions]

Q4 (Income): What is your household's monthly income (that is, after income taxes have been paid)?

Your total household income includes your own income plus the incomes of all household members who live together with you. The total income includes income from jobs, pensions, social security, interest, dividends, capital gains claimed, profits from businesses, unemployment payments, and all other money you received.

[PROG: SINGLE RESPONSE]
[PROG: insert country specific <INCOME LIST Excel>]

999. Prefer not to answer
9999. Don't know

Q5 (Making ends meet): Thinking of your household's monthly income, how easy or difficult is it for your household to make ends meet?

1. Very difficult
2. Fairly difficult
3. Neither easy nor difficult
4. Fairly easy
5. Very easy

999. Don't know

[Stop: timer_screeners]

Part 2: Exposure to original products

Base: All respondents
[Start: timer_part1]

Now, imagine that you are looking for a new kettle and a pair of sunglasses, for yourself or a friend. You also almost ran out of hand soap. You look online and visit stores to buy these items.

On the next screens, you will see six products that you encounter while shopping. Please indicate, for each product, what you think of the product and whether you would consider buying it.

[PROG: SHOW THE BELOW VIGNETTES IN RANDOM ORDER, capture the order]

[PROG: Each vignette shown includes a picture of a specific product with brand information visible in the picture and product price provided as text under the picture.]

	Product type	Brand type	Product	Brand name (deleted in the report)
1.	Low-involvement product	Everyday brand	Hand soap	
2.	Low-involvement product	High status brand	Hand soap	
3.	High-involvement functional product	Everyday brand	Kettle	
4.	High-involvement functional product	High status brand	Kettle	
5.	High-involvement hedonic/luxury product	Everyday brand	Sunglasses	
6.	High-involvement hedonic/luxury product	High status brand	Sunglasses	

PROG: show Q6 till Q8 per vignette (so 6 times, and capture as Q6_1 till Q6_6, same for Q7 and Q8), use sliders

[Attitude towards the product & purchase intention; Van Horen & Pieters, 2012, 2017]

Q6. What is your impression of this product?

Negative	1	2	3	4	5	6	7	8	9	Positive
Unattractive	1	2	3	4	5	6	7	8	9	Attractive

Q7. If you were looking for [Scripter: add relevant product], would you consider buying this product?

Definitely not	1	2	3	4	5	6	7	8	9	Definitely so

Q8. How familiar are you with the brand "PROG: insert name"?

Never heard of it	1	2	3	4	5	6	7	8	9	Know it very well

[Stop: timer_part1]

Part 3: Evaluation of counterfeit products

Base: All respondents

[Start: timer_part2]

In the next part, you will again see a number of products that you may encounter while shopping.

All products that you will see in this part are **counterfeit products**. A counterfeit product is a fake version of an original product. It looks the same and is usually marked with the brand or logo of the original product, without the permission of the company that sells the original.

Base: All respondents

Now, imagine again that you are looking for a new kettle and a pair of sunglasses, for yourself or a friend. You also plan to buy hand soap.

On the next screens, you will be presented with 12 situations in which you might buy these products (all **counterfeit products**). Each time, you will receive information about the product (shown in a picture), the price, and where you encounter it.

Please indicate, in each situation, what you think of the product and whether you would consider buying it. Please examine the product and situation carefully before providing your answers.

Base: all respondents

[PROG: SHOW THE BELOW VIGNETTES IN RANDOM ORDER BASED ON RESPONDENT GROUP, capture order]

If group = 1, then show VIGNETTE1-VIGNETTE12

If group = 2, then show VIGNETTE13-VIGNETTE24

If group = 3, then show VIGNETTE25-VIGNETTE36

If group = 4, then show VIGNETTE37-VIGNETTE48

If group = 5, then show VIGNETTE49-VIGNETTE60

If group = 6, then show VIGNETTE61-VIGNETTE72

If group = 7, then show VIGNETTE73-VIGNETTE84

If group = 8, then show VIGNETTE85-VIGNETTE96

Each group is exposed to 4 vignettes for each of 3 product types (12 vignettes in total).

Each vignette includes a picture of a specific product with brand information visible in the picture and some additional information provided in the text below. Information provided in the text below includes details about the product place of purchase, product price, product quality, and product similarity to the original.

PROG: show Q9 till Q10 per vignette (so 12 times, and capture as Q9_1 till Q9_12, same for Q10), use sliders

[MEASURE TIME TAKEN TO EVALUATE EACH VIGNETTE]

[Start: timer_vignette 1, 2, ….12]

[Stop: timer_vignette 1, 2, ….12]

IF GROUP=3 OR 4: show HEALTH AND SAFETY WARNING, before proceeding to show vignettes:

Please note that the ingredients / components present in the counterfeit products may not comply with the relevant industry standards and could expose users to health and safety risks.

IF GROUP=5 OR 6: show RISK OF PUNISHMENT WARNING, before proceeding to show vignettes:

Please note that in some EU countries it is illegal to buy counterfeit goods.

IF GROUP=7 OR 8: show both health and safety and risk of punishment warnings, then proceed to show vignettes:

Please note that the ingredients / components present in the counterfeit products may not comply with the relevant industry standards and could expose users to health and safety risks.

Please note that in some EU countries it is illegal to buy counterfeit goods.

Q9. What is your impression of this product?

Negative	1	2	3	4	5	6	7	8	9	Positive
Unattractive	1	2	3	4	5	6	7	8	9	Attractive

Q10. If you were looking for [Scripter: add relevant product], would you consider buying this product?

Definitely not	1	2	3	4	5	6	7	8	9	Definitely so

Part 4: Person-related characteristics

Base: All respondents

[Start: timer_part3]

Finally, we would like to ask you some more general questions about yourself and your shopping behaviour.

Base: All respondents

[Value consciousness; adapted from Lichtenstein et al., 1990]

Q11 SGRID (progressive grid)

To what extent do you agree or disagree with the following statements?

Rows (randomize):

1. When shopping, I compare the prices of different brands to be sure I get the best value for the money
2. When purchasing a product, I always try to maximize the quality I get for the money I spend
3. When I buy products, I like to be sure that I am getting my money's worth
4. I always check prices to be sure I get the best value for the money I spend
5. I am very concerned about low prices, but I am equally concerned about product quality

Columns:

1. Strongly disagree
2. Disagree
3. Neither agree, nor disagree
4. Agree
5. Strongly agree

Base: All respondents

[Need to belong/normative susceptibility; adapted from Bearden et al., 1989]

Q12 SGRID (progressive grid)

To what extent do you agree or disagree with the following statements?

Rows (randomize):

1. It is important that others like the products and brands I buy
2. When buying products, I generally purchase those brands that I think others will approve of
3. I like to know what brands and products make good impressions on others

4. I achieve a sense of belonging by purchasing the same products and brands that others purchase

Columns:

1. Strongly disagree
2. Disagree
3. Neither agree, nor disagree
4. Agree
5. Strongly agree

Base: All respondents

[Prior purchase of counterfeits; EUIPO Perception study; Tom et al., 1998]

Q13. Have you ever knowingly purchased a counterfeit product[i] (meaning you knew the product you bought was fake)?

PROG: Mouse-over (i): *A counterfeit product is a fake version of an original product. It looks the same and is usually marked with the brand or logo of the original product, without the permission of the company that sells the original.*

1. Yes
2. No
3. Don't know
4. Prefer not to say

Base: Q13 = 1

[Prior purchase of counterfeits; EUIPO Perception study; Tom et al., 1998]

Q14. How often have you knowingly purchased a counterfeit product?

1. Rarely
2. Occasionally
3. Sometimes
4. Often
5. Prefer not to say

Base: Q13 = 1

Q15. When was the last time you knowingly purchased a counterfeit product?

1. Less than a year ago
2. More than a year ago
3. Don't know
4. Prefer not to say

Base: All respondents

[Personal integrity; adapted from Vitell & Muncy, 2005]

Q16 SGRID (progressive grid)

To what extent do you believe the following actions to be wrong or not wrong?

