

# LEARNING FROM PANDEMIC PERIODS: ELEMENTS OF THE THEORY OF BEHAVIORAL TRANSFORMATION

## UČENJE IZ RAZDOBLJA PANDEMIJE: ELEMENTI TEORIJE PROMJENE PONAŠANJA



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### Abstract

**Purpose** – This research study develops a theoretical model of behavioral transformation by integrating contextual factors specific to the Covid-19 pandemic into the framework of the Theory of Planned Behavior, amended through the use of elements of the Regulatory Focus Theory.

**Design/Methodology/Approach** – A two-step approach is used to develop a model of behavioral transformation. First, the study analyzes a shift in buyers' behavioral preferences from offline buying to online buying during the Covid-19 pandemic by conceptualizing barriers and opportunities, and identifying personal characteristics of consumers that foster or create resistance to online buying. Integration of these elements within the Theory of Planned Behavior and Regulatory Focus Theory is used to explain the mechanism of their interactions. Second, building on the model of such situational transformation, a more general model is devised, contributing to the development of the Theory of Behavioral Transformation.

**Findings and Implications** – This study contributes to future research by proposing a behavioral transformation model that is applicable to a wide range of behavioral transformations in a variety of studies.

### Sažetak

**Svrha** – U radu se razvija teorijski model transformacije ponašanja uključivanjem kontekstualnih čimbenika specifičnih za pandemiju Covid-19 u okviru Teorije planiranog ponašanja, dopunjenu elementima Teorije regulatornog fokusa.

**Metodološki pristup** – Koristi se pristup u dva koraka kako bi se razvio model transformacije ponašanja. Prvo, analizira se pomak u preferencijama ponašanja kupaca s offline na online kupovinu tijekom razdoblja pandemije Covid-19. Konceptualiziraju se prepreke i prilike, identificiraju osobne karakteristike potrošača koje potiču ili stvaraju otpor prema online kupovini. Uključivanje ovih elemenata u Teoriju planiranog ponašanja i Teoriju regulatornog fokusa koristi se za objašnjenje mehanizma njihove interakcije. Drugo, nadovezujući se na model situacijske transformacije, u radu se razvija općenitiji model koji pridonosi razvoju Teorije promjene ponašanja.

**Rezultati i implikacije** – Doprinos rada sadržan je u prijedlogu modela promjene ponašanja koji se može primijeniti na širok raspon promjena ponašanja u raznim budućim studijama.

**Ograničenja** – Iako teorijski model, prijedlozi i istraživačka pitanja razvijeni u radu služe kao dobra pozadina

**Limitations** – While the theoretical model, propositions, and research questions developed in this paper serve as solid pillars for the Theory of Behavioral Transformation, its further development requires empirical evidence from further studies.

**Originality** – The present study employs a unique approach to the building of a theoretical model: it provides an in-depth analysis of behavioral transformation during the Covid-19 pandemic and broadens it to create a wider and more universal theoretical model. This results in the development of an original theoretical model that explains the overall mechanism of behavioral transformations.

**Keywords** – Covid-19, Regulatory Focus Theory, Theory of Planned Behavior, facilitators, distractors

za Teoriju promjene ponašanja, a njezin daljnji razvoj zahtijeva empirijske dokaze iz budućih istraživanja.

**Doprinos** – U radu se koristi jedinstveni pristup izgradnji teorijskog modela, kroz dubinsku analizu promjena ponašanja tijekom pandemije Covid-19, proširujući je u širi i univerzalniji teorijski model. To rezultira razvojem originalnog teorijskog modela koji objašnjava cjelokupni mehanizam promjena ponašanja.

