

CONSUMER RISK PERCEPTION AND BEHAVIOR CHANGE INTENTIONS: EVIDENCE FROM THE COVID-19 PANDEMIC

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ABSTRACT This manuscript addresses behavior change intentions and consumer risk perceptions in the context of uncertainty and crisis such as the Covid-19 pandemic. Based on the theory of planned behavior and health behavior theories, a conceptual framework is developed that focuses on the role of attitudes toward the Covid-19 pandemic, their determinants in the context of the public campaign conducted, and the resulting behavior change intentions. The empirical study, based on an actual campaign and a representative nationwide sample in a developing country, is conducted to test the developed hypotheses. The results suggest that information search is relevant to predicting attitudes and intention to change behavior. At the same time, exposure to the campaign is directly relevant to motivating the target audience to change their behavior. There is also a gap between attitude and behavior, but it is bridged by perceived risk, which plays a vital moderating role when rated high or low. Finally, in the presence of this moderating effect, an indirect effect of information search on behavior change intention is confirmed by attitudes toward the Covid-19 pandemic. Overall, this study provides valuable insights for research in health behavior and crisis management.

KEYWORDS: *behavior change intentions, risk perception, consumer attitudes, Covid-19 pandemic*

1. INTRODUCTION

In the face of crises such as pandemics, people are often forced to change their behavior in response to various external incentives. In the context of health-related behaviors, interventions aimed at promoting protective behaviors and discouraging risky behaviors are likely more effective when the public is well-informed about health recommendations through various marketing and communication channels. Several studies have examined the effec-

tiveness of “stay-at-home campaigns” (e.g., Duong et al., 2023; Tsoy et al., 2022). However, there is still a gap in knowledge regarding people’s responses and subsequent intentions, and the present study aims to fill this gap.

Risk perception is crucial in predicting a person’s health behavior. Researchers argue that a person who perceives a particular risk is more likely to change their health-related actions to reduce or eliminate that risk (i.e., preventive behavior) (Sorensen et al., 2003; Bae

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& Chang, 2020). The Covid-19 pandemic had global implications due to the high contagiousness of the virus, which exceeds that of previous crises such as SARS or MERS. The impact of the Covid-19 pandemic has been studied in various areas (primarily medicine, but also business) and at various levels, e.g., national, corporate, and individual levels (Alfirević et al., 2021). This study focuses on individual responses and their importance for effective crisis management. Previous outbreaks have also elicited preventive behaviors in individuals (Bae & Chang, 2020). Existing literature indicates that individuals engaged in behaviors that deviated from their normative behaviors during the Covid-19 pandemic, with differences observed across countries. In addition, the risk perception related to Covid-19 varied widely across countries, suggesting that risk perception may be a vital determinant of the pandemic's outcome, as it may influence the occurrence of new positive cases (Yildirim & Guler, 2020).

Previous studies have shown that risk perception of Covid-19 is relatively high (e.g., Wise et al., 2020), suggesting that the public is well-informed and aware of the consequences of the infection. In the study conducted by Dryhurst et al. (2020), the public's risk perception of Covid-19 was predicted by a variety of factors, including personal experience with the virus, individualistic and prosocial values, personal and collectivistic efficacy, and social elaboration by family and friends.

With this background, this study analyzes citizens' attitudes toward the Covid-19 pandemic regarding their information search, emotional characteristics, exposure to preventive behavioral prevention, and perceived risk and intentions to change their behavior. The study was conducted in a developing country (i.e., Bosnia and Herzegovina), which further adds to the literature on behavior change intentions. The intended contributions of this study are threefold.