Rows (randomize order):

1. Reporting a lost item as ‘‘stolen’’ to an insurance company in order to collect the insurance money
2. Returning damaged goods when the damage was your own fault
3. Getting too much change and not saying anything
4. Not saying anything when the waiter or waitress miscalculates a bill in your favour
5. Lying about a child’s age to get a lower price
6. Returning merchandise after trying it and not liking it
7. Buying counterfeit goods instead of buying the original manufacturers’ brands

Columns:

1. 1 – Strongly believe that it is wrong
2. 2
3. 3
4. 4
5. 5 – Strongly believe that it is **not** wrong

Base: All respondents

[Attitude towards counterfeits; adapted from EUIPO Perception study; Mishra & Rana, 2019; Yoo & Lee, 2009]

Q17 SGRID (progressive grid)

Finally, please indicate to what extent you agree or disagree with the following statements.

Rows (randomize):

1. It is acceptable to purchase a counterfeit product when the original product is overpriced
2. It is acceptable to purchase a counterfeit product when you cannot afford to purchase the original brand
3. Counterfeit products are just as good as the original products
4. Buying counterfeit products demonstrates that you are a wise shopper
5. Buying counterfeit products harms the companies that manufacture and sell the original product
6. Buying counterfeit products poses a threat to health and safety
7. Buying counterfeit products supports child labour and illegal trafficking
8. Buying counterfeit products is an act of protest against big brands

Columns:

1. Strongly disagree
2. Disagree
3. Neither agree, nor disagree
4. Agree

5. Strongly agree

[St: timer_part3]

[END OF SURVEY]

Annex B Summary of factors presented in the literature reviewed

Factor	Influence, as specified in the article:	Source, as specified in the article:
Age	Negative impact on purchase intent	Bian, X., & Veloutsou, C. (2007). Consumers' attitudes regarding non-deceptive counterfeit brands in the UK and China. Journal of Brand Management, 14(3), 211–222.
Age	Positive impact on purchase intent	Li, T., & Seaton, B. (2015). Emerging consumer orientation, ethical perceptions, and purchase intention in the counterfeit smartphone market in China. Journal of International Consumer Marketing, 27, 27–53.
Age	Negative impact on purchase intent	Randhawa, P., Calantone, R. J., & Voorhees, C. M. (2015). The pursuit of counterfeited luxury: An examination of the negative side effects of close consumer-brand connections. Journal of Business Research, 68(11), 2395–2403.
Age	Negative impact on purchase intent	Rod, A., Rais, J., Schwarz, J., & Čermáková, K. (2015). Economics of luxury: Counting probability of buying counterfeits of luxury goods. Procedia Economics and Finance, 30(15), 720–729.
Age	Negative impact on purchase intent	Tom, G., Garibaldi, B., Zeng, Y., & Picher, J. (1998). Consumer demand for counterfeit goods. Psychology & Marketing, 15(5), 405–421.

Age	Negative impact on purchase intent	Wan, W. W. N., Luk, C. L., Yau, O. H. M., Tse, A. C. B., Sin, L. Y. M., Keong, K. K., & Chow, R. P. M. (2009). Do traditional Chinese cultural values nourish a market for pirated cds? Journal of Business Ethics, 88(1), 185–196.
Attitudes towards lawfulness	Negative impact on purchase intent	Cordell, V. V., Wongtala, N., & Kieschnich, R. L. (1996). Counterfeit purchase intentions: Role of lawfulness attitudes and product traits as determinants. Journal of Business Research, 35(1), 42–53.
Education	No significant impact on purchase intent	Bian, X., & Veloutsou, C. (2007). Consumers' attitudes regarding non-deceptive counterfeit brands in the UK and China. Journal of Brand Management, 14(3), 211–222.
Enjoyment	Positive impact on purchase intent	Penz, E., & Stöttinger, B. (2012). A comparison of the emotional and motivational aspects in the purchase of luxury products versus counterfeits. Journal of Brand Management, 19(7), 581–594.
Ethic judgement	Negative impact on purchase intent	Wan, W. W. N., Luk, C. L., Yau, O. H. M., Tse, A. C. B., Sin, L. Y. M., Keong, K. K., & Chow, R. P. M. (2009). Do traditional Chinese cultural values nourish a market for pirated cds? Journal of Business Ethics, 88(1), 185–196.
Ethical value	Negative impact on purchase intent	Kozar, J. M., & Marcketti, S. B. (2011). Examining ethics and materialism with purchase of counterfeits. Social Responsibility Journal, 7(3), 393–404.

Fear	Negative impact on purchase intent	Penz, E., & Stöttinger, B. (2012). A comparison of the emotional and motivational aspects in the purchase of luxury products versus counterfeits. Journal of Brand Management, 19(7), 581–594.
Fun	Positive impact on purchase intent	Penz, E., & Stöttinger, B. (2012). A comparison of the emotional and motivational aspects in the purchase of luxury products versus counterfeits. Journal of Brand Management, 19(7), 581–594.
Hedonic benefits	Positive impact on purchase intent	Bian, X., Wang, K. Y., Smith, A., & Yannopoulou, N. (2016). New insights into unethical counterfeit consumption. Journal of Business Research, 69(10), 4249–4258.
Hedonic benefits	Positive impact on purchase intent	Kaufmann, H. R., Petrovici, D. A., Filho, C. G., & Ayres, A. (2016). Identifying moderators of brand attachment for driving customer purchase intention of original vs counterfeits of luxury brands. Journal of Business Research, 69(12), 5735–5747.
Household income	Positive impact on purchase intent	Rod, A., Rais, J., Schwarz, J., & Čermáková, K. (2015). Economics of luxury: Counting probability of buying counterfeits of luxury goods. Procedia Economics and Finance, 30(15), 720–729.
Integrity	Negative impact on purchase intent	Ang, S. W., Cheng, P. S., Lim, E. A. C., & Tambyah, S. K. (2001). Spot the difference: Consumer responses towards

		counterfeits. Journal of Consumer Marketing, 18(3), 219–235.
Integrity	Negative impact on purchase intent	Phau, I., Sequeira, M., & Dix, S. (2009a). To buy or not to buy a “counterfeit” Ralph Lauren polo shirt. Asia-Pacific Journal of Business Administration, 1(1), 68–80.
Integrity	Negative impact on purchase intent	Phau, I., Teah, M., & Lee, A. (2009). Targeting buyers of counterfeits of luxury brands: A study on attitudes of Singaporean consumers. Journal of Targeting, Measurement and Analysis for Marketing, 17(1), 3–15.
Integrity	Negative impact on purchase intent	Türkyılmaz, C. A., & Uslu, A. (2014). The role of individual characteristics on consumers’ counterfeit purchasing intentions: Research in fashion industry”. Journal of Management Marketing Logistics, 1(3), 259–275.
Materialism	Positive impact on purchase intent	Kozar, J. M., & Marcketti, S. B. (2011). Examining ethics and materialism with purchase of counterfeits. Social Responsibility Journal, 7(3), 393–404.
Materialism	Positive impact on purchase intent	Türkyılmaz, C. A., & Uslu, A. (2014). The role of individual characteristics on consumers’ counterfeit purchasing intentions: Research in fashion industry”. Journal of Management Marketing Logistics, 1(3), 259–275.
Moral belief	Negative impact on purchase intent	Kim, J., Kim, J.-E., & Park, J. (2012). Effects of cognitive resource availability on consumer decisions involving counterfeit products: The role of perceived

		justification. Marketing Letters, 23(3), 869–881.
Moral intensity	Negative impact on purchase intent	Koklic, M. K. (2011). Non-deceptive counterfeiting purchase behavior: Antecedents of attitudes and purchase intentions. Journal of Applied Business Research, 27(2), 127–137.
Novelty seeking	Positive impact on purchase intent	Agarwal, S., & Panwar, S. (2016). Consumer orientation towards counterfeit fashion products: A qualitative analysis. IUP Journal of Brand Management, 13(3), 55–74.
Perceived financial value	Positive impact on purchase intent	Bian, X., Wang, K. Y., Smith, A., & Yannopoulou, N. (2016). New insights into unethical counterfeit consumption. Journal of Business Research, 69(10), 4249–4258.
Perceived financial value	Positive impact on purchase intent	Engizek, N., & Şekerkaya, A. (2015). Is the price only motivation source to purchase counterfeit luxury products? Journal of Academic Research in Economics, 7(1), 89–118.
Perceived financial value	Positive impact on purchase intent	Engizek, N., & Şekerkaya, A. (2015). Is the price only motivation source to purchase counterfeit luxury products? Journal of Academic Research in Economics, 7(1), 89–118.
Perceived risk	No significant impact on purchase intent	Khalid, M., & Rahman, S. (2015). Word of mouth, perceived risk and emotions, explaining consumers' counterfeit products purchase intention in a developing country: Implications for local