**Gljučne riječi** – Covid-19, Teorija regulatornog fokusa, TPB, pomagači, distraktori

## 1. INTRODUCTION

Consumers tend to repeat behaviors that have proven desirable in the past (Verplanken & Wood, 2006). While they may adapt their behaviors, these changes are rarely radical (Li, Dahana, Ye, Peng & Zhou, 2021; Shi & Zhang, 2014). Changes in consumer behavior are often gradual, following an evolutionary mode of development (Bessant, Caffyn & Gallagher, 2001). However, the generally slow transformation of consumer behavior can be expedited by dramatic changes in the environment; consumers (or buyers) may be compelled to abruptly shift their traditional behaviors in response to novel situational factors (Kannan & Kulkarni, 2022; Zwanka & Buff, 2021). Hence, periods in which consumers are subjected to sudden, drastic environmental changes offer a valuable opportunity to analyze the factors and mechanisms that trigger behavioral transformations. For instance, the Covid-19 pandemic resulted in a significant increase in online purchasing and a drastic decrease in offline buying (e.g., Kannan & Kulkarni, 2022; Pham, Thi & Le, 2020). However, while the key factors contributing to these trends during the pandemic (i.e., social distancing regulations and avoidance of public spaces out of fear of infection) have now mostly dissipated, the balance between offline and online buying has not returned to pre-pandemic ratios (Alwan, Hu, Al Asbahi, Al Harazi & Al Harazi, 2023). Therefore, the pandemic period provides a valuable insight into consumer/buyer behavior, having encouraged certain parts of the population to embrace online shopping and, in addition, having contributed to increases in online shopping volumes for those who had already shopped online prior to the pandemic (Hansson, Holmberg & Post, 2022; Toska, Zeqiri, Ramadani & Ribeiro-Navarette, 2022; Zwanka & Buff, 2021).

During the Covid-19 pandemic, a distinct group of situational factors emerged in the wake of health threats and the implementation of social distancing measures (Hansson et al., 2022; Shaw, Eschenbrenner & Baier, 2022).

These factors acted as barriers to traditional, offline buying practices, disrupting the habits of many consumers and consequently altering their established purchasing patterns. The social restrictions imposed during the Covid-19 pandemic created actual obstacles to offline shopping, restricting individuals' ability to visit physical stores and engage in traditional shopping experiences (Akhtar, Akhtar, Usman, Ali & Siddiqi, 2020). Health threats and social distancing requirements limited offline buying, making online buying alternatives not only more attractive but necessary (Amin et al., 2022; Pantano, Pizzi, Scarpi & Dennis, 2020). The shift in buyers' preferences was additionally fueled by growing awareness of the benefits of online buying – specifically, the convenience and safety offered by e-stores. As consumers sought to minimize exposure to potential health risks, many turned to online shopping as a viable solution, leading to a surge in the growth of online retailing.

Having brought on a mass shift from offline to online buying, the Covid-19 pandemic provides an ideal platform to postulate the factors that provoke lasting behavioral transformation. Observed and conceptualized regularities may be used to build a broader theoretical model that would ground behavioral transformations beyond the period of the pandemic.

Analyzing such situational triggers for behavioral change is a valuable practice in understanding the universal mechanisms of behavioral transformations. The present study concentrates on factors that can be conceptualized as barriers to “old” behavior (i.e., buying offline) and opportunities for “new” behavior (i.e., buying online). In addition, certain factors can be viewed as facilitators to or distractors from old or new types of behavior, thus functioning as incentives or counterincentives for behavioral transformation. All these factors are analyzed in the context of the Theory of Planned Behavior (TPB), which serves as a general tool for explaining human behaviors (Hassan, Shiu & Parry, 2016), including those exhibited by buyers and consumers. One particular behavior

that has been extensively studied through TPB lens is online buying (Bhati, Vijayvargy & Pandey, 2022). The extant literature supports the use of the TPB as a key framework in modeling behavioral transformation toward online buying. However, the emergence of specific, contextual factors during the Covid-19 pandemic warrants a reexamination of this widely known theoretical framework.