First, the study aims to understand better the impact of various factors on individuals' attitudes toward the crisis (i.e., the Covid-19 pandemic in the example of this study), such as individuals' level of information, emotional characteristics, and exposure to the preventive behavior campaign. Second, examining perceived risk and intention to change behavior can provide insights into the factors influencing individuals' decisions to adopt preventive behaviors, which could have implications for future pandemics and public health policies. Consequently, this study adds to the existing literature on the behavior of individuals in crises. Third, this study provides valuable insights for public health professionals and policymakers. Indeed, there is a solid need to communicate and disseminate information about crises effectively, and the lessons learned from the Covid-19 pandemic

could be reused in different scenarios. In addition, the study could help policymakers develop and implement targeted behavioral prevention campaigns.

2. CONCEPTUAL FRAMEWORK

The Theory of Planned Behavior (TPB) predicts behavior based on its immediate predictors, behavioral intentions (Ajzen, 1991; Ajzen & Madden, 1986). Thus, the central concept of this theory - intention - is determined by three essential components: attitude, perceived behavioral control, and subjective norms. Attitude refers to a person's overall evaluation of the behavior, and perceived behavioral control refers to a person's perceived control in performing the behavior (Kwasnicka et al., 2016); thus, the focus in this manuscript is on the relationship between the attitudes toward the Covid-19 pandemic and intention to change behavior. Possible determinants of the emergence of such attitudes are further explored.

Scholars concerned with behavior change would like to caution against a common mistake, namely privileging the role of information from expert sources as a driver of behavior change. Since providing expertise is synonymous with providing information for many practitioners, this model assumes that people informed about the negative consequences of overeating or exercising too little will change their behavior accordingly (Kelly & Barker, 2016). Therefore, it is reasonable to assume that the amount and quality of information people have access to may also play an essential role in shaping their attitudes toward the pandemic.

A conceptual framework was developed that focuses on behavior change intention as the most critical dependent variable to explain behavior change intention with attitudes toward the Covid-19 pandemic and three independent variables that determine attitudes, as shown in Figure 1. These determinants are (1) information, (2) emotional characteristics, and (3) exposure to campaigns. Individuals' risk perception is a potential moderator of the relationship between attitudes toward the Covid-19 pandemic and intention to change behavior. This framework is further explored through hypotheses in the following text.

Research has shown that people who actively seek information about a particular topic tend to have more positive attitudes about that topic than those who do not engage in information search, although this is an interesting consideration when it comes to critical interrelated topics (e.g., Anker et al., 2011; So-roya et al., 2021). Therefore, information overload can sometimes cause adverse psychological and behavioral reactions. First, information search can lead to a

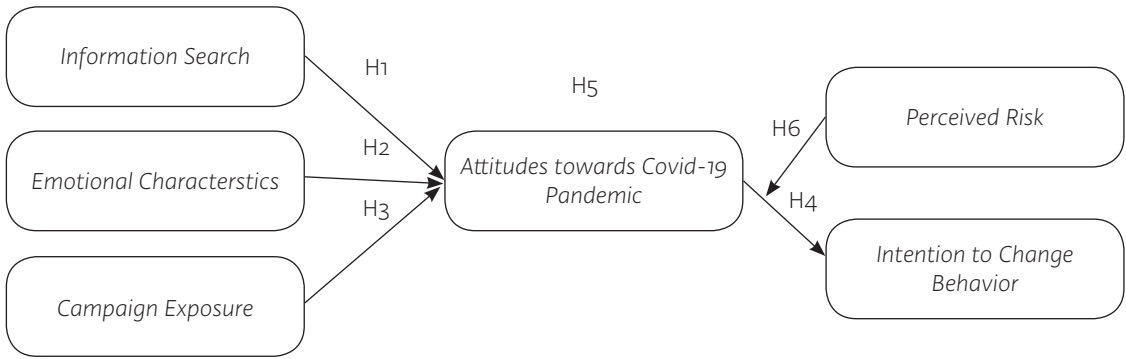


FIGURE 1. Conceptual framework of the study
SOURCE: Author

more accurate and comprehensive understanding of the topic, increasing its perceived relevance and importance and ultimately influencing attitudes toward it. Therefore, it is hypothesized that:

H1: Information search is positively related to attitudes toward the Covid-19 pandemic.

