LAPPEENRANTA-LAHTI UNIVERSITY OF TECHNOLOGY

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THE IMPACT OF COVID-19 ON BUYING DECISION-MAKING: CHANGES IN BEAUTY CONSUMER BEHAVIOR DURING LOCKDOWN

Lappeenranta–Lahti University of Technology LUT | SKEMA Business School

Double Degree in International Marketing Management | Master's Thesis

2022 | Julia Katharina Unger

Examiners: Professor Olli Kuivalainen (LUT)

Peter Spier, Professor of Marketing, Sales and International Business (SKEMA)

ABSTRACT

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The COVID-19 crisis has brought devastating changes to the lives of billions of people. Along with the global-scale health hazard, arose a financial and economic crisis rivaling the Global Financial Crisis of 2008 and the Great Depression of 1928. To protect their people, nations worldwide mandated lockdowns of unprecedented magnitudes. These would not only slow

down economic growth but force companies to accelerate their digital transitions to ensure revenue streams during the mandated closure of non-essential stores and the following physical shopping reluctance of consumers.

The industries struggling most with this transition are naturally those with a strong dependency on brick & mortar stores. Among them is the beauty and cosmetics industry with a pre-COVID in-store sales rate of around 85 percent in western markets. Research suggests that cosmetics consumers did not transition to online channels as seamlessly as was expected and an apparent reason for this is the impact this forced online migration had on the consumers' buying decision-making process. Traditionally, beauty consumers made a large number of their buying decisions ad-hoc in-store – influenced by the marketing stimuli around them. With this part of the decision-making process inaccessible during lockdown periods, this research aimed to understand how exactly decision-making and subsequent buying behavior has changed during this challenging time.

In a large-scale literature review of over 70 sources of classic theories and modern research on decision-making and impulse-buying behavior, this work has created a multi-faceted view on the topic and a comprehensive theoretical framework of the process.

In an empirical research approach, an in-depth online survey was created to understand the thus far theoretically researched phenomenon and bridge gaps in the existing literature. The findings of this research indicate a surge of routine response behavior in beauty purchases during the lockdown periods – meaning a fallback of consumers to products they had positive prior experience with. The research further proved an increase in social commerce in the beauty industry, brought on by the increased usage of social media during lockdowns and the thus increase in passive information influence. Finally, this work was able to prove that consumers of beauty products tend to generally shop more impulsively offline, compared to online – bearing enormous implications for online marketers in the industry.

This thesis contributes therefore an updated model of the buying decision-making process adapted to the restrictions of the coronavirus sanitary crisis. It provided further, several research gap-bridging findings which enabled the creation of valuable managerial recommendations, as well as foundation points for future research on the topic of the digital transition of sales channels in the cosmetics and beauty industry.

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My gratitude goes out to one most special person whom without I could not have finished this work as well as I did – if at all. My love, you mean more to me than anything else in this world. I have no words to express how grateful I am that you were with me during the months I was holed up at home, stressed and constantly on edge, while writing half the day and working the other half. I have no idea how you managed to keep up with my mood swings, constant tiredness, and forgetfulness. You were the only constant during this time and are always my place of calm and safety. Thank you for everything you have done for me, and I cannot wait to repay you all your kindness, effort, and tireless support hundredfold in the future.

Thank you more than anything for believing in me when I didn't.

Karlsruhe, 18.09.2022

Julia Katharina Unger

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LIST OF ABBREVIATIONS

CFA – *Confirmatory factor analysis*

COVID-19 – *SARS-CoV-2 2019 Coronavirus Disease*

EFA – *Exploratory factor analysis*

EKB – *Engel-Kollat-Blackwell*

IBT – *Impulse buying tendency*

PPT – *Planned purchasing tendency*

RQ – *Research question*

SQ – *Sub-research question*

UPT – *Unplanned purchasing tendency*

US – *United States of America*

WHO – *World Health Organization*

WOM – *Word of mouth*

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1. INTRODUCTION

1.1 Background

The COVID-19 or coronavirus pandemic has reshaped the daily lives of billions of people around the globe and, accordingly, consumption habits have changed drastically in the two years since the beginning of the crisis. However, different product categories have been impacted in multiple different ways by this predicament.

The cosmetics and beauty industry is one that has suffered substantially due to the health crisis situation. According to Statista's Consumer Market Outlook (Statista, 2022a), the beauty and personal care industry has seen an increase of 10.1 percent in global revenue between 2015 and 2019. However, in 2020, the year the COVID-19 pandemic first broke out globally, revenue decreased by 7.11 percent during this one year alone. This is arguably due to the industry's dependency on brick & mortar stores (Cohen, 2020). Due to the health hazards imposed by the COVID-19 pandemic, most countries within Central Europe have mandated one or several lockdowns during which non-essential shops were required to shut operations down (all data on COVID-19 countermeasures by country can be found in ECDC, 2022). McKinsey & Company (Gerstell, Marchessou, Schmidt, & Spagnuolo, 2020) found that prior to the COVID-19 crisis, in most major markets for the beauty industry, 85 percent of beauty products had been purchased in-store. They further reason that when beauty-product outlets were closed down during the pandemic, this effectively shut down 30 percent of the entire beauty market. Consumers were thus forced to buy their products online rather than in-store. However, the study found further, that online sales in the US only increased by 20 to 30 percent depending on the retailer, with big cosmetics online retailers such as Amazon and Sephora seeing the biggest increase (Gerstell, Marchessou, Schmidt, & Spagnuolo, 2020).

Still, there is an apparent gap between the offline demand prior to the COVID lockdowns and the increase in online demand during the lockdowns that should make up for the inaccessible brick & mortar stores. Consumer behavior was forced to change due to the unprecedented shutdowns of non-essential stores during the pandemic, but – when going by the evidence McKinsey & Company found – this online migration did not pass unobstructed.

The purpose of this work is, thus, to have a deeper look into the consumer behavior changes triggered by the COVID-19 crisis, specifically within the realm of the cosmetics and beauty

industry. Despite the coronavirus outbreak being largely under control by the time this thesis is being written, the impact a forced online migration of sales channels on consumer behavior bears great implications for the current and future digitalization efforts of the cosmetics and beauty industry. The findings of this research are believed to thus produce useful insights for managers and marketers of beauty and cosmetics products.

1.2 Preliminary Literature Review and Research Questions

Research conducted by the Alvarez & Marsal Consumer and Retail group (A&M) (A&M Consumer and Retail Group, 2021) surveyed approx. 1,000 female US beauty consumers, and found similar results as McKinsey's quantitative approach, where 34 percent of the questioned consumers said they utilized online retail to buy their makeup products (32 percent for skincare). However, this number only increased to 47 percent (46 percent for skincare) for purchases during the pandemic. They found that 70 percent of the survey participants bought less makeup in 2020 as compared to 2019, and 18 percent stopped altogether (as for skincare, only 40 percent of the consumers answered that they bought less) (A&M Consumer and Retail Group, 2021).

While there are most likely several factors coming together to create this clear change in consumer buying behavior, one very strong hint can be taken from the results of a survey conducted by Klarna Bank AB (Klarna) in the US, pre-COVID in 2019. This survey found that 78 percent of consumers, said they were "more likely to make a purchase if they can see the item in real-life before parting with their cash" (Klarna, 2019). Two years later, the company launched a similar survey in which out of 15,000 surveyed US-beauty consumers, 67 percent answered that they preferred to buy their beauty products in-store as opposed to online (Klarna, 2021).

In conclusion, consumers of the beauty and cosmetics industry generally prefer buying their products in-store as opposed to buying them online. This is peculiar as comparable retail industries, such as the apparel industry, make around 35 percent of their sales online (pre-COVD) – with a trend of various big brands (Victoria Secret, GAP etc.) closing parts of their brick & mortar store fleets within the past years (Cohen, 2020). A&M (2021) suggests this difference between the beauty and other retail industries exists due to the traditional *test before you try* model most physical cosmetics retailers apply in their shops where testers are left for the convenience of the consumer to try the product on their skin. However, A&M also found

later in their survey, that only 15 percent of their respondents felt comfortable using beauty product testers in retail stores during the pandemic. Moreover, only 25 percent foresaw that they would return to using them after the pandemic situation had calmed down (A&M Consumer and Retail Group, 2021).

The cited survey by A&M had been conducted in December 2020, similarly to the survey conducted for the 2021 Klarna report mentioned prior. This evidence suggests that even though the majority of consumers do not feel comfortable with the idea of using shared testers anymore and thus lose the chance to *test before they buy*, they still prefer the idea of shopping in a physical store. A possible explanation could be that beauty consumers generally prefer to make their product buying decision ad-hoc in-store rather than accessing the large amount of available information and influences online. Decisions made in-store, meaning impulsive buying decisions, would be largely influenced by what the consumer sees and experiences inside the store, and when looking at the humble increase in US online sales as compared to the massive losses in brick & mortar sales, one can infer that these impulsive decisions might, in fact, have made up a large part of pre-COVID buying decisions. This raises the question of which are the in-store influences, or marketing stimuli, that have the biggest impact on the decision-making process in the mind of a consumer – and (how) can they be translated to an online environment.

This sentiment is supported by McKinsey's prior mentioned research (Gerstell, Marchessou, Schmidt, & Spagnuolo, 2020) which also investigated consumers' pre-COVID shopping habits (in-store vs. online purchases) and segmented the results into age groups. They concluded that only 13 to 24 percent of the consumers (depending on age group and product type) were not at all influenced by a physical store in their buying decision, as they exclusively informed themselves about and bought products online, whereas the majority of respondents had at least some touchpoints with the physical store, be it for the browsing or the buying process (see full graph of their research results in *Appendix 1*).

It can thus be concluded that the decision-making process for a large part of consumers, must have been strongly impacted by the COVID-19 safety measurements-related store closures, as a large part of their usual decision influencers would fall away.

Therefore, the main research question of this thesis will be as follows:

RQ: How have the COVID-19 crisis-related store closures impacted the buying decision-making process of beauty consumers?

In order to help answer this question from multiple angles and better structure this work, several sub-questions have been derived.

> *SQ 1: How is the buying decision-making process structured within the consumer's mind and what are the specific external influences relevant to the process?*
>
> *SQ 2: How has the consumers' information search behavior been impacted by the COVID-19 pandemic?*
>
> *SQ 3: How strong is the influence of impulse buying as compared to informed buying on the (beauty) consumer? And are impulse buying decisions influenced by the forced online migration of consumers?*
>
> *SQ 4: How was the consumer's buying behavior impacted in terms of quantity and quality of the purchase?*

Since buying decision-making is a wide-branching topic, that can be investigated from multiple different angles, SQ1 is aiming to clarify existing scientific consensus on the topic of decision-making from the view of different disciplines and historic schools of thought. This question will be answered entirely through a secondary literature review. SQs 2 – 4 on the other hand are going to be answered mainly through the empirical research part of this thesis, while grounded in the theoretical insights obtained from answering SQ 1.

1.3 Theoretical Framework

In order to put the prior introduced research questions into context and show their connection to the subject, the following simple framework has been conceptualized (see *Figure 1*, below).

This framework has been created from the insights drawn from classic research on the buying decision-making process (detailed in the secondary research) but broken down, re-arranged, and simplified in order to highlight specifically the aspects relevant to this work in a way that makes it understandable to the first-time reader without needing the theoretical information from the literature review in chapter 2. On the other hand, it has been enriched with some aspects that transcend the classic consumer decision-making theory – such as the incorporation of impulse decision-making and the distinction between offline and online stimuli – to create a rounded model that depicts the complex interconnection between the different aspects while highlighting the angle this work approaches from.

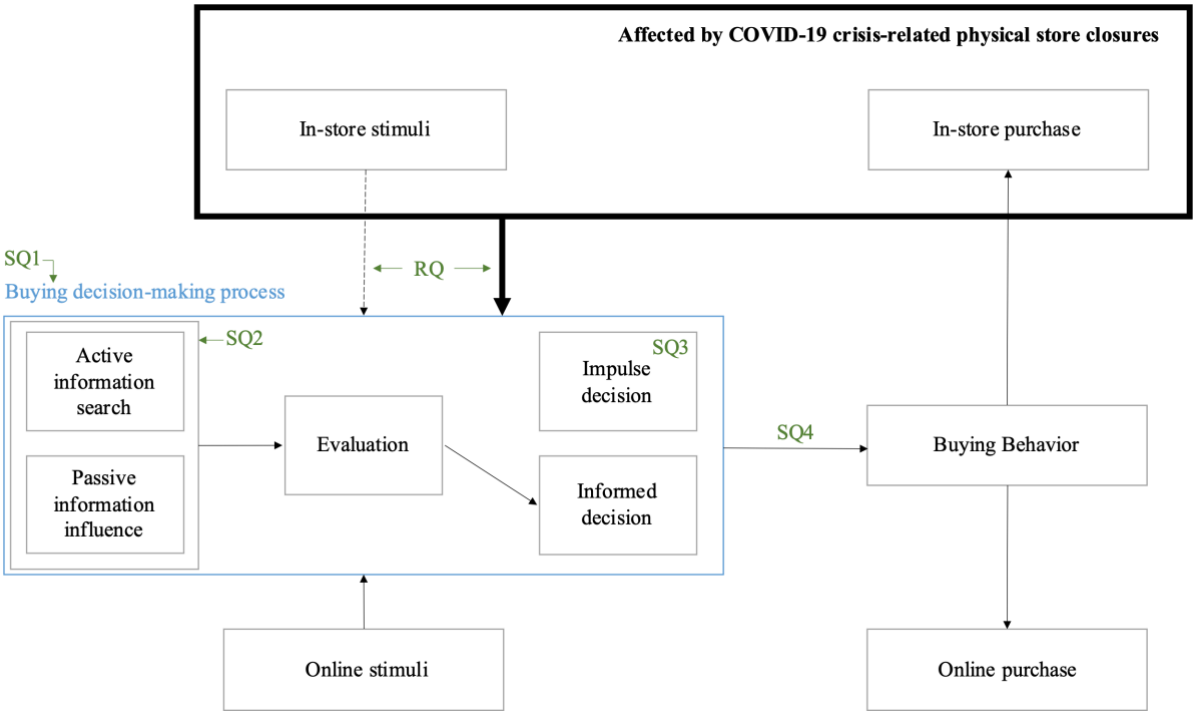


Figure 1: Thesis theoretical framework (simplified); concept by author.

1.4 Definitions

Buying decision-making process: This process, as understood by this work, entails the mental journey a consumer takes prior to the purchase of a good or service. The literary review in chapter 2 will compare several different classical understandings of this process in detail and thereby build upon its own, individual construct of the process in the context of a forced online migration of sales channels. It may be added that many interpretations of this process understand the consumer's need recognition as the starting point of the process. This work, however, sees great importance in the possible passive influence of marketing stimuli, which may happen even before the consumer realizes their need to buy or even trigger said need as part of an impulse purchase. Thus, the theoretical framework used as a basis of this thesis has been simplified as can be seen in *Figure 1*, above.

Marketing stimuli: This denotes external stimuli, crafted by marketers to steer a consumer towards a certain buying decision. As such, the four key considerations of the marketing mix – namely price, place, promotion, and product – are utilized to stimulate the consumer's interest in or need to buy the product (Kotler & Armstrong, 1991).

Active information search: This process describes a consumer's conscious effort to collect information on a product, product category, or brand, upon recognizing a purchase need.

Information can be acquired offline or online, through marketing channels or by word of mouth (WOM) (Blackwell, Miniard, & Engel, 2006).

Passive information influence: This describes marketing stimuli the consumer has been subjected to without actively searching for the information. The consumer may or may not have recognized a need for purchase by the time they are subjected to this information. They may simply save the information to their memory subconsciously, which can influence a later made buying decision or the influence can trigger an ad-hoc impulse buying decision (Blackwell, Miniard, & Engel, 2006).

COVID-19 pandemic: Describes the coronavirus disease, called COVID-19, which is being caused by the SARS-CoV-2 virus. The fast-spreading virus first broke out towards the end of 2019 and causes respiratory infection in its hosts. Due to the ease of transmission, the fast global spread, the comparably high number of severe cases and the potential long-term effects, the World Health Organization (WHO) declared the disease an international public health emergency and few months later a global pandemic in early 2020. As of September 11, 2022, the WHO counted 605 million confirmed cases and 6.4 million deaths globally (WHO, 2022).

COIVD-19-related lockdowns: Haider et al. (2020) have rightfully complained in their work that there is no universally accepted and clear definition of what a 'lockdown' entails. Not even the WHO offers a set definition from their side. Haider et al. (2020) reason that this is due to how lockdown implementations differ(ed) around the world. As for the Central European region which this work focuses on, the implementation was rather similar (ECDC, 2022). The lockdown measures primarily included the cancellation of all mass gatherings (above a certain visitor count), the closure of public spaces (ranging from restaurants, non-essential shops, to public transport), and the closure of educational facilities. Additionally, recommendations or even mandates to stay-at-home apart from essential reasons to leave the house had been issued at crucial points in the course of the COVID-19 pandemic (EDCD, 2022).

Beauty and cosmetics industry: The definition this work uses for the beauty and cosmetics industry encompasses cosmetic make-up products, personal/body care, skin care, nail care, hair care, and fragrances – as per the definition used by the market research platform MarketLine (MarketLine, 2022). Excluded from this definition are cosmetic services (such as aesthetic surgery/permanent makeup, hair dressing, manicure/pedicure services etc.), professional cosmetics products (used for professional services of a beautician, make-up artist etc.), and beauty tech products (such as hair removal technology, skin analysis technology etc.).

Social commerce (also: social media purchasing): This term will be used several times later in this work. It describes brands forgoing dedicated online shops and selling their products or services directly via social media platforms. This practice aims to shorten the customer journey (and thus decision-making process) as advertising and point-of-sales are brought into the same space – reducing potential barriers (Wong, 2021).

1.5 Delimitation

This thesis will focus its research on the central European region. Specifically, due to geographical restrictions, quantitative research will focus on consumers from German-speaking countries. This regional limitation will make it impossible for this work to account for decision-making and opinion-forming processes of consumers from different cultural backgrounds. It has to be mentioned that the majority of data collection and prior research that the theoretical part of this work is based on, was however conducted primarily in North America. Due to the general nature of the theoretical part, great disparities are not expected, nonetheless.

This work has used a rather broad definition of the beauty and cosmetics industry (see *section 1.4 - Definitions*). This was done with the intention adhere to the standards applied in prior research and data collectives (such as Statista) when making statements about the industry as a whole. This practice diluted the idea of consumers primarily shopping for cosmetics and beauty products in dedicated retail stores but instead added drugstores and supermarkets as popular sales channels for the respondent group of the empirical research. Due to this practice, luxury cosmetics or niche-focused products (such as Halal products, vegan products, sustainable products etc.) which can only be found in specialty stores have not been included much in the spectrum of answers received from respondents, but daily used fragrances, personal care products or makeup were on the forefront of the respondents' minds when answering the survey.

In terms of theoretical delimitations, this work has focused its literature reviewing efforts on the buying decision-making process. From there some adhering ideas such as marketing stimulation and impulse buying behavior have been additionally researched to enhance the greater picture. However, due to the scope of this thesis no other aspects of consumer behavior theory have been taken into closer account. Thus, when finally concluding the research findings in SQ 4 (see *section 5.2 - Discussion of findings by research question*) where the perceived

impact on buying behavior is being discussed, no additional psycho analyst or buying behavioral theories have been taken into account – all conclusions were drawn on the theoretical basis of what was discussed in the primary and secondary research chapters 2 and 4.

1.6 Research Methodology

To answer the research questions posed in this introductory overview, quantitative empirical research in the form of a self-administered online survey has been conducted. Target respondents were frequent beauty shoppers of all age groups from predominantly Central European countries. The survey has been devised in two languages, German and English – to reach as many potential respondents as possible. The survey will not single out female consumers, however, a majority of female respondents is expected due to the topic of the survey. The expected scope was 100-120 responses of which a sample of close to 100 was projected to be within the target group of the research – the final count of responses was 110 of which 94 were valid, useable answers.

The survey assessed respondents on three factors external to the decision-making process. Several scales have been used for their assessment. Their reliability and validity have been thoroughly tested by calculating Cronbach's Alpha and conducting exploratory factor analysis.

The hypotheses have been tested utilizing the analysis method best suited to the respective hypothesis format, namely binary regression analysis, independent samples t-tests, and a comparison of the distribution of means. The external factors have been utilized as control variables and their influence on the dependent variables have been tested additionally using binary regression and correlation analysis. SPSS is the software chosen predominantly to conduct the analyses.

1.7 Structure of the Thesis

To answer the main research question of this thesis, four sub-research questions have been derived to better structure this work. The following secondary research part follows the flow of these sub-research questions to gain an understanding of the potential influence that the COVID-19-related lockdowns may have had on consumer decision-making and to finally draw

conclusions on how these findings can help predict future online shopping behavior of beauty consumer.

Therefore, the theory chapter will first focus on understanding the buying decision-making process from different angles. Two classic theories on the topic have been detailed and compared in-depth. Finally, the best befitting parts of either theory have been used to create this work's theoretical framework.

The second part of the chapter will investigate the possibility of an impact on the information search stage of the decision-making process.

Finally, impulse buying behavior will be taken into closer account. Specifically, the key factors to influence impulse buying offline and online have been researched and a literature review of over 40 different works has been conducted to gain insight on the variety of factors that have been studied so far.

Within the theoretical chapter, four hypotheses have been posed which are once summarized and discussed at the end of chapter 2. Based on the existing secondary research and the classical models on decision-making, an extended version of the theoretical framework shown above (see for comparison *Figure 1* and *Figure 7*) has been created to accommodate all that has been learned in a simplified fashion and to include the four hypotheses.

The literature review is then followed by a well-structured overview of the empirical research methods. Research design process, data collection methods and proposed analytical measures are being described prior to the conduct of the analysis itself.

In the findings chapter, statistical data of the conducted survey is being displayed, utilized scales are being tested for reliability and validity, and finally the prior posed hypotheses are being tested through statistical analysis. In an additional exploratory effort, known external factors are being tested for correlation and regression with the depended variables in order to enable some additional statements for future research.

In the final discussions and conclusions chapter, results are being discussed in their meaning for the hypotheses that had been posed and concluded in how this draws back to the research questions this work aims to answer. These discussions are then concluded in the practical implications they offer and the future research this work recommends based on everything it has found so far.

2. THE BUYING DECISION-MAKING PROCESS AND HOW IT IS BEING INFLUENCED BY ONLINE MIGRATION

As has been detailed in the introductory part of this work, several research questions have been derived in order to better understand in which ways beauty consumers' purchasing behavior has been impacted specifically by the store closure aspect of the COVID-19 sanitary crisis. This literature review will be aiming to comprise prior conducted research to answer SQ1 and build the foundation for the empirical research conducted to answer the overarching main research question of this work: *How have the COVID-19 crisis-related store closures impacted the buying decision-making process of beauty consumers?*

2.1 The Consumer Buying Decision-Making Process

Several researchers have been working on ways to adequately map the cognitive processes surrounding consumer buying behavior to create indications for marketers and future research alike. Central to these considerations is the consumer's decision-making process (Engel, Kollat, & Blackwell, 1968). Understanding what it involves, and which factors it is being influenced by, bears great implications for marketing strategies (Nicosia, 1966). Several different models exist that approach the subject from slightly different angles, however, there are certainly recognizable patterns appearing repeatedly throughout the available literature. In the following, two such models will be depicted in detail: the Howard-Sheth model which has been one of the earliest to be derived, and the Engel-Kollat-Blackwell (EKB) model which was first created around the time Howard & Sheth's but has ever since been continuously adapted to the changing state of the consumer over time. Both approaches offer valuable insights that helped build the theoretical framework of this work and will further answer *SQ 1: How is the buying decision-making process structured within the consumer's mind and what are the specific external influences relevant to the process?*

2.1.1 The classic Howard-Sheth Model of Buyer Behavior

The buyer behavior model developed by Howard and Sheth (1969) is one of the earliest in the field of consumer behavior research, as it depicts the combination of psychological, social, and commercial influences on the buyer's decision process. The authors researched the cognitive functioning of consumer behavior and simultaneously aimed to produce an empirically testable, concise model (Borgardt, 2017).

The Howard-Sheth model (see *Figure 2*, below) is comprised of four major parts: the buyer's internal state (in other words, the decision-making process) depicted by the central box (in blue and orange), the inputs to the left, outputs to the right. In the original model from Howard and Sheth, exogenous factors (importance of the purchase, personality, social class, culture, organization, time pressure, financial status) that may influence the decision-making process of the consumer on an individual level had been added outside of this three-part system[1] (Howard & Sheth, 1969, p. 470).

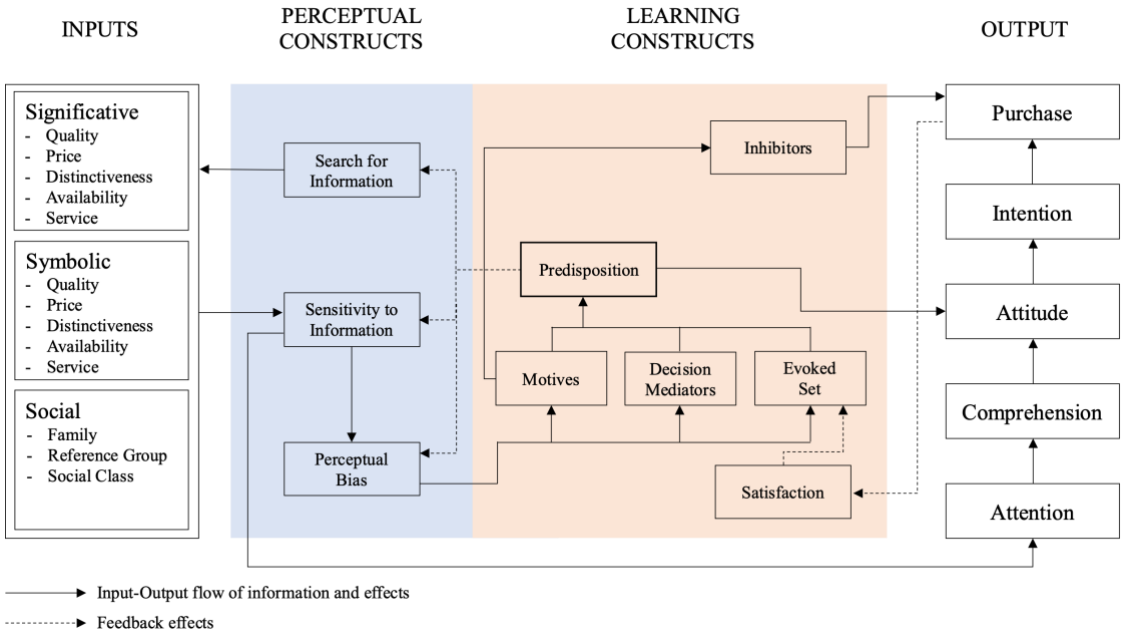


Figure 2: The Howard-Sheth Model ("Model of Buyer Behavior"); adapted and simplified from Howard & Sheth (1969, p. 471).

The input category is defined by Howard and Sheth to be environmental stimuli of commercial or social nature. Commercial stimuli are further divided into *significative* (brand elements that are communicated through the brand object itself) and *symbolic* (brand attributes that are

[1] Note: The exogenous factors have been omitted in the depicted adapted model below for the sake of simplification and better visibility of the factors important to this work.

represented by marketing, such as advertisement, packaging, salespeople, etc.) stimuli. The *social stimuli* category is limited to WOM by personal contacts in this model. The outputs in this model are depicted as a collection of small processes or "response variables" (Howard & Sheth, 1969, p. 479) that ultimately lead to the purchase itself. They comprise *attention* which leads to *comprehension* which in turn allows the consumer to build an *attitude* toward the brand. The collection of attitudes will lead to a *purchase intention* which will finally allow for the actual *purchase* to take place.