		and international original brands. Advances in Business[1]Related Scientific Research Journal, 6(2), 145–160.
Perceived financial value	Positive impact on purchase intent	Penz, E., Schlegelmilch, B. B., & Stöttinger, B. (2009). Voluntary purchase of counterfeit products empirical evidence from four countries. Journal of International Consumer Marketing, 21, 67–84.
Perceived financial value	Positive impact on purchase intent	Poddar, A., Foreman, J., Banerjee, S., & Ellen, P. S. (2012). Exploring the Robin Hood effect: Moral profiteering motives for purchasing counterfeit products. Journal of Business Research, 65(10), 1500–1506.
Perceived risk	Negative impact on purchase intent	Koklic, M. K. (2011). Non-deceptive counterfeiting purchase behavior: Antecedents of attitudes and purchase intentions. Journal of Applied Business Research, 27(2), 127–137.
Perceived risk	Negative impact on purchase intent	Liao, C. H., & Hsieh, I. Y. (2013). Determinants of consumer's willingness to purchase gray-market smartphones. Journal of Business Ethics, 114(3), 409–424.
Perceived unethicality	Negative impact on purchase intent	Li, T., & Seaton, B. (2015). Emerging consumer orientation, ethical perceptions, and purchase intention in the counterfeit smartphone market in China. Journal of International Consumer Marketing, 27, 27–53.

Personal gratification	Negative impact on purchase intent	Türkyılmaz, C. A., & Uslu, A. (2014). The role of individual characteristics on consumers' counterfeit purchasing intentions: Research in fashion industry". Journal of Management Marketing Logistics, 1(3), 259–275.
Household income	No significant impact on purchase intent	Norum, P. S., & Cuno, A. (2011). Analysis of the demand for counterfeit goods. Journal of Fashion Marketing and Management: An International Journal, 15(1), 27–40.
Gender	No significant impact on purchase intent	Norum, P. S., & Cuno, A. (2011). Analysis of the demand for counterfeit goods. Journal of Fashion Marketing and Management: An International Journal, 15(1), 27–40.
Education	No significant impact on purchase intent	Norum, P. S., & Cuno, A. (2011). Analysis of the demand for counterfeit goods. Journal of Fashion Marketing and Management: An International Journal, 15(1), 27–40.
Self ambiguity	Positive impact on purchase intent	Fernandes, C. (2013). Analysis of counterfeit fashion purchase behavior in UAE. Journal of Fashion Marketing and Management: An International Journal, 17(1), 85–97.
Household income	No significant impact on purchase intent	Penz, E., Schlegelmilch, B. B., & Stöttinger, B. (2009). Voluntary purchase of counterfeit products empirical evidence from four countries. Journal of International Consumer Marketing, 21, 67–84.

Education	No significant impact on purchase intent	Penz, E., Schlegelmilch, B. B., & Stöttinger, B. (2009). Voluntary purchase of counterfeit products empirical evidence from four countries. Journal of International Consumer Marketing, 21, 67–84.
Age	No significant impact on purchase intent	Penz, E., Schlegelmilch, B. B., & Stöttinger, B. (2009). Voluntary purchase of counterfeit products empirical evidence from four countries. Journal of International Consumer Marketing, 21, 67–84.
Self-expanding desire	Positive impact on purchase intent	Inkon, K. (2013). A Study on luxuries possession desires and purchase intention: A comparative study between luxuries and limitations. Academy of Entrepreneurship Journal, 19(3), 63–78.
Materialism	No significant impact on purchase intent	Phau, I., Sequeira, M., & Dix, S. (2009b). Consumers' willingness to knowingly purchase counterfeit products. Direct Marketing: An International Journal, 3(4), 262–281.
Self-image enhancement	Positive impact on purchase intent	Bian, X., Wang, K. Y., Smith, A., & Yannopoulou, N. (2016). New insights into unethical counterfeit consumption. Journal of Business Research, 69(10), 4249–4258.
Personal gratification	No significant impact on purchase intent	Phau, I., Teah, M., & Lee, A. (2009). Targeting buyers of counterfeits of luxury brands: A study on attitudes of Singaporean consumers. Journal of Targeting, Measurement and Analysis for Marketing, 17(1), 3–15.

Self-monitoring ability	Negative impact on purchase intent	Engizek, N., & Şekerkaya, A. (2015). Is the price only motivation source to purchase counterfeit luxury products? Journal of Academic Research in Economics, 7(1), 89–118.
Sense of interest	Positive impact on purchase intent	Bian, X., Wang, K. Y., Smith, A., & Yannopoulou, N. (2016). New insights into unethical counterfeit consumption. Journal of Business Research, 69(10), 4249–4258.
Shame	Negative impact on purchase intent	Penz, E., & Stöttinger, B. (2012). A comparison of the emotional and motivational aspects in the purchase of luxury products versus counterfeits. Journal of Brand Management, 19(7), 581–594.
Smart shopper	Positive impact on purchase intent	Penz, E., & Stöttinger, B. (2012). A comparison of the emotional and motivational aspects in the purchase of luxury products versus counterfeits. Journal of Brand Management, 19(7), 581–594.
Smart shopper	Positive impact on purchase intent	Türkyılmaz, C. A., & Uslu, A. (2014). The role of individual characteristics on consumers' counterfeit purchasing intentions: Research in fashion industry". Journal of Management Marketing Logistics, 1(3), 259–275.
Gender	No significant impact on purchase intent	Randhawa, P., Calantone, R. J., & Voorhees, C. M. (2015). The pursuit of counterfeited luxury: An examination of the negative side effects of close consumer-brand connections. Journal of Business Research, 68(11), 2395–2403.

Affordability	No significant impact on purchase intent	Randhawa, P., Calantone, R. J., & Voorhees, C. M. (2015). The pursuit of counterfeited luxury: An examination of the negative side effects of close consumer-brand connections. Journal of Business Research, 68(11), 2395–2403.
Materialism	No significant impact on purchase intent	Trinh, V., & Phau, I. (2012). The overlooked component in the consumption of counterfeit luxury brands studies: Materialism— A Literature Review. Contemporary Management Research, 8(3), 251–264.
Value consciousness	Positive impact on purchase intent	Agarwal, S., & Panwar, S. (2016). Consumer orientation towards counterfeit fashion products: A qualitative analysis. IUP Journal of Brand Management, 13(3), 55–74.
Value consciousness	Positive impact on purchase intent	Ang, S. W., Cheng, P. S., Lim, E. A. C., & Tambyah, S. K. (2001). Spot the difference: Consumer responses towards counterfeits. Journal of Consumer Marketing, 18(3), 219–235.
Value consciousness	Positive impact on purchase intent	Fernandes, C. (2013). Analysis of counterfeit fashion purchase behavior in UAE. Journal of Fashion Marketing and Management: An International Journal, 17(1), 85–97.
Value consciousness	Positive impact on purchase intent	Geiger-Oneto, S., Gelb, B. D., Walker, D., & Hess, J. D. (2012). Buying status by choosing or rejecting luxury brands and their counterfeits. Journal of the Academy of Marketing Science, 41(3), 357–372.

Value consciousness	Positive impact on purchase intent	Phau, I., Teah, M., & Lee, A. (2009). Targeting buyers of counterfeits of luxury brands: A study on attitudes of Singaporean consumers. Journal of Targeting, Measurement and Analysis for Marketing, 17(1), 3–15.
Value consciousness	Positive impact on purchase intent	Randhawa, P., Calantone, R. J., & Voorhees, C. M. (2015). The pursuit of counterfeited luxury: An examination of the negative side effects of close consumer-brand connections. Journal of Business Research, 68(11), 2395–2403.
Value consciousness	Positive impact on purchase intent	Türkyılmaz, C. A., & Uslu, A. (2014). The role of individual characteristics on consumers' counterfeit purchasing intentions: Research in fashion industry". Journal of Management Marketing Logistics, 1(3), 259–275.
Attitude toward the original brand	Negative impact on purchase intent	Marticotte, F., & Arcand, M. (2017). Schadenfreude, attitude and the purchase intentions of a counterfeit luxury brand. Journal of Business Research, 77, 175–183.
Product knowledge	No significant impact on purchase intent	Bian, X., & Moutinho, L. (2009). An investigation of determinants of counterfeit purchase consideration. Journal of Business Research, 62(3), 368–378.
Brand loyalty	Negative impact on purchase intent	d'Astous, A., & Gargouri, E. (2011). Consumer evaluations of brand imitations. European Journal of Marketing, 35(1/2), 153–167.