Additionally, account should be taken of the fact that behavioral transformation is impacted by personal priorities, influenced by either prevention- or promotion-focused motivations, as suggested by the Regulatory Focus Theory (RFT). The RFT posits that individuals are either driven by a prevention focus, emphasizing risk aversion, safety, and potential losses, or a promotion focus, concerned with potential gains, positive outcomes, and aspiration fulfillment. Therefore, it is important to integrate key aspects of the Regulatory Focus Theory into the framework of the TPB to reflect buyers' behaviors prompted by the barriers and opportunities of the pandemic period. Consideration of the regulatory focus helps in determining how much of the behavioral transformation is fueled by promotion focus (emphasis on the benefits of online buying) as opposed to prevention focus (avoiding the threats and complying with the restrictions of the pandemic). Such integration of the RFT into the TPB against the backdrop of the pandemic provides additional insights into how motivational orientations influence the transition toward online buying. Building on this situational transformation, the paper suggests a broader concept that could be used to build a more general model and Theory of Behavioral Transformation.

## 2. CONTEXTUAL IMPACTS OF THE COVID-19 PERIOD ON BUYING BEHAVIOR

The dramatic shift from offline to online shopping during the pandemic was primarily rooted in the threat of Covid-19 infection (e.g., Hansson et al., 2022; Shaw et al., 2022). This threat inspired both personal concerns about the safety of usual behaviors (i.e., shopping in a public setting) on an individual level (Akar, 2021; Hai & Khoa, 2021; Truong & Truong, 2022) and the establishment of social distancing requirements on the level of societies (communities, countries, etc.) (Bracale & Vaccaro; Hai & Khoa, 2021; Tran, 2021). These two sources of impact have given rise to other factors that in turn affected consumer/buyer behavior (e.g., Bermes, 2021; Sheth, 2020). These factors either directly or indirectly contributed to the behavioral transformation from offline to online buying. However, the variety of factors salient to this shift is broad and fragmented. Therefore, the factors have been grouped into categories based on the nature of their influence on consumer behavior, with specific consideration given to offline and online buying.

The devastating impact of the pandemic on in-store purchasing can be attributed mainly to the risks and prohibition of physical contact. Such restrictions hindered shopping in offline outlets. Even where in-person operation was not halted (e.g., Grashuis, Skevas & Segovia, 2020), stores were still affected by social distancing requirements, limitations on the number of buyers in a store, and specific servicing regulations. Therefore, stores were affected not only by regulations on retail, but also by general social distancing regulations that restricted visits to public places, traveling, and meeting with other people. The main types of restrictions established during the pandemic are listed in Table 1 below.

TABLE 1: Types of regulations that reduced offline buying

Regulation	Countries/ Locations Applied	Source
Stay-at-home notice and/or limitation of outings to strict necessities	e.g., Brazil, Singapore, Germany, UK	Bracale & Vaccaro (2020); Gordon-Wilson (2020); Nauman et al. (2020)
Complete lockdown	e.g., China, parts of Italy, Egypt	Akhtar et al. (2020); Alaimo, Fiore & Galati (2022); El-Magd & Zanaty (2021)
Possible offline shopping adhering to store-related restrictions and safety requirements	e.g., Germany, USA	Bridges & Fowler (2022); Dannenberg, Fuchs, Riedler & Wiedemann (2020)
Avoiding gatherings, practicing social distancing, washing hands, and wearing masks	e.g., USA, Pakistan, Japan, Singapore, Hong Kong, Poland, Portugal	Croucher, Ashwell, Murray, Condon & Fletcher (2021); Mahmood et al. (2020); Strzelecki, Azevedo & Albuquerque (2020); Swain, Jena & Das (2022)
Only essential stores open	e.g., USA, UK	Gordon-Wilson (2020); Martin-Neuninger & Ruby (2020); Repko & Thomas (2020)

Source: Prepared by the authors based on the sources indicated in the table.