The central part of this model displays the internal state of the consumer which will be most integral to answer SQ1. Howard and Sheth describe two different sets of constructs that this internal state contains, and which are needed to reach a buying decision: learning constructs and perceptual constructs. The perceptual constructs are relevant to the way consumers interact with the learned information. They are defined as "all perceptual phenomena create some change in the quantity or quality of objective information" (Howard & Sheth, 1969, p. 477). Three different such constructs are mentioned in Howard and Sheth's work: *sensitivity to information* (perceptual vigilance influenced by the degree of ambiguity of the presented information – if the level of ambiguity is too high, then it will be difficult for the consumer to grasp the information; if it is too low, then the consumer will get bored and not take in the information either), *perceptual bias* (adaptation of information to one's own established, personal cognitive framework), and the *active search for information* by the consumer. In this context, the work highlights the importance of the difference between the passive influence of marketing on the consumer, as opposed to their active search for marketing information. However, they believe that during the state of active search for information the consumer is least influenced by their own perceptual bias and thus most susceptible to commercial communication surrounding a brand or product (Howard & Sheth, 1969, pp. 477-479).

As for the learning constructs, consumers can learn in two ways: through actual experience – meaning they have bought the same product before – or they have bought a similar product and generalize their thus gained experience to be able to build upon the constructs needed to make a buying decision. Alternatively, if they do not have any comparable experience, they will need to collect information from the commercial or their social environment regarding the product.

The first of the constructs that consumers draw from to make informed decisions are *motives*. These can be *specific*, meaning a motive that is very concrete such as e.g., good color transfer, smooth product texture, or added skin benefits for cosmetics products, or *non-specific*, in which case it is general and non-tangible. Non-specific motives can be caused by positive or negative

feelings like anxiety, personality traits like insecurity, or be of social nature such as seeking power or prestige through a purchase (Howard & Sheth, 1969, pp. 472-473). Different alternative brands that can satisfy the consumer's needs and comply with their motives for this one specific purchase are called an *evoked set*. Consumers then use a set of rules which Howard and Sheth call *decision mediators*, to mentally rank the brands within their evoked set according to their "want-satisfying capacity" (Howard & Sheth, 1969, p. 473).

This ranking process will create *predisposition* toward the different brands in the consumer's mind and as a result, the consumer will attach a certain value to the individual brands. In conclusion, this means that the three prior mentioned constructs all together lead to creating this predisposition. The predisposition concept is thus a crucial variable and connects directly to the attitudes a consumer attaches to a brand which, in turn, contribute to the purchase intention in the output segment of the model.

The final two learning constructs mentioned in the research are *inhibitors* and *purchase satisfaction*. Satisfaction or dissatisfaction can only be assessed after the purchase process has been concluded, and thus the resulting information can only be used after when the purchasing cycle repeats itself. Inhibitors on the other hand are disruptive influences in the consumer's environment that can discourage the consumer from their purchase decision. Howard and Sheth note that these inhibitors are purely situational factors. If an inhibitor, such as e.g., the lack of availability of the preferred brand, persists for too long, it will be considered as a decision mediator instead (Howard & Sheth, 1969, pp. 472-475). In the example of unavailability, if a consumer were to be unable to find a certain brand or product several times while having intended on buying it in-store, they will at some point take up the "availability of the preferred product" as a decision mediator and eventually the unavailable brand will be taken out of the *evoked set* in the consumer's decision-making process.

This additional explanation in the research has important connotations for this work, as it implies that consumers stopped seeing the COVID-19-related store closures as situational (and therefore as inhibitors) at some point and started to adapt their decision mediators accordingly. It can thus be concluded that consumers are likely to have consciously adapted their buying decision-making process during the COVID-19-related lockdowns and will be able to give useful insights about this conscious change in the quantitative survey that will be part of this work's empirical research.

In conclusion, this model provides a great, if complex, view of the consumer decision-making process. Specifically, the different variables and their correlation within the consumer's mind can be directly considered in empirical studies. Critics of this model, however, do note that it is merely a depiction of correlation rather than an explicit cause-effect relationship. There is no direct link between the usage and passive influence of the media and the customers' consumption habits. Further, since this model was devised in the '60s and has not been majorly revised since, the inputs are not showing a difference between symbolic and significative variables and are solely focused on material criteria such as quality and price (Howard Sheth Model – 4 Components, 3 Levels, and Limitations, 2021). This is not an adequate representation of today's marketing strategies that, depending on the industry and product class, can be very focused on intangible values and feelings in their marketing communication (Ross, 2021) (symbolic stimuli), that the actual product however can't convey (significative stimuli). For example, the personal care and beauty brand Dove focuses its advertisement on selling products that promote self-love and positive body image (Ross, 2021). This is a kind of symbolic stimulus that cannot be conveyed as a significant stimulus by the product itself.

2.1.2 The adapted Engel-Kollat-Blackwell (EKB) Consumer Decision Process Model

As opposed to the model introduced before, the EKB model has undergone multiple revisions ever since it was first devised in 1968. With additions from Paul Miniard, the latest edition of the Engel, Kollat, and Blackwell's book *Consumer Behavior* was published in 2006[2]. In general, the message of this model is similar to Howard and Sheth's, however, its linear structure and potential to be simplified for easier understanding and application, make the EKB model the preferred choice for textbooks (e.g., Mothersbaugh & Hawkins, 2010) and business analysts alike. Additionally, due to the additions and changes made over the course of time, this model is far more adapted and relevant to current consumption trends *(The Engel Kollat Blackwell Model of Consumer Behavior*, 2021), making it an important addition to this work's literature review.

The model consists of four pre- and three post-purchase stages (added in later editions).

[2] Depicted below is the 2006 version of the model; see *Appendix 2* for the original 1968 model for reference.

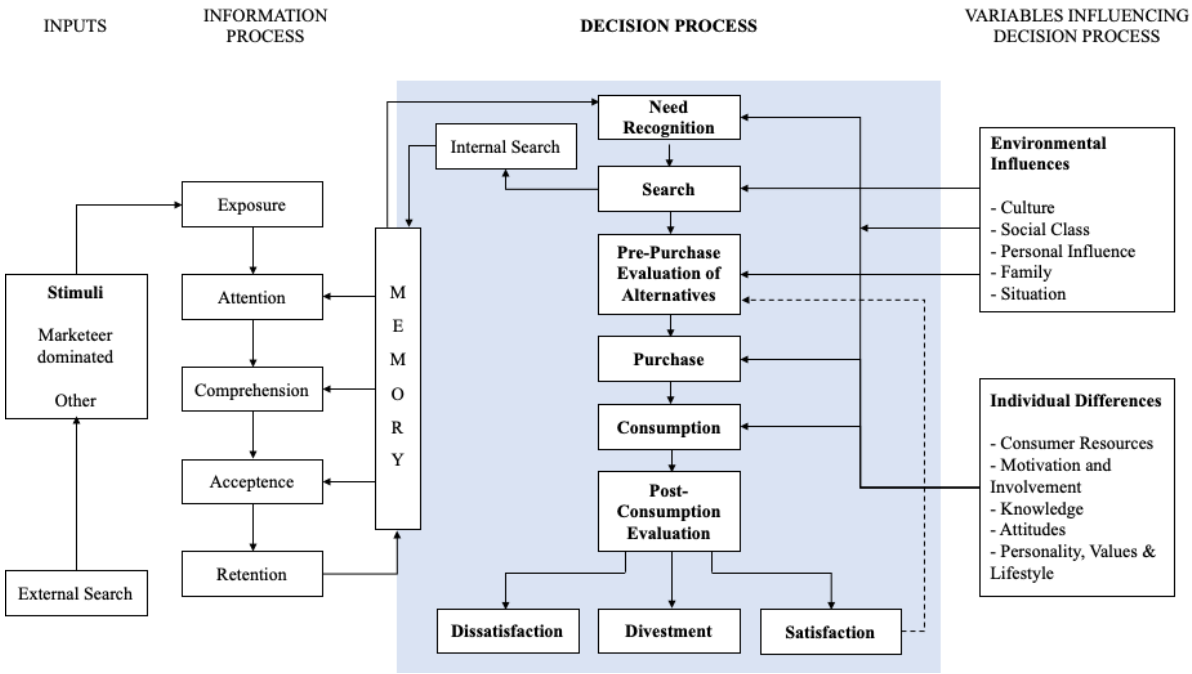


Figure 3: The Engel-Kollat-Blackwell Model ("5-Step Model to Consumer Decision Process Model"); adapted from Blackwell, Miniard & Engel (2006).

Stage 1: Need Recognition

Different from the Howard-Sheth model, for EKB the decision-making process starts with "an individual sens[ing] a difference between what he or she perceives to be the ideal versus the actual state of affairs" (Blackwell, Miniard, & Engel, 2006, p. 71) – in other words, the consumer recognizing the existence of an unmet need. The work argues that this recognition phase is influenced by internal and external factors. Internal contributions are the consumer's own memory and imagination, leading to them recognizing a problem they can solve via purchase and consumption. External factors include the same influences mentioned in Howard and Sheth's *exogenous influences*, namely environmental factors such as culture, social class, personal influences, family, and overall situation; and individual differences (between consumers) which include the consumer's resources, motivation, knowledge, attitudes and personality, values, and lifestyle (Blackwell, Miniard, & Engel, 2006, pp. 71-74). Howard and Sheth mention that these exogenous factors are only meant to serve as an explanation for unexplained variance when using their model to conduct empirical research (Howard & Sheth, 1969, p. 485), since many of these variables are not easy to ascertain through quantitative methods.

This is one of the important, additional insights gained from using the EKB model in addition to the Howard-Sheth model. Howard and Sheth did not take the magnitude of impulse purchases into account when creating their model, and unplanned purchases do not have a place

in it. In their model the consumer always considers alternatives. However, impulsiveness has already been identified as a major difference between online and offline purchasing and thus needs to be taken into account in this work.

Stage 2: Search for Information

EKB describe two general methods of information search: internal and external. This split is very reminiscent of Howard and Sheth's model, however, there are some important additions and distinctions that better adapt this stage to the current decade. Upon recognizing an unmet need, consumers will first use internal information available to them via long-term memory (product experience and past information searches) (Mothersbaugh & Hawkins, 2010). If the information available to them internally is insufficient, they turn to their environment in an external information search. External information is classified into marketer-dominated (advertising, information from sales staff, infomercials, websites, and points-of-sale material) and non-marketer-dominated (friends, family, opinion-leaders, and the media), which can come in the form of WOM (*personal input variables*) as well as objective product rating sources (consumer, government, or industry reports) (*independent input variables*). EKB also mention that the external search can also happen passively, where consumers simply become more susceptible to information around them but do not actively search for new information (Blackwell, Miniard, & Engel, 2006, pp. 74-76).

Upon having received the needed information, EKB describe how the information is being processed in the consumer's mind: The process starts with *exposure* to information. Next, is the *attention* phase, where the consumer subconsciously decides whether to allocate information processing capacity. The more relevant the information seems to the consumer, the higher the chance that the consumer will pay attention. This is a difficult stage for marketers to get past, and Howard and Sheth referred to this problem as *perceptual vigilance* in their perceptual constructs of the consumer's mind. If attention is attracted, the process continues with *comprehension*, where the consumer analyzes and interprets the message they received and stores it in their memory. There is however no guarantee that the meaning of the received information will be interpreted as the marketer intended it. After comprehension follows *acceptance* of the received message which will lead to a positive change in the best case of the consumer's attitude toward the brand. Finally, the ultimate goal of marketers is for their intended message to reach the fifth and last stage of information processing, the *retention* phase, where consumers store the information in their long-term memory.

Stage 3: Pre-purchase evaluation of alternatives

In this stage, the consumer uses the information they have already processed to evaluate their different options and narrow their field of alternatives. This part too is remarkably similar to how Howard and Sheth describe the decision-making process: In the EKB model, consumers are described to develop so-called *evaluative criteria* – standards that help them evaluate alternatives against one another. These are dependent on the individual consumer and influenced by their needs, values, and personality. EKB add that consumers decide upon the channel they buy the product from in the same way (Blackwell, Miniard, & Engel, 2006, pp. 79-81). This addition bears great importance for this work since it explains the importance of the channel choice to the consumer and how they might very well be highly apprehensive of switching from offline to online sales channels if this change is dissonant with their evaluative criteria.

While this stage is relatively similar to the previously introduced model, there is a very relevant addition to this stage based on Howard and Sheth's idea of the evoked set in Mothersbaugh and Hawkins' (2010, pp. 520-522) work (see *Figure 4* below): Out of all the potential brand and product alternatives available in the world, the consumer first creates an *awareness set* of brands in this large selection that they are actually aware of. With the help of evaluative criteria or decision mediators they build their *evoked* or *consideration set*. Brands that are disliked for any personal or value-connected reason are called an *inept set* and omitted from all further consideration. Even if the consumer receives positive information about this brand, they will not be susceptible to it. Finally, the *inert set* consists of brands the consumer is indifferent toward. They are not particularly preferred by the consumer, but favorable information about them will be accepted. The brands in this set might be considered actively, if the evoked set alternatives are unavailable or inertia sets in. Inertia in this context refers to a consumer who has reached their *routine decision-making phase* (see *section 2.1.3 - Types of Decision-Making*) – meaning they usually buy the same brand repeatedly due to it rising to the top of their evoked set. This extended idea of the evoked set circles right back and fits in well with Howard and Sheth's (1969, p. 479) observation that consumers tend to get bored (low stimulus ambiguity) when buying the same product repeatedly and will thus start seeking information about alternative brands from outside their evoked set – namely the inert set that Mothersbaugh and

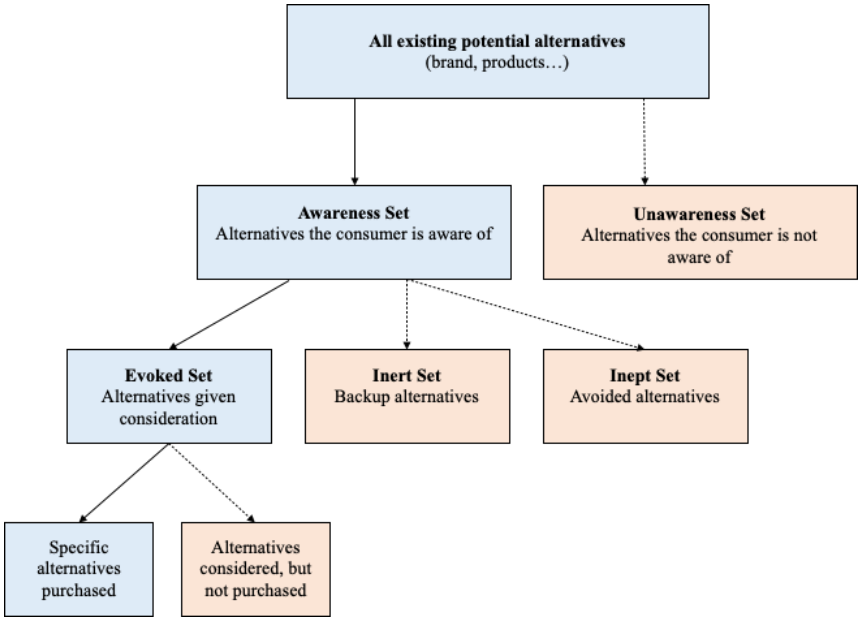


Figure 4: Categories of Decision Alternatives; adapted from Mothersbaugh & Hawkins (2010, p. 522).

Hawkins describe – to potentially try another brand again despite not being dissatisfied with their current choice.

Stage 4: Purchase

As for this stage, there are two major decision phases: In the first phase, the consumer decides on the retailer, and the second phase includes all in-store choices the consumer makes. EKB explain that at this point in time in-store marketer-dominated information often contributes to last-minute decision changes, despite the prior described long process of information searching and decision-making (Blackwell, Miniard, & Engel, 2006, pp. 81-82) – which now creates the direct connection to the impulse purchases relevant to this work (see *section 2.3 - Impulse Buying Behavior*).

Post-purchase stages 5 – 7: Consumption, Post-consumption evaluation, Divestment

There is not much to say about the consumption and divestment stages (disposal, recycling, or re-sale of the purchased product) from the decision-making point of view, as they have no direct influence on the buying decision-making process due to them happening post-purchase. The post-consumption evaluation stage, however, is interesting since its outcome – satisfaction or dissatisfaction with the purchase – is stored in the consumer's memory and thus influences the preceding need recognition and information processing stages. Lu, Lu, and Wang (2012) state in their research on the connection between consumer dissatisfaction and repurchase decisions that consumers use two types of coping behaviors when confronted with potential purchase dissatisfaction and the subsequent negative emotion it evokes: *Problem-based* and

emotion-based coping. Whereas emotion-based coping is trying to mediate the negative emotion received and distance oneself from it, problem-based coping involves the consumer directly taking action to change or prevent a dissatisfying situation. In beauty and cosmetics e-commerce, consumers are usually not entitled to refunds upon being dissatisfied with a bought product, which provides a stark contrast to other retail industries, such as apparel or consumer electronics. This perceived risk of buying something they may not like, but being unable to return it, creates something Shaukat, Kamran, and Syed (2018) refer to as *mental costs*. Mental costs encompass the negative feelings associated with an (online) purchase and generally have a negative impact on purchase intention – meaning higher mental costs will make the consumer more apprehensive in their buying decision-making. Lu and Liu (2018) came to the same conclusion regarding risk-perception on virtual cosmetics purchases and conducted research on the information search behavior of beauty consumers buying virtually. The results showed that consumers of this product family put an exceptionally high value on personal buying experience over official information provided by the brand itself, which they felt was unreliable. Lu and Liu further found that due to the high number of fake reviews that have been abundant in (Chinese) online shops and social media, consumers were found to value their own, physical experience with a product most (more so than in other product families). By implication, this means that consumers would also prefer a product they have personal experience with over one they do not have personal experience with when buying virtually.

2.1.3 Types of Decision-Making

A concept that has been left out of consideration so far is the level of involvement the consumer has for the purchase they are about to do. In their book on consumer behavior, Mothersbaugh and Hawkins (2010) describe today's most commonly used model on *purchase involvement* and define the term as "the level of concern for, or interest in, the purchase process triggered by the need to consider a particular purchase" (Mothersbaugh & Hawkins, 2010, p. 497). The idea of purchase involvement has been derived and refined by several researchers over time, separating it clearly from the phenomenon that is *product involvement* (Krugman, 1962; Howard & Sheth, 1969; Clarke & Belk, 1979; Zaichkomsky, 1995). The major difference is that high purchase involvement indicates a high interest in the process of buying, whereas product involvement indicates an interest in the product itself. This is an important distinction since e.g., a consumer can be highly interested in beauty products (high product involvement),

but they are very partial toward one specific brand (high brand loyalty) and thus do not put a lot of thought and effort into the purchasing process anymore (low purchase involvement).

Two of the earliest researchers to consider this phenomenon of involvement were Howard and Sheth (1969), despite them never using the term *involvement*, their prior introduced model was depicted in three ascending levels, in accordance with the consumer's degree of predisposition. As mentioned in *section 2.1.1 - The classic Howard-Sheth Model of Buyer Behavior*, the predisposition concept plays a major role and the authors explain the differences in decision-making between individual customers through their varying levels of predisposition (Howard & Sheth, 1969, pp. 475-476). Building upon this research by Howard and Sheth, Mothersbaugh and Hawkins (2010, pp. 496-499) detail a model that defines three different types of decision-making depending on the degree of the consumer's purchase involvement. Since their model provides useful additions to Howard and Sheth's original idea, both will be briefly highlighted in the following:

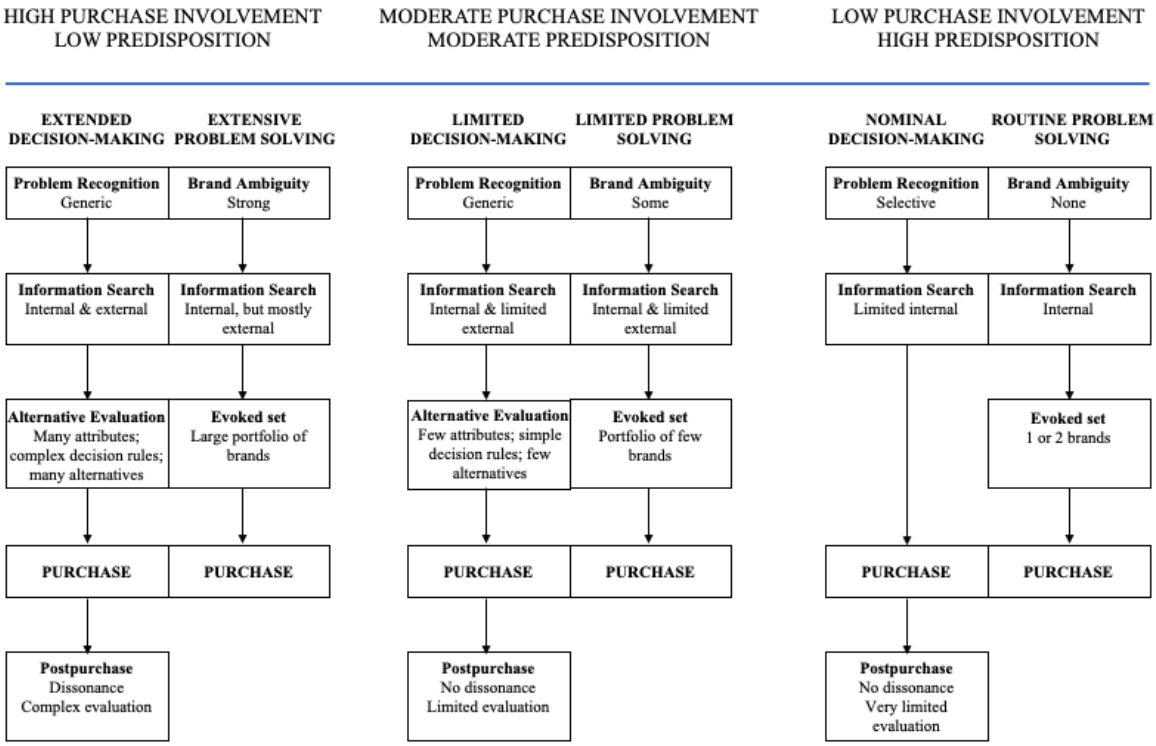


Figure 5: Involvement / Types of Decision-Making versus Predisposition / Problem-solving; adapted from Mothersbaugh & Hawkins (2010, p. 497) and the author's understanding of Howard & Sheth's (1969) Levels of Problem-Solving.

Howard and Sheth: Extensive Problem solving (*Mothersbaugh and Hawkins: Extended Decision Making*)

In the earlier stages of a consumer buying a certain product class, they do not have well-developed decision mediators yet. They do not have a good concept of the product class and a low predisposition due to a lack of points for comparison between brands. Naturally, during this stage, the buyer is most active in searching for information about the product class by themselves. This is also the stage with the highest latency of response – meaning the longest time interval between initiation of the decision and the actual purchase – due to the time it takes the buyer to do their research. In this stage, the consumer is considering a larger number of brands than usual as their evoked set. They are less likely to be coerced into an impulse purchase by commercial stimuli. For Motherbaugh and Hawkins (2006) this model is not one of different linear stages that a consumer will necessarily go through at some point. They simply describe several types of consumers in different types of purchase situations. Apart from describing an extensive internal and external information search like Howard and Sheth, they add that since this type of consumer has the highest possible level of involvement, they are far more thorough in scrutinizing their decision post-purchase and are also more likely to give feedback. The work reasons that relatively few customer decision processes use this type of decision-making due to its time consumption and effort.

Limited Problem solving (Limited Decision Making)

The consumer has a moderate predisposition, but no preference for one singular brand yet. They still seek information but notably less than before. Their evoked set is significantly smaller and preferences for various brands are about the same. Motherbaugh and Hawkins (2006) add that this type of consumer uses a set of simplistic rules to decide upon their preferred brand. For example, in a buying decision with a singular rule, a consumer could have chosen the simple rule to "always buy the cheapest brand of a product category". If a few more rules are involved, it could become something like "I want to buy a lipstick of a name brand that is pink in color but doesn't cost more than 20€".

Routine response behavior (Nominal Decision Making)

In this last stage, sufficient experience has been accumulated and brand ambiguity eliminated. Predisposition has now been built towards one or two brands from the evoked set. The consumer does not actively search for information anymore and only uses the internal information available to them (memory) for the purchase decision. They are also susceptible

only to information that supports their current choice. Information congruent with their predisposition can however act as a trigger to motivate a buying decision on cue. Motherbaugh and Hawkins (2006) also describe the possibility of this type of decision-making happening due to the consumer viewing the product in question as a commodity and thus not making an effort to discern between choices.

In conclusion, different levels of involvement will result in different types of decision-making which react differently to commercial stimuli they are being subjected to. Purchase involvement will thus be an important variable to add to the empirical research part of this work.

Putting the prior justified apprehensiveness of consumers to buy products they have no personal experience with through an online medium (see *section 2.1.2*) into the context of this concept of different types of decision-making, this work hypothesizes:

H1: During the COVID-19-related lockdowns and the resulting forced online-shopping period, beauty and cosmetics consumers were more prone to use routine response behavior/nominal decision-making.

2.2 Considerations regarding a shift in information search behavior

The search for information to make an informed decision, whether it is part of a limited or extensive problem-solving process, is as per *section 2.1* an essential part of the decision-making process. Thus, the question remains whether the COVID-19 crisis-related lockdowns have led to a change in consumers' search behavior which is reflected in *SQ 2: How has the consumers' information search behavior been impacted by the COVID-19 pandemic?* Has it shifted to become more online-based than it was before? Or has digitalization progressed to a point where beauty product-related information search had already been done largely online-based before the outbreak of the pandemic?

This question is not easy to answer with existing research, as pre- versus post-COVID information search behavior is a topic that has not been researched thoroughly yet. Generally, a pronounced shift toward digital usage throughout all facets of daily life is undeniable (De', Pandey, & Pal, 2020). While not directly related, research by Bento, et al. (2020) suggests that only the information search directly concerning information about the pandemic has seen increases selectively (right after big announcements, especially at the beginning of the

pandemic) since the beginning of the crisis. The research compares different search motives connected to the pandemic and found that information about personal health strategy-related searches, as a part of which they counted information regarding masks, over-the-counter medicine, and grocery delivery, did not increase. While these results are not directly linked to the question of whether beauty product search has increased during the pandemic, it does imply that since not even personal health-related searches have increased dramatically, the same would be true for an unrelated topic such as beauty. This consideration is supported by evidence from Google Trends: When monitoring the search words "best beauty products", "beauty trends", and "makeup trends", no increase in the interest over time value provided by the Google Trends service can be detected since the start of the pandemic (see *Appendix 4: Google Trends Interest over Time 5-Year Comparison (worldwide) for* the Search Terms "best beauty products", "beauty trends" and "makeup trends"; taken from Google Trends (2022).