Product / category involvement	No significant impact on purchase intent	Bian, X., & Moutinho, L. (2009). An investigation of determinants of counterfeit purchase consideration. Journal of Business Research, 62(3), 368–378.
Brand personality of CF	Positive impact on purchase intent	Bian, X., & Moutinho, L. (2009). An investigation of determinants of counterfeit purchase consideration. Journal of Business Research, 62(3), 368–378.
Product / category involvement	No significant impact on purchase intent	Bian, X., & Moutinho, L. (2011a). The role of brand image, product involvement, and knowledge in explaining consumer purchase behavior of counterfeits. European Journal of Marketing, 45(1/2), 191–216.
Brand sensitivity	Negative impact on purchase intent	d'Astous, A., & Gargouri, E. (2011). Consumer evaluations of brand imitations. European Journal of Marketing, 35(1/2), 153–167.
Corporate image of CF	Positive impact on purchase intent	Penz, E., & Stottinger, B. (2008). Original brands and counterfeit brands—Do they have anything in common? Journal of Consumer Behavior, 7(2), 146–163.
Corporate image of original brand	Positive impact on purchase intent	Penz, E., & Stottinger, B. (2008). Original brands and counterfeit brands—Do they have anything in common? Journal of Consumer Behavior, 7(2), 146–163.
Features of the imitation	No significant impact on purchase intent	d'Astous, A., & Gargouri, E. (2011). Consumer evaluations of brand imitations. European Journal of Marketing, 35(1/2), 153–167.
Features of the imitation	Positive impact on purchase intent	Gentry, J. W., Putrevu, S., & Shultz, C. J. (2006). The effects of counterfeiting on consumer search. Journal of Consumer Behavior, 5(3), 245–256. Goffman, E.

		(1959). Presentation of self in everyday life. New York: The Overlook Press.
Brand attachment to original	No significant impact on purchase intent	Kaufmann, H. R., Petrovici, D. A., Filho, C. G., & Ayres, A. (2016). Identifying moderators of brand attachment for driving customer purchase intention of original vs counterfeits of luxury brands. Journal of Business Research, 69(12), 5735–5747.
Perceived quality	Positive impact on purchase intent	Poddar, A., Foreman, J., Banerjee, S., & Ellen, P. S. (2012). Exploring the Robin Hood effect: Moral profiteering motives for purchasing counterfeit products. Journal of Business Research, 65(10), 1500–1506.
Perceived similarity between CF and genuine	Positive impact on purchase intent	Marticotte, F., & Arcand, M. (2017). Schadenfreude, attitude and the purchase intentions of a counterfeit luxury brand. Journal of Business Research, 77, 175–183.
Perceived similarity between CF and genuine	Positive impact on purchase intent	Penz, E., & Stottinger, B. (2008). Original brands and counterfeit brands—Do they have anything in common? Journal of Consumer Behavior, 7(2), 146–163.
Performance expectation	Positive impact on purchase intent	Cordell, V. V., Wongtala, N., & Kieschnich, R. L. (1996). Counterfeit purchase intentions: Role of lawfulness attitudes and product traits as determinants. Journal of Business Research, 35(1), 42–53.

Prior experience with CF	Positive impact on purchase intent	Agarwal, S., & Panwar, S. (2016). Consumer orientation towards counterfeit fashion products: A qualitative analysis. IUP Journal of Brand Management, 13(3), 55–74.
Prior experience with CF	Positive impact on purchase intent	Wan, W. W. N., Luk, C. L., Yau, O. H. M., Tse, A. C. B., Sin, L. Y. M., Keong, K. K., & Chow, R. P. M. (2009). Do traditional Chinese cultural values nourish a market for pirated cds? Journal of Business Ethics, 88(1), 185–196.
Prior experience with CF	Positive impact on purchase intent	Yoo, B., & Lee, S. (2012). Asymmetrical effects of past experiences with genuine fashion luxury brands and their counterfeits on purchase intention of each. Journal of Business Research, 65(10), 1507–1515.
Prior experience with original brand	Positive impact on purchase intent	Yoo, B., & Lee, S. (2012). Asymmetrical effects of past experiences with genuine fashion luxury brands and their counterfeits on purchase intention of each. Journal of Business Research, 65(10), 1507–1515.
Product / category involvement	Negative impact on purchase intent	d'Astous, A., & Gargouri, E. (2011). Consumer evaluations of brand imitations. European Journal of Marketing, 35(1/2), 153–167.
Product attributes	Positive impact on purchase intent	Bian, X., & Moutinho, L. (2009). An investigation of determinants of counterfeit purchase consideration. Journal of Business Research, 62(3), 368–378.

Product familiarity	Negative impact on purchase intent	d'Astous, A., & Gargouri, E. (2011). Consumer evaluations of brand imitations. European Journal of Marketing, 35(1/2), 153–167.
Propensity to buy authentic brand	Negative impact on purchase intent	Randhawa, P., Calantone, R. J., & Voorhees, C. M. (2015). The pursuit of counterfeited luxury: An examination of the negative side effects of close consumer-brand connections. Journal of Business Research, 68(11), 2395–2403.
Product knowledge	No significant impact on purchase intent	Penz, E., Schlegelmilch, B. B., & Stöttinger, B. (2009). Voluntary purchase of counterfeit products empirical evidence from four countries. Journal of International Consumer Marketing, 21, 67–84.
Self-brand connection	Positive impact on purchase intent	Randhawa, P., Calantone, R. J., & Voorhees, C. M. (2015). The pursuit of counterfeited luxury: An examination of the negative side effects of close consumer-brand connections. Journal of Business Research, 68(11), 2395–2403.
Social brand connection	Positive impact on purchase intent	Randhawa, P., Calantone, R. J., & Voorhees, C. M. (2015). The pursuit of counterfeited luxury: An examination of the negative side effects of close consumer-brand connections. Journal of Business Research, 68(11), 2395–2403.
Prior experience with CF	No significant impact on purchase intent	Randhawa, P., Calantone, R. J., & Voorhees, C. M. (2015). The pursuit of counterfeited luxury: An examination of the negative side effects of close consumer-brand connections. Journal of Business Research, 68(11), 2395–2403.

Product knowledge	No significant impact on purchase intent	Sharma, P., & Chan, R. Y. K. (2017). Exploring the role of attitudinal functions in counterfeit purchase behavior via an extended conceptual framework. Psychology & Marketing, 34(3), 294–308.
Fashion consciousness	Negative impact on purchase intent	Engizek, N., & Şekerkaya, A. (2015). Is the price only motivation source to purchase counterfeit luxury products? Journal of Academic Research in Economics, 7(1), 89–118.
Fashion consciousness	Positive impact on purchase intent	Türkyılmaz, C. A., & Uslu, A. (2014). The role of individual characteristics on consumers' counterfeit purchasing intentions: Research in fashion industry". Journal of Management Marketing Logistics, 1(3), 259–275.
Gaining admiration	Positive impact on purchase intent	Turunen, L. L. M., & Laaksonen, P. (2011). Diffusing the boundaries between luxury and counterfeits. Journal of Product & Brand Management, 20(6), 468–474.
Occupational prestige	No significant impact on purchase intent	Geiger-Oneto, S., Gelb, B. D., Walker, D., & Hess, J. D. (2012). Buying status by choosing or rejecting luxury brands and their counterfeits. Journal of the Academy of Marketing Science, 41(3), 357–372.
Normative influences	Negative impact on purchase intent	Engizek, N., & Şekerkaya, A. (2015). Is the price only motivation source to purchase counterfeit luxury products? Journal of Academic Research in Economics, 7(1), 89–118.
Normative susceptibility	Negative impact on purchase intent	Ang, S. W., Cheng, P. S., Lim, E. A. C., & Tambyah, S. K. (2001). Spot the difference: Consumer responses towards