The measures shown in Table 1 directly or indirectly limited consumers' visits to offline stores, acting as effective barriers to in-person shopping. To survive during this period, many retailers were forced to adapt to these barriers and modify their ways of retailing (Dannenberg et al., 2020; Kabadayi, O'Connor & Tuzovic, 2020; Pham et al., 2020). Retailers that already operated both offline and online stores started to develop online alternatives (Arora, Dahlstrom, Hazan, Khan & Khanna, 2020). A rapid development of online platforms enabled retailers to offer a similar or even broader assortment of products (e.g., Al-Hawari, Balasa & Slimi, 2021). Offline retailers with no previous online outlet were galvanized to develop their online market as rapidly as possible (e.g., Briedis, Kronschnabl, Rodriguez & Ungerman, 2020; Faqih, 2022). Additionally, many manufacturers with estab-

lished distribution channels were inspired to enter online retailing, either by creating online stores or establishing new partnerships (e.g., Wang, Hong, Li & Gao, 2020). Both existing and new stores enjoyed rapid online development (Briedis et al., 2020). Furthermore, new business partnerships were developed for the purpose of creating more efficient avenues to order and deliver products (Wang et al., 2020).

These developments in retailing were supported by the expedited technological evolution of online selling platforms, payment systems, and online communication opportunities (Laato, Islam, Farooq & Dhir, 2020; Wang et al., 2020), all of which served to make online purchasing more accessible and attractive. The fundamental developments taking place in online retailing in response to the demands of the pandemic are presented in Table 2 below.

TABLE 2: Developments aimed at stimulating online buying

Development	Source
Curbside pickup instead of selecting items from store shelves and contactless deliveries	Jiang & Stylos (2021); Meena & Kumar (2022); Trude et al.(2022); Truong & Truong (2022)
Information and Communications Technologies (ICT) that facilitate online interactions between buyers and retailers	Pandey & Pal (2020)
Increased number of digital shopping applications	Jiang & Stylos (2021); Zwanka & Buff (2021)
Autonomous devices/agents (e.g., robotics)	Jiang & Stylos (2021); Pani, Mishra, Golias & Figliozzi (2020)
Improved serviceability (e.g., easy returns, better CRM including feedback provision)	Gruntkowski & Martinez (2022); Jiang & Stylos (2021); Pham et al. (2020)
Improved and flexible payment methods	Gruntkowski & Martinez (2022)

Source: Prepared by the authors based on the sources indicated in the table.

Many of the developments shown in Table 2 were business responses to an otherwise unfavorable situation for traditional retailing (Prasad & Srivastava, 2021; Truong & Truong, 2022). However, from a consumer perspective, those changes served as opportunities for online buying (Showrav, Hassan, Anam & Chakrabarty, 2021).

Barriers to offline retailing and opportunities for online retailing are associated with two major external influences that have created contextual prerequisites for the transformation of buying behaviors from the offline to the online type. However, an analysis of Covid-19 consumer behaviors revealed additional factors that catalyzed this change. These are personal factors (characteristics, beliefs, perceptions) that either facilitate or distract from the behavioral change from offline toward online buying. Hence, factors belonging to the facilitators/distractors group are linked with either offline or online form of buying. A positive effect on online buying stems from the factors that distract from offline buying or those that facilitate online buying. Factors facilitating offline buying or

distracting from online buying have a negative effect on behavioral transformation with regard to online buying. The most typical factors of all types are listed in Table 3.

The factors listed in Table 3 are only an illustration of a much larger variety of variables that facilitate or distract from online buying. However, most of these remaining variables are represented in at least one of the categories relating to health, interaction with online technologies, and perceptions about the safety/convenience of online shopping.

The barriers to offline retailing resulting from the Covid-19 pandemic, coupled with facilitating/distracting factors associated with positive trends in online shopping, resulted in mass behavioral transformations in retailing. Specifically:

1. Retailers emphasized the development of online stores; and
2. Buyers began to utilize online buying options much more frequently and/or on a larger scale.