In psychology, behavior change models seek to understand and predict how individuals will behave under specific circumstances by incorporating these multiple determinants (Sisk, 2019). Different emotions stimulate different behaviors, and logically, incentives that elicit emotions should encourage goal-directed participants to engage in goal-directed behaviors (e.g., exercise). In addition, the expected intensity of emotions generally increases the likelihood of goal-directed behavior (van der Swaluw, 2018), thus:

H2: Emotional characteristics are positively related to attitudes toward the Covid-19 pandemic.

Awareness campaigns can be an effective tool in promoting positive attitudes toward the Covid-19 pandemic. Suppose individuals are exposed to relevant appeals about the pandemic through awareness campaigns. In that case, it can improve their knowledge and understanding of the situation, leading to more positive attitudes toward the pandemic. Awareness campaigns can provide information about preventive measures such as social distancing and wearing masks, which can help individuals feel in control of the situation and reduce their anxiety and fear. In addition, campaigns can highlight the importance of taking responsibility for one’s health and well-being and that of others in the community.

Research has shown that public health messag-

es, including awareness campaigns, can positively impact attitudes and behaviors related to health issues (Mheidy & Fares, 2020). Exposure to awareness campaigns can increase knowledge and thus promote positive health behaviors:

H3: Campaign exposure is positively related to attitudes toward the Covid-19 pandemic.

Attitudes result from assessing the consequences of the behavior in question and the relative importance of those consequences to the individual (Gielen & Sleet, 2003). Therefore, promoting positive health prevention attitudes increases individuals’ intention to change their behavior. Behavioral intention is the likelihood that a person will perform a specific action. A person who shows a solid intention to engage in a particular behavior is more likely to engage in that behavior (Lin, 2015), which is consistent with the theory of planned behavior. Therefore, it is hypothesized:

H4: Attitudes toward the Covid-19 pandemic positively relate to the intention to change behavior.

Moreover, the mechanisms underlying the outlined relationships are of interest. Thus, the study examines the potential mediating role of attitudes between attitudinal determinants and behavioral intentions, which supports the proposition that:

H5: Attitudes toward the Covid-19 pandemic mediate the effect of (a) information search, (b) emotional characteristics, and (c) campaign exposure on intention to change behavior.

The perceived risk may significantly predict behavior change during a pandemic such as Covid-19

(e.g., Sorensen et al., 2003; Bae & Chang, 2020). Individuals with a higher risk of contracting Covid-19 are more likely to engage in protective behaviors, such as hand washing, social distancing, and wearing masks. However, perceived risk may also influence attitudes and behavior change. Individuals with a higher perceived risk may be more likely to act on their attitudes and intentions than individuals with a lower perceived risk. For example, individuals with a higher risk of contracting Covid-19 are more likely to engage in protective behaviors, even if their attitudes toward these behaviors are only moderately positive.

H6: *Perceived risk moderates the relationship between the attitudes toward the Covid-19 pandemic and the intention to change behavior.*

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3. METHODS

To test the proposed hypotheses based on the theory of planned behavior and models of health behavior and protective behavior, a dataset is collected related to the actual campaign aimed at communicating protection against the Covid-19 pandemic, i.e., communicating guidelines to prevent the spread of the pandemic in 2020 and 2021, following the recommendations of the World Health Organization. To verify the campaign's effectiveness, an independent research agency surveyed a representative sample of the entire Bosnia and Herzegovina, where the analysis was conducted.