		counterfeits. Journal of Consumer Marketing, 18(3), 219–235.
Public self-consciousness	No significant impact on purchase intent	Kaufmann, H. R., Petrovici, D. A., Filho, C. G., & Ayres, A. (2016). Identifying moderators of brand attachment for driving customer purchase intention of original vs counterfeits of luxury brands. Journal of Business Research, 69(12), 5735–5747.
Perceived social consequences	Negative impact on purchase intent	Li, T., & Seaton, B. (2015). Emerging consumer orientation, ethical perceptions, and purchase intention in the counterfeit smartphone market in China. Journal of International Consumer Marketing, 27, 27–53.
Perceived social value	Positive impact on purchase intent	Engizek, N., & Şekerkaya, A. (2015). Is the price only motivation source to purchase counterfeit luxury products? Journal of Academic Research in Economics, 7(1), 89–118.
Sensitivity to negative social consequences	No significant impact on purchase intent	Marticotte, F., & Arcand, M. (2017). Schadenfreude, attitude and the purchase intentions of a counterfeit luxury brand. Journal of Business Research, 77, 175–183.
Reference group belonging	Positive impact on purchase intent	Inkon, K. (2013). A Study on luxuries possession desires and purchase intention: A comparative study between luxuries and limitations. Academy of Entrepreneurship Journal, 19(3), 63–78.

Schadenfreude	Positive impact on purchase intent	Marticotte, F., & Arcand, M. (2017). Schadenfreude, attitude and the purchase intentions of a counterfeit luxury brand. Journal of Business Research, 77, 175–183.
Status consumption	No significant impact on purchase intent	Phau, I., Sequeira, M., & Dix, S. (2009a). To buy or not to buy a “counterfeit” Ralph Lauren polo shirt. Asia-Pacific Journal of Business Administration, 1(1), 68–80.
Normative susceptibility	No significant impact on purchase intent	Phau, I., Teah, M., & Lee, A. (2009). Targeting buyers of counterfeits of luxury brands: A study on attitudes of Singaporean consumers. Journal of Targeting, Measurement and Analysis for Marketing, 17(1), 3–15.
Information susceptibility	No significant impact on purchase intent	Phau, I., Teah, M., & Lee, A. (2009). Targeting buyers of counterfeits of luxury brands: A study on attitudes of Singaporean consumers. Journal of Targeting, Measurement and Analysis for Marketing, 17(1), 3–15.
Collectivism	No significant impact on purchase intent	Phau, I., Teah, M., & Lee, A. (2009). Targeting buyers of counterfeits of luxury brands: A study on attitudes of Singaporean consumers. Journal of Targeting, Measurement and Analysis for Marketing, 17(1), 3–15.
Show of consumption	Positive impact on purchase intent	Inkon, K. (2013). A Study on luxuries possession desires and purchase intention: A comparative study between luxuries and limitations. Academy of Entrepreneurship Journal, 19(3), 63–78.

Social group acceptance	Positive impact on purchase intent	Turunen, L. L. M., & Laaksonen, P. (2011). Diffusing the boundaries between luxury and counterfeits. Journal of Product & Brand Management, 20(6), 468–474.
Status consumption	Positive impact on purchase intent	Agarwal, S., & Panwar, S. (2016). Consumer orientation towards counterfeit fashion products: A qualitative analysis. IUP Journal of Brand Management, 13(3), 55–74.
Status consumption	Positive impact on purchase intent	Geiger-Oneto, S., Gelb, B. D., Walker, D., & Hess, J. D. (2012). Buying status by choosing or rejecting luxury brands and their counterfeits. Journal of the Academy of Marketing Science, 41(3), 357–372.
Status consumption	Positive impact on purchase intent	Phau, I., Teah, M., & Lee, A. (2009). Targeting buyers of counterfeits of luxury brands: A study on attitudes of Singaporean consumers. Journal of Targeting, Measurement and Analysis for Marketing, 17(1), 3–15.
Status consumption	Negative impact on purchase intent	Türkyılmaz, C. A., & Uslu, A. (2014). The role of individual characteristics on consumers' counterfeit purchasing intentions: Research in fashion industry". Journal of Management Marketing Logistics, 1(3), 259–275.
Subjective norms	Positive impact on purchase intent	Fernandes, C. (2013). Analysis of counterfeit fashion purchase behavior in UAE. Journal of Fashion Marketing and Management: An International Journal, 17(1), 85–97.

Subjective norms	Positive impact on purchase intent	Jirotmontree, A. (2013). Business ethics and counterfeit purchase intention: A comparative study on Thais and Singaporeans. Journal of International Consumer Marketing, 25(4), 281–288.
Susceptibility to interpersonal pressures	Positive impact on purchase intent	Agarwal, S., & Panwar, S. (2016). Consumer orientation towards counterfeit fashion products: A qualitative analysis. IUP Journal of Brand Management, 13(3), 55–74.
Symbolic values	positive impact on purchase intent	Juggessur, J., & Cohen, G. (2009). Is fashion promoting counterfeit brands? Journal of Brand Management, 16(5–6), 383–394.
Uniqueness	Positive impact on purchase intent	Agarwal, S., & Panwar, S. (2016). Consumer orientation towards counterfeit fashion products: A qualitative analysis. IUP Journal of Brand Management, 13(3), 55–74.
Word of mouth	Positive impact on purchase intent	Khalid, M., & Rahman, S. (2015). Word of mouth, perceived risk and emotions, explaining consumers' counterfeit products purchase intention in a developing country: Implications for local and international original brands. Advances in Business[1]Related Scientific Research Journal, 6(2), 145–160.

Table 11: In-depth summary of factors discussed in the Baruönü & Kirezli (2018) article

Factor	Influence, as specified in the article:	Source, as specified in the article:
Age	Younger consumers are more likely than older individuals to purchase counterfeit product	Cheung, W.L., & Prendergast, G. (2006a). Buyers' perceptions of pirated products in China. Marketing Intelligence & Planning, 24(5) 446-462.
Age	Younger consumers are more likely than older individuals to purchase counterfeit product	Eisend, M., & Schuchert-Guler, P. (2006). Explaining counterfeit purchases: A review and preview. Academy of Marketing Science Review, 10(12), 1-25.
Being impulsive	Impulsive individuals are more likely to purchase counterfeit products	Musnaini, W. H., Anshori, M., & Astuti, S. W. (2015). Impulse buying behavior in counterfeit luxury brands product: Evidence from Indonesia. Undiksha Press.
Being impulsive	Impulsive individuals are more likely to purchase counterfeit products	Sondhi, N. (2019). Mapping the luxury purchase intentions of the counterfeit luxury buyers. International Journal of Management Practice, 12(4), 476-494.
Being materialistic	Being materialistic was also found to be related to purchasing counterfeit products	Davidson, A., Nepomuceno, M.V., & Laroche, M. (2019). Shame on you: When materialism leads to purchase intentions toward counterfeit products. Journal of Business Ethics, 155 (2), 479-494.
Being materialistic	Being materialistic was also found to be related to purchasing counterfeit products	Nagar, K., & Singh, V.P. (2019). Modelling the effects of materialism, ethics and variety-seeking behaviour on counterfeit consumption of young consumers. Global Business Review, 1-14.
Being novelty seeking	Novelty seeking individuals are more likely to purchase counterfeit products	Randhawa, P., Calantone, R.J., & Voorhees, C.M. (2015). The pursuit of counterfeited luxury: An examination of the negative side effects of close

		consumer-brand connections. Journal of Business Research, 68(11), 2395- 2403.
Being novelty seeking	Novelty seeking individuals are more likely to purchase counterfeit products	Tang, F., Tian, V.I., & Zaichkowsky, J. (2014). Understanding counterfeit consumption. Asia Pacific Journal of Marketing and Logistics, 26(1), 4-20.
Being novelty seeking	Novelty seeking individuals are more likely to purchase counterfeit products	Phau, I., Sequeira, M., & Dix, S. (2009a). Consumers' willingness to knowingly purchase counterfeit products. Direct Marketing: An International Journal, 3(4), 262-281.
Being religious	The more consumers are religious, the less likely they purchase counterfeit products	Casidy, R., Phau, I., & Lwin, M. (2016). Religiosity and digital piracy: An empirical examination. Services Marketing Quarterly, 37(1), 1-13.
Being religious	There is no relationship between religiosity and ethical judgments in business	Kidwell, J., Stevens, R., & Bethke, A. (1987). Differences in ethical perceptions between male and female managers: Myth or reality? Journal of Business Ethics, 6(6), 489-493.
Being religious	The more consumers are religious, the less likely they purchase counterfeit products	Souiden, N., Ladhari, R., & Amri, A.Z. (2018). Is buying counterfeit sinful? Investigation of consumers' attitudes and purchase intentions of counterfeit products in a Muslim country. International Journal of Consumer Studies, 42(6), 687-703.
Education	Consumers who have a higher level of education may be more unlikely to purchase counterfeit products	Craft, J.L. (2013). A review of the empirical ethical decision-making literature: 2004-2011. Journal of Business Ethics, 117(2), 221-259.