TABLE 3: Selected facilitators to and distractors from online and offline buying

Factor	Impact	Effect on online buying	Source
Health consciousness	Distractor to offline buying	Positive	Candra, Ayudina & Arashi (2021); Giang, Tram, Hang, Nhien & Duy (2022)
Health concern	Distractor to offline buying	Positive	Hai & Khoa (2021)
Personal innovativeness	Facilitator of online buying	Positive (direct) Positive (indirect)	Chauhan, Pandey, Mishra & Rai (2021); Saleem, Aslam, Kim, Nauman & Khan (2022); Polas, Tabash, Jahanshani & Ahamed (2022)
Consumer technology acceptance	Facilitator of online buying	Positive	Habib & Hamadne (2021)
Personal awareness of security	Facilitator of online buying	Positive	Saleem et al. (2022)
Privacy concern	Distractor from online buying	Negative	Alzaidi & Agag (2022)
Internet shopping anxiety	Distractor from online buying	Negative	Faqih (2022)

Source: Prepared by the authors based on the sources indicated in the table.

The universal and abrupt shift to online purchasing elicited diverse reactions from buyers. Namely, individuals who had previously not used online shopping channels were forced to embrace online purchasing out of necessity due to limited offline alternatives, while buyers with an infrequent online shopping history turned toward more frequent and larger-scale online purchasing. Furthermore, buyers who were already active online consumers before the pandemic increased their online purchasing, enjoying the increase in online shopping opportunities. These trends resulted in an overall increase in the scale and importance of online buying.

It is important to note that the facilitating/distracting factors shown in Table 3 do not fully account for the rational and motivational aspects of the mass behavioral transformation toward online buying. The same facilitators or distractors may be perceived differently relative to individuals' motivational focus, as surmised by the Regulatory Focus Theory: promotion-focused individuals are predominantly interested in advancements and developments, while those

who are prevention-focused demonstrate greater concern for safety and security (Higgins, 1997; Steidle, Gockel & Werth, 2013). This consideration, while not widely analyzed in the extant literature, deserves attention, as it helps to explain individuals' embrace of or resistance to online buying.

### 3. THEORETICAL GROUNDING OF THE COVID-19 MODEL

#### 3.1. TPB Application for Predicting Online Buying During Covid-19

The Theory of Planned Behavior (TPB), as a tool frequently employed to analyze buying behaviors (Bhati et al., 2022), can be used as a theoretical model to understand different online consumer behavior during the Covid-19 pandemic. Through the lens of the TPB, behavioral intentions and subsequent behaviors are determined by behavioral, normative, and control beliefs (Ajzen, 2012). These three antecedents appear in the form of attitudes, subjective norms, and

perceived behavioral control. Furthermore, these determinants of behavioral intention may be influenced by predictors that are included in broader sets of beliefs (Lee, Cerreto & Lee, 2010). Recent studies have modified the TPB model to explain online purchasing behavior in the specific context of the Covid-19 pandemic (e.g., Akar, 2021; Bhati et al., 2022; Sajid, Rashid & Haidler, 2022). It must be noted that, in many instances, the restrictions and social distancing practices warranted by pandemic guidelines left online purchasing as the only option available to consumers during the pandemic period. In addition, even when lockdown measures were lifted, many consumers continued to purchase online as a safer option due to a lingering fear of being infected, more general pandemic concerns, or even the uncertainty about the future (Hansson et al., 2022; Shaw et al., 2022).

### 3.2. Use of the Regulatory Focus Theory for Predicting Online Buying During Covid-19

Self-regulation is a socio-cognitive concept grounded on the principle that individuals will seek pleasure and avoid pain (Higgins, 1997, 2000). The Regulatory Focus Theory (RFT) claims that two distinct modes exist in relation to how people regulate their behavior (i.e., individuals are driven either by promotion focus or prevention focus). The RFT is one of the most commonly used theories to explain self-regulation (Higgins, 1998). Within this theory, regulatory focus can be analyzed as either a chronic individual difference or a situationally induced focus (Cesario, Grant & Higgins, 2004; Park & Morton, 2015). Chronic individual difference refers to regulatory focus as a relatively stable human trait and is therefore viewed as a dispositional factor in research (Lee & Aaker, 2004). Alternatively, situational focus is short-term and depends on the influence of other factors at a specific moment in time (Cesario et al., 2004). Although situational factors played a paramount role in the Covid-19 period, an identification of lasting regularities of buyer behavior requires an emphasis on chronic individual dif-

ferences and the dispositional aspects of promotion/prevention focus.