So, despite more research in this area being necessary, there is reason to believe that product-related Google searches have in fact not largely increased during the pandemic. This does however not mean that there hasn't been an impact on information search or the decision-making process as a whole: Statistic evidence suggests that social media usage has increased exponentially since the start of the pandemic – especially in 2020. A Statista study from 2022 compiling different statistics concerning the social media usage since the beginning of the pandemic summarized the following (see *Appendix 5: Statista "Coronavirus: impact on social media usage worldwide"* Study results; taken from Statista (2022b, pp. 8-9, 13-14, 18). for original graphs):

- Daily time spent on all major social media platforms (Facebook, Instagram, Snapchat, TikTok, Twitter) has increased – with the biggest increases seen in TikTok and Twitter usage, according to a study by eMarketer (Statista, 2022b, p. 8).
- According to Activate and comScore, user engagement has increased for most major social media platforms in recent years – lead by Twitter with an increase of 78 percent between 2018 and 2020 (Statista, 2022b, p. 9).
- Tech.co found that the rate of active social media users has increased exceptionally between 2019 and 2021 for TikTok (38 percent increase), Pinterest (32 percent increase), and Reddit (30 percent increase). Instagram, Snapchat, and Facebook have seen increases of 16 to 19 percent each (Statista, 2022b, p. 13).

- 30 percent of U.S. respondents of a survey by Business Insider and eMarketer said they use social media 1-2 hours more since the beginning of the pandemic – 18 percent said they used it over 3 hours more than before (Statista, 2022b, p. 14).
- eMarketer found that the annual increase in TikTok users from central European countries such as the UK, Germany, France, and the Netherlands increased between 75 and 94 percent in the year-on-year change from 2019 to 2020 (Statista, 2022b, p. 18).

In conclusion, consumers have been spending inarguably more time on social media due to the COVID-19 pandemic. However, additional information is needed to connect the rise in social media usage to a change in consumer decision-making, and ultimately buying behavior: A study by the market intelligence company data.ai documented an exponential increase in consumer spending on social media applications. In the first quarter of 2021 alone, the $3.2Bn have been spent on social apps worldwide, which marks a 50 percent increase in the year-on-year comparison to 2020 (App Annie (now: data.ai), 2021, p. 6). This means that not only have users spent more time on social media, but they also spent more money through the medium of social media applications during the pandemic. This data is mirrored by evidence from IAB Europe which states that in 2021, European companies spent 42 percent more on social media marketing compared to 2020 (whereas the spent of other digital marketing categories only increased by up to 30 percent) (IAB Europe, 2022) – meaning that companies have recognized and reacted to this trend.

As has been discussed before (see *section 1.2 - Preliminary Literature Review and Research Questions*), beauty and cosmetics is a product category that consumers traditionally prefer to buy offline. However, with the forced migration to an online purchasing environment due to the COVID-19-related lockdowns and a general increase in social media usage during this time, an increase in social commerce of beauty products seems likely. This conclusion is supported by a recent report from Accenture, which found that beauty and personal care was a category that was "smaller in terms of total social commerce sales" (Accenture, 2022) but at the same time one of the fastest growing ones – and thus they predicted that by 2025 social commerce would account for 40 percent of beauty consumers' digital spend (on average). This leads to the following hypothesis:

H2 – Due to a rise in social media usage during the COVID-19 pandemic, beauty consumers bought more products through the medium of social media applications.

As a traditionally marketing-heavy industry, this has important implications for the beauty industry. The high need for initial and ongoing investment in marketing has been a market entry barrier in the industry ever since (MBA Skool, 2022). However, now a study by the GlobalWebIndex has found that consumers are 41 percent more likely to discover a new product or a new brand via social media, and another 47 percent more so, if they see the ad in question as part of an update on the brand's social media page (Valentine, 2019). According to market research company GWI's media landscape report, in 2021 (for the first time) young consumers have discovered more new brands through social media than any other media (GWI, 2021, as cited in, Schwarz, 2022).

Moreover, the social media purchasing model is tightly connected to impulse purchasing behavior (Ross, 2006). As previously reasoned in the introduction of this work (see *section 1.2 - Preliminary Literature Review and Research Questions*), there is evidence suggesting that a grand amount of buying decisions made by beauty consumers, might have been impulsive, in-store decisions. This raises the question as to how offline and online impulse behavior differs and which implications this change has for consumer decision-making processes. For this reason, the next section of this work will summarize insights from preceding literature on impulse buying behavior.

2.3 Impulse Buying Behavior

As this thesis' purpose is to study the impact that a forced migration from an offline to an online purchasing environment has on the consumer's buying decision-making process and the thus resulting change in buying behavior, it is most relevant to understand what differentiates those two environments. Besides the *test before you buy* feature that becomes inaccessible in online shopping, a big factor that needs to be assessed is the difference in the prevalence of impulse buying, leading to the sub-research question *SQ 3: How strong is the influence of impulse buying as compared to informed buying on the (beauty) consumer? And are impulse buying decisions influenced by the forced online migration of consumers?*

2.3.1 Planning as a factor in consumer purchasing

Generally, researchers (Blackwell, Miniard, & Engel, 2006; Kollat & Willett, 1967) differentiate between different degrees of planning in consumer purchasing.

Fully planned Purchases

A fully planned purchase is one where the specific product and the brand are chosen before the consumer enters the store environment (Blackwell, Miniard, & Engel, 2006). In their study on in-store consumer decision-making tactics, d'Astous, Bensouda, and Guindon (1989) found that consumers generally use more complex decision-making processes (planned decision-making) when the purchased product is of high importance to them (high product involvement) but not frequently purchased. There is still a chance of a spontaneous, in-store change of plans, nonetheless. Several factors decide the success of the original purchasing plan, such as the consumer's knowledge of the store layout, and potential time pressure (Park, Iyer, & Smith, 1989). The consumer can also be swayed by in-store marketing influences and thus make an impulsive decision to change plans. Marketing tactics have less of a chance of success in swaying a consumer away from their pre-chosen brand, the higher the consumer's brand loyalty is (Blackwell, Miniard, & Engel, 2006).

In the context of the cosmetics and beauty industry, this leads to the conclusion that rather few buying decisions around beauty products would be fully planned purchases, seeing as they have rather short purchasing cycles (Howard & Sheth, 1969). Only if a consumer has a very high brand loyalty, will they thoroughly plan their purchase beforehand and not pivot in-store.

Partially Planned Purchases

Blackwell, Miniard, and Engel (2006) define this type of purchase as one where only the product has been chosen prior to the shopping trip, whereas consumers delay the brand choice and/or the specific style, format, or size of the product until they can have a look at the alternatives in the store or on the website. So e.g., a beauty shopper may have recognized the need to buy a colored lip product but has not yet decided on the specific brand or whether they want to buy a lipstick, lip balm, or lip tint format. Kollat and Willett (1967) defined a subcategory of this type of purchase where the consumer had before the purchase only decided on the product class in accordance with a recognized need. This would e.g., describe a customer who wants to buy makeup for a special occasion, but hasn't decided which products in particular they want. Consumers with low product involvement tend to resort to products of brands they already know or have experience with but may not have a specific brand preference (Blackwell, Miniard, & Engel, 2006). Their final decision is naturally more likely to be influenced by in-store decision drivers than that of a buyer who fully planned their purchase.

Unplanned Purchases

Finally, unplanned purchases are described as ones where neither product nor brand is chosen before entering the store environment (Blackwell, Miniard, & Engel, 2006). Various researchers highlight a difference between an unplanned purchase and an impulse purchase (Rook, 1987; Beatty & Ferrell, 1998). They argue that an impulse purchase is instantaneously decided on with strong emotion and no prior buying intent. Kollat and Willett define unplanned purchasing as "Before entering the store the shopper recognizes the existence of a problem or need, but has not decided which product class, product or brand that she intends to purchase" (1967, p. 21) and impulse purchasing as "Before entering the store the shopper does not recognize the existence of a need, or the need is latent until she is in the store and has been exposed to its stimuli" (1967, p. 21). There are however also researchers who see no need to differentiate these two planning stages into two different groups (Stern, 1962; Cobb & Hoyer, 1986; Blackwell, Miniard, & Engel, 2006). For this work as well, since the subject is not within the field of impulse behavior studies but merely uses them as a vehicle to explain a different phenomenon, there is no imminent need to differentiate between unplanned and impulse purchases. Thus, the two terms will be used interchangeably from here on.

2.3.2 Key factors in stimulating impulse buying

Impulse buying makes up a large part of consumers' daily shopping. Kollat and Willett found in their study on impulse purchases in grocery shopping trips from 1967 that 50.5 percent of purchases had been conducted on an unplanned basis, and only 25.9 percent on a completely planned one (Kollat & Willett, 1967, p. 23). In their study on consumer online impulse behavior, Verhagen and van Dolen (2011) found the same to be true for around 40 percent of all online purchases. However, it is questionable how significant these findings are for this work. For one, because of the 40-year difference between the two pieces of research; for another, because Kollat and Willett were looking at grocery shoppers specifically, whereas Verhagen and van Dolen were not researching any specific product category. In 1950, Vernon T. Clover studied impulse purchases throughout different product categories. Among them, cosmetics in particular had been studied as a distinct product class as well, and Clover found that, depending on the sales channel (variety stores, drug stores, and department stores), impulse purchases made up 24.3 to 61.5 percent (Clover, 1950, as cited in West, 1950). Here too the results are dated too far back and the large variety in results between different sales channels makes it

difficult to further utilize these numbers as a reference for this work. In comparison, a study by the Point-of-Purchase Advertising Institute in 1978 found that 61 percent of all beauty products of their focus group had been bought in unplanned purchases with no focus on the channel (POPAI/DuPont Studies, 1987, as cited in Iyer, 1989).

These largely varying results across research naturally raise the question as to which factors influence impulse buying behavior and which conclusions can be drawn to anticipate such behavior in today's multichannel cosmetics and beauty industry.

Prior research on impulse behavior influences is traditionally very fragmented. Due to the vast array of possibilities and the difficulties of testing them, researchers in this field tend to focus on a singular or a small set of influences to study (Hussain et al., 2021). Gaining an overarching view of factors that contribute to impulse buying can thus become quite challenging. Through their literature reviewing work, Iram and Chacharkar (2017) have created a model of impulse buying behavior on basis of a literature review and analysis (see *Appendix 3: Iram & Charcharkar's Model of Impulse Buying Behavior*; adapted from Iram & Chacharkar (2017, p. 48).). While without question an encompassing model on the entirety of the impulse buying process, upon conducting an in-depth literature review this work feels that to accurately portray the impulse buying behavior of the 21st century, some important factors need to be added and others modified or disregarded.

Iram and Chacharkar (2017) and Hussain et al. (2021) segment the factors influencing an impulse purchase into internal and external factors. These are then further divided with the help of additional research:

External Factors stimulating unplanned buying

Commercial

Commercial factors include first and foremost all types of *advertising* which can be transmitted through a variety of different mediums online (search advertising, display advertising/banner advertising, mobile advertising, or social media advertising) (Bundeskartellamt, 2018) and offline (through media such as TV, radio, print media, billboard ads, etc.) (Iram & Chacharkar, 2017).

Next are *sales offers*, including discounts and promotions, which can be especially effective in eliciting impulse behavior when they are unexpectedly met by the consumer in the store

environment (Hussain, Ali, Ullah, & Rasool, 2021; Iram & Chacharkar, 2017; Park, Kim, Funches, & Foxx, 2012; Badgaiyan & Verma, 2015).

Personal selling has a grand impact, especially in the beauty and cosmetics industry. Its influence in offline shopping is contributing most to the creation of a personal connection between consumer and brand, creating brand loyalty, and thus having a greater success rate at forging long-term relationships with the customer. Their influence on unplanned purchases is among the highest in this category (Brady & Cronin, 2016; Sherman, Marthur, & Smith, 1997; Badgaiyan & Verma, 2015).

A lot of research has also been conducted on the influence of general *store design and layout*. The properties of a physical store that have the power to influence consumer purchasing behavior are often referred to as store atmospherics (Kotler, 1974). Researchers argue that when applied well, atmospherics can shape the direction and duration of consumers' attention and direct it towards certain products or brands (Mothersbaugh & Hawkins, 2010). Multiple researchers have found that when consumers reacted positively to a shop's atmospherics it can directly stimulate impulse buying behavior (Husnain et al., 2019; Ahmed & Riaz, 2018; Sherman, Marthur, & Smith, 1997). Baker et al. (2002) additionally found that a positive impression of the store environment and presentation of the product can increase the perceived quality of the product.

The *placement of the products* inside of the store, whether in the context of the shelf space/placement, or a promotional/special display for the product in question, is crucial for gaining the customer's attention (Chuchu, Venter de Villiers, & Chinomona, 2018). A study by Mohan, Sivakumaran, and Sharma (2012) found that the placement of products on the shelf can also strongly influence impulse buying decisions.

Situational

Situational Circumstances include *time pressure* and *special occasion needs* (Iram & Chacharkar, 2017). There is not much evidence of the influence of special occasion needs, such as in the holiday season, Halloween, or the back-to-school time on impulse buying. However, it makes sense to assume that the combination of special needs (such as gift giving) and systematic discounts and promotions, is very influential when it comes to unplanned purchases (Iram & Chacharkar, 2017). A study by Google showed that in the holiday season of 2018, 1 in 3 purchases had been made on impulse (including in-store and online purchases) (Google/Ipsos, 2018).

In comparison, a lot of research has been done on the connection between time pressure and impulse purchases. There are two opposing schools of thought, however: There has been evidence found that consumers under time pressure will be more haphazard in their in-store decision processes. Especially, when they have been in the store for a while, they often wish to speed up the process and start acting more impulsively (Park, Iyer, & Smith, 1989). On the other hand, researchers have also found evidence that sufficient time during the in-store browsing process will result in higher satisfaction of the consumer and with it, a higher tendency for impulse purchases (Beatty & Ferrell, 1998; Badgaiyan & Verma, 2015).

Internal Factors stimulating unplanned buying

Demographic

Demographic factors are deemed important by some researchers; however, results are highly different: Kollat and Willett (1969) in their study on grocery shoppers found that women tended to be more impulsive in their buying behavior. On the other hand, researchers Akram et al. (2016) found the opposite to be true. Mohiuddin and Iqbal (2018) found that people buy more impulsively when emotional and physical needs specific to them are involved. This means e.g., that women buy more impulsively when buying beauty-enhancing products such as cosmetics or fashion items, whereas men do more so when they buy daily routine simplifying items (such as kitchen gadgets). There are however also several researchers who did not find any difference between genders when it comes to unplanned buying behavior (Verplanken & Herabadi, 2001; Mihic & Kursan, 2010; Rook & Fisher, 1995).

Research is more coherent when it comes to the connection between impulse buying and age: Generally, young people are more likely to buy impulsively: Wood (1998) found that people's impulsive behavior increases between the age of 18 to 39 and then declines from there, with similar findings from Bashar, Ahmad, and Wasi (2012).

Specifically for cosmetics, in their study on the Chinese market, Wu and Lee (2016) found educated, unmarried women aged 30-35 are most likely to buy beauty products impulsively.

Personal

This category is divided into *hedonic motives*, such as pleasure, arousal, and escapism, that impulse buying can arouse (Rook, 1987) and the *personality traits* specific to a consumer (Park, Iyer, & Smith, 1989). Many researchers link a lack of self-control to impulsiveness during

shopping (Iram & Chacharkar, 2017; Baumeister, 2002; Wells, Parboteeah, & Valacich, 2011). It should be mentioned, however, that all research mentioned here strongly differentiates impulse buying from unplanned buying and see it as abnormal buying behavior.

There is a consensus between researchers about the existence of what is called *impulse buying tendency* (IBT). First introduced as *consumer impulsiveness* by Radhika Puri (1996), this personality trait describes consumers in their degree of impulsivity in daily life – meaning some people simply have more of a tendency to act and thus buy, impulsively. A consumer with a high IBT may use active browsing – unplanned purchasing – as a "shopping strategy" (Beatty & Ferrell, 1998, p. 175). Researchers use it as an individual difference variable in their research (Jones, Reynolds, Weun, & Beatty, 2003; Rook & Gardner, 1993; Beatty & Ferrell, 1998).

Product involvement also appears to be an important factor in impulse purchasing: Jones, Reynolds, Weun, and Beatty (2003) introduced the idea of IBT as a product-specific variable. Further, they hypothesized that product involvement would have a significant influence on product-specific impulsiveness. Both of their hypotheses tested positive, proving the correlation between high product involvement and increased impulsive purchasing behavior for that specific product.

Circumstantial

Researchers have also extensively studied the connection between *moods* and unplanned buying decisions. There are two main motivators: Consumers in a good mood can feel more inclined to impulse purchases due to high satisfaction, enjoyment of the shopping experience itself, and a wish to indulge by spending additional money (Beatty & Ferrell, 1998; Chang & Eckman, 2011; Sundström et al., 2013). On the other hand, consumers in a bad mood can feel the urge to treat themselves to lift their mood (Rook & Gardner, 1993; Sundström et al., 2013).

Moreover, the amount of *disposable income* is a deciding factor for people to have a tendency for impulsive buying behavior (Beatty & Ferrell, 1998). To buy a product without putting prior thought into the process, the consumer is more likely to have enough disposable income to easily cover the expense. Badgaiyan and Verma (2015) additionally differentiate between general economic well-being and current money availability, but find that both (individually) lead to a positive effect on impulsive buying behavior.

2.3.3 Online Impulse Buying

The central question this work asks concerning impulse buying behavior remains: How does offline impulse buying – which makes up a large number of cosmetics purchases – translate to online impulse buying? Is there a loss or increase in the number of purchases?

Hussain et al. (2021) through their literature review conclude that generally speaking there are opportunities for impulse purchasing on- and offline. However, quantitatively there are more stimuli and experiences that can be provided in the offline, in-store environment to influence impulse buying behavior. Out of the different factors stimulating unplanned buying behavior that have been explored in *section 2.3.2* most are applicable to both, offline and online environments. However, some factors, namely the personal selling influence, store atmospherics, and shelf space/shelf placement, are difficult to translate to the e-commerce environment.

There are, however, online-purchase-specific features that can lead to increased impulse buying behavior: Evidence from Verhagen and van Dolen (2011) shows that *functionality and aesthetics* of a website contribute to shopping emotion, and further, that positive shopping emotion positively influences impulse buying. These results are backed by Liu, Li, and Hu (2013) who found that the ease of use and visual appeal of a website can increase unplanned purchases. Additionally, Aragoncillo and Orús (2018) found that the *greater assortment and variety* of online stores and the possibility of using credit cards cause similar influences. The use of credit cards is of course possible offline as well, but their use is simplified online and there are several other *easy payment options*, also including the buy-now-pay-later option providers like Klarna and PayPal are offering online. In their survey Klarna found that 75 percent of consumers felt their shopping experience to be more positive when offered such an option during their checkout process (Klarna, 2021).

The following model will give a clear overview of all mentioned factors in unplanned buying decision and whether they influence offline and/or online purchases:

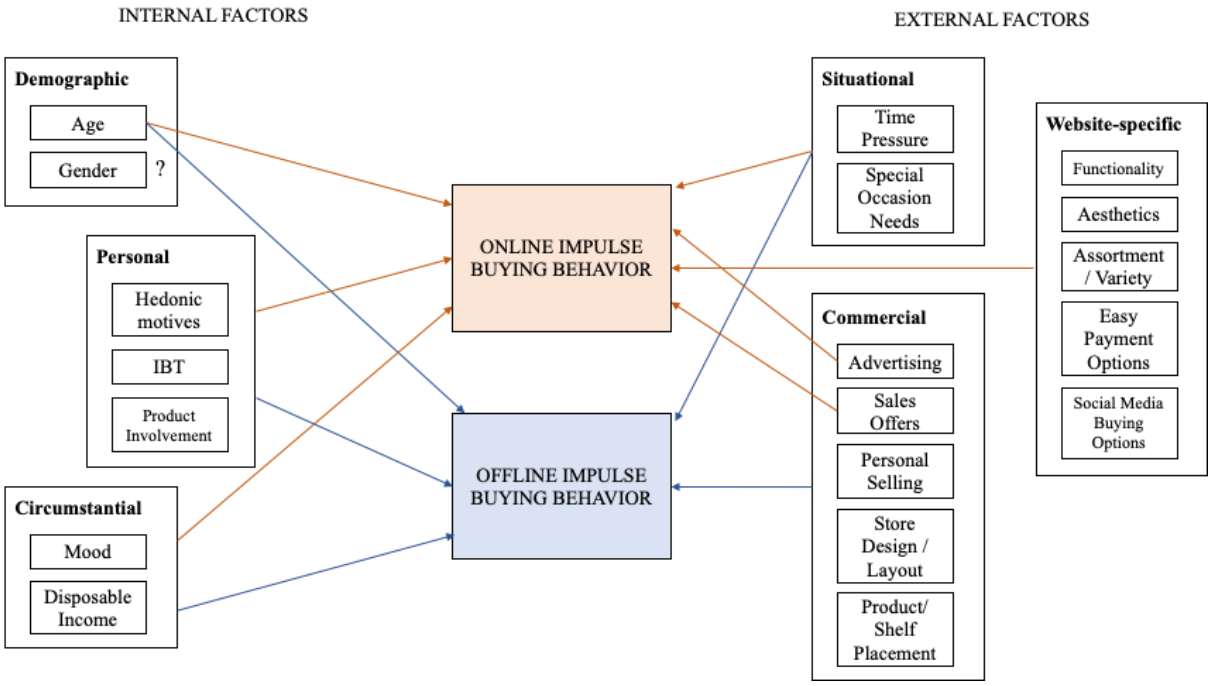


Figure 6: Conceptual Model of Factors Influencing online/offline Impulse Buying Behavior; concept by author.

On the more general side, there seems to be a grand discussion among researchers whether online (Greenfield, 1999; LaRose, 2001) or offline (Kacen, 2003; Aragoncillo & Orús, 2018) purchases are more prone to be made impulsively. The pieces of research mentioned in the prior sentence were all conducted either generally throughout all industries (Aragoncillo & Orús, 2018; Greenfield, 1999; LaRose, 2001) or specifically in the grocery shopping (Kacen, 2003). There is reason to believe that research results may differ significantly if conducted in the cosmetics industry. Most prominently this belief is led by McCabe and Nowli's (2003) research proving that when confronted with products where the material or texture matters to the buying decision of the consumer, consumers were found to be more likely to buy a product upon being able to process the sensory information from holding and touching the product, as opposed to situations where they were unable to do so (such as catalog or online purchases). So, it is reasonable to think that this phenomenon will also be applicable to impulse purchases. This leads to the following hypothesis:

H3: To consumers who prefer offline over online shopping, the texture and feel of the product are a major factor in offline impulse purchase decisions.

There is, however, no prior empirical evidence clearly proving whether consumers generally buy cosmetic products more impulsively on- or offline. While circumstantial evidence may be

in favor of offline impulsiveness, there is no evidence yet, due to the contextual nature of the subject. This work aims to bridge this gap through its own empirical research.

It has been shown in *section 1.2 - Preliminary Literature Review and Research Questions* that beauty consumers vastly prefer shopping offline. McCabe and Nowli's research on the importance of texture underlines this line of thought. Research on impulse behavior (see *section 2.3.2 - Key factors in stimulating impulse buying*) has detailed how not only shop interior but also a positive mood can influence impulse buying tendency. This points toward the possibility that consumers would be more inclined to shop impulsively offline. The following hypothesis ensues:

H4.a: Cosmetics and beauty consumers buy less impulsively when shopping online and therefore, bought less impulsively during COVID-19-related lockdowns.

Evidence by Greenfield (1999) and LaRose (2001), however, found that due to the larger variety available online, the ease of purchase, and the omission of the time and physical process of taking an item, bringing it to the cashier and paying for it, consumers are more likely to buy more impulsively online. Thus follows the counterhypothesis:

H4.b: Cosmetics and beauty consumers buy more impulsively when shopping online and therefore, bought more impulsively during COVID-19-related lockdowns.

2.4 Lineup of the hypotheses and adaption of the theoretical framework

In conclusion, this work has posed two major questions that it aims to answer through the analysis of prior research and the conduct of its own empirical research:

RQ: How have the COVID-19 crisis-related store closures impacted the buying decision-making process of beauty consumers?

> *SQ 1: How is the buying decision-making process structured within the consumer's mind and what are the specific external influences relevant to the process?*
>
> *SQ 2: How has the consumers' information search behavior been impacted by the COVID-19 pandemic?*

SQ 3: How strong is the influence of impulse buying as compared to informed buying on the (beauty) consumer? And are impulse buying decisions influenced by the forced online migration of consumers?

SQ 4: How was the consumer's buying behavior impacted in terms of quantity and quality of the purchase?

As mentioned prior, the purpose of SQ1 was to understand the decision-making process by inquiring about its classic understanding in literature. This question was answered primarily in *section 2.1- The Consumer Buying Decision-Making Process* which dug into two different classic models that aim to understand and structure the process and further what influences it externally. This research was then used as a basis to understand how the COVID-19 pandemic-related lockdowns have influenced buying decision-making. The majorly impacted touch points that this work has identified were the consumer's information search behavior and the consumer's impulse buying behavior. Both points have been thoroughly examined through prior conducted research, respectively in *sections 2.2 - Considerations regarding a shift in information search behavior* and *2.3 - Impulse Buying Behavior*. The final sub-research question SQ4 takes a special position, as it is a conclusional question that will have this work investigate how the decision-making changes it is researching have translated into real buying behavior. This question will be discussed in detail in *chapter 5 - DISCUSSION & CONCLUSIONS*.

Throughout the reviewing process, several important implications have been identified that helped shape the design of this work's empirical research. These implications have thus been expressed as the following hypotheses:

In connection to the suspected change in search behavior, this work has found that there is a chance that consumers have bought fewer new products during the lockdown periods, due to the fact that cosmetics are products that customers like to try out and touch before the purchase as part of the information search process, paired with the mental cost created by the perceived risk of buying something new online. This leads to H1: During the COVID-19-related lockdowns and the resulting forced online-shopping period, beauty and cosmetics consumers were more prone to use routine response behavior/nominal decision-making.

Further, in connection to a potential increase in social media usage during the information search process, there is room to believe that users were more likely to engage in social commerce when it came to cosmetics purchases; H2: Due to a rise in social media usage during

the COVID-19 pandemic, beauty consumers bought more products through the medium of social media applications.

A large portion of this work focuses on impulse buying behavior and how the COVID-19 pandemic has impacted this behavior. It is imperative for corporations to know the triggers of these impulse purchases, so they can adapt their sales model accordingly during the online migration of their services. Due to the importance of the feel of texture in cosmetics purchases, which has been found to be a large driver in purchases decisions in general, this work hypothesizes that H3: To consumers who prefer offline over online shopping, the texture and feel of the product are a major factor in offline impulse purchase decisions.

In connection to impulse buying behavior, massive differences have been identified between the offline and online environments in prior research. However, there has not yet been sufficient research conducted on the topic of impulsive behavior in cosmetics purchasing and the differences between these two vastly different sales environments. Thus, this work considers the following two alternative hypotheses: H4.a: Cosmetics and beauty consumers buy less impulsively when shopping online and therefore, bought less impulsively during COVID-19-related lockdowns.

H4.b: Cosmetics and beauty consumers buy more impulsively when shopping online and therefore, bought more impulsively during COVID-19-related lockdowns.

The following *Figure 7* shows an updated version of the theoretical framework of this thesis, which was first introduced in the introduction part of this work. This version has been extended to include the hypotheses and factors this work believes are influencing them.