Education	Consumers who have bachelor's degree or higher are more likely to perceive purchasing counterfeit products as unethical	Tolkach, D., Pratt, S., & Zeng, C.Y. (2017). Ethics of Chinese & western tourists in Hong Kong. Annals of Tourism Research, 63, 83-96.
Gender	Gender affects the ethical beliefs toward purchasing counterfeiting. More specifically, they have asserted that females are more likely than males to purchase counterfeit goods	Carpenter, J.M., & Lear, K. (2011). Consumer attitudes toward counterfeit fashion products: does gender matter?. Journal of Textile and Apparel, Technology and Management, 7(1), 1-16.
Gender	Males more likely than females to purchase counterfeit goods?	Cheung, W.L., & Prendergast, G. (2006b). Exploring the materialism and conformity motivations of Chinese pirated product buyers. Journal of International Consumer Marketing, 18 (3), 8-31.
Gender	Males more likely than females to purchase counterfeit goods?	Moores, T., & Chang, J.C.J. (2006). Ethical decision making in software piracy: Initial development and test of a four component model. MIS Quarterly, 30(1), 167-180.
Income	Individuals with high income are more likely to purchase counterfeit goods	Cheung, W.L., & Prendergast, G. (2006a). Buyers' perceptions of pirated products in China. Marketing Intelligence & Planning, 24(5) 446-462.
Income	Individuals with high income are more likely to purchase counterfeit goods	Phau, I., Teah, L., & Lee, A. (2009b). Targeting buyers of counterfeits of luxury brands: A study on attitudes of Singaporean consumers. Journal of Targeting, Measurement and Analysis for Marketing, 17, 3-15.

Income	Individuals with high income are more likely to purchase counterfeit goods	Riquelme, H.E., Abbas, E.M.S., & Rios, R.E. (2012). Intention to purchase fake products in an Islamic country. Education, Business and Society: Contemporary Middle Eastern Issues, 5(1), 6-22. Ritson, M. (2007). Fakes can genuinely aid luxury brands. Marketing, 25, 21-27.
Income	Individuals with high income in Singapore were found to purchase counterfeit products. The purchase of counterfeit products may not be limited to individuals with low socioeconomic background	Teah, M., & Phau, I. (2008). Attitudes towards counterfeits of luxury brands: the Singapore story. In Proceedings of Australian and New Zealand Marketing Academy conference 2008. University of Western Sydney.
Income	Individuals with low income tend to purchase counterfeit products	Viot, C., Le Roux, A., & Kremer, F. (2014). Attitude towards the purchase of counterfeits: Antecedents and effect on intention to purchase. Recherche et Applications en Marketing, 29(2), 3-31. Academy of Strategic Management Journal Volume 20, Issue 1, 2021 13 1939-6104-20-1-689
Morality	May inhibit consumers from buying counterfeit products	Nagar, K., & Singh, V.P. (2019). Modelling the effects of materialism, ethics and variety-seeking behaviour on counterfeit consumption of young consumers. Global Business Review, 1-14.
Morality	Some individuals practice moral decoupling to solve the dilemma of choosing between buying an illegal counterfeit product vs. status and money saving, and end up purchasing counterfeit products	Orth, U.R., Hoffmann, S., Nickel, K. (2019). Moral decoupling feels good and makes buying counterfeits easy. Journal of Business Research, 98, 117-125.

Morality	Many consumers do not consider the purchase of a counterfeit as unethical.	Riquelme, H.E., Abbas, E.M.S., & Rios, R.E. (2012). Intention to purchase fake products in an Islamic country. Education, Business and Society: Contemporary Middle Eastern Issues, 5(1), 6-22. Ritson, M. (2007). Fakes can genuinely aid luxury brands. Marketing, 25, 21-27.
Morality	Consumers buy counterfeit products, due to their anti-big-business ideologies	Wang, Y., & Song, Y. (2013). Counterfeiting: Friend or foe of luxury brands? An examination of Chinese consumers' attitudes toward counterfeit luxury brands. Journal of Global Marketing, 26(4), 173-187.
Past purchase of counterfeits	Past history of purchasing counterfeit products is predictive of engaging in future purchase of counterfeit products	Yoo, B., & Lee, S.H. (2009). Buy genuine luxury fashion products or counterfeits?. ACR North American Advances.
Place and time of purchase	Consumers surveyed at flea markets and during holidays were likely to buy counterfeit products, but consumers surveyed at malls were less likely to buy original products	Cademan, A., Henriksson, R., & Nyqvist, V. (2012). The affect of counterfeit products on luxury brands: An empirical investigation from the consumer perspective.
Place and time of purchase	The reason consumers buy more counterfeit products during a holiday could be related to less planning and/or positive mood	Eisend, M., & Schuchert-Güler, P. (2015). How consumers cope with buying counterfeits: Effects of dissonance reduction strategies. In Proceedings of the 2008 Academy of Marketing Science (AMS) Annual Conference. Springer, Cham.

Product (counterfeit) accessibility	The more accessible counterfeit products are, the more people will purchase them	Quach, S., & Thaichon, P. (2018). Dark motives-counterfeit selling framework: An investigate on the supply side of the non-deceptive market. Marketing Intelligence & Planning, 36(2), 245-259.
Product price difference	The difference between the price of the original and counterfeit product were also found to explain preference for purchasing counterfeit products	Hadiwijaya, K. (2015). Consumer intention of purchasing original and counterfeit products: A case study of Louis vuitton wallet. iBuss Management, 3(2), 272-284.
Product price difference	The difference between the price of the original and counterfeit product were also found to explain preference for purchasing counterfeit products	Kapferer, J.N., & Laurent, G. (2016). Where do consumers think luxury begins? A study of perceived minimum price for 21 luxury goods in 7 countries. Journal of Business Research, 69(1), 332-340.
Product price difference	The difference between the price of the original and counterfeit product were also found to explain preference for purchasing counterfeit products	Staake, T., Thiesse, F., & Fleisch, E. (2009). The emergence of counterfeit trade: a literature review. European Journal of Marketing, 43(3/4), 320-349.
Product price difference	It has been argued that luxury brands should lower their prices to become more attainable. However, some argue that this may work against luxury brands, as their very expensive prices (prestige-pricing strategy) is argued to be a business strategy to keep them rare and thus more valuable.	Truong, Y., McColl, R., & Kitchen, P.J. (2009). New luxury brand positioning and the emergence of masstige brands. Journal of Brand Management, 16(5-6), 375-382.