The two types of regulatory focus – prevention focus and promotion focus – lend insight into the underlying motives for individuals' behaviors, their established goals and standards, and the nature of their primed outcomes (Brockner, Higgins & Low, 2004; Higgins, 2000). Promotion-focused individuals are motivated by growth and advancement needs. As such, they are driven by the pursuit of positive outcomes. Prevention-focused individuals on the contrary, are motivated by security and safety needs; their behaviors are enacted with the primary intention of eschewing negative outcomes (Higgins, 1998, 2000) rather than producing positive outcomes.

Previous research supports the application of the RFT in explaining consumer behavior during the Covid-19 pandemic. In their study, Rahmani and Kordrostami (2023) demonstrated that the condition of a Covid-19 pandemic and, in turn, a stressful shopping context, may lead consumers to adopt a prevention-focused state of mind, resulting in a higher tendency for risk aversion. In addition, it may lead individuals to reduce in-person shopping or reduce it completely to avoid the risk of being infected. However, some individuals may naturally be oriented toward promotion-focused coping, trying new brands, or even buying options such as online shopping, thus taking advantage of the stay-at-home opportunities brought about by the pandemic (Das, 2015; Sit, Ballantyne & Gorst, 2022).

### 3.3. Integration of TPB and RFT in Predicting Buying Behavior During Covid-19

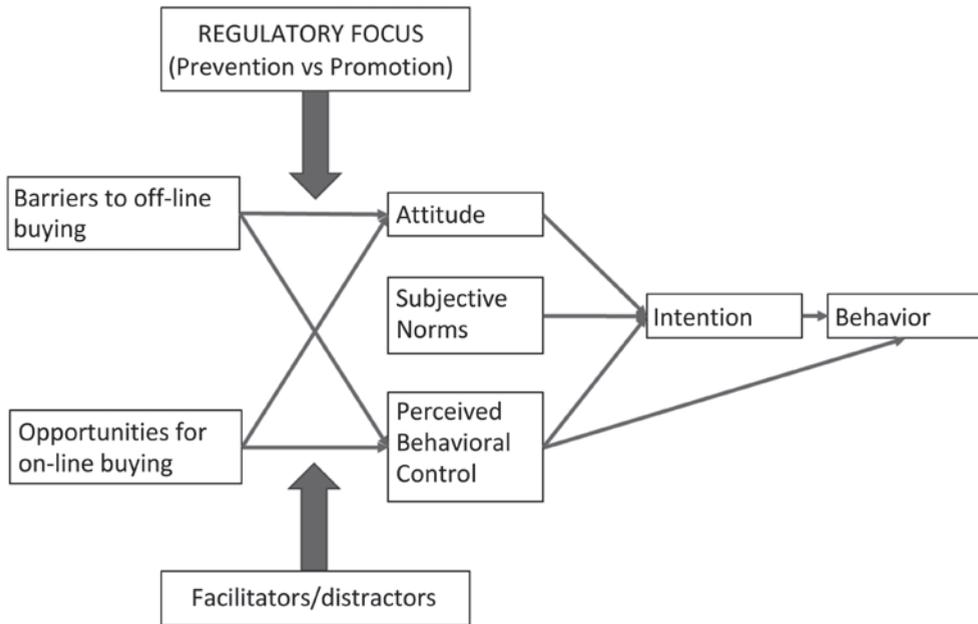
While the TPB and RFT have traditionally been applied in different domains, integrating them into one model combines the strengths of both theories. By pairing TPB's focus on intention formation with RFT's emphasis on motivational orientation, the model can not only capture the impact of specific Covid-19 factors but also

present them in a consistent way. The integration of the two theories acknowledges that human behavior is both influenced by a combination of conscious intentions and situational factors and shaped by motivational tendencies (i.e., promotion and prevention focus).