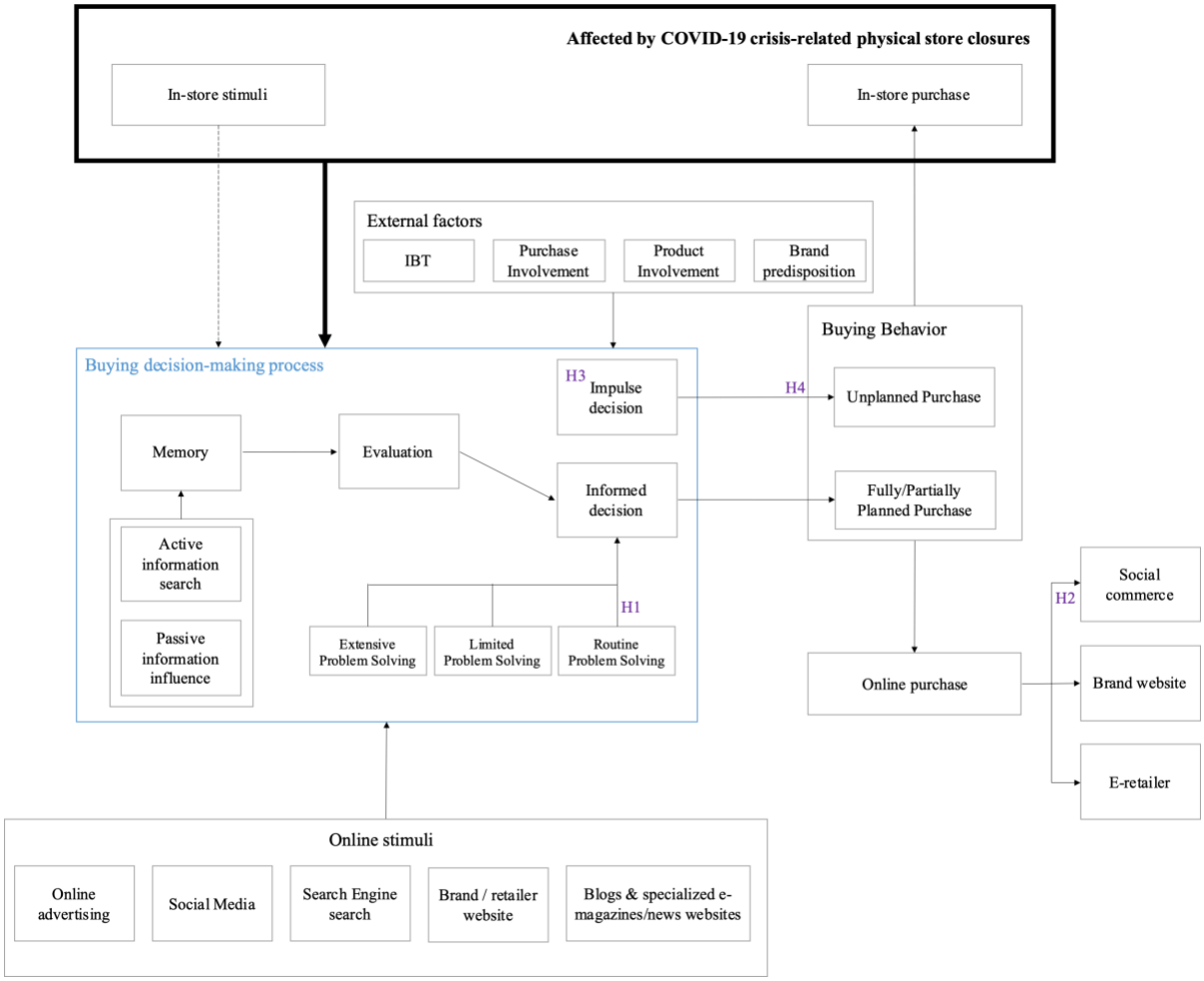


Figure 7: Thesis theoretical framework (completed with hypotheses); concept by author.

3. RESEARCH METHODS

The following part will serve as an introduction to the empirical research content which was conducted as a part of this work. It will detail and justify the methods used, the connection between the research design and hypotheses, and give an overview of the methods used for the following analysis part.

The empirical research conducted for this thesis follows the general steps of research design for consumer behavior research projects, as recommended by Chysochou (2017). The steps he introduces start with careful consideration of the actual research objective, followed by choosing the most effective mode of research and translating it into a research design. These steps will then be followed by considerations regarding the befitting respondent group and how to approach them. The research data must be collected through the practical implementation of the prior designed research method. Once the research has been conducted and finalized, the

received data needs to be analyzed, tested for reliability and validity, and finally, the prior derived hypotheses must be tested. The final step is the reporting of the results. See the *Figure 8* below for a visual representation of this process.

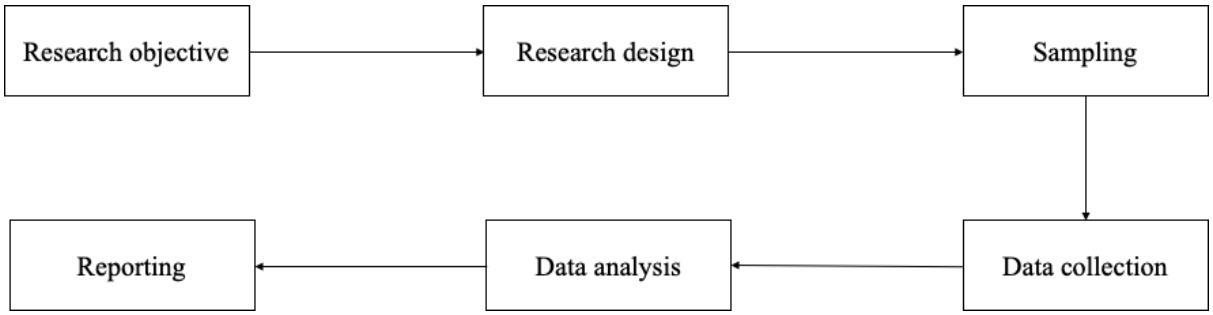


Figure 8: Design of the Research Project; adapted from Chysochou (2017, p.410).

3.1Research objective

The overarching research objective of this thesis – to research the impact COVID-19-related lockdowns had on buying decision-making in the beauty and cosmetics industry – has been decided upon the conduct of a preliminary literature review of the topic in largely non-scientifically published sources and expressed through one main and four sub research questions in the introductory, first chapter. Upon a more thorough, in-depth analysis of scientifically published research – especially on the topic of the buying decision-making process itself – several hypotheses have been established on basis of the research questions in chapter 2. These hypotheses in combination with the research questions built the foundation of the survey design.

3.2 Research design

A quantitative survey approach has been identified as the optimal research method to answer the posed research questions. Survey research is known to have the advantage of gaining the ability to collect a comparably big sample within a short amount of time. Chrysochou (2017) dubs it as a method most suited to reach generalizations of an observation, serving as "empirical validation of a theoretical phenomenon" (Chrysochou, 2017, p. 422). He warns however, that this method is especially susceptible to several biases that can potentially alter research results. He names sampling bias (adoption of ill-fitted sampling method), measurement bias (using influencing wording), response bias (respondents' proneness to give an incorrect answer) and

researcher bias (all or any steps of the research being influenced by the researcher's own views and opinions). Thus, this research was designed specifically with the pitfalls of these biases in mind, designing it neutrally worded and based on prior research (as discussed in the theoretical part of this work), while also testing the survey on a small circle of test respondents, before opening it for the general public. Since the survey relied on the respondents self-reporting their habits and behaviors, response bias specifically was a concern in the creation of the survey. Rosenman, Tennekoon, and Hill (2011) describe that the most common triggers of response bias include misunderstanding the questions or answer options, and social-desirability bias in which the respondent wants to appear 'desirable' through their answers to the survey (even if the survey is conducted anonymously). Thus, much consideration was put into the wording of each question in terms of understandability and neutrality of the answer choice, as to not make the respondent feel like they have to 'admit' to a bad habit.

The first part of the survey aims to assess the respondents according to the several external factors that have been found to influence the buying decision-making process, as per the secondary research conducted prior to the empirical research part – namely IBT, product and purchase involvement, and brand predisposition. These factors have been singled out, as they have been shown to influence online shopping behavior and impulse purchases which can also be seen in the theoretical framework of this work. While these factors are not directly part of the analysis conducted in the hypothesis testing, as an exploratory approach to this research their influence on the different dependent variables has been additionally tested. This method has been adopted to enable further assertions for the learnings this work can provide, and gain more clarity on which factors need to be considered when conducting further research on this topic.

3.3 Data collection

The data for this research has been collected through a self-administered Google Forms survey for enhanced accessibility and availability. It has been spread via the university network, social media (such as Instagram and Facebook), and in the form of physical flyers within local areas (especially in proximity to shopping areas). The format chosen is an in-depth survey with a total of 79 questions, of which not all had to be answered by each participant. Depending on their answers to previous questions, respondents are guided to different follow-up questions,

shortening the survey significantly for the individual respondent. The survey remained online for three weeks.

To reach as many respondents as possible and increase their accessibility to this survey, the survey has been devised in two languages separately. For this reason, all 79 questions and the corresponding answer choices have been translated individually from English to German. A small group of bilingual test subjects was then asked to read through both versions and confirm there to be no unnatural wording or translation errors that would result in different understandings of the same question in different languages to maintain neutral phrasing.

3.4 Measurements

3.4.1 Variables by hypothesis

For the assessment of the four different hypotheses, a set of different dependent and independent variables have been used:

H1, which uses mean comparison as an analysis method, puts routine response buying tendency during the lockdowns in relation to the respondents' general routine response tendency outside of the lockdown situation.

H2 uses a binary logistic regression in which social media purchasing tendency during the lockdowns is used as the dependent, and the relative increase in the usage of social media applications during lockdowns as the independent variable.

H3 uses an independent samples t-test as its analysis method, in which offline and online shopping preferring consumers will be separated into two groups (independent binary/grouping variable), and the means for their answers on the importance of texture/feel of the product in impulse purchasing (dependent continuous variable) are compared.

Similarly, the counterhypotheses of *H4* use an independent samples t-test, where consumers are separated into offline impulsive and online impulsive groups (independent binary/grouping variable), and the means for their answers on their impulse purchasing tendency during lockdowns (dependent continuous variable) are compared.

3.4.2 Control variables

The control variables in this analysis are the external factors that have been identified in the theoretical research of this work, to have the potential to influence the buying decision-making process significantly.

IBT

Determining the respondent's individual IBT is an essential control variable when it comes to hypotheses involving impulsiveness. Thus, a lot of thought was put into which scale to choose for measuring the respondents' IBT: The language used in Rook and Fisher's classic single-factor 9-item scale (1995) appears slightly dated and might not sound intuitive to respondents – especially when translating the survey into another language. This may lead to differences in how respondents will react to and thus answer the items. Even though this scale is the most commonly used scale for measuring IBT, some criticism has accumulated around it due to its wording and low factor loading (Kacen & Lee, 2002). Thus, for this research, a more modern adaptation was sought out: Badgaiyan, Verma, and Dixit's two-factor, 8-item scale (2016) is more modern in language, however, for their scale, the authors aimed to create wording that was specifically suited to the Indian, collectivist population upon finding that the Rook and Fisher scale was focused on individualistic, developed countries. Kacen and Lee (2002) argue, in fact, that Rook and Fisher's scale should only be used for surveys conducted with U.S. respondents. After some more research, an IBT scale constructed for research targeting Norwegian respondents was found (Verplanken & Herabadi, 2001). While this scale is less well-known than Rook and Fisher's or Badgaiyan, Verma & Dixit's, it fits the purpose of this work best. The scale uses two factors and 20 items. 20 items are without question too extensive for the scope of this work and survey. Therefore, a shortened version (8 selected items from either factor, that had a high factor loading on a single factor in the EFA (exploratory factor analysis) Verplanken and Herbadi tested in their work will be used for this work's empirical research (factor loading results for Verplanken and Herbadi's original scale, as well as all other mentioned scales, can be found in *Appendix 6: Different IBT assessing scales that had been considered to use in the empirical research*. for reference).

Product Involvement

Product involvement, as was mentioned in *section 2.3.1 - Planning as a factor in consumer purchasing*, measures the interest a consumer has in a specific product or product group. It has been identified as a potential factor in the consumer's degree of planning in their purchasing

strategy (Blackwell, Miniard, & Engel, 2006) and was found to be a deciding factor in product-specific impulsiveness (Jones et al., 2003). Thus, measuring the correlation between product involvement and other variables used in hypotheses concerned with routine problem-solving and impulse purchasing could prove especially insightful. For this variable, a scale was created by the author to befit the context of the product category in question.

Purchase Involvement

Mothersbaugh and Hawkins defined purchase involvement as "the level of concern for, or interest in, the purchase process triggered by the need to consider a particular purchase" (Mothersbaugh & Hawkins, 2010, p. 497). In *section 2.1.3 - Types of Decision-Making*, it has been detailed how several researchers have found there to be a connection between different levels of such involvement and different levels of complexity in the decision-making process. A consumer with a low level of involvement would use little to no research of external information (active information search) as part of their decision-making, and thus, only make low planning efforts before the purchase. To assess a respondent's level of purchase involvement, their level of planning has been assessed drawing from the three levels of planning described in *section 2.3.1 - Planning as a factor in consumer purchasing* in a scale created specifically for this work.

3.5 Data analysis

As for the analysis of the data received through the self-administered online questionnaire, first reliability and validity of all scales is tested using the STATA[3] and SPSS software to determine Cronbach's Alpha and conduct EFA. Descriptive statistics (mean, range, and standard deviation) are determined using SPSS and for the more general statistics like displaying the distribution of demographics in percentage values, Microsoft Excel was found to be the most effective method.

As for the hypotheses testing, different measures will be adopted for each hypothesis due to the varying formats: H1 uses a comparison of answer distributions and means conducted in Excel and an independent samples t-test (conducted in SPSS) as a supplementary proof of

[3] Please note: The analysis for this work has been started using STATA, thus in some instances Cronbach's Alpha has been calculated using it. However, later in the process, SPSS has been identified as the more suitable software option and has therefore been used for most of the analysis instead.

assumption. H2 is tested using binary logistic regression analysis conducted via SPSS. H3 and H4 are tested using independent samples t-tests, also using SPSS.

Finally, in an additional, exploratory approach to this analysis, the influence of the external factors (control variables) on the hypotheses' dependent variables is tested using binary logistic regression and correlational analysis (also utilizing SPSS software).

3.6 Limitations

There are several known limitations to this research format:

Brand Loyalty / Brand predisposition

Brand Loyalty has been shown to have the potential of reducing a consumer's tendency for marketing stimuli-induced impulse purchases for brands that the consumer is not loyal to but increase the impulsive purchasing tendency towards products from the brand they are loyal to. Thus, brand predisposition was added as an external factor to influence the buying decision-making process in the theoretical framework (see *Figure 7*) of this work. However, as there are two potential, contrary outcomes a high brand predisposition can have – impulse strengthening for a brand the consumer is loyal to and impulse weakening for a brand the consumer is not loyal to – it becomes impossible to incorporate this factor as a variable in this quantitative research. Using it as a control variable like the other external factors introduced prior would create confusing and potentially misinterpreted results when tested for correlation with the dependent variables – thus, reducing content validity. In conclusion, this factor can only be taken into consideration in a qualitative research format (e.g., individual interviews) where the consumer is asked how they feel about a specific brand – whether they would describe themselves as loyal towards it, followed by a question about their impulse purchasing tendencies concerning this one brand. In the quantitative survey format that was chosen for this research which has been kept general by not singling out one specific brand, one major limitation was the non-incorporation of brand loyalty as a control variable.

Survey as the research method

Surveys have many advantages over other quantitative and qualitative research methods. First and foremost, they are cost-effective, offer high representativeness, can reach a large variety of audiences, and can be conducted on a large scale within a comparably short amount of time (Queirós, Faria, & Almeida, 2017). This makes surveys an ideal tool for students conducting

research for a thesis. On the other hand, however, surveys dictate a rigid structure and do not allow for emotions or respondents' reasoning behind their answers to be recorded (Queirós, Faria, & Almeida, 2017).

Geographical limitations due to the distribution method of the survey

A large advantage of online administered surveys is that they are easy to globally distribute – and thus, reach a large variety of people with different backgrounds and demographics. Due to the limitations in terms of time, budget, and methods of distribution available to a student, the survey will largely be spread using personal social media and distributing physical flyers in the local community. Thus, a large surplus of German respondents is expected. This bears the risk of one-dimensionality and makes it difficult to generalize statements on a global scale.

Prevalence of mean-comparing analysis methods

Due to the nature of the hypotheses that have been derived in the literature review part, a mean comparison was the appropriate mode of analysis identified for most of them. This method made it difficult to directly test for control variables. While other, conclusive methods to test for the control variables have been adopted, a direct comparison – as can be used in regression analysis – was largely not possible.

4. FINDINGS

4.1 Descriptive Statistics

Out of the 110 respondents of the self-administered online survey, 81.8 percent chose the option to answer it in German. Correspondingly, a large majority of respondents (80.9 percent) answered that they were located in Germany during the COVID-19-related lockdown periods. Another 4.6 percent were located in France, 3.6 percent in Austria, and the remaining 10.9 percent stayed in a variety of different countries (most of which were Central European). As had been expected due to the topic of the survey centering around beauty and cosmetics, a large majority of respondents identified as female (80.9 percent), followed by male (18.2 percent), and only a small minority as genderfluid, non-binary, or other (0.9 percent). It is highly appreciated that except the very outer ones, all age groups have been represented and none stood out with an exceedingly high frequency (see *Table 1* for the age distribution of respondents).

Below 18	18 – 25	26 – 30	31 – 40	41 – 50	51 – 60	Above 60
0.00%	22.73%	34.55%	17.27%	11.82%	12.73%	0.91%

Table 1: Age distribution of respondents.

When asked for the frequency of their beauty and cosmetics product purchases, 1.8 percent answered they did not use products like this at all, and 12.7 percent that they buy them no more than a few times a year. Especially this last number was higher than expected. The 14.5 percent – equaling 16 respondents – who answered this question with either of these answer choices have been excluded from further answering the survey, leaving 94 remaining valid responses – rather than the 100 responses the survey aimed for.

The following shows the descriptive statistics for all dependent, independent, and control variables used:

Variable type & Hypothesis	Description	Survey Item ID	Range	Mean	Standard deviation
Dependent H1	Routine response buying tendency during lockdowns	BB_Q2	(Nominal)		
Dependent H2	Social media purchasing tendency during the lockdowns	SMU2	(Nominal)		
Dependent H3	Relative importance of texture/feel in impulse purchasing	Imp1.a6	4	2.98	1.495
Dependent H4	Impulse purchasing tendency during lockdowns	Imp2	4	2.45	1.206
Independent H1	General routine response tendency	PuI7	4	3.52	0.877
Independent H2	Relative increase in the usage of social media applications during lockdown	SMU1	(Nominal)		
Independent/ Grouping H3	Preference of offline versus online cosmetics purchasing	BB_Ch1-BB_Ch6	4	1.65 – 4.14	0.947 – 1.277
Independent/ Grouping H4	Online versus offline impulse purchasing tendency	Imp1	(Nominal)		
Control	IBT	IBT2-IBT8	4	2.5	0.782
Control	Product Involvement	PI1-PI3	3/4	5.64	1.498
Control	Purchase Involvement	PuI1-PuI6	4	2.55 – 2.92	0.942 – 0.961

Table 2: Variables and hypotheses; descriptive statistics.

A table containing all 79 questions of the survey and their descriptive statistics can be found in *Appendix 7: Empirical Research - Survey Questions & Descriptive Statistics*.

4.2 Reliability and validity

In an effort to reduce measurement errors as much as possible, empirical research needs to assess the reliability and validity of the scales it uses to ascertain characteristics of its respondents. Validity is thereby supposed to verify the accuracy of the scales used and whether they measure what they are supposed to (Hair, Black, Barbin, & Anderson, 2010). The four most important types of validity researchers are usually concerned with, are content validity (extent to which all crucial aspects of the concept are measured), construct validity (adherence of measure to existing theory), face validity (relevance and appropriateness of this measure for what it is assessing), and criterion validity (correspondence to other measures of the same concept) (Winter, 2010). Reliability, on the other hand, is the degree to which the utilized scales offer true values and no errors. In case of different alternatives available, a researcher should always choose the one with the highest measured reliability (Hair, Black, Barbin, & Anderson, 2010). This measures preciseness, meaning how close the individual measure is to the actual measure. These two would increase to drift apart with an increase in deviation, variance, or noise (Winter, 2010).

This empirical research has assessed the external factors/control variables detailed in the research design in the form of different scales. Whereas the scale to assess the respondents' IBT has been derived from prior literature on the topic, due to the specific context of this work. The remaining two scales have been created for this research specifically. Their reliability and validity will be assessed in the following, using Cronbach's Alpha as a measure of reliability and EFA as a measure of validity.

4.2.1 IBT

The scale for IBT had been adopted from Verplanken and Herbadi's (2001) research on impulse behavior and had thus already been tested for internal coherence and reliability by the original researchers (Verplanken & Herbadi, 2001, p.75-78; *Appendix 6*). However, since the scale for this work had been simplified from 20 items down to 8 items and the demography of respondents had been different, testing for reliability was an important step, nonetheless.

Cronbach's Alpha has been calculated using the STATA software to get an overview of all alpha values of the different variables and whether any of the items should be omitted to gain a higher score. The Cronbach's Alpha for the entire IBT scale used in this work's empirical research has been calculated to be 0.8. Further analysis on whether the alpha value would increase if any of the items were to be left showed no significant increase for any of the items. As per the early works of Nunnally (1967) a scale with a 0.8 value can be interpreted as a scale with generally good reliability. The more recent consensus on an acceptable Cronbach's Alpha interpretation, however, rates a scale of 0.8 as one of very good reliability (Streiner, 2003).

Next, an EFA was conducted to test for the scale's validity. Verplanken and Herbadi (2001) found in their research, when creating their 20-item scale, that the items loaded onto two factors which they identified as cognitive and affective factors. For this work's 8-item scale, the items with the highest single-factor loading have been selected from Verplanken and Herabadi's prior research, however upon conducting 1-factor EFA, item *IBT6: I find it difficult to pass up a bargain.* produced a low factor loading of 0.296. Additionally, there were two factors with an Eigenvalue >1. Thus, in accordance with Verplanken and Herabadi's conclusion, a 2-factor matrix was more accurate, therefore the same was tested for this work's 8-item scale as well:

Question	**ID**	**Factor**	
		1 – Cognitive	**2 – Affective**
[I usually only buy things I intended to buy.] **(reverse-coded)**	IBT1	.454	.158
[I often buy things without thinking.]	IBT2	.821	.302
[If I buy something I usually do that spontaneously.]	IBT3	.720	.269
[It is not my style to just buy things.] **(reverse-coded)**	IBT4	.677	-.028
[I am a bit reckless in buying things.]	IBT5	.248	.675
[I find it difficult to pass up a bargain.]	IBT6	-.097	.745
[It is a struggle to leave nice things I see in a shop.]	IBT7	.327	.594
[I sometimes cannot suppress the feeling of wanting to buy something.]	IBT8	.352	.597

Table 3: Rotated 2-Factor Matrix for IBT variable.

Maximum likelihood was used as an extraction method and Kaiser's (1958) varimax rotation, in order to simplify interpretation and inspection. As can be seen in *Table 3*, by using a 2-factor approach as recommended, all variables except IBT1 show a factor loading above 0.55 which is the recommended threshold for a sample size of 100 observations (Hair, Black, Barbin, & Anderson, 2010). IBT1 has thus been omitted in further calculations.

To use the IBT scale as a control variable, the mean value of all remaining 7 items was taken for each response in order to create a score with a 1 to 5 value that can be utilized for further analysis. The mean score for all valid responses was 2.5 on a scale of 1 to 5, placing the average respondent to be on the less impulsive side of the spectrum.

4.2.2 Product Involvement

Early prototyping and sampling of the research survey revealed the test subjects to feel alienized by being presented some of the questions in a Likert-scale format. Due to this negative feedback and in an effort to reduce potential response bias as much as possible, the items in question from the product involvement variable have been adapted to a format that provides more intuitive, nominal answer choices for the respondents to make the answering process feel more natural and thus increase validity. Two of the three items in the product involvement category have therefore been swapped out for multiple-choice questions. These can be translated into continuous scales, however, using a 4-point value system, whereas the remaining, third question uses a 5-point Likert scale. Due to different scale dimensions being used to determine these variables, using a regular Cronbach's Alpha analysis as a reliability measure proved to be not applicable, as using it could have led to biased internal consistency estimates (Shu & Schwarz, 2014). Instead, a standardized Cronbach's Alpha analysis has been conducted using the SPSS software. This analysis utilizes an inter-item correlation matrix (see *Table 4* below) to calculate a standardized Cronbach's Alpha of 0.779. As per Streiner (2003), with this value the scale can still be interpreted as one of good reliability.

	(PI1) How would you describe your interest in beauty and cosmetics products in general?	(PI2) How often do you check on new beauty trends e.g., via blogs, social media etc.?	(PI3) Do you follow any beauty/cosmetics-centric content creators or influencers?
(PI1) How would you describe your interest in beauty and cosmetics products in general?	1.000	.585	.549
(PI2) How often do you check on new beauty trends e.g., via blogs, social media etc.?	.585	1.000	.487
(PI3) Do you follow any beauty/cosmetics-centric content creators or influencers?	.549	.487	1.000

Table 4: Inter-item correlation matrix of PI variables for standardized Cronbach's Alpha calculation.

An initial EFA of the product involvement variables using maximum likelihood as the extraction method and thus utilizing a correlation matrix, resolved the issue of the standardization of the different scale formats. As per *Table 5*, all items loaded either quite or very high on the singular factor and the Eigenvalue of the first item was calculated to be 2.082 with 69.4 percent of variance. This confirms that the three items are groupable under one factor – namely a high product involvement.

Question	ID	Factor loading	Eigenvalue	Initial Eigenvalue % of variance
How would you describe your interest in beauty and cosmetics products in general?	PI1	.812	2.082	69.384
How often do you check on new beauty trends e.g. via blogs, social media etc.?	PI2	.721	0.517	17.229
Do you follow any beauty/cosmetics-centric content creators or influencers?	PI3	.676	0.402	13.387

Table 5: Singular factor loading with Eigenvalue for PI variables.

In order to use the product involvement of a respondent as a control variable, a score has been calculated for each individual observation. Due to the perceived importance (high factor loading on and high Eigenvalue) of PI1, more weight was given to this item in comparison to the other two items. The final score for product involvement has been calculated by giving double weight to the value of PI1 and singular weight to PI2 and PI3 when taking a mean score for all three. The mean of PI2 and PI3 was thus added to the 1 – 5 ranging score of PI1. This created a final score ranging potentially from 2 to 9, with 2 being the lowest possible product involvement and 9 the highest. The mean for the score of all respondents was at 5.64.

4.2.3 Purchase Involvement

Since the purchase involvement scale was designed to indicate the frequency of a consumer using fully planned, partially planned, or unplanned purchasing strategies, a 3-factor EFA using maximum likelihood as the extraction method and a varimax rotation was first adopted to confirm a sufficient factor loading for the three factors in question.

Question	ID	Factor		
How often do you buy beauty or cosmetics products when you…		**1 (fully planned purchasing)**	**2 (unplanned purchasing)**	**3 (partially planned purchasing)**
[…have fully planned which product you need and which brand you want to buy it from before you enter the store or website?]	(PuI1)	.501	-.403	.071
[…know which product(s) you need but check on the available brands and then decide which one to buy?]	(PuI2)	.043	-.043	.782
[…just go to the store or website without thinking and be inspired by what you see there?]	(PuI3)	-.046	.728	.207
[….are on a shopping trip for something else but then impulsively buy a beauty or cosmetics product because of an add display, staff recommendation, product display etc.?]	(PuI4)	-.028	.542	-.038
When deciding to buy a new beauty /cosmetics product how often do you usually…				
[…do a lot of research on available products, trends and brands, compare prices, reviews, etc. before making a final decision?]	(PuI5)	.997	-.051	-.047
[…compare products/brands during your shopping trip before making a purchase?]	(PuI6)	.473	.043	.372

Table 6: Rotated 3-factor matrix for PuI variables.