Product quality and durability	Perceived product quality and perceived durability of products after purchasing them plays a key role in purchasing products in general	Kassim, A.W.M., Igau, O.A., Swidi, A.K., Tahajuddin, S.B., & Neezm, S.M.A. (2013). The role of perceived product quality and customer satisfaction on brand loyalty among mobile phone users. In Proceedings of the 6th International Conference of the Asian Academy of Applied Business.
Product quality and durability	One reason for the increasing demand for counterfeit product is that their quality and perceived use life has been increasing over the years	Nill, A. & Shultz, C.J. II (1996). The scourge of global counterfeiting. Business Horizons, 39(6), 37-41. Office of Strategy, Policy & Plans (2020). Combating trafficking in counterfeit and pirated goods: Report to the president of the United States.
Product quality and durability	Perceived product quality and perceived durability of products after purchasing them plays a key role in purchasing products in general	Phau, I., Sequeira, M., & Dix, S. (2009a). Consumers' willingness to knowingly purchase counterfeit products. Direct Marketing: An International Journal, 3(4), 262-281.
Product quality and durability	Because of the tough competition between the quality of counterfeit and original brands, Louis Vuitton has withdrawn from the Italian market, as many consumers opted for purchasing counterfeit products	Shams, K. (2015). As Louis Vuitton knows all too well, counterfeiting is a costly bargain. Capital Flows.
Product quality and durability	As the quality of a counterfeit product increases, it is more justifiable for consumers to increasingly buy more of them	Staake, T., Thiesse, F., & Fleisch, E. (2009). The emergence of counterfeit trade: a literature review. European Journal of Marketing, 43(3/4), 320-349.

Product similarity (counterfeit and original)	The more similar the counterfeit product is to the original products; the more likely consumers will purchase it	Doss, F., & Robinson, T. (2013). Luxury perceptions: Luxury brands vs counterfeit for young US female consumers. Journal of Fashion Marketing and Management, 17, 424-439.
Product similarity (counterfeit and original)	The more similar the counterfeit product is to the original products; the more likely consumers will purchase it	Yao, V.W. (2006). An economic analysis of counterfeit goods: The case of China. Business and Public Administration Studies, 1(1), 116-124.
Product type (related to its associated risk of failure)	The most popular counterfeit market is clothing, watches, and jewellery, respectively.	Pasricha, D., Jain, K., & Gautam, S. (2018). Attitude of Indian consumers towards counterfeit luxury brands. Proceedings of the management imperatives for Sustainable Growth' held at ICFAI Business School (IBS) Gurgaon on August 24.
Risk perceptions	Legal risk is related to the legal consequences that consumers may face if caught with fake products	Al Ramahi, N. (2017). Make it a crime to buy fake goods, police say. Retrived July 5, 2020.
Risk perceptions	Risk perceptions play a serious role in consumers' counterfeit purchasing decisions	Koay, K.Y. (2018). Understanding consumers' purchase intention towards counterfeit luxury goods: An integrated model of neutralisation techniques and perceived risk theory. Asia Pacific Journal of Marketing and Logistics, 30(2), 495-516.
Risk perceptions	Psychological risk is related to the feeling of guilt due to the purchase of counterfeit items	Liao, C., Lin, H.N., & Liu, Y.P. (2010). Predicting the use of pirated software: A contingency model integrating perceived risk with the theory of planned behaviour. Journal of Business Ethics, 91(2), 237-252.

Risk perceptions	Physical risk is related to health problems that may be caused by using counterfeit products	Martinez, L.F., & Jaeger, D.S. (2016). Ethical decision making in counterfeit purchase situations: the influence of moral awareness and moral emotions on moral judgment and purchase intentions. Journal of Consumer Marketing, 33(3), 213-223.
Risk perceptions	Social risk relates to feeling ashamed if others realized that the products are counterfeit	Sharma, P. & Chan, R. (2016). Demystifying deliberate counterfeit purchase behaviour. Marketing Intelligence & Planning, 34(3), 318-335.
Risk perceptions	Purchasing and wearing counterfeit products is risky (different kinds of risk including social, legal, physical, performance and psychological risks that affect consumers' purchase of counterfeit products).	Ting, M.S., Goh, Y.N., & Isa, S.M. (2016). Determining consumer purchase intentions toward counterfeit luxury goods in Malaysia. Asia Pacific Management Review, 21(4), 219-230.
Social factors	Consumers buy counterfeit products to copy and imitate others	Ahmed, T. (2016). Countering counterfeit branding: Implications for public-sector marketing. Journal of Nonprofit & Public Sector Marketing, 28(3), 273-286.
Social factors	Having friends who purchase counterfeit products increases the chance to buy counterfeit products	Albers-Miller, N.D. (1999). Consumer misbehavior: why people buy illicit goods. Journal of Consumer Marketing, 16, 273-287.
Social factors	Many individuals purchase counterfeit products to signal some social identity	Amaral, N.B., & Loken, B. (2016), Viewing usage of counterfeit luxury goods: Social identity and social hierarchy effects on dilution and enhancement of genuine luxury brands. Journal of Consumer Psychology, 26(4) 483-495.

Social factors	Many individuals purchase counterfeit products to signal some social identity	Berger, J., & Heath, C. (2008). Who drives divergence? Identity signaling, outgroup dissimilarity, and the abandonment of cultural tastes. Journal of Personality and Social Psychology, 95(3), 593-607.
Social factors	Some consumers in Pakistan purchase counterfeit products in order to appear unique	Husanian, M., & Akhtar, W. (2015). Impact of Lifestyle on Brand Preferences (Genuine versus Counterfeits Smartphones). Journal of Business Administration Research, 4 (2).
Social factors	Some individuals purchase counterfeit products if their friends wear luxury brands	Jiang, L., & Cova, V. (2012). Love for Luxury, Preference for Counterfeits - A Qualitative Study in Counterfeit Luxury Consumption in China. International Journal of Marketing Studies, 4, 6.
Social factors	Many individuals purchase counterfeit products to gain a high status in their social environment	Jiang, L., & Cova, V. (2012). Love for Luxury, Preference for Counterfeits - A Qualitative Study in Counterfeit Luxury Consumption in China. International Journal of Marketing Studies, 4, 6.
Social factors	Desire to appear as belonging to some social class pushes consumers towards buying counterfeit products. So, their focus is often on the brand and less on the quality of the product.	Purwanto, P., Margiati, L., Kuswandi, K., Prasetyo, B. (2019). Consumer motives for purchasing counterfeit luxury products: Behind the status signalling behaviour using brand prominence. Business: Theory and Practice, 20, 208-215.
Social factors	Several social factors play a role in the purchase of counterfeit products including social approval, peer influence, and sense of belonging	Quach, S., & Thaichon, P. (2018). Dark motives-counterfeit selling framework: An investigate on the supply side of the non-deceptive market. Marketing Intelligence & Planning, 36(2), 245-259.

Table 12: In-depth summary of factors discussed in the Elsantil & Hamza (2021) article

Annex C Profile lists presented in the experiment

C.1 Conjoint design

Using specialised software, a conjoint experimental design was developed with 96 vignettes in total. The vignettes were divided into four groups based on the combination of perceived risk of punishment (low, high; x6) and perceived health/safety risks (low, high; x7). The table below presents the factor levels of each of the 96 vignettes.

Variable	Factor	Factor levels
x1_type	Type of product	1 Everyday 2 Investment 3 Splurge
x2_brand	Brand	1 Low-status 2 High-status
x3_price	Price	1 Low 2 High
x4_quality	Quality of product	1 Low 2 High
x5_similarity	Similarity to original	1 Low 2 High
x6_riskpun	Perceived risk of punishment	1 No warning 2 Warning
x7_riskhealth	Perceived health/safety risks	1 No Warning 2 Warning
x8_channel	Purchase channel	1 Online 2 Offline

Table 13: A legend for Tables 14

Group	Vignette	x1	x2	x3	x4	x5	x6	x7	x8
1	1	1	1	1	2	1	1	1	2
1	2	1	1	2	1	1	1	1	1
1	3	1	2	1	1	1	1	1	1
1	4	1	2	2	1	2	1	1	2
1	5	2	1	1	1	2	1	1	2
1	6	2	1	2	1	1	1	1	1
1	7	2	2	1	2	1	1	1	1
1	8	2	2	2	2	2	1	1	2
1	9	3	1	2	1	2	1	1	1
1	10	3	1	2	2	2	1	1	2
1	11	3	2	1	2	1	1	1	1
1	12	3	2	1	2	2	1	1	2
2	13	1	1	1	1	2	1	1	2
2	14	1	1	1	2	2	1	1	1
2	15	1	2	2	2	1	1	1	2
2	16	1	2	2	2	2	1	1	1
2	17	2	1	1	2	2	1	1	1
2	18	2	1	2	2	1	1	1	2
2	19	2	2	1	1	1	1	1	2
2	20	2	2	2	1	2	1	1	1
2	21	3	1	1	1	1	1	1	2
2	22	3	1	2	2	1	1	1	1
2	23	3	2	1	1	2	1	1	1
2	24	3	2	2	1	1	1	1	2
3	25	1	1	2	2	1	1	2	2
3	26	1	2	1	1	2	1	2	2
3	27	1	2	1	2	2	1	2	1
3	28	1	2	2	1	1	1	2	1
3	29	2	1	1	2	1	1	2	2
3	30	2	1	2	1	2	1	2	2
3	31	2	2	1	2	2	1	2	2
3	32	2	2	2	2	1	1	2	1