Such analysis of the factors that are specific to the Covid-19 pandemic, grounded in the the-

oretical philosophy of two behavioral models (TPB and RFT), helps to develop an integrated model of online purchasing behavior and related propositions. This model employs key elements of the TPB while considering the prevention/promotion focus of buyers and also takes account of contextual factors relevant to Covid-19 factors (see Figure 1 below).

FIGURE 1: Model of Covid-19 impact on online buying



Source: Prepared by the authors

All TPB factors (attitude, subjective norms, perceived behavioral control, intention, and behavior) are linked with online buying, i.e., they exert effects of behavioral, normative, and control beliefs on an individual’s intention. The beliefs themselves are formed by several other factors, and their effects may also be observed either on the beliefs or on the intention to behave via the mediation of beliefs. Since the new behavior is developed because of the impacts of Covid-specific factors (Bhati et al., 2022; Troise, O’Driscoll, Tani & Prisco, 2021), the authors of this research study posit that the indirect impact of the barriers to offline buying is positive:

*P1: Barriers to offline buying positively affect online buying intention with the mediation of behavioral and control beliefs (attitudes and perceived behavioral control).*

To observe the proposed mediation effect, the direct impacts of the barriers to attitude and perceived behavioral control must be considered (e.g., Qi, Tian & Ploeger, 2021; Shin, 2021). Therefore, more specific propositions have been formulated:

*P1a: Barriers to offline buying positively influence attitudes in favor of online buying.*

*P1b: Barriers to offline buying positively impact perceived behavioral control regarding online buying.*

In line with this logic, opportunities for greater convenience in online buying naturally encourage online buying (e.g., Gruntkowski & Martinez, 2022; Sajid et al., 2022). Adopting this assumption, similar propositions regarding opportunities for online buying can be developed:

*P2: Opportunities for online buying positively affect online buying intention with the mediation of behavioral and control beliefs (attitudes and perceived behavioral control).*

*P2a: Opportunities for online buying positively affect attitude toward online buying.*

*P2b: Opportunities for online buying positively affect perceived behavioral control regarding online buying.*

As shown in Table 3, many additional factors may serve as facilitators to or distractors from online buying behavior. The authors of this study predict that these factors will moderate direct relationships of barriers and opportunities with respect to behavioral and control beliefs:

*P3: Facilitating and distracting factors moderate the impact of barriers and opportunities on behavioral and control beliefs (attitudes and perceived behavioral control).*

*P3a: Facilitating factors of online buying positively moderate the impact of barriers and opportunities on attitude and perceived behavioral control.*

*P3b: Distracting factors of online buying negatively moderate the impact of barriers and opportunities on attitude and perceived behavioral control.*

Considering the impact of different motivational focuses of buyers, it is proposed that the prevention and promotion focus, respectively, moderate differently the impact of barriers and opportunities. Therefore, we postulate:

*P4: Prevention focus and promotion focus moderate the impact of barriers and opportunities on behavioral and control beliefs (attitudes and perceived behavioral control).*

P4a: Increased prevention focus strengthens the impact of barriers on attitude and perceived behavioral control.

P4b: Increased promotion focus strengthens the impact of opportunities on attitude and perceived behavioral control.

## 4. MODELING OF BEHAVIORAL TRANSFORMATION

The present analysis of consumer behavior during the Covid-19 pandemic helps to develop a theoretical model of behavior that contributes to a better understanding of the recent shift from offline to online buying, as well as the general behavioral transformation. It is important to note that this shift occurred in the light of factors specific to the conditions of the Covid-19 pandemic. It is also worth noting that behavioral transformations do not always – or even frequently – happen in radical conditions such as the Covid-19 pandemic. In addition, the factors themselves can be different. Therefore, to develop a more universal model of behavioral transformation, certain aspects of the present model must be strictly formulated and discussed in further detail.