External datasets for research purposes have numerous advantages and disadvantages. The most critical advantages have already been outlined: the reliable random sample representative of the whole country and the actual setting of the tested ongoing campaign. However, the main disadvantage of such an approach is that research institutions often do not use reliable and valid measures that meet scientific standards (Kimberlin & Winterstein, 2008). This is also the case in the present study, as the research agency did not rely on the already developed scientific measures but measured the focal concepts mainly through directly observable direct questions/statements. Therefore, to operationalize the construct of information, the general question "How often do you follow news and articles about the following topics?" was used, and the respondents were offered six different topics related to the pandemic: information about the spread of the coronavirus in the world, information about the spread of the coronavirus in Bosnia and Herzegovina, detailed statistics on infected, sick, and deceased people, news about the measures against the pandemic, press conferences of govern-

ment/crisis staff representatives, and interviews with coronavirus experts.

Exposure to information or awareness was measured on a 5-point Likert scale, where 1 = mostly not following, and 5 = several times a day, most of the time. The construct of emotional characteristics was operationalized by using measures of four emotions: uncertainty, emotional irritability, fear, and agitation. The respondents were asked if they had experienced these emotions recently (e.g., in the last 2-3 weeks). The intensity of the emotions was measured on a 6-point Likert scale, where 0 = absence of emotion ("at no point"), 1 = sometimes, and 5 = all the time).

To operationalize the third independent construct in the study, the so-called exposure to the campaign, the following questions were asked: 1 = I noticed the campaign and paid attention to the content, 2 = I noticed the campaign but did not pay attention to the content, and 3 = I did not notice the campaign. It is important to note that respondents who answered that they had not seen the campaign were shown a video depicting the entire campaign in the next part of the questionnaire so that they could describe their behavioral intentions in line with the video they had seen.

Attitudes toward the Covid-19 pandemic were operationalized by analyzing responses related to family care and health concern, ranked first, second, or third by the respondents. The variable takes values from 0 (when respondents had no attitude related to family or health care in their first three choices) to a maximum of 5 (when one of these attitudes was the first choice and the other was the second choice).

Concerning risk perception, which was positioned as a moderator in the conceptual model, the respondents answered a general question, "To what extent are you personally concerned about the spread of the new coronavirus?". The respondents answered this question on a scale of 1-4, where 1 = not at all concerned and 4 = very concerned. Finally, the last dependent variable in the study, intentions to change behavior, was measured with one direct statement, "To what extent has this campaign prompted you to change (adjust) your behavior to better match current precautions in Bosnia and Herzegovina?" measured on a scale of 1-4, where 1 = not at all concerned and 4 = wholly concerned.

The data collection process involved a representative sample of 550 residents of Bosnia and Herzegovina. The respondents were roughly evenly distributed by gender and had comparable demographic characteristics (age, employment, education, and geographic affiliation) to the general population.

4. RESULTS

Before assessing the hypotheses, the reliability and validity of the measures (Tabachnik & Fidell, 2007; Hair et al., 2010) will first be examined. Regarding validity, a principal component analysis of two latently measured constructs (information seeking and emotional characteristics) is conducted, finding acceptable factor loadings higher than 0.5 (Costello & Osborne, 2005) as well as the AVE higher than 50% (Hair et al., 2010). Regarding reliability, Cronbach’s alpha values were also high and acceptable.

As an additional aspect of validity testing, especially discriminant validity, the correlation matrix between the constructs of interest was analyzed (Voorhees et al., 2016). The correlation matrix is shown in the following table.

The correlation matrix shows no discriminant validity issue, as the highest correlation (between attitudes toward the Covid-19 pandemic and risk perception) is $\rho = 0.453, p < 0.001$. It also shows that the constructs are moderately correlated with each other. Interestingly, the emotional characteristics are not significantly related to any other variable of interest. In contrast, the intention to change behavior, the ultimate dependent variable in this model, is significantly related to all constructs except information. The intention to change behavior strongly correlates with risk perception ($\rho = 0.352, p < 0.001$).