Factor	Variables	Chronbach's Alpha
1 – Fully Planned Purchasing	PuI1 & PuI5	0.6808
2 – Unplanned Purchasing	PuiI3 & PuI4	0.5839
3 – Partially planned purchasing	PuI2 & PuI6	0.4762

Table 7: Cronbach's Alpha for 3-factor categorization of PuI variables.

For each but one item, the factor loading was as planned. PuI6 having a higher factor loading for factor 1 which correlates with a fully planned purchasing behavior, was unexpected. Rather, it was supposed to load highest for factor 3 – partially planned purchasing behavior.

Upon testing Cronbach's Alpha for the three factors, all of them were below 0.7 which is not unusual seeing as only two variables have been used for either calculation. Whereas the values for factors 1 and 2 are however still within a justifiable range, factor 3 delivers a Cronbach's Alpha value below 0.5.

Not further taking into consideration PuI6 would be a possibility but leave only one item related to factor 3. Instead, a different possible solution was sought out: The most important distinction

PuI needs to make is to whether consumers were tending to use any sort of planning prior to their purchase of cosmetics or if they did not. In other words, another EFA, however this time with only two factors, was conducted with the results seen in *Table 9* (all analysis methods were conducted the same way).

Question	**ID**	**Factor**	
How often do you buy beauty or cosmetics products when you…		**1 (fully or partially planned purchasing)**	**2 (unplanned purchasing)**
[…have fully planned which product you need and which brand you want to buy it from before you enter the store or website?]	(PuI1)	.582	-.297
[…know which product(s) you need but check on the available brands and then decide which one to buy?]	(PuI2)	.119	.139
[…just go to the store or website without thinking and be inspired by what you see there?]	(PuI3)	-.047	.900
[….are on a shopping trip for something else but then impulsively buy a beauty or cosmetics product because of an add display, staff recommendation, product display etc.?]	(PuI4)	-.064	.451
When deciding to buy a new beauty /cosmetics product how often do you usually…			
[…do a lot of research on available products, trends and brands, compare prices, reviews, etc. before making a final decision?]	(PuI5)	.843	-.059
[…compare products/brands during your shopping trip before making a purchase?]	(PuI6)	.540	.126

Table 8: Rotated 2-factor matrix for PuI variables.

All items except PuI2 had a factor loading above 0.45 and could thus be assigned to either factor 1 – planned purchase of any degree or 2 – unplanned purchase. Using this grouping will allow for clearer results in the following control variable testing. Omitting PuI2, Cronbach's Alpha for PuI1, PuI5, and PuI6 lies now at 0.663 which still makes for useable reliability as per Streiner (2003).

The mean of all items from the planned factor 1 and the unplanned factor 2 (PuI2 omitted) was calculated and respondents received a planned purchase tendency (PPT) and an unplanned purchase tendency (UPT) score. The mean for the PPT of all respondents was 2.92 and the mean for the UPT at 2.55 on a scale from 1 to 5. Meaning generally respondents tended to use more planned than unplanned purchase strategies. In order to better work with these results later, respondents were then also parted into one of two groups: Depending on whether their PPT score or their UPT score was higher, they were categorized into either the primarily using

PPT or UPT categories. This resulted in 31 respondents in the UPT and 63 respondents in the PPT group.

4.3 Hypotheses Testing

H1: During the COVID-19-related lockdowns and the resulting forced online-shopping period, beauty and cosmetics consumers were more prone to use routine response behavior/nominal decision-making.

In order to test this hypothesis, this work will make use of results from the survey item *BB_Q2: Would you say you generally bought different brands during or since the lockdowns than you did before the COVID pandemic?* as a measure of consumers' qualitative buying behavior during the COVID-19 pandemic, which, due to its nominal, multiple choice questioning format, will allow for conclusions on the consumers' routine response behavior. These results then will need to be compared to the respondents' pre-COVID-19 routine response behavior. This was measured through survey item *PuI7: When deciding to buy a new beauty /cosmetics product how often do you usually… […just buy what you already know is good?]* which had to be answered in a Likert-scale format.

The results from BB_Q2 showed that 70.21 percent of respondents either only bought products or brands they had previous experience with during the pandemic.

Results of BB_Q2 by answer	
No, I only bought from brands that I had bought from before, even if I didn't know the specific product prior.	22.34%
No, I only bought products I already knew worked for me.	47.87%
Yes, I generally bought less expensive brands during the lockdowns.	5.32%
Yes, I generally bought more expensive brands that promise better quality.	8.51%
Yes, I tried a new brand/some new brands that I found out about during the lockdown situation.	7.45%
Yes, I tried some new brands I wanted to try since a long time.	8.51%
Grand Total	**100.00%**

Table 9: Distribution of answer choices for survey item BB_Q2.

However, an independent samples t-test confirmed that there was a significant mean difference between respondents who portrayed a high or low tendency for routine response behavior pre-COVID (mean difference 0.54; t-value 2.83; p-value 0.006). Thus, these respondents needed to be accounted for in order to understand how high the ratio of respondents who changed their behavior during the COVID-19-related lockdowns actually was. Subtracting the respondents who answered "agree" or "rather agree" for PuI7, the percentage of respondents who answered

in BB_Q2 they only bought products or brands they had previous experience with during the pandemic declined, as was expected due to the prior conducted t-test. However, the final result still counts 59.09 percent of respondents who do not show routine response tendency outside of the COVID-19 pandemic and still responded they only bought brands or products they had experience with during the lockdowns.

Results of BB_Q2 by answer – omitting all respondents displaying routine response behavior pre-COVID	
No, I only bought from brands that I had bought from before, even if I didn't know the specific product prior.	29.55%
No, I only bought products I already knew worked for me.	29.55%
Yes, I generally bought less expensive brands during the lockdowns.	2.27%
Yes, I generally bought more expensive brands that promise better quality.	15.91%
Yes, I tried a new brand/some new brands that I found out about during the lockdown situation.	11.36%
Yes, I tried some new brands I wanted to try since a long time.	11.36%
Grand Total	**100.00%**

Table 10: Distribution of answer choices for survey item BB_Q2 after omitting respondents who showed routine behavior tendencies pre-COVID.

While a very simple method of surveying and analysis, this method was identified as the most effective for hypothesis H1. As per the results of the questionnaire, H1 is being supported.

H2 – Due to a rise in social media usage during the COVID-19 pandemic, beauty consumers bought more products through the medium of social media applications.

In order to assess the strength of relationship between the individual increase in social media usage and a potential increase in social media purchases during the COVID-19 related lockdown, a regression analysis has been conducted. Both survey items used for this analysis, *SMU1: Would you say you used social media applications (Facebook, Twitter, Instagram, Pinterest, TikTok, Twitch, YouTube etc.) more often during the pandemic-related lockdowns on a daily basis?* And *SMU2: When comparing your buying behavior in the lockdown periods versus before, would you say that you have been buying more beauty and cosmetics products through social media applications?* offered nominal answer choices. In order to be able to conduct the analysis, SMU1 was transformed into a continuous scale from 0 (No increase in social media activity) to 4 (Over 3 hours more social media usage than pre-lockdown) and SMU2 into a dichotomous scale with the dummy values 0 (for all respondents who answered they have never before engaged in social commerce and those who answered they have used it before but did not use it more during the lockdown periods) and 1 (for all respondents who answered they used social commerce for the first time or significantly more during lockdown periods). Using SMU2 as the dependent and SMU1 as the independent variable, a binary

logistic regression analysis has been chosen to analyze the relationship between the two variables. For this type of analysis, a minimum sample size of 50 observations is recommended (Field, 2013). The significance of the omnibus test was at 0.036. Since the test result is <0.05 the utilized model outperforms the null model and can thus be interpreted as suited for this analysis (Garson, 2014). The Hosmer and Lemeshow test had a significance of 0.574. As it is >0.05 the model's variance can be interpreted as not significant and thus suited for this analysis (Garson, 2014). As per the classification table, the overall accuracy rate of this model is good, with a rate of 81.9 percent and an especially high sensitivity in the prediction of people who did not buy more cosmetics products via social media channels.

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
								Lower	Upper
Step 1[a]	**Would you say you used social media applications (Facebook, Twitter, Instagram, Pinterest, TikTok, Twitch, YouTube etc.) more often during the pandemic-related lockdowns on a daily basis?**	.421	.207	4.146	1	.042	1.524	1.016	2.287
	Constant	-2.37	.543	18.964	1	<.001	.094		

a. Variable(s) entered on step 1: Would you say you used social media applications (Facebook, Twitter, Instagram, Pinterest, TikTok, Twitch, YouTube etc.) more often during the pandemic-related lockdowns on a daily basis?.

Table 11: Binary logistic regression results for H2.

The results depicted in *Table 11* can be interpreted as follows: The influence of the independent variable on the dependent one can be interpreted as significant, since the t-value of 0.042 is <0.05 (Garson, 2014). Since the regression coefficient B is positive, it can be interpreted that for every 1 unit the independent variable (increase in social media activity during lockdown) increases, there is a positive influence on the probability of the dependent variable being 1 rather than 0 (meaning the probability that the respondent's social media purchasing tendency increased during lockdown). Further, as per the odd's ratio of 1.524, for each 1 unit the independent variable increases, the probability that the dependent variable is 1 will increase by 50.24 percent. Finally, since the upper and lower values of the 95% confidence interval are above 1, a significantly positive effect can be assumed (Garson, 2014).

Summarizing, this means that a significant, positive relationship between increased social media activity during the lockdown periods and an increase in social commerce during these periods has been proven. Hence, H2 is supported by this analysis.

H3: To consumers who prefer offline over online shopping, the texture and feel of the product are a major factor in offline impulse purchase decisions.

In order to test for this hypothesis, an independent samples t-test has been conducted. As the dependent variable, survey item *Imp1.a6: What do you think mostly influences you buying more than you planned when you are in a physical shop environment? [I often try out products in-store and buy them impulsively when I like the texture/feel.]* has been selected. Respondents answered this question on a 5-point Likert scale from 1 – disagree to 5 – agree. As for the grouping variable, respondents have been categorized into two separate groups, the offline-preferring and the online-preferring group. These groups have been devised by using survey items BB_Ch1-6 which asked respondents about the channels they usually (outside of the COVID-19-related lockdown periods) prefer to buy their cosmetics and beauty products from. Respondents with a higher mean score for online channels were grouped in the "online-preferring" group, whereas respondents with a higher mean score for offline channels have been grouped in the "offline-preferring" category.

The results of the t-test were as follows:

Question	Group pre-covid	Mean	Std. Deviation	Std. Error Mean
Imp1.a6: What do you think mostly influences you buying more than you planned when you are in a physical shop environment? [I often try out products in-store and buy them impulsively when I like the texture/feel.]	**offline**	2.76	1.53	.284
	online	3.32	1.42	.325

Table 12: T-test results for H3.

As can be seen in the table above, contrary to the hypothesis, the mean and therefore the importance of texture/feel as a factor in impulse purchases, is higher for the online than for the offline group. In order to inspect whether there is a significant difference between these two means, Lavene's test for equality has been conducted. The test indicated a sufficiently high significance of 0.48 and coupled with the similar standard deviation of the two groups, this leads to the conclusion that equal variances can be assumed for this analysis (Gastwirth, Gel, & Miao, 2010). The t-value was at -1.231 and freedom df = 46. The p-value was at 0.21, and thus above the determined confidence level of 0.05, which leads to the acceptance of the null hypothesis that the mean score between the groups is not significantly different. The confidence interval of 95% is between -1.44 and 0.33, whereas the mean difference between the two groups

is -0.56. Thus, one can be 95% confident that the actual difference in the importance of texture/feel of the product as a factor to impulsive purchases between the two groups is between the two values mentioned prior, and therefore a significant difference between the two means cannot be proven.

This leads to the conclusion, that H3 is not supported, but the contrary is not supported either.

H4.a: Cosmetics and beauty consumers buy less impulsively when shopping online and therefore, bought less impulsively during COVID-19-related lockdowns. / H4.b: Cosmetics and beauty consumers buy more impulsively when shopping online and therefore, bought more impulsively during COVID-19-related lockdowns.

Survey item *Imp1: Which of the following generally describes your online buying behavior of beauty/cosmetics products best?* will be used in order to determine the respondents' impulsiveness during their cosmetics purchases. Respondents were able to choose whether they feel they buy more impulsively online, offline, or whether they do not see a difference in their online/offline buying behavior. Thus, respondents have already been categorized into three separate groups during the survey.

51 percent of respondents answered that they buy less impulsively online, 36 percent that they see no difference between their on- and offline impulsiveness and only 13 percent felt they buy more impulsively online. It can thus be concluded that consumers generally buy beauty and cosmetics products less impulsively online.

Survey item *Imp2* asked respondents how much they agreed with the sentiment *"I bought more impulsively during the COVID-19-related lockdown periods."* On a Likert scale from 1 – disagree to 5 – agree. The mean of the results was 2.45, with a standard deviation of 1.206. The left leaning bell curve of the normal distribution (skewness = 0.466) (Hair, Hult, Ringle, & Sarstedt, 2014) hinted that respondents felt less impulsive in their cosmetics and beauty purchases during lockdown periods.

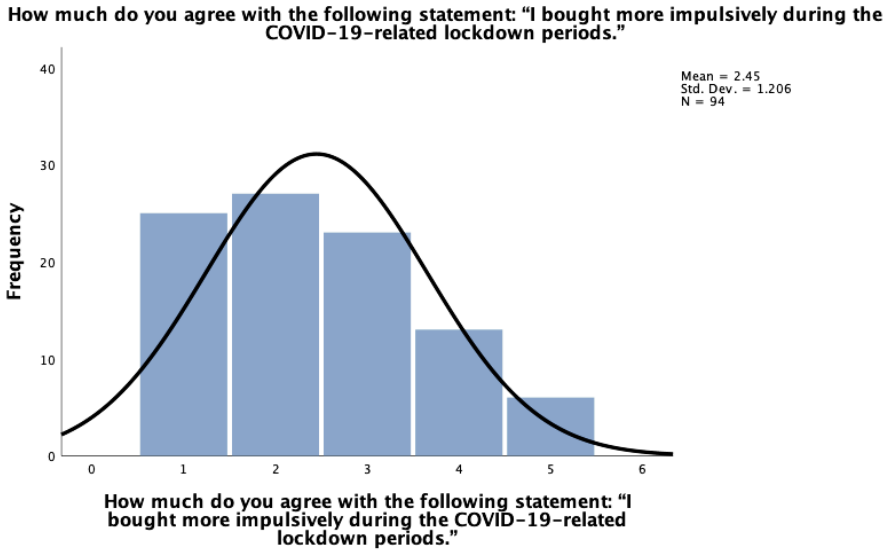


Figure 9: Normal distribution curve of H4 dependent variable Imp2; created using SPSS.

Finally, an independent samples t-test was conducted to compare the item's mean values of the online-impulsive group against the offline-impulsive group, in order to prove whether there is or is not a connection between the reduced impulsiveness during the lockdowns and the reduced online-shopping impulsiveness. The results were as follows:

Question	Group pre-covid	Mean	Std. Deviation	Std. Error Mean
How much do you agree with the following statement: "I bought more impulsively during the COVID-19-related lockdown periods."	**Less impulsive online**	2.38	1.142	.165
	More impulsive online	2.75	1.485	.429

Table 13: T-test results for H4.

When comparing the means, it can be concluded that the group who self-reported to be less impulsive during online purchases as compared to offline purchases, had a lower mean score for item Imp2 – implying that they also purchased less impulsively during the lockdowns. Lavene's test for equality has been conducted, in order to verify whether this difference in means is in fact significant: The test indicated a sufficient significance of 0.142 and the standard deviation of the two groups was rather similar as well, leading to the conclusion that equal variances can be assumed for this analysis (Gastwirth, Gel, & Miao, 2010). The t-value was at -0.957 and freedom df = 58. The p-value was at 0.343, and thus above the determined confidence of 0.05, which leads to the acceptance of the null hypothesis that the mean score between the groups is not significantly different. The confidence interval of 95% is between -1.159 and 0.409, whereas the mean difference between the two groups is -0.375. One can

therefore be 95% confident that the actual difference in the purchase impulsiveness of beauty products during the COVID-19 lockdown periods regarding the two groups is between the two values mentioned prior, and therefore it cannot be said that there is a significant difference between the two means. This leads to the following conclusion about hypotheses H4.a and H4.b:

H4.a is supported partially, as it has been proven that consumers of beauty and cosmetics products generally buy less impulsively when shopping online. However, there is no significant correlation between decreased online impulsiveness and decreased impulsiveness during the COVID-19-related lockdowns.

H4.b is not supported by the results of the analysis.

Concluding the hypothesis testing, the following results have been observed:

Hypothesis	**Result**
H1: During the COVID-19-related lockdowns and the resulting forced online-shopping period, beauty and cosmetics consumers where more prone to use routine response behavior/nominal decision-making.	**Supported**
H2: Due to a rise in social media usage during the COVID-19 pandemic, beauty consumers bought more products through the medium of social media applications.	**Supported**
H3: To consumers who prefer offline over online shopping, the texture and feel of the product are a major factor in offline impulse purchase decisions.	**Not supported**
H4.a: Cosmetics and beauty consumers buy less impulsively when shopping online and therefore, bought less impulsively during COVID-19-related lockdowns.	**Partially supported**
H4.b: Cosmetics and beauty consumers buy more impulsively when shopping online and therefore, bought more impulsively during COVID-19-related lockdowns.	**Not supported**

Table 14: Summarizing table of support for hypotheses.

4.4 Control Variable Testing

In addition to the testing of the hypotheses by themselves, this work decided to further test the influence of external factors on the dependent variables of the four hypotheses, to be able to make more encompassing statements in the following discussion part. For this purpose, regression and correlational analysis were used, when possible. Correlational analysis is criticized for not allowing direct cause-effect statements and that it is unable to deliver conclusive reasons for the correlation (Queirós, Faria, & Almeida, 2017). This was not detrimental to the testing of these control variables, however, as the purpose of this analysis is

to simply add to the already existing cause-effect statements made through the hypotheses testing and to add more content to guide the direction of future research.

H1

In order to test whether there is a connection of significance between respondents' routine response behavior during the lockdowns, and the control variables, a binary logistic regression analysis was conducted. Therefore, the dependent variable of H1, BB_Q2, was split into binary dummy variables of 1 - "routine response behavior" and 0 - "no routine response behavior".

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
								Lower	Upper
Step 1[a]	**IBT Mean**	-.499	.347	2.070	1	.150	.607	.308	1.198
	PI Score	-.174	.183	.906	1	.341	.840	.588	1.202
	PuI Unplanned	-.343	.300	1.307	1	.253	.710	.395	1.277
	PuI Planned	-.084	.277	.092	1	.762	.919	.534	1.583
	Constant	4.309	1.389	9.623	1	.002	74.342		
a. Variable(s) entered on step 1: IBT Mean, PI Score, PuI Unplanned, PuI Planned.									

Table 15: Binary logistic regression for control variable testing of H1.

As per the result of this analysis, none of the control variables showed to have a t-value below 0.05.

Thus, none of the control variables can be proven to have a significant effect on whether respondents did or did not use routine response behavior during the COVID-19 related lockdowns.

H2

To research the influence of the control variables on H2, the binary logistic regression conducted in the hypothesis testing was repeated, however this time including the control variables.

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
								Lower	Upper
Step 1[a]	**Would you say you used social media applications (Facebook, Twitter, Instagram, Pinterest, TikTok, Twitch,**	.290	.254	1.311	1	.252	1.337	.813	2.197

	YouTube etc.) more often during the pandemic-related lockdowns on a daily basis?								
	IBT Mean	.440	.462	.907	1	.341	1.553	.628	3.843
	PI Score	.819	.279	8.595	1	.003	2.269	1.312	3.923
	PuI Unplanned	-.274	.390	.492	1	.483	.760	.354	1.635
	PuI Planned	-.064	.363	.031	1	.860	.938	.461	1.909
	Constant	-7.41	1.927	14.759	1	<.001	.001		

a. Variable(s) entered on step 1: Would you say you used social media applications (Facebook, Twitter, Instagram, Pinterest, TikTok, Twitch, YouTube etc.) more often during the pandemic-related lockdowns on a daily basis?, IBT Mean, PI Score, PuI Unplanned, PuI Planned.

Table 16: Binary logistic regression for control variable testing of H2.

From the analysis, it can be deduced that PI had a very significant effect on the dependent variable SMU2, with a t-value of 0.003.

The effect is strongly positive and, thus, implies a very high possibility that a respondent who increased their social media purchasing during lockdown, has a high product involvement.

H3

For H3 and H4 it was possible to conduct a correlation analysis between the dependent variable and the control variables. Thus, a Pearson correlation was conducted to verify whether the control variables are correlated to the dependent variable Imp1.a6.

As was explained in *section 4.2.3 - Purchase Involvement*, the Purchase Involvement variable has been grouped into two categories due to the preferable 2-factor loading: Unplanned (UPT) and planned purchase tendency (PPT). Thus, for each observation, a UPT and a PPT score has been calculated, using the mean of either category for each individual. Therefore, PuI is represented in two different categories in this correlation analysis: UPT and PPT.

		Imp1.a6	**IBT**	**PI**	**PuI (UPT)**	**PuI (PPT)**
Imp1.a6: What do you think mostly influences you buying more than you planned when you are in a physical shop environment? [I often try out products in-store and buy them impulsively when I like the texture/feel.]	Pearson Correlation	1	.282	.093	.365*	.123
	Sig. (2-tailed)		.052	.529	.011	.405

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

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

Table 17: Pearson correlation results for control variable testing of H3.

As can be seen in the table above, only UPT showed any significant correlation with the dependent variable.

This implies a correlation between low purchase involvement and a high importance texture/feel in impulse decisions.

H4

Similar to H3, for H4 a Pearson correlation has been conducted to determine the correlation between the hypothesis' dependent variable Imp2, and the control variables. The same measures for PPT and UPT were applied.

		Imp2	IBT	PI	PuI (UPT)	PuI (PPT)
Imp2: How much do you agree with the following statement: "I bought more impulsively during the COVID-19-related lockdown periods."	Pearson Correlation	1	.358**	.220*	.265**	-.022
	Sig. (2-tailed)		<.001	.033	.010	.832

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
Table 18: Pearson correlation results for control variable testing of H4.

As can be seen in the table above, IBT, PI, and UPT are all significantly correlated to the dependent variable Imp2.

This implies a correlation between high IBT, high product involvement, and low purchase involvement with increased impulse purchases during lockdowns.

5. DISCUSSION & CONCLUSIONS

5.1 Discussion of findings by hypotheses

H1 was shown to be clearly supported by the data collected, by showing that a majority of consumers used routine response purchasing behavior during lockdown, despite not showing such tendencies outside of the lockdown periods. Thus, the evidence supports the conclusion drawn from the theoretical research, that consumers rely heavily on personal experience when using online channels to purchase. This effect is enhanced by the existence of mental costs associated with the purchase of cosmetic products, as they are usually non-refundable upon purchase (as compared to other retail products e.g., apparel, which usually can be return or refunded upon dissatisfaction with the product). The findings are thus in line with the research

conducted by Shaukat, Kamran and Syed (2018) and Lu and Liu (2018) (see *section 2.1.2 - The adapted Engel-Kollat-Blackwell (EKB) Consumer Decision Process Model* and *section 2.1.3 - Types of Decision-Making*).

The analysis of H2 found a clear correlation between the increase in social media usage and an increase in social commerce of cosmetics and beauty products. As the hypothesis was built upon an increase in social media activity during the lockdowns as measured by Business Insider and eMarketer in the US population (see *Appendix 5*; Statista, 2022b), one worry for this hypothesis was that the measured increase differed largely for the Central European population which this research mainly focused on. However, the similarities in results between the two geographies are quite remarkable: The aforementioned research found that 29.7 percent of respondents self-reported to use social media applications approx. 1-2 hours more during the coronavirus pandemic than before; 20 percent answered 2-3 hours, 17.9 percent above 3 hours and 32.3 percent below 1 hour (the research results did not display the share of respondents who did not increase their social media usage). This work's empirical research of the Central European demographic (upon removing the respondents that answered they did not increase their social media usage at all) found very similar results (see *Figure 10* below).

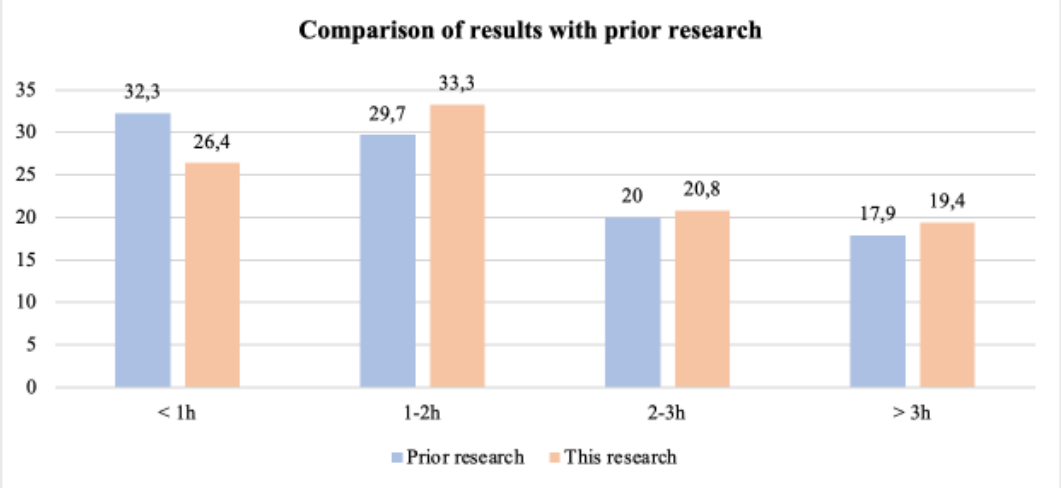


Figure 10: Comparison of results of own research conducted in Central Europe and prior research by eMarketer (Appendix 5; Statista, 2022b).

Since social media usage increased similarly for both demographics this leads to assume that, potentially, the increase in social commerce of beauty products may have also risen similarly in both geographical areas. Confirmatory research in this area could prove highly interesting due to the large market size of beauty and cosmetics products in the US (Statista, 2022a). Additionally, the rise in social commerce was found to correlate with product involvement, meaning interest in beauty and cosmetics products, not however with IBT and UPT. This means

that there is a high possibility that social commerce of cosmetics is not connected to impulse purchasing, as had been assumed in the theoretical chapter.

H3 has been disproven, with no evidence that offline channel-preferring shoppers might be more succinct to the texture and feel of a product in their impulse purchasing. This hypothesis was created leaning on research from McCabe and Nowli (2003) which found that products, where the texture or feel are of importance to the consumer, had a higher chance of being bought when the consumer had had the opportunity to physically hold it in hand (see *section 2.3.3 - Online Impulse Buying*). The disproving of this hypothesis could mean one of two things: The hypothesis assumed a natural extension of McCabe and Howli's findings – which had not taken planning behavior into account – toward impulse behavior. Either this extension was unwarranted or, as the respondents self-reported in the survey conducted for this work, consumers are not entirely aware of the reasons pushing them toward an impulse purchase. Hussain et al. (2021) discussed this possibility in their work and came to the conclusion that the passage of time between the impulse purchase in question and the researcher's questioning might be decisive, as consumers easily forgot or repressed their spur-of-the-moment reasoning for purchasing an item on impulse. Thus, results may have been skewed by the passage of time. The second possible explanation for the disproving of H3 may be that the importance of texture and feel of cosmetics and beauty products was never of high importance to the consumers, to begin with. Studies concerned with researching the importance of different factors in cosmetics purchases, tend to focus on intangible factors such as image, price, quality (Anjana, 2018; Bharathi & Dinesh, 2018), a sustainability aspect (Singhal & Malik, 2018; Fonseca-Santos, Corrêa, & Chorilli, 2015; Tang, Wang, & Lu, 2014) or the safety of ingredients (Ross, 2006; Fonseca-Santos, Corrêa, & Chorilli, 2015); the only tangible factor found as a prior researched factor, was packaging (Anjana, 2018; Weber & Capitant de Villebonne, 2002). Thus, there is an apparent research gap discussing the relative importance or insignificance of the texture and feel of cosmetics products in the consumer's purchasing decision-making.

Additionally, the control variable testing found a correlation between unplanned buying behavior and the importance of feel/texture in impulse decisions. This is interesting especially since there was no correlation found between this importance and IBT. This means that consumers who tend to buy cosmetics without much prior planning – meaning those who make their decision in the physical or online shop and not so before – are most likely to put importance on the texture and feel as a discerning factor in their decision-making.

Concerning the counterhypotheses of H4.a, H4.b has been disproven entirely whereas H4.a could only be proven to be supported partially. Clear evidence was found that consumers of beauty and cosmetics products behave in fact more impulsive in their offline shopping trips. There is also evidence that consumers bought less impulsively during the COVID-19 lockdowns. However, no significant connection was found between the decreased online impulsiveness and the generally decreased impulsiveness during the lockdowns.

Upon reviewing some other results from the conducted survey, the reason for this disconnect becomes apparent: *Table 19* shows the descriptive statistics of the survey items BB_Ch1-6 which inquired about consumers' beauty/cosmetics shopping habits pre-COVID, whereas *Table 20* shows those of items BB_Ch7-9 which inquired about shopping habits during the lockdown periods. In connection to their own buying behavior and the forced online migration due to the lockdown periods, respondents clearly showed to be favoring drugstores and supermarkets as their channel of choice before, as well as during the lockdowns. On a Likert scale from 1 – disagree to 5 – agree, the mean value for the item *BB_Ch1: I usually buy my cosmetics and beauty products from… [the drugstore/supermarket].* was 4.14 – the highest in the entire category.

ID	Question	Scale Type	N	Range	Mean	Standard Deviation
BB_Ch1	I usually buy my cosmetics and beauty products from… [Drugstore/Supermarket]	Continuous	94	4	4.14	.968
BB_Ch2	I usually buy my cosmetics and beauty products from… [Perfumery/Cosmetics retailer]	Continuous	94	4	2.51	1.189
BB_Ch3	I usually buy my cosmetics and beauty products from… [Brand flagship store]	Continuous	94	4	1.91	1.104
BB_Ch4	I usually buy my cosmetics and beauty products from… [Beautician/hair dresser/similar specialist]	Continuous	94	4	1.65	.947
BB_Ch5	I usually buy my cosmetics and beauty products from… [E-retailer]	Continuous	94	4	2.69	1.146
BB_Ch6	I usually buy my cosmetics and beauty products from… [E-shop of a specific brand/brand website]	Continuous	94	4	2.30	1.277

Table 19: Comparing table of mean answer results of survey items BB_Ch1-6.

Comparing these values to those of the answers of the scale "*During lockdown periods, I purchased my cosmetics/beauty products from…*" (*BB_Ch7-9*), it is remarkable to see almost

all channels seeing a decline in the mean. The only channel that rose in popularity were the e-retailers.

ID	Question	Scale Type	N	Range	Mean	Standard Deviation
BB_Ch7	During lockdown periods, I purchased my cosmetics/beauty products from… [Drugstore/Supermarket]	Continuous	94	4	3.71	1.215
BB_Ch8	During lockdown periods, I purchased my cosmetics/beauty products from… [E-retailer]	Continuous	94	4	2.88	1.310
BB_Ch9	During lockdown periods, I purchased my cosmetics/beauty products from… [E-shop of a specific brand/brand website]	Continuous	94	4	2.12	1.390

Table 20: Comparing table of mean answer results of survey items BB_Ch7-9.

These results are in line with the research from McKinsey & Company introduced in the introduction of this thesis, which found that the drop in in-store sales was not caught entirely by the channels remaining open to consumers during the lockdowns (Gerstell, Marchessou, Schmidt, & Spagnuolo, 2020). Consumers have evidently bought fewer cosmetics and beauty products during the lockdown periods (A&M Consumer and Retail Group, 2021). The data from this work's survey suggests the same going by the channel usage introduced above and the evidence from item BB_Q1 which found that 48 percent of respondents self-reported to have bought fewer beauty products during the lockdowns for various reasons.

Another reason to explain the contradiction of H4.a is the large popularity of drugstores and supermarkets as a channel to buy cosmetics products among the respondents. Despite the sinking mean between BB_Ch1 and BB_Ch7, drugstores and supermarkets were evidently still the most popular available choice as a sales channel during the COVID lockdowns. Seeing as over 80 percent of respondents resided in Germany during the lockdown periods (see *section 4.1 - Descriptive Statistics*), this makes sense, as any type of non-restaurant store that sells food[4] or other essential items could stay in business throughout the entire pandemic (BBC News, 2020). The largest drugstore chains in Germany, Rossmann, dm, and Müller offer large varieties of low-cost makeup, skin, and personal care (in the case of Müller, some high-end and organic brands are sold in flagship stores as well) (ref. Müller Handels GmbH & Co. KG, 2022; Dirk Rossmann GmbH und Rossmann Online GmbH, 2022; dm-drogerie markt GmbH

[4] Note: In Germany, drugstores sell a small variety of packaged food items. Mostly items with focus on health or athletics, as well as bottled beverages.

+ Co. KG, 2022). This means that consumers had an offline alternative to purchase their cosmetics products during the lockdowns, which, according to the survey findings, was very attractive to consumers. Thus, even if consumers act generally less impulsive online, they were able to purchase cosmetics offline – in drugstores – during the lockdown. Therefore, no connection between the dependent and independent variables could be proven.

Additionally, the control variable testing showed evidence that an increase in impulsiveness during the COVID-19 lockdown periods correlates with high IBT, high product involvement and low purchase involvement. The correlation with IBT was to be expected – high impulsive buying tendency equals an increased tendency to buy impulsively during lockdown. The correlation with a high product involvement is very interesting. It implies that consumers who are very interested in cosmetics and beauty products tended to be more impulsive during the lockdown periods as well. This also reflects in the discussion on H2, where a positive effect of product involvement on social commerce was found. Thus, there could potentially be a tendency of beauty enthusiasts to buy more impulsively online during lockdowns – or in other words, during periods when they are confined in their hobbies and passions. This is however purely an assumption made upon interpreting the evidence found through this research. More profound future research concerning this topic may prove very insightful. A correlation with low purchase involvement has also been found. This correlation, however, is quite contradictive and difficult to assume a reason for. As correlation analyses are never entirely causal, there is the possibility that this is in fact a spurious correlation – meaning a third, unknown variable might exist that skews the results (Haig, 2011). Further research on this topic is certainly recommended.

5.2 Discussion of findings by research question

The main research question, this work aimed to answer was *How have the COVID-19 crisis-related store closures impacted the buying decision-making process of beauty consumers?*

To better structure the research and answering process of this question, four sub-research questions have been posed, which will be answered in the following using the findings discussed above:

SQ1: How is the buying decision-making process structured within the consumer's mind and what are the specific external influences relevant to the process?

Many different interpretations and depictions of the decision-making process can be found in the existing literature. Two such models have been introduced in the literature review of this work. However, these classical theories do not take the full impact of online marketing stimuli and online purchasing channels into account. Additionally, as impulse purchases are often not seen as part of the decision-making process, they are usually not accounted for in classical models. This is due to the fact that an impulse decision does not require prior information search and decision-making, thus it does not adhere to the normal decision-making process. An impulse decision is however still a decision and leads to a purchase, which is why this work believes firmly it needs to have a place in an explanatory model of the process. The expanded theoretical framework (*Figure 7* attached again *below* for better accessibility) used for this thesis was derived as an encompassing model to capture all of these influences. As such this work simplifies the structure of the decision-making process:

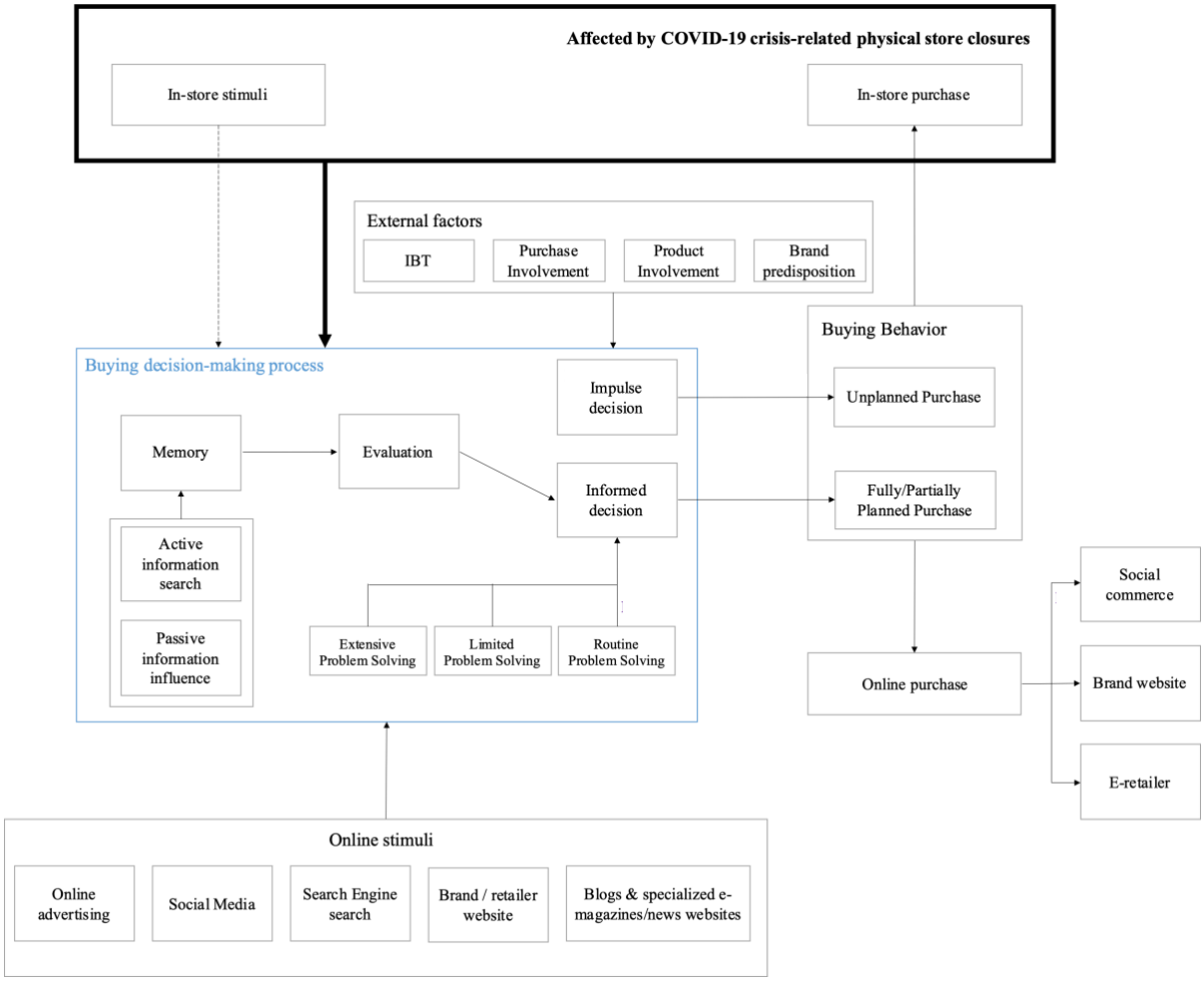


Figure 7 (repeated): Thesis theoretical framework; concept by author.

Information Search (active or passive influence from stimuli) → saved in Memory → Evaluation process to determine the product of choice → informed decision under the usage of

extensive/limited/routine problem solving → planned or partially planned purchase in an online or offline environment.

An ad-hoc in-store or impulse decision stands apart from this process and results in an unplanned purchase.

The factors that can influence the decision-making process are marketing stimuli on one hand and factors specific to the individual on the other hand. These factors are dubbed as *external* here (as they are external to the decision-making process) and researchers have found a large variety of factors belonging to this category. For the limited scope of this work, the factors that were identified to have the most impact and were found easiest to measure in the empirical research, were IBT, product involvement, purchase involvement, and brand predisposition (more such external factors have been detailed in the *sections 2.1.1*, *2.1.2* and *2.3.2*).

SQ 2: How has the consumers' information search behavior been impacted by the COVID-19 pandemic?

Consumers' active search behavior has not been found to be impacted majorly by the lockdowns. There is no prior research connected to changing information search behavior of product information pre- and during lockdowns. When asked in the conducted survey only a minority of respondents answered that their information search habits have significantly changed. Seeing as social media consumption has increased largely during the lockdowns, however, passive marketing stimulation through this channel also increased for consumers. This is evident in the measured increase in social commerce during the lockdown periods and the calculated correlation between the increase in social media usage and the increase in social commerce.

SQ 3: How strong is the influence of impulse buying as compared to informed buying on the (beauty) consumer? And are impulse buying decisions influenced by the forced online migration of consumers?

The evidence from prior research on the ratio of unplanned to planned purchases in cosmetics and beauty shoppers is quite inconclusive. Clover (1950, as cited in West, 1950) found that the sales channel mattered greatly in impulse purchasing and found results varying between 24 and 62 percent depending on which sales channel he monitored. Almost 30 years later, the Point-of-Purchase Advertising Institute found that 61 percent of all beauty products were bought impulsively (POPAI/DuPont Studies, 1987, as cited in Iyer, 1989). They did not compare different sales channels. However, neither of these sources can be called significant to today's

omnichannel offer of beauty and cosmetics products. More recent research on the topic of beauty and cosmetics products specifically is not available but strongly recommended. The reason for this sparseness of available research is most likely the level of difficulty of the empirical research methods required. Consumers would need to be asked right after their purchase whether or not the purchased cosmetics products were bought on impulse or if the purchase was planned. Asking them at a much later time would falsify their responses (Hussain et al., 2021).

In this research, the best way to measure whether consumers favored impulse or planned purchases, was to ask about tendencies, rather than specific shopping trips. While these results are not as conclusive as the percentage of products bought on impulse, it is a useful tool to gain a general understanding of the decision-making situation, as is. As a result of the survey, consumers showed to favor fully or partially planned purchasing strategies over unplanned ones when it came to cosmetics. Each respondent received a score for their unplanned and their planned behavior. The higher of the two scores put them into either the *unplanned* or the *planned* purchase preferring group. As a result, 63 respondents were categorized under the planned purchase preferring and only 31 under the unplanned purchase preferring group. While not directly comparable to the research results of Clover and POPAI/DuPont, it shows that there is most definitely a contradiction here and the number of impulse purchases today may in fact be much lower than what Clover and POPAI found in the past.

The follow-up question to the impact of impulse buying generally, was whether the forced online migration influenced impulse buying behavior. The answer to this is yes and no. There is most definitely a difference between online and offline environments for consumers when it comes to impulse purchases. The respondents of the survey conducted for this work were asked whether they felt that they generally bought more or less impulsively online. And a majority of 51 percent of respondents answered that they buy less impulsively online (compared to 36 percent that they see no difference between their on- and offline impulsiveness, and 13 percent who felt they buy more impulsively online). Thus, consumers behave more impulsively in a physical in-store environment. The major reason cited for this impulsiveness was a sense of happiness and joy, when physically shopping – as compared to shopping online.

Therefore, if consumers would be forced to migrate to online shopping this impulsiveness may decrease as well, was the hypothesis of this work. A majority of respondents answered they bought less impulsively during the lockdown periods. However, as detailed in *section 5.1* above, no correlation was found due to the prevalence of drugstores and supermarkets as an alternative

physical shopping environment in Germany. Consumers highly in favor of physical shopping were able to visit these stores rather than shop online if they preferred, thus no connection could be detected between online impulsiveness and impulsiveness during COVID-19 lockdowns.

SQ 4: How was the consumer's buying behavior impacted in terms of quantity and quality of the purchase?

The following has been found through this work's research: Buying behavior has generally turned more towards routine response behavior during the lockdowns, as consumers associate higher mental costs with the purchase of cosmetics products still unknown to them. This means that consumers generally reverted back to predominantly buying the products and/or brands they already have personal experience with.

Online sales channels have naturally seen increases in popularity during lockdown periods. However, surprisingly, brand websites and online shops seem to have been left behind with consumers preferring e-retailers over one-brand online stores.

Due to an increase in the use of social media for entertainment, but also as a tool in the external information search stage of the decision-making process, social commerce has been found to have increased during the lockdown periods.

It has been found that the large majority of consumers buy more impulsively offline, which however had no direct influence on consumers' impulsiveness during the lockdown periods. That does not change the fact that 55.3 percent of respondents answered they bought less impulsively during lockdowns and only 20.2 percent answered they bought more impulsively.

In terms of the impact on the quality of purchases during lockdowns, an evaluation of survey item *BB_Q2: Would you say you generally bought different brands during or since the lockdowns than you did before the COVID pandemic?* found that the ratio of respondents who answered they deliberately bought more expensive products during lockdown to the respondents who answered they bought generally less expensive items, was 3:1. Thus we see a tendency of consumers reaching for more expensive products when confronted with higher mental costs during the lockdown.

When asked about their buying habits during lockdown in terms of quantity, 43.6 percent of respondents answered they bought about as much as before the lockdowns, 47.9 percent answered they bought less and only 8.5 percent said they bought more. Respondents who answered they bought less were further asked for their reasons (on a 5-point Likert scale). The most common reason, with a mean of 3.73 was that consumers felt like they did not require as

much quantity due to lifestyle changes. Next, with a mean of 2.59 was being unable to try the product on one's own skin and being uncomfortable with the process of online purchasing cosmetics with a mean of 2.51. Being unable to receive the advice of beauty staff or beauticians was the least chosen option with a mean of 1.84.

5.3 Practical Implications

A major motivation to conduct this study was to be able to derive implications for management, to accommodate the swiftly changing sales environment of the beauty and cosmetics industry. While specifically the COVID-19-related lockdowns were the subject of this study, the results bear great implications for the digitalization efforts of beauty and cosmetics companies.

An important piece of information that this research found, for marketers specifically, is that consumers' routine response behavior increases with the increasing prevalence of web-driven sales models. Consumers of cosmetics and beauty products feel less confident to buy new products when they are unable to see and potentially try them out in a physical store environment. This information needs to be considered in the product development of new products, but especially when thinking about the promotion of a new product in an online environment. Marketers should center their considerations around the questions "How to provide a sense of safety for the consumer buying this product? How to take away their fear of buying something new online?"

Further, this work found a clear increase in social commerce during the lockdown periods linked to a general increase in the usage of social media. The fact that many consumers were introduced to the social commerce concept for the first time during lockdown periods opens great opportunities for social media marketing even after the COVID-19 crisis. Seeing as the majority of the survey respondents resided in Germany during lockdowns, this raises some implications, especially for businesses in this country: Germany is surprisingly far behind other Central European countries in terms of digitalization. This fact is especially noticeable in SMEs where the integration of digital technologies lags the furthest behind (Płóciennik, 2021). The Digital Economy and Society Index DESI (European Commision, 2022) traditionally places Germany closer to Eastern than Northern European countries in its ranking of the best-developed digital economies in the EU. In 2022, the country was ranked 13th out of 27 – just barely above the EU average. Similarly, the European Center for Digital Competitiveness (European Center for Digital Competitiveness, 2021) ranks digital risers in terms of their digital

mindset and ecosystems relative to the prior year. The 2021 report scores Germany with a -176 – the second lowest score in all of Europe, and also second lowest within the G7. Neighboring countries such as Belgium (+34), France (+28), Denmark (+14), The Netherlands (-4), Switzerland (-35), and Austria (-40) all scored significantly better than Germany. Thus, the digital mindset of companies tends to lag behind the international competition. Seeing this trend of social commerce gain momentum, even within the traditionally brick & mortar-heavy beauty industry, German companies – management and marketers specifically – need to revisit their social media marketing strategies and adjust them according to the trends.

Additionally, this work found results for an increase in social media usage during lockdown, which was very similar to prior research on this topic conducted with US consumers (see *Appendix 5, Figure 10;* Statista, 2022b). This thus raises the possibility that social commerce also increased during lockdowns in the US. According to Statista's 2021 Consumer Market Outlook (2022a), the US is by far the largest market for beauty and personal care products in the world, with a revenue of $80.2 Bn in 2021 (followed by China with $51.7 Bn and Japan with $37.8 Bn). Thus, a potential increase in social commerce needs to be assessed timely and the development of this trend should be monitored closely, as marketing efforts will need to be adjusted accordingly. Further research on this topic is highly recommended.

While H4 was only found to be supported partially, there was evidence of beauty consumers buying more impulsively offline (as compared to online). While impulse purchases have traditionally the most implications for low-cost groceries and snack items (such as gum, chocolate, etc.) (Stern, 1962) marketers cannot underestimate the importance of impulse purchases of beauty items. In his pioneering study on impulse buying, Hawkins Stern (1962) concluded that impulse buying is purely conceptual, irrational, and thus impossible for marketers to influence (Stern, 1962, p. 62). Over time many researchers have taken to study this very phenomenon and with their studies, we have become clearer as to what the potential triggers for impulse purchases are, how likely they are to occur, and thus how to potentially influence consumers to buy more impulsively (see *section 2.3.2 - Key factors in stimulating impulse buying*). The empirical study conducted for this work has included a section in its survey asking consumers to self-report what they believe to be the reasons for their own increased impulsive behavior. Interestingly, the most common answer was a feeling of happiness or comfort that enticed the shoppers to buy more than they originally planned. While these results are congruent with prior research (ref. Beatty & Ferrell, 1998; Chang & Eckman, 2011; Sundström et al., 2013), there has also been evidence from prior research that the

opposite – namely feelings of unhappiness (Rook & Gardner, 1993; Sundström et al., 2013) and time pressure (Iram & Chacharkar, 2017) – is true. For this opposite reasoning, however, this research finds no evidence. Survey respondents feeling they tend to be more specific in online environments also feel strongly that the large variety of products available online contributes to their impulse behavior. This should provide insights for marketers for both their online and offline sales channels: A sense of comfort and happiness is most significant to enhance impulse buying tendencies – no matter if the shopper buys on- or offline. This sentiment should be reflected in store layouts and online shop aesthetics and considered further with regard to customer service and staff training.

Finally, consumers have been found to generally buy fewer cosmetics and beauty products during the COVID-19-related lockdowns. The most prominent reason for this change in behavior was a reduced need for such products due to the forced changes to lifestyle during lockdown periods. The majority of consumers also agreed with the notion of buying less due to feeling uncomfortable with the online shopping process of cosmetics and not being able to test the products on their own skin. Thus, these reasons should be taken into consideration in the online rollouts of new products in the future.

5.4 Limitations and Further Research

A major limitation of this research was its focus on Central European and specifically German consumers. Thus, similar research in different geographical areas – especially the US due to the size of their beauty and cosmetics market – may prove useful.

Another limitation was the usage of a quantitative survey format as the mode of research. This made some lines of questioning impossible. A qualitative research approach could include a brand predisposition aspect and ask for respondents' reasoning and emotions.

Further, this research was conducted in an exploratory manner with a wide theoretical scope to understand the decision-making process as a whole. There are several aspects that were found in the findings of this research that this work recommends conducting further in-depth research about:

Firstly, impulse purchasing behavior in cosmetics and beauty purchases is a largely overlooked topic. The latest, conclusive empirical research was conducted in 1978 when online channels were not yet available, but sales channels such as TV infomercials prevailed. Research asking

individual consumers directly post-purchase about their impulse behavior should prove the most accurate if resource-consuming method.

This work has found that consumers are more impulsive in their purchasing of cosmetics in an offline environment. Respondents were asked about their reasons as part of the survey and the answers were pointing toward happiness as a deciding factor in impulse decision-making. This topic should be researched further, as the results will bear direct implications for marketing efforts.

This work hypothesized texture and feel of cosmetics to be relevant in impulse decision-making but could not find evidence to support this hypothesis. This bore the question of how important texture and feel are to beauty consumers in their normal buying decision-making process. Research has not covered this topic yet, however, empirical results would bear great implications for product development processes.

In its comparative research regarding the buying habits of consumers pre- and during COVID-19-related lockdowns, online e-retailers were found to have surged in popularity among consumers. Brand websites and online shops had been expected to see a similar rise in popularity, but instead, it decreased. This phenomenon should be looked into further in a dedicated research approach.

Finally, multiple correlations between the dependent variables and external factors have been identified. While correlation analysis is not conclusive, there were some interesting findings among these correlations that should be looked into in-depth. The most prominent one was that a connection was found between product involvement and impulsive online purchasing behavior, implying that high interest in a product category could result in increased online purchasing (as compared to using offline channels). This would bear interesting implications for online marketers.

REFERENCES

A&M Consumer and Retail Group. (2021). *Beauty in the Next Normal.* Survey, Alvarez & Marsal.

Accenture. (2022, January). *Shopping on Social Media Platforms Expected to Reach $1.2 Trillion Globally by 2025, New Accenture Study Finds*. Retrieved July 2022, from newsroom.accenture.com: https://newsroom.accenture.com/news/shopping-on-social-media-platforms-expected-to-reach-1-2-trillion-globally-by-2025-new-accenture-study-finds.html.

Ahmed, H., & Riaz, H. (2018). Impact of Store Environment on Impulse Buying (A case of International Modern Trade Retailers in Karachi). *KASBIT Business Journals*, 11(1), 57-76.

Akram, U., Hui, P., Khan, M. K., Hashim, M., & Rasheed, S. (2016). Impact of Store Atmosphere on Impulse Buying Behaviour: Moderating Effect of Demographic Variables. *International Journal of u- and e- Service, Science and Technology*, 9(7), 43-60.

Anjana, S. S. (2018). A study on factors influencing cosmetic buying behavior of consumers. *International Journal of Pure and Applied Mathematics*, 118(9), 453-459.

App Annie (now: data.ai). (2021). *The Evolution of Social Media Apps.* Retrieved June 2022, from data.ai: https://dataai.infogram.com/1pmrg199wrmd76s3gpw7gr9w5dbz91z2x9d.

Aragoncillo, L., & Orús, C. (2018). Impulse buying behaviour: an online-offline comparative and the impact of social media. *Spanish Journal of Marketing - ESIC*, 22(1), 42-62.

Badgaiyan, A. J., & Verma, A. (2015). Does urge to buy impulsively differ from impulsive buying behaviour? Assessing the impact of situational factors. *Journal of Retailing and Consumer Services*, 22, 145-157.

Badgaiyan, A. J., Verma, A., & Dixit, S. (2016). Impulsive buying tendency: Measuring important relationships with a new perspective and an indigenous scale. *IIBM Management Review*, 28(4), 1-14.

Baker, J., Parasuraman, A., Grewal, D., & Voss, G. B. (2002). The influence of multiple store environment cues on perceived merchandise value and patronage intentions. *Journal of Marketing*, 66(2), 120-141.

Bashar, A., Ahmad, I., & Wasi, M. (2012). A study of the influence of demographic factors on consumer impulse buying behavior. *International Journal of Management and Strategy*, 3(5), 1-18.