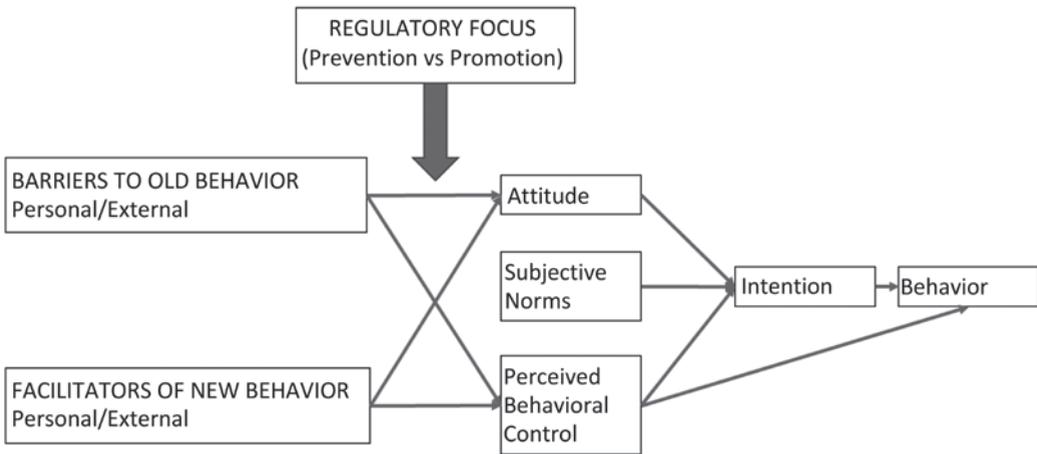
Firstly, the model must account for previous (“old”) and novel (“new”) behaviors. In a typical TPB model, only one type of behavior is considered; therefore, in order to model transformation toward a new behavior, all elements of the TPB model (attitude, subjective norms, perceived behavioral control, intention, and behavior) must be linked with the new behavior. This argument is justified by the model based on the change from offline to online buying during the Covid-19 pandemic.

Secondly, since behavioral transformations do not necessarily happen because of sudden dramatic contextual changes, not always can important factors be categorized into barriers and opportunities. Rather, opportunities may be integrated with facilitating factors to be

conceptualized more broadly than in the model for the Covid-19 period. Instead of capturing just personal aspects, facilitating factors at the level of operationalization may also capture external (contextual) elements. The same is suggested

for barriers, which could include distracting factors from the Covid-related model. Based on these amendments, the suggested model for behavioral transformation is presented below in Figure 2.

FIGURE 2: Behavioral transformation model



Source: Prepared by the authors

Although the proposed model is rooted in the analysis of behavioral change during the Covid-19 pandemic, it is entirely theoretical and would thus benefit from additional theoretical justifications and empirical evidence. At the moment, it gives rise to several important questions that can guide further research:

*RQ1: Do barriers to old behavior always positively impact attitude to and perceived behavioral control of the new behavior?*

*RQ2: Do facilitators of new behavior always positively impact attitude to and perceived behavioral control of the new behavior?*

*RQ3: Do prevention/promotion focuses significantly moderate the above-mentioned relationships?*

## 5. LIMITATIONS AND DIRECTION FOR FUTURE RESEARCH

The present research study highlights specific, catalyzing factors behind the behavioral shift from offline to online buying during the Covid-19 pandemic. In addition, this study presents a broader model of behavioral transformation that is applicable to conditions beyond the situational specificities of the Covid-19 period. However, it also includes several limitations, which simultaneously offer opportunities for future research.

Firstly, the present study and its proposed model are entirely conceptual. Therefore, further research is needed to empirically test and validate the developed theoretical model while also addressing the aforementioned research questions. Secondly, while the suggested model proposes a structure through which

to observe interactions between behavioral transformation factors, it does not specify the factors themselves; the determination of the relevant factors is left to the discretion of future researchers. However, this study maintains that there are three broad avenues for researching the impacts of barriers, facilitators, and regulatory focus within the framework of the TPB. This means that specific factors may reflect various behavioral changes within broad sets of exter-

nal contexts. It would be a valuable next step to encourage researchers and experts to discuss the proposed model and its applications.

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