Later, the latent variables were aggregated

based on the average value, and the tool PROCESS was used to analyze the hypothesized relationship. Model 14 (Preacher & Hayes, 2004; Hayes, 2022) was selected to fit the study’s conceptual framework. The model was estimated using 5,000 bootstrap samples with 95% confidence intervals. Three demographic control variables were also included – participants’ gender, age, and education level. Regarding education, the participants were divided into those with a college degree (and above) and those with an educational level lower than college. It is important to note that the PROCESS analysis has the limitation that only one central independent variable is included, for which mediating and moderating effects are examined.

In contrast, additional independent variables may be part of the model but are treated as covariates, and indirect and interaction effects are not calculated. This is the approach used in the analysis. The results are presented in Table 3 and Table 4.

TABLE 1. Construct validity and reliability assessment

Construct	Number of items	Loadings	AVE	Cronbach’s Alpha
Information Search	6	0.786-0.886	71.43	0.919
Emotional Characteristics	4	0.714-0.843	64.09	0.807

Source: Authors.

TABLE 2. Correlation matrix

#	Constructs	1	2	3	4	5	6
1	Information Search	1					
2	Emotional Characteristics	-0.026	1				
3	Campaign Exposure	-0.156***	-0.008	1			
4	Attitudes toward the Covid-19 pandemic	0.338***	-0.022	-0.091**	1		
5	Perceived Risk	0.378***	-0.034	-0.093**	0.453***	1	
6	Intention to Change Behavior	0.290***	0.055	-0.151***	0.226***	0.352***	1

SOURCE: Authors.

NOTE: *** - $p < 0.001$; ** - $p < 0.05$;

TABLE 3. Attitudes toward the Covid-19 pandemic as a dependent variable

Constructs	B coefficient (Unstandardized)	Std. error	LLCI	ULCI	R ²
<i>Independent Variables</i>					
Information Search	0.616***	0.083	0.453	0.778	0.137
Emotional Characteristics	-0.031 ^{NS}	0.073	-0.217	0.415	
Campaign Exposure	0.099 ^{NS}	0.156	-0.126	0.487	
<i>Control Variables</i>					
Gender	0.181 ^{NS}	0.156	-0.126	0.487	
Age	0.018***	0.005	0.008	0.029	
Education	0.158 ^{NS}	0.161	-0.157	0.473	

SOURCE: Authors.

NOTES: Dependent variable: Attitudes toward the Covid-19 pandemic. PROCESS Model 14 (5,000 bootstrapped samples, 95% confidence intervals); LLCI – Lower level confidence interval; ULCI – Upper-level confidence interval; *** - $p < 0.001$; ** - $p < 0.05$; * - $p < 0.1$;

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As can be seen, attitudes toward the Covid-19 pandemic are only partially explained by this model, with a relatively low coefficient of determination of 13.7%. Among the key independent variables, only information is positively and significantly related to attitudes toward the Covid-19 pandemic ($\beta = 0.616, p < 0.001$), while respondents' emotional characteristics and exposure to the campaign, which was the focus of the research are not positively and significantly related to attitudes toward the Covid-19 pandemic according to this result. As for the control variables, the respondents' age is significant ($\beta = 0.018, p < 0.001$), and there is a positive relationship with the dependent variable, indicating that older respondents have a more robust expression of attitudes toward the Covid-19 pandemic. Based on these results, it can be said that H1 is fully confirmed, while this study cannot support H2 and H3.-

By analyzing the model focusing on the dependent variable of intention to change behavior, it can be seen that information has a direct influence on behavior change ($\beta = 0.133, p < 0.001$), and exposure to the campaign is also directly and positively related to intention to change behavior ($\beta = 0.127, p < 0.001$). Emotional characteristics, as expected, were not a significant predictor in this model. Surprisingly, attitudes toward the Covid-19 pandemic were insignificant for the intention to change behavior. Thus, there appears to be a gap between attitudes and intentions, as described in the Theory of Planned Behavior. Furthermore, Hypothesis 4 of this study cannot be confirmed based on these results.

Perceived risk, the