Baumeister, R. F. (2002). Yielding to Temptation: Self-Control Failure, Impulsive Purchasing, and Consumer Behavior. *Journal of Consumer Research*, 28(4), 670-676.

BBC News. (2020, December 13). *Coronavirus: Germany to go into lockdown over Christmas*. Retrieved from BBC News: https://www.bbc.com/news/world-europe-55292614

Beatty, S., & Ferrell, M. (1998). Impulse Buying: Modeling Its Precursors. *Journal of Retailing*, 74, 169-191.

Bento, A. I., Nguyen, T., Wing, C., Lozano-Rojas, F., Ahn, Y.-Y., & Simon, K. (2020). Evidence from internet search data shows information-seeking responses to news of local COVID-19 cases. *Proceedings of the National Academy of Sciences of the United States of America (PNAS)*, 117(21), 11220-11222.

Bharathi, D., & Dinesh, G. P. (2018). Female Consumer: Importance of Cosmetics and Beautification in their buying. *Journal of Emerging Technologies and Innovative Research*, 5(8), 1017-1021.

Blackwell, R. D., Miniard, P. W., & Engel, J. F. (2006). *Consumer Behavior* (10th Ed.). Mason, OH, USA: Thomson South-Western.

Borgardt, E. (2017). Motivation and Consumer Behaviour. *Konsumpcja I Rozwój*, 4(21), 5-22.

Brady, M. K., & Cronin, J. J. (2016). Some new thoughts on conceptualizing perceived service quality: A hierarchical approach. *Journal of Marketing*, 65(3), 34-49.

Bundeskartellamt. (2018, February). Online advertising. *Competition and Consumer Protection in the Digital Economy*, pp. 1-10.

Chang, H.-J., & Eckman, M. (2011). Application of the Stimulus-Organism-Response model to the retail environment: the role of hedonic motivation in impulse buying behavior. *The International Review of Retail, Distribution and Consumer Research*, 21(3), 233-249.

Chrysochou, P. (2017). Consumer Behavior Research Methods. In G. Emilien, R. Weitkunat, & F. Lüdicke, *Consumer Perception of Product Risks and Benefits* (pp. 409-428). Cham: Springer.

Chuchu, T., Venter de Villiers, M., & Chinomona, R. (2018). The influence of store environment on brand attitude, brand experience and purchase intention. *South African Journal of Business Management*, 49(1), 1-8.

Clark, K., & Belk, R. W. (1979). The Effects of Product Involvement and Task Definition on Anticipated Consumer Effort. In A. A. William L. Wilkie, NA - Advances in Consumer Research (Vol. 6). MI: *Association for Consumer Research*.

Clover, V. T. (1950). Relative Importance of Impulse-Buying in Retail Stores. In J. West, RESULTS OF TWO YEARS OF STUDY INTO IMPULSE BUYING (pp. 362-363). Montreal: *The Journal of Marketing*.

Cobb, C. J., & Hoyer, W. D. (1986). Planned versus impulse purchase behavior. *Journal of Retailing*, 62(4), 384-409.

Cohen, A. (2020, July 31). *Why Only 10% of Beauty Sales are Online, and How to Fix the Consumer "Trust Gap"*. Retrieved September 2022, from Rockwater: https://wearerockwater.com/how-beauty-brands-can-close-the-digital-sales-gap/.

d'Astous, A., Bensouda, I., & Guindon, J. (1989). A Re-Examination of Consumer Decision Making For a Repeat Purchase Product: Variations in Product Importance and Purchase Frequency. *Advances in Consumer Research*, 16, 433-438.

Dawson, S., & Kim, M. (2009). External and internal trigger cues of impulse buying online. *Direct Marketing: An International Journal*, 3(1), 20-34.

De', R., Pandey, N., & Pal, A. (2020). Impact of digital surge during Covid-19 pandemic: A viewpoint on research and practice. *International Journal of Information Management*, 55.

Dirk Rossmann GmbH und Rossmann Online GmbH. (2022). *Make-Up*. Retrieved August 2022, from Rossmann.de: https://www.rossmann.de/de/make-up/c/olcat1_1.

dm-drogerie markt GmbH + Co. KG. (2022). *Make-Up*. Retrieved August 2022, from dm.de: https://www.dm.de/make-up.

ECDC (European Centre for Disease Prevention and Control). (2022, August 25). *Data on country response measures to COVID-19*. Retrieved September 2022, from ECDC: https://www.ecdc.europa.eu/en/publications-data/download-data-response-measures-covid-19.

Engel, J. F., Kollat, D. T., & Blackwell, R. D. (1968). *Consumer behavior*. New York: Holt, Rinehart and Winston.

European Center for Digital Competitiveness. (2021). Digital Riser Report 2021. Berlin: ESCP Business School.

European Commission. (2022). *The Digital Economy and Society Index (DESI).* Retrieved September 2022, from European Commission: https://digital-strategy.ec.europa.eu/en/policies/desi.

Field, A. P. (2013). *Discovering statistics using SPSS: and sex and drugs and rock'n'roll* (4th Ed.). London: Sage.

Fonseca-Santos, B., Corrêa, M. A., & Chorilli, M. (2015). Sustainability, natural and organic cosmetics: consumer, products, efficacy, toxicological and regulatory considerations. *Brazilian Journal of Pharmaceutical Sciences*, 51(1), 17-26.

Garson, G. D. (2014). *Logistic Regression: Binary & Multinominal.* Asheboro: Statistical Associates Publishing.

Gastwirth, J., Gel, Y. R., & Miao, W. (2010). The Impact of Levene's Test of Equality of Variances on Statistical Theory and Practice. *Statistical Science*, 24(3), 343-360.

Gerstell, E., Marchessou, S., Schmidt, J., & Spagnuolo, E. (2020). How COVID-19 is changing the world of beauty. McKinsey & Company.

Google Trends. (2022). *Compare Interest over Time.* Retrieved July 2022, from trends.google.com: https://trends.google.com/trends/explore?date=today%205-y&q=best%20beauty%20products,beauty%20trends,makeup%20trends.

Google/Ipsos. (2018). *Omnichannel Holiday Study*. US.

Greenfield, D. N. (1999). Psychological characteristics of compulsive internet use: a preliminary analysis. *Cyberpsychology & Behavior*, 2(5), 403-412.

GWI. (2022). The global media landscape. In R. Schwarz, *Why Social Media Marketing Will Only Become More Popular In The Beauty Industry In 2022*. Retrieved June 2022, from Forbes: https://www.forbes.com/sites/forbescommunicationscouncil/2022/02/15/why-social-media-marketing-will-only-become-more-popular-in-the-beauty-industry-in-2022/?sh=97ce4372bb35.

Haider N, Osman AY, Gadzekpo A, et al. (2020). Lockdown measures in response to COVID-19 in nine sub-Saharan African countries. *BMJ Global Health*, 5(10).

Haig, B. (2011). Spurious Correlation. In N. J. Salkind, *Encyclopedia of Measurement and Statistics* (pp. 938-940). Thousand Oaks, California: Sage Publications Inc.

Hair, J. F., Black, W. C., Barbin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis (7th Ed.)*. New York: Prentice Hall International.

Hair, J. F., Hult, T. M., Ringle, C., & Sarstedt, M. (2014). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. Los Angeles: Sage.

Hausman, A. (2000). A multi-method investigation of consumer motivations in impulse buying behavior. *Journal of Consumer Marketing*, 17(5), 403-426.

Howard Sheth Model – 4 Components, 3 Levels, and Limitations. (2021). Retrieved June 2022, from neostrom: https://neostrom.in/howard-sheth-model/#:~:text=Another%20drawback%20is%20that%20in,the%20majority%20of%20marketing%20strategies.

Howard, J. A., & Sheth, J. N. (1969). The Theory of Buyer Behavior. *Journal of the American Statistical Association*, 467-487.

Husnain, M., Rehman, B., Syed, F., & Akhtar, M. W. (2019). Personal and in-store factors influencing impulse buying behavior among generation Y consumers of small cities. *Business Perspectives and Research*, 7(1), 92-107.

Hussain, A., Ali, Z., Ullah, M., & Rasool, F. (2021). A structured literature review on impulse buying: Online jitters and offline jeepers. *Humanities & Social Sciences Reviews*, 9(3), 37-49.

IAB Europe. (2022). *ADEX BENCHMARK 2021 STUDY.* Retrieved July 2022, from IAB Europe: https://iabeurope.eu/wp-content/uploads/2022/06/IAB-Europe_AdEx-Benchmark-2021_v2.pdf.

Inman, J. J., & Winer, R. S. (2009). The Interplay Among Category Characteristics, Customer Characteristics, and Customer Activities on In-Store Decision Making. *Journal of Marketing*, 73, 19-29.

Iram, M., & Chacharkar, D. D. (2017). Model of Impulse Buying Behavior. *BVIMSR's Journal of Management Research*, 9(1), 45-53.

Jones, M. E., Reynolds, K. E., Weun, S., & Beatty, S. E. (2003). The product-specific nature of impulse buying tendency. *Journal of Business Research*, 56, 505-511.

Kacen, J. J. (2003). Bricks and clicks and the buying impulse: an investigation of consumer impulse buying behavior in an online and traditional retail environment". *European Advances in Consumer Research*, 6, 271-276.

Kacen, J. J., & Lee, J. A. (2002). The influence of culture on consumer impulsive buying behavior. *Journal of Consumer Psychology*, 12(2), 163-176.

Kaiser, H. F. (1958). The varimax criterion for analytic rotation in factor analysis. Psychometricka, 23, 187-200.

Klarna. (2019). The Beauty Confidential Report. Survey.

Klarna. (2021, March 30). New Klarna survey finds Boomers value sustainability more than Gen Z when shopping beauty brands. Retrieved April 2022, from Klarna.com: https://www.klarna.com/international/press/new-klarna-survey-finds-boomers-value-sustainability-more-than-gen-z-when-shopping-beauty-brands/.

Kollat, D. T., & Willett, R. P. (1967). Customer Impulse Purchasing Behavior. *Journal of Marketing Research*, 4(1), 21-31.

Kotler, P., & Armstrong, G. (1991). *Principles of marketing*. Englewood Cliffs, N.J.: Prentice Hall.

Kotler, P. (1974). Atmospherics as a Marketing Tool. *Journal of Retailing*, 49(4), 48-64.

Krugman, H. E. (1967). The Measurement of Advertising Involvement. *The Public Opinion Quarterly*, 30(4), 583-596.

LaRose, R. (2001). On the negative effects of e-commerce: a sociocognitive exploration of unregulated on-line buying. *Journal of Computer-Mediated Communication*, 6(3).

Liu, Y., Li, H., & Hu, F. (2013). Website attributes in urging online impulse purchase: An empirical investigation on consumer perceptions. *Decision Support Systems*, 55, 829-837.

Lu, Y., & Liu, X. (2018) Chinese female preference of cosmetic products information channels. *Global Knowledge Memory and Communication*, 67(4), 166-179.

Lu, Y., Lu, Y., & Wang, B. (2012). Effects of Dissatisfaction on Customer Repurchase Decisions in E-Commerce. *Journal of Electronic Commerce Research*, 13(3), 224-237.

MarketLine. (2022). *Beauty + Cosmetics Industry Analysis*. Retrieved September 2022, from: https://advantage-marketline-

com.skema.idm.oclc.org/Analysis?reporttype=5902&q%5B%5D=beauty+cosmetics&IsSearchApi=true&exactword=1.

Mary Kay. (2022). *Sell Mary Kay.* Retrieved August 2022, from marykay.com: https://www.marykay.com/en-us/sell-mary-kay.

MBA Skool. (2022, February 26). *Estée Lauder Porter Five Forces Analysis*. Retrieved June 2022, from mbaskool.com: https://www.mbaskool.com/five-forces-analysis/companies/18338-estee-lauder.html.

McCabe, D. B., & Nowlis, S. M. (2003). The Effect of Examining Actual Products or Product Descriptions on Consumer Preference. *Journal of Consumer Psychology*, 13(4), 431-439.

Mihic, M., & Kursan, I. (2010). Assessing the Situational Factors and Impulsive Buying Behavior: Market Segmentation Approach. *Management*, 15, 47-66.

Mohan, G., Sivakumaran, B., & Sharma, P. (2012). Impact of store environment on impulse buying behavior. *European Journal of Marketing*, 47(10), 1711-1732.

Mohiuddin, Z. A., & Iqbal, H. (2018). Relationship of Demographic Factors and Impulse Buying Behavior of Customers in Pakistan. *Journal of Marketing and Consumer Research*, 46, 43-46.

Mothersbaugh, D. L., & Hawkins, D. I. (2010). *Consumer Behavior: Building Marketing Strategy* (11th ed.). Bosten: McGraw Hill Irwin.

Müller Handels GmbH & Co. KG. (2022). *Parfümerie*. Retrieved August 2022, from Müller.de: https://www.mueller.de/parfuemerie/

Nicosia Model of Consumer Behaviour and its Limitations. (2021). Retrieved June 2022, from neostrom: https://neostrom.in/nicosia-model/.

Nicosia, F. M. (1966). *Consumer Decision Processes: Marketing and Advertising Implications.* N.J: Prentice-Hall: Englewood Cliffs.

Nunnally, J. C. (1967). *Psychometric Theory* (1st Ed.). New York: McGraw-Hill.

Park, C. W., Iyer, E. S., & Smith, D. C. (1989). The Effects of Situational Factors on In-Store Grocery Shopping Behavior: The Role of Store Environment and Time Available for Shopping. *Journal of Consumer Research*, 15(4), 422-433.

Park, E. J., Kim, E. Y., Funches, V. M., & Foxx, W. (2012). Apparel product attributes, web browsing, and e-impulse buying on shopping websites. *Journal of Business Research*, 65(1), 1583-1589.

Płóciennik, S. (2021, 11 22). *Digitalization in Germany: an overview and what lies behind the delays.* Retrieved September 2022, from OSW - Centre for Eastern Studies: https://www.osw.waw.pl/en/publikacje/osw-commentary/2021-11-22/digitalisation-germany-overview-and-what-lies-behind-delays

POPAI/duPont Studies. (1987). Marketing Emphasis. Product Marketing, 65(1), 61-64.

Puri, R. (1996). Measuring and modifying consumer impulsiveness: a cost–benefit accessibility framework. *Journal of Consumer Psychology*, 5(2), 87-113.

Queirós, A., Faria, D., & Almeida, F. (2017). STRENGTHS AND LIMITATIONS OF QUALITATIVE AND QUANTITATIVE RESEARCH METHODS. *European Journal of Education Studies*, 3(9), 369-382.

Rook, D. W. (1987). The Buying Impulse. *Journal of Consumer Research*, 14(2), 189–199.

Rook, D. W., & Fisher, R. J. (1995). Normative Influences on Impulsive Buying Behavior. *Journal of Consumer Research*, 22, 305-313.

Rook, D. W., & Gardner, M. P. (1993). In the mood: Impulse buying's affective antecedents. *Research in Consumer Behavior*, 6(7), 1-28.

Rosenman, R., Tennekoon, V., & Hill, L. (2011). Measuring bias in self-reported data. *International Journal of Behavioural and Healthcare Research*, 320-332.

Ross, E. (2021, October 29). *Intangible Values: The Secret To A Brand's Success*. Retrieved August 2022, from Forbes.com: https://www.forbes.com/sites/forbesagencycouncil/2021/10/29/intangible-values-the-secret-to-a-brands-success/?sh=14dee692df54.

Ross, G. (2006). A Perspective on the Safety of Cosmetic Products: A Position Paper of The American Council on Science and Health. *International Journal of Toxicology*, 25(4).

Shaukat, A., Kamran, A., & Syed, N. A. (2018). Consumers Online Purchase Intention Towards Cosmetic Products in Karachi. *Journal of Social Sciences and Media Studies*, 2(2), 20-34.

Sherman, E., Marthur, A., & Smith, R. B. (1997). Store environment and consumer purchase behavior: mediating role of consumer emotions. *Psychology and Marketing*, 14(4), 361-379.

Shu, L., & Schwarz, R. D. (2014). IRT-Estimated Reliability for Tests Containing Mixed Item Formats. *Journal of Educational Measurement*, 51(2), 163-177.

Singhal, A., & Malik, G. (2018). The attitude and purchasing of female consumers towards green marketing related to cosmetic industry. *Journal of Science and Technology Policy Management*, 12(3), 514-531.

Statista. (2022a). *Worldwide Beauty And Personal Care Market Revenue 2013-2026*. Consumer Market Outlook, Statista.

Statista. (2022b). *Coronavirus: impact on social media usage worldwide*. Retrieved June 2022, from Statista: https://www.statista.com/study/86189/social-media-use-during-the-covid-19-pandemic-worldwide/.

Stern, H. (1962). The Significance of Impulse Buying Today. Journal of Marketing, 26(2), 59-62.

Streiner, D. L. (2003). Starting at the Beginning: An Introduction to Coefficient Alpha and Internal Consistency. *Journal of Personality Assessment*, 80(1), 99-103.

Sundström, M., Balkow, J., Florhed, J., Tjernström, M., & Wadenfors, P. (2013). *Impulsive Buying Behaviour: The Role of Feelings When Shopping for Online Fashion*. EAERCD. Valencia.

Tang, Y., Wang, X., & Lu, P. (2014). Chinese consumer attitude and purchase intent towards green products. *Asia-Pacific Journal of Business Administration*, 6(2), 84-96.

The Engel Kollat Blackwell Model of Consumer Behavior. (2021). Retrieved June 2022, from mbaknol: https://www.mbaknol.com/marketing-management/the-engel-kollat-blackwell-model-of-consumer-behavior/.

Valentine, O. (2019, July 11). *How social media is reshaping the beauty industry*. Retrieved April 2022, from We are Social (GlobalWebIndex): https://wearesocial.com/us/blog/2019/07/how-social-media-is-reshaping-the-beauty-industry/.

Verhagen, T., & van Dolen, W. (2011). The influence of online store beliefs on consumer online impulse buying: A model and empirical application. *Information & Management*, 48, 320-327.

Verplanken, B., & Herabadi, A. G. (2001). Individual Differences in Impulse Buying Tendency: Feeling and No Thinking. *European Journal of Personality*, 15(1), 71-83.

Weber, J. M., & Capitant de Villebonne, J. (2002). Differences in purchase behavior between France and the USA: the cosmetic industry. *Journal of Fashion Marketing and Management*, 6(4), 396-407.

Wells, J. D., Parboteeah, V., & Valacich, J. S. (2011). Online Impulse Buying: Understanding the Interplay between Consumer Impulsiveness and Website Quality. *Journal of the Association for Information Systems*, 12(1), 32-56.

WHO. (2022, September 14). *Weekly epidemiological update on COVID-19 - 14 September 2022*. Retrieved September, 2022, from WHO.int: https://www.who.int/publications/m/item/weekly-epidemiological-update-on-covid-19---14-september-2022.

Winter, F. (2010). Validity and Reliability. *Wiley International Encyclopedia of Marketing*.

Wood, M. (1998). Socio-economic status, delay of gratification, and impulse buying. *Journal of Economic Psychology*, 19(3), 295-320.

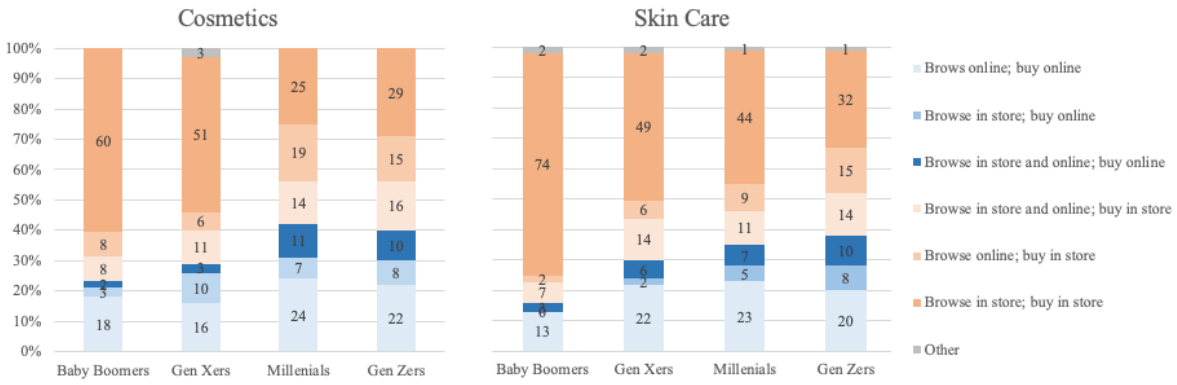
Wong, J. (2021, December 3). The Latest E-Commerce Trend: What You Need To Know About Social Commerce. Retrieved September 2022, from Forbes: https://www.forbes.com/sites/forbescommunicationscouncil/2021/12/03/the-latest-e-commerce-trend-what-you-need-to-know-about-social-commerce/?sh=2e9481fe753b.

Wu, P.-T., & Lee, C.-J. (2016). Impulse buying behaviour in cosmetics marketing activities. *Total Quality Management & Business Excellence*, 27(9-10), 1091-1111.

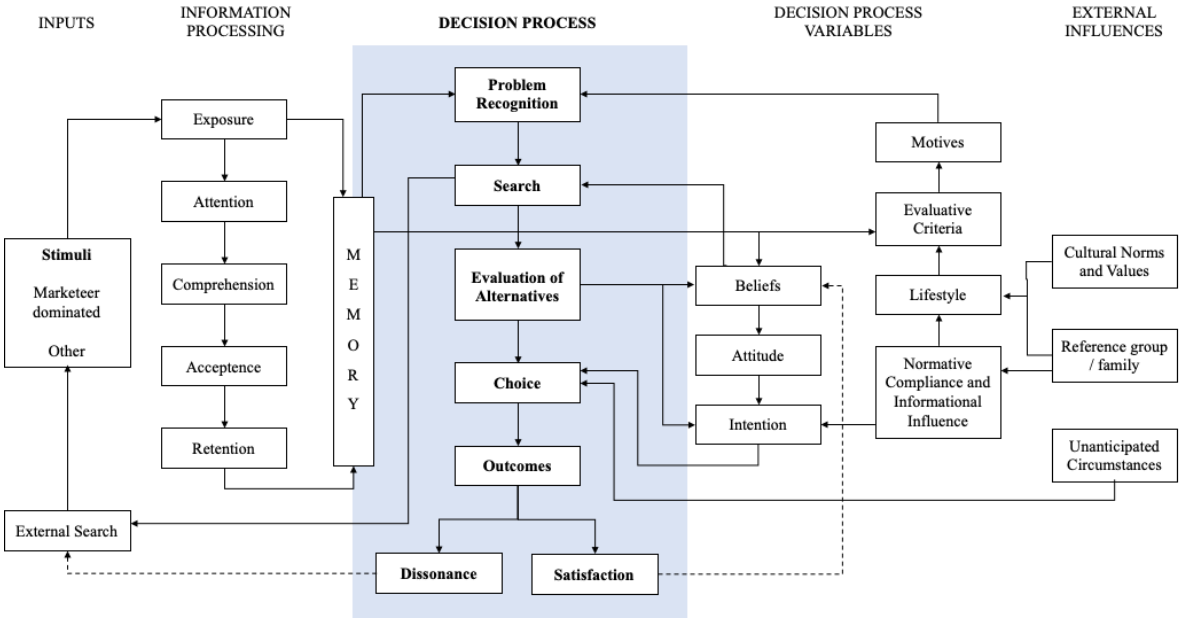
Zaichkowsky, J. L. (1985). Measuring the Involvement Construct. *Journal of Consumer Research*, 12(3), 341-352.

APPENDIX

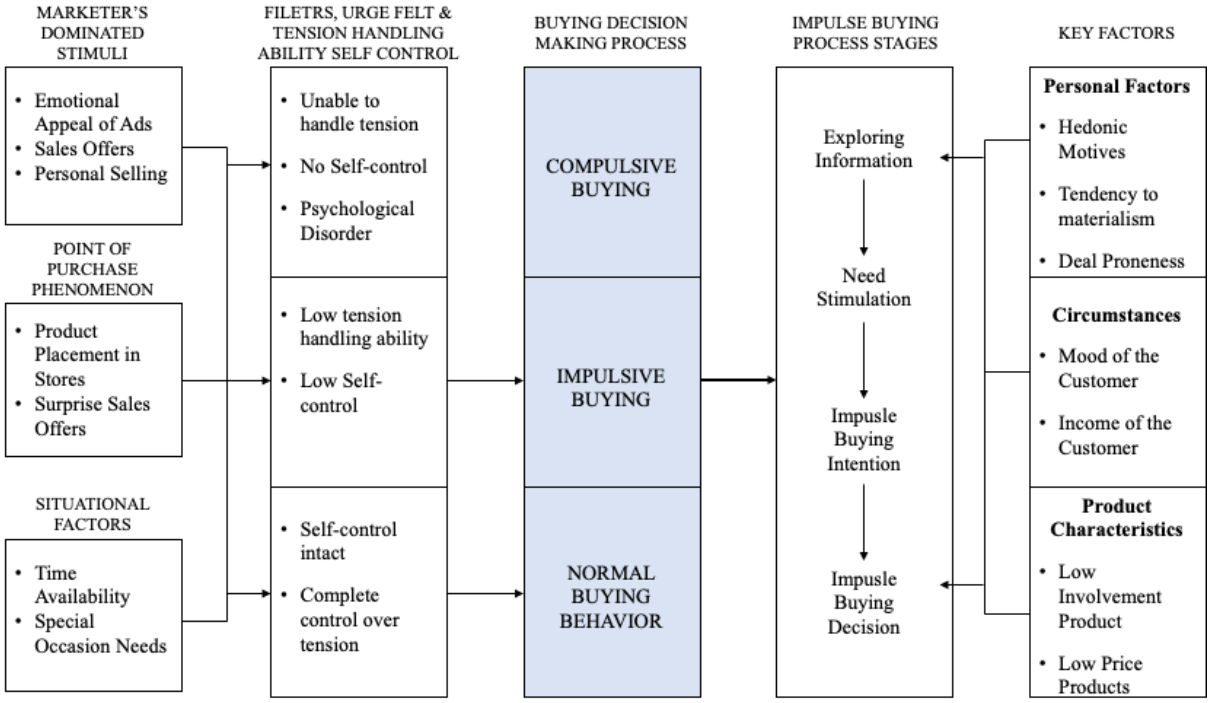
Appendix 1: Beauty shopping habits by age group (in % of respondents); adapted from McKinsey New Age of the Consumer Generational Survey 2019 in Gerstell, Marchessou, Schmidt, & Spagnuolo (2020, p.6).



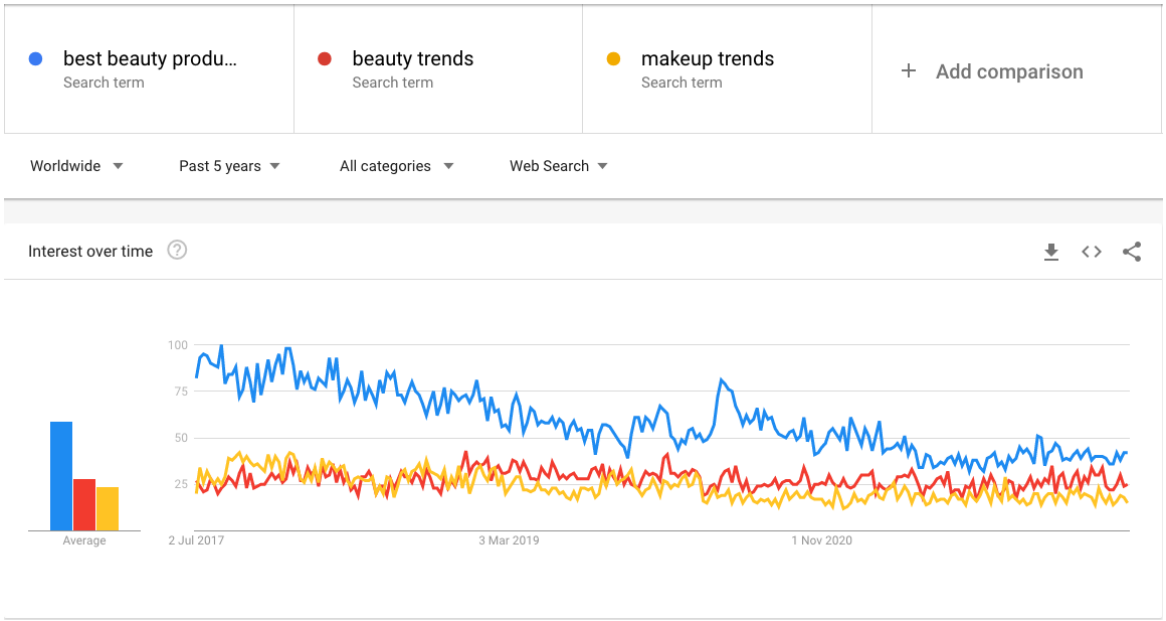
Appendix 2: The original Engel-Kollat-Blackwell (EKB) Model; adapted from Engel, Kollat, & Blackwell (1968, p. 500).



Appendix 3: Iram & Charcharkar's Model of Impulse Buying Behavior; adapted from Iram & Chacharkar (2017, p. 48).



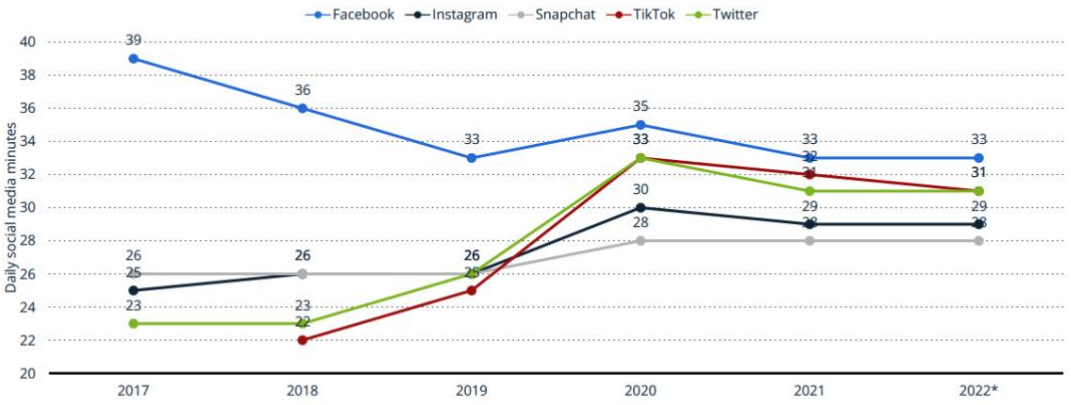
Appendix 4: Google Trends Interest over Time 5-Year Comparison (worldwide) for the Search Terms "best beauty products", "beauty trends" and "makeup trends"; taken from Google Trends (2022).



Appendix 5: Statista “Coronavirus: impact on social media usage worldwide” Study results; taken from Statista (2022b, pp. 8-9, 13-14, 18).

Average daily time spent on selected social networks by adults in the United States from 2017 to 2022, by platform (in minutes)

Average daily time spent on social media by U.S. adults 2017-2022



8 **Description:** As of January 2021, the average time spent by day by American users on Facebook was 33 minutes, and that was the platform with the largest amount of time spent daily, followed by TikTok and Twitter. A factor that played a major role in the time spent on social media was the coronavirus outbreak. Read more
Note(s): United States; January 2021; 18 years and older; Who use at least once per month; *Forecast Time spent with each medium includes all time spent with that medium, regardless of multitasking; for example, 1 hour of multitasking on [... Read more
Source(s): eMarketer

statista

Change in user engagement with selected social media platforms in the United States from 2018 to August 2020

U.S. social platform user engagement growth 2020

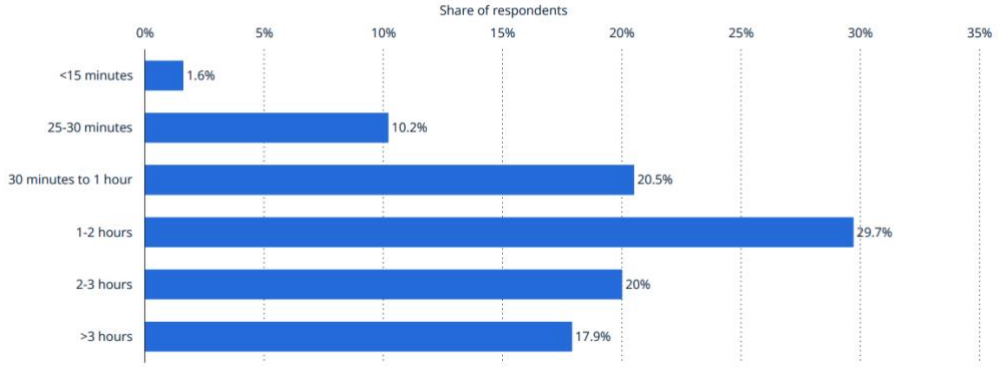
	Share of respondents
Twitter	78%
LinkedIn	38%
Reddit	19%
Instagram	8%
Facebook + Messenger	2%
Facebook	-9%

9 **Description:** As of August 2020, U.S. user engagement with Facebook had declined by nine percent compared to 2018. Instagram made gains of eight percent during the measured period, and Twitter was the big winner with 78 percent increase in user engagement during that time. Read more
Note(s): United States; 2018 to YTD August 2020; desktop, mobile web, and app
Source(s): Activate; comScore

statista

Additional daily time spent on social media platforms by users in the United States due to coronavirus pandemic as of March 2020

Increased time spent on social by U.S. users during COVID-19 pandemic 2020

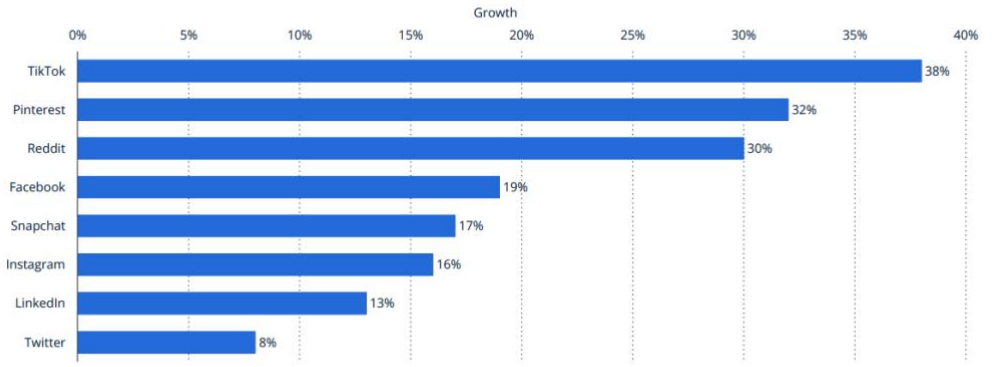


14 **Description:** As of March 2020, social media users in the United States were staying online more. According to a survey of U.S. social media users, 29.7 percent of respondents were using social media 1-2 hours additional hours per day. A further 20.5 percent used social media 30 minutes to 1 hour more than usual per day. Only 1.6 percent of users were adding less than 15 minutes to their usage. Additional social media usage was a result of the coronavirus pandemic, which caused stay home orders [...] Read more
Note(s): United States; March 31 - 2020; 609 respondents; 18 years and older; who indicated they are spending more time on social media
Source(s): Business Insider; eMarketer

statista

Growth of monthly active users of selected social media platforms worldwide from 2019 to 2021

Social media platforms growth of MAU worldwide 2019-2021

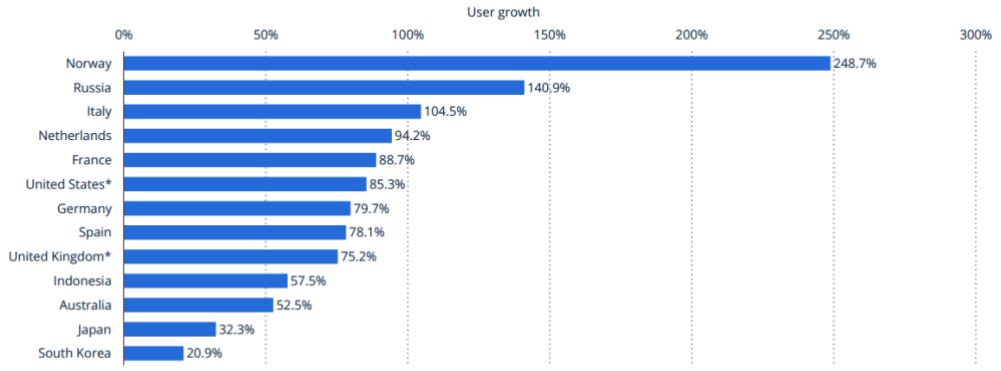


13 **Description:** TikTok saw an exceptional increase of monthly active users worldwide from 2019 to 2021, at 38 percent. The short-form video sharing app was used by 689 million individuals monthly as of 2021, compared to 500 million in 2019. Other leading social networks that increased with over 30 percent were Pinterest and Reddit. Read more
Note(s): Worldwide
Source(s): Tech.co; Various sources

statista

Annual TikTok user growth in selected countries worldwide as of October 2020

TikTok annual user growth in select countries globally 2020



18 **Description:** As of October 2020, Norway had the highest year-over-year increase of TikTok users with 248.7 percent user growth. Russia ranked second with there a 140.9 percent of user growth in the same time period Read more
Note(s): Worldwide; October 2020; internet users of any age who access TikTok via any device at least once per month; * August 2020 forecast Read more
Source(s): eMarketer

statista

Appendix 6: Different IBT assessing scales that had been considered to use in the empirical research.

Impulsiveness measuring scale from Rook & Fisher (1995)

- I often buy things spontaneously.
- "Just do it" describes the way I (often) buy things.
- I often buy things without thinking (too much about it).
- "I see it, I buy it" describes me.
- "Buy now, think about it later" describes me.
- Sometimes I feel like buying things on the spur-of-the-moment.
- I buy things according to how I feel at the moment.
- I carefully plan most of my purchases. (Reverse coded)
- Sometimes I am a bit reckless about what I buy.

IBT measuring scale from Badgaiyan, Verma, & Dixit (2016)

Cognitive factors

- Most of my purchases are planned in advance. (Reverse coded)
- Before I buy something I always carefully consider whether I need it. (Reverse coded)
- I carefully plan most of my purchases. (Reverse coded)
- I often buy without thinking.

Affective factor

- I sometimes buy things because I like buying things, rather than because I need them.
- I buy what I like without thinking about consequences.
- I buy products and services according to how I feel at that moment.
- It is fun to buy spontaneously.

Impulse Buying Tendency scale and factor loadings for single and 2-factor solutions (Verplanken & Herabadi, 2001).

Item	IBT—total	IBT—cognitive	IBT—affective
Cognitive items			
1. I usually think carefully before I buy something.	0.63	0.83	−0.18
2. I usually only buy things that I intended to buy.	0.84	0.79	0.19
3. If I buy something, I usually do that spontaneously.	0.75	0.78	0.07
4. Most of my purchases are planned in advance.	0.69	0.78	−0.02
5. I only buy things that I really need.	0.77	0.74	0.16
6. It is not my style to just buy things.	0.81	0.74	0.21
7. I like to compare different brands before I buy one.	0.45	0.67	−0.23
8. Before I buy something I always carefully consider whether I need it.	0.56	0.66	−0.04
9. I am used to buying things 'on the spot'.	0.65	0.65	0.09
10. I often buy things without thinking.	0.67	0.65	0.12
Affective items			
11. It is a struggle to leave nice things I see in a shop.	0.56	0.02	0.81
12. I sometimes cannot suppress the feeling of wanting to buy something.	0.61	0.02	0.79
13. I sometimes feel guilty after having bought something.	0.32	−0.15	0.66
14. I'm not the kind of person who 'falls in love at first sight' with things I see in shops.	0.25	−0.20	0.65
15. I can become very excited if I see something I would like to buy.	0.42	−0.09	0.63
16. I always see something nice whenever I pass by shops.	0.44	0.08	0.54
17. I find it difficult to pass up a bargain.	0.61	0.32	0.48
18. If I see something new, I want to buy it.	0.42	0.12	0.47
19. I am a bit reckless in buying things.	0.71	0.44	0.47
20. I sometimes buy things because I like buying things, rather than because I need them.	0.44	0.15	0.45

Note: Items 1, 2, 4–8, and 14 should be reverse coded.
IBT—total = the complete 20-item impulse buying tendency scale; IBT—cognitive = Impulse Buying Tendency—cognitive factor; IBT—affective = Impulse Buying Tendency—affective factor.

Appendix 7: Empirical Research - Survey Questions & Descriptive Statistics

Category	Code*	Question	Measuring scale	Valid answers	Range	Mean	Standard Deviation
Language setting		Please choose a language. / Bitte wähle eine Sprache.	Nominal	110			
Demographics	(D_Gen)	Gender:	Nominal	110			
Demographics	(D_Cou)	Country of residence during COVID lockdown:	Nominal	110			
Demographics	(D_Age)	Age:	Metric	110			
KO criterion - Purchase Frequency	(PF)	How often do you buy beauty or cosmetics products (makeup, skincare, personal care, hair care/color, nail care, etc.)?	Nominal	110			
IBT	IBT1	Please indicate how much you agree with the following notions about yourself. [I usually only buy things I intended to buy.] (reverse-coded)	Continous	94	4	3.54	1.179
IBT	IBT2	Please indicate how much you agree with the following notions about yourself. [I often buy things without thinking.]	Continous	94	4	2.35	1.152
IBT	IBT3	Please indicate how much you agree with the following notions about yourself. [If I buy something I usually do that spontaneously.]	Continous	94	4	2.40	1.081
IBT	IBT4	Please indicate how much you agree with the following notions about yourself. [It is not my style to just buy things.] (reverse-coded)	Continous	94	4	3.14	1.317
IBT	IBT5	Please indicate how much you agree with the following notions about yourself. [I am a bit reckless in buying things.]	Continous	94	4	2.26	1.126
IBT	IBT6	Please indicate how much you agree with the following notions about yourself. [I find it difficult to pass up a bargain.]	Continous	94	4	2.69	1.236
IBT	IBT7	Please indicate how much you agree with the following notions about yourself. [It is a struggle to leave nice things I see in a shop.]	Continous	94	4	2.51	1.216
IBT	IBT8	Please indicate how much you agree with the following notions about yourself. [I sometimes cannot suppress the feeling of wanting to buy something.]	Continous	94	4	2.48	1.309
Product involvement	PI1	How would you describe your interest in beauty and	Continous	94	4	3.55	.911

		cosmetics products in general?					
Product involvement	PI2	How often do you check on new beauty trends e.g. via blogs, social media etc.?	Nominal > Continous	94	3	2.16	.82
Product involvement	PI3	Do you follow any beauty/cosmetics-centric content creators or influencers?	Nominal > Continous	94	3	2.02	.88
Brand loyalty	BL1	Do you have a favorite beauty/cosmetics brand or a brand you would describe yourself as loyal to?	Nominal > Continous	94	4	2.97	1.031
Brand loyalty	BL2	If possible, please provide the brand(s) in question.	Free text	78			
Brand loyalty	BL3	Compared to other brands, how often do you buy from this brand/these brands?	Continous	90	4	3.56	.973
Brand loyalty	BL4	In regard to this brand/these brands, how often do you... [...check their social media for updates?]	Continous	90	3	1.53	.85
Brand loyalty	BL5	In regard to this brand/these brands, how often do you... [...check their newsletter for updates?]	Continous	90	3	1.46	.767
Brand loyalty	BL6	In regard to this brand/these brands, how often do you... [...check their physical stores to stay up-to-date with their latest product releases?]	Continous	90	4	2.09	1.012
Purchase invlovement	PuI1	How often do you buy beauty or cosmetics products when you… […have fully planned which product you need and which brand you want to buy it from before you enter the store or website?]	Continous	94	4	2.95	1.265
Purchase invlovement	PuI2	How often do you buy beauty or cosmetics products when you… […know which product(s) you need but check on the available brands and then decide which one to buy?]	Continous	94	4	3.11	1.150
Purchase invlovement	PuI3	How often do you buy beauty or cosmetics products when you… […just go to the store or website without thinking and be inspired by what you see there?]	Continous	94	4	2.67	1.130
Purchase invlovement	PuI4	How often do you buy beauty or cosmetics products when you… [….are on a shopping trip for something else but then impulsively buy a beauty or cosmetics product because of an add display, staff recommendation, product display etc.?]	Continous	94	4	2.43	1.112

Purchase invlovement	PuI5	When deciding to buy a new beauty /cosmetics product how often do you usually… […do a lot of research on available products, trends and brands, compare prices, reviews, etc. before making a final decision?]	Continous	94	4	2.69	1.192
Purchase invlovement	PuI6	When deciding to buy a new beauty /cosmetics product how often do you usually… […compare products/brands during your shopping trip before making a purchase?]	Continous	94	4	3.13	1.272
Purchase invlovement	PuI7	When deciding to buy a new beauty /cosmetics product how often do you usually… […just buy what you already know is good?]	Continous	94	4	3.52	.877
Information Search Behavior (outside of COVID)	ISB1	In general, when you search for information about beauty products or brands that might be interesting to you how frequently do you do so via… [Social media/influencers/beauty content creators]	Continous	94	4	2.04	1.145
Information Search Behavior (outside of COVID)	ISB2	In general, when you search for information about beauty products or brands that might be interesting to you how frequently do you do so via… [Beauty blogs (written) and beauty/cosmetics-focused news websites]	Continous	94	4	1.53	.813
Information Search Behavior (outside of COVID)	ISB3	In general, when you search for information about beauty products or brands that might be interesting to you how frequently do you do so via… [E-retailers]	Continous	94	4	2.31	1.098
Information Search Behavior (outside of COVID)	ISB4	In general, when you search for information about beauty products or brands that might be interesting to you how frequently do you do so via… [Specific brand websites]	Continous	94	3	2.11	1.021
Information Search Behavior (outside of COVID)	ISB5	In general, when you search for information about beauty products or brands that might be interesting to you how frequently do you do so via… [Google search]	Continous	94	4	2.51	1.259
Information Search Behavior (outside of COVID)	ISB6	In general, when you search for information about beauty products or brands that might be interesting to you how frequently do you do so via… [Physical magazines]	Continous	94	4	1.70	1.046

Information Search Behavior (outside of COVID)	ISB7	In general, when you search for information about beauty products or brands that might be interesting to you how frequently do you do so via… [Physical stores displays (retailer, department store, brand flagship store…)]	Continous	94	4	2.02	1.126
Information Search Behavior (outside of COVID)	ISB8	In general, when you search for information about beauty products or brands that might be interesting to you how frequently do you do so via… [The recommendations of sales personal, beauticians etc.]	Continous	94	4	2.11	1.072
Information Search Behavior (outside of COVID)	ISB9	In general, when you search for information about beauty products or brands that might be interesting to you how frequently do you do so via… [The recommendation of friends/family/other people you know personally]	Continous	94	4	3.41	1.111
Information Search Behavior (COVID)	ISB10	Would you say your information search behavior during the COVID lockdowns changed?	Nominal > Dichotomous	94			
Buying Behavior (channel)(outside of COVID)	BB_Ch1	I usually buy my cosmetics and beauty products from… [Drugstore/Supermarket]	Continous	94	4	4.14	.968
Buying Behavior (channel)(outside of COVID)	BB_Ch2	I usually buy my cosmetics and beauty products from… [Perfumery/Cosmetics retailer]	Continous	94	4	2.51	1.189
Buying Behavior (channel)(outside of COVID)	BB_Ch3	I usually buy my cosmetics and beauty products from… [Brand flagship store]	Continous	94	4	1.91	1.104
Buying Behavior (channel)(outside of COVID)	BB_Ch4	I usually buy my cosmetics and beauty products from… [Beautician/hair dresser/similar specialist]	Continous	94	4	1.65	.947
Buying Behavior (channel)(outside of COVID)	BB_Ch5	I usually buy my cosmetics and beauty products from… [E-retailer]	Continous	94	4	2.69	1.146
Buying Behavior (channel)(outside of COVID)	BB_Ch6	I usually buy my cosmetics and beauty products from… [E-shop of a specific brand/brand website]	Continous	94	4	2.30	1.277
Buying Behavior (channel)(COVID)	BB_Ch7	During lockdown periods, I purchased my cosmetics/beauty products from… [Drugstore/Supermarket]	Continous	94	4	3.71	1.215
Buying Behavior (channel)(COVID)	BB_Ch8	During lockdown periods, I purchased my cosmetics/beauty products from… [E-retailer]	Continous	94	4	2.88	1.310
Buying Behavior	BB_Ch9	During lockdown periods, I purchased my cosmetics/beauty products	Continous	94	4	2.12	1.390

(channel)(COVID)		from… [E-shop of a specific brand/brand website]					
Online Shopping Experience	Exp	Did you buy beauty/cosmetics products online for the first time during the COVID pandemic?	Nominal	94			
Online Shopping Experience (Satisfaction - first time user)	Exp.a	How satisfied were you with the experience?	Continous	13	4	3.92	1.188
Online Shopping Experience (Satisfaction - frequent user)	Exp.b	How much do you enjoy shopping for beauty products online?	Continous	65	4	3.31	.983
Buying Behavior (quantity)(COVID)	BB_Q1	During the COVID-19 pandemic lockdown periods I bought...	Nominal	94			
Buying Behavior (bought more during COVID)	BB_Q1.a	Please briefly explain why you bought more beauty/cosmetics products during the COVID-19 lockdown periods:	Free text	8			
Buying Behavior (bought less during COVID)	BB_Q1.b1	I required less due to COVID-related lifestyle changes.	Continous	45	4	3.73	1.250
Buying Behavior (bought less during COVID)	BB_Q1.b2	I didn't feel comfortable shopping for beauty/cosmetics products online.	Continous	45	4	2.51	1.377
Buying Behavior (bought less during COVID)	BB_Q1.b3	I didn't want to buy beauty/cosmetics products without a beauticians/experienced beauty staff's advice.	Continous	45	4	1.84	1.347
Buying Behavior (bought less during COVID)	BB_Q1.b4	I didn't want to buy beauty/cosmetics products without trying them out on my skin.	Continous	45	4	2.59	1.564
Buying Behavior (bought less during COVID)	BB_Q1.b5	If you had any other reasons, please briefly describe:	Free text	3			
Buying Behavior (change in brands)(COVID)	BB_Q2	Would you say you generally bought different brands during or since the lockdowns than you did before the COVID pandemic?	Nominal	94			
Buying Behavior (change in brands)(COVID)	BB_Q2	Would you say you generally bought different brands during or since the lockdowns than you did before the COVID pandemic? (2)	Nominal	18			

Buying Behavior (change in brands)(COVID)	BB_Q2	Would you say you generally bought different brands during or since the lockdowns than you did before the COVID pandemic? (3)	Nominal	4			
Buying Behavior (change in brands)(COVID)	BB_Q2.a	If you discovered any new brands during the lockdown periods, please name them here:	Free text	16			
Buying Behavior (change in brands)(COVID)	BB_Q2.a2	Where did you find out about this new brand/these new brands?	Nominal	45			
Impulsiveness Online/Offline	Imp1	Which of the following generally describes your online buying behavior of beauty/cosmetics products best?	Nominal	94			
More Impulsiveness Offline	Imp1.a1	What do you think mostly influences you buying more than you planned when you are in a physical shop environment? [I feel happier/have more fun shopping in-store which often leads to me buying more than I planned.]	Continous	48	4	3.44	1.147
More Impulsiveness Offline	Imp1.a2	What do you think mostly influences you buying more than you planned when you are in a physical shop environment? [I generally feel more stressed or under time-pressure when I shop physically, which leads to me not thinking about the purchases I make sometimes.]	Continous	48	4	2.38	1.248
More Impulsiveness Offline	Imp1.a3	What do you think mostly influences you buying more than you planned when you are in a physical shop environment? [I often get swayed by display ads/posters in shops.]	Continous	48	4	2.21	1.091
More Impulsiveness Offline	Imp1.a4	What do you think mostly influences you buying more than you planned when you are in a physical shop environment? [I often get swayed by attractive, visual product displays in shops.]	Continous	48	4	2.75	1.329
More Impulsiveness Offline	Imp1.a5	What do you think mostly influences you buying more than you planned when you are in a physical shop environment? [I often spontaneously buy the recommendation I get from sales personal in shops.]	Continous	48	4	2.38	1.378

More Impulsiveness Offline	Imp1.a6	What do you think mostly influences you buying more than you planned when you are in a physical shop environment? [I often try out products in-store and buy them impulsively when I like the texture/feel.]	Continous	48	4	2.98	1.495
More Impulsiveness Online	Imp1.b1	What do you think mostly influences you buying more than you planned when you are in an e-shop environment? [Easy checkout process/no standing in line at the cashier]	Continous	12	4	2.50	1.624
More Impulsiveness Online	Imp1.b2	What do you think mostly influences you buying more than you planned when you are in an e-shop environment? [Easy payment methods (credit card, 1-click purchase, paypal, buy-now-pay-later etc.)]	Continous	12	4	3.17	1.749
More Impulsiveness Online	Imp1.b3	What do you think mostly influences you buying more than you planned when you are in an e-shop environment? [Social media and related purchase channels/quick link to buyable product]	Continous	12	4	2.08	1.443
More Impulsiveness Online	Imp1.b4	What do you think mostly influences you buying more than you planned when you are in an e-shop environment? [More variety than in physical stores, meaning more opportunity to find something I like.]	Continous	12	4	4.00	1.348
More Impulsiveness Online	Imp1.b5	What do you think mostly influences you buying more than you planned when you are in an e-shop environment? [I am usually in the comfort of my home or another quiet place when I do online shopping which motivates me to shop more items I didn't plan for.]	Continous	12	4	3.83	1.403
More Impulsiveness Online	Imp1.b6	What do you think mostly influences you buying more than you planned when you are in an e-shop environment? [I feel happier/have more fun shopping online which often leads to me buying more than I planned.]	Continous	12	4	3.25	1.288
Impulsiveness (COVID)	Imp2	How much do you agree with the following statement: “I bought more impulsively during the COVID-19-related lockdown periods.”	Continous	94	4	2.45	1.206

Social Media Usage (COVID)	SMU1	Would you say you used social media applications (Facebook, Twitter, Instagram, Pinterest, TikTok, Twitch, Youtube etc.) more often during the pandemic-related lockdowns on a daily basis?	Nominal > Continous	94			
Social Media Usage (COVID)	SMU2	When comparing your buying behavior in the lockdown periods versus before, would you say that you have been buying more beauty and cosmetics products through social media applications?	Nominal > Dichotomous	94			

***Code key:** Each code is given the initials of the group of variables it belongs to, followed by the question count within its group (if aplicable). In case of a question that branches into different following questions depending on the respondent's answer, .a or .b is added to indicate a question belonging to such a branch. When there are multiple questions within one brand, it will be counted additionally after the letter. This code is used for the indification of individual questions, but also to explain the variing valid answer numbers.