3	33	3	1	1	1	2	1	2	1
3	34	3	1	1	2	1	1	2	1
3	35	3	1	2	1	1	1	2	2
3	36	3	2	2	1	2	1	2	1
4	37	1	1	1	1	1	1	2	1
4	38	1	1	2	1	2	1	2	2
4	39	1	1	2	2	2	1	2	1
4	40	1	2	1	2	1	1	2	2
4	41	2	1	1	1	1	1	2	1
4	42	2	1	2	2	2	1	2	1
4	43	2	2	1	1	2	1	2	1
4	44	2	2	2	1	1	1	2	2
4	45	3	1	1	2	2	1	2	2
4	46	3	2	1	1	1	1	2	2
4	47	3	2	2	2	1	1	2	1
4	48	3	2	2	2	2	1	2	2
5	49	1	1	1	2	1	2	1	1
5	50	1	1	2	1	2	2	1	1
5	51	1	2	1	1	1	2	1	2
5	52	1	2	1	1	2	2	1	1
5	53	2	1	2	2	1	2	1	1
5	54	2	1	2	2	2	2	1	2
5	55	2	2	2	1	1	2	1	1
5	56	2	2	2	1	2	2	1	2
5	57	3	1	1	2	1	2	1	2
5	58	3	1	1	2	2	2	1	1
5	59	3	2	1	1	2	2	1	2
5	60	3	2	2	2	1	2	1	2
6	61	1	1	2	1	1	2	1	2
6	62	1	1	2	2	2	2	1	2
6	63	1	2	1	2	2	2	1	2
6	64	1	2	2	2	1	2	1	1
6	65	2	1	1	1	1	2	1	2

6	66	2	1	1	1	2	2	1	1
6	67	2	2	1	2	1	2	1	2
6	68	2	2	1	2	2	2	1	1
6	69	3	1	1	1	1	2	1	1
6	70	3	1	2	1	2	2	1	2
6	71	3	2	2	1	1	2	1	1
6	72	3	2	2	2	2	2	1	1
7	73	1	1	1	1	1	2	2	2
7	74	1	1	2	2	1	2	2	1
7	75	1	2	2	1	2	2	2	1
7	76	1	2	2	2	2	2	2	2
7	77	2	1	1	2	1	2	2	1
7	78	2	1	2	1	2	2	2	1
7	79	2	2	1	1	2	2	2	2
7	80	2	2	2	2	2	2	2	1
7	81	3	1	1	1	2	2	2	2
7	82	3	1	2	2	1	2	2	2
7	83	3	2	1	1	1	2	2	1
7	84	3	2	1	2	1	2	2	2
8	85	1	1	1	1	2	2	2	1
8	86	1	1	1	2	2	2	2	2
8	87	1	2	1	2	1	2	2	1
8	88	1	2	2	1	1	2	2	2
8	89	2	1	1	2	2	2	2	2
8	90	2	1	2	1	1	2	2	2
8	91	2	2	1	1	1	2	2	1
8	92	2	2	2	2	1	2	2	2
8	93	3	1	2	1	1	2	2	1
8	94	3	1	2	2	2	2	2	1
8	95	3	2	1	2	2	2	2	1
8	96	3	2	2	1	2	2	2	2

Table 14: A complete list of vignettes used in the experiment

There are zero correlations between the individual factors (orthogonality; see the table below). In addition, all two-way interactions are estimable (there are 6 correlations of -0,1667 between interaction terms; all other correlations are zero).

	x1	x2	x3	x4	x5	x6	x7	x8
x1	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
x2	0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000
x3	0.000	0.000	1.000	0.000	0.000	0.000	0.000	0.000
x4	0.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000
x5	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000
x6	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000
x7	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000
x8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000

Table 15: Correlations between factors

C.2 Statistical models

To analyse the data, multilevel regression analyses (also known as random-effects, mixed-effects or hierarchical linear regression analyses) were performed in Stata.[49] The regression models estimate the individual contribution of each factor to respondents' intention to buy a counterfeit product. The models are estimated using unweighted data.[50]

In the experiment, each respondent evaluated 12 vignettes. Because multiple responses (e.g., purchase intention for vignette 1, purchase intention for vignette 2, etc.) were provided by the same respondent, the data have a "nested" structure, with responses (level 1) clustered *within* respondents (level 2). These responses tend to be correlated within respondents (e.g., respondents who report a relatively high purchase intention for the counterfeit in situation 1 are also more likely to report a relatively high purchase intention in situation 2). To account for this, we estimated multilevel

[49] Rabe-Hesketh, S., & Skrondal, A. (2008). *Multilevel and longitudinal modeling using Stata*. Stata press.

[50] In the multivariate regression analyses, no weighting was applied as this can lead to biased standard errors; see e.g., Winship, C., & Radbill, L. (1994). Sampling weights and regression analysis. *Sociological Methods & Research*, 23(2), 230-257.

regression models – random-intercept models to be specific. A random-intercept model is a model in which the intercept (the "baseline" purchase intention) is allowed to vary across respondents.[51]

Model 1: The outcome variable is respondents' intention to purchase the counterfeit product ("Would you consider buying this product if you were looking for [hand soap, a kettle, sunglasses]?), assessed on a scale from 1 (definitely not) to 9 (definitely so). The predictors are the manipulated product and situation-related factors (x1-x8; categorical) and the measured person-related factors (on an interval scale from 1 to 5). In addition, the analyses control for differences in brand familiarity as well as country differences (fixed effects). Correlations between predictors are zero (see C.1) or small (maximum correlation = -0.24, between personal integrity and need to belong; max. VIF = 1.20). Model results are reported in Table 7.

Model 2: Model 2 is the same as model 1, but additionally included all two-way interactions between the factors as predictors (max. VIF = 1.50). As a follow-up on the results, which revealed that the influence of several of the factors of interest significantly differed across the product and brand types used in the experiment, multilevel regression models (similar to model 1) were estimated for each of the six product/brand types separately. Model results are reported in
Table 8.

Finally, using Latent Gold software, a multilevel latent class regression model was estimated to identify consumer segments.[52] Here, we assume that the total respondent population consists of an (unknown) number of segments. The different segments differ in their responses to the (characteristics of the) counterfeit products, but respondents within a segment have similar responses. The segments are unobserved or "latent", meaning that, prior to the analysis, we do not know how many segments there are and what defines them (i.e., we let the data "speak"). In this case, the model combines (1) a model that predicts, for a number of unobserved segments, purchase intentions for counterfeit products (on a scale from 1 to 9) based on the product and situation-related factors (x1-x8, categorical), with brand familiarity as a control variable, and (2) a model that predicts segment membership based on person-related factors (value consciousness, personal integrity and the need to belong).[53] The model accounts for the fact that multiple responses come from the same respondent. Socio-demographic factors (age, gender, financial situation and country) are included as profiling variables (they are not used in the prediction of segments). Due to the large number of observations (*N* = 244,668), information criteria commonly used to determine the number of segments (e.g., BIC and CAIC) continued to improve with each additional segment, up to

[51] Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2013). *Applied multiple regression/correlation analysis for the behavioral sciences*. New York: Routledge.

[52] Magidson, J., & Vermunt, J. K. (2005). A nontechnical introduction to latent class models. *DMA Research Council Journal*.

[53] Kamakura, W. A., Wedel, M., & Agrawal, J. (1994). Concomitant variable latent class models for conjoint analysis. *International Journal of Research in Marketing*, 11(5), 451-464.

over 15 segments. Therefore, we selected the solution based on the criteria of practical usefulness and segment size (no segments < 5%). The results of the five-segment model are reported in
Table 9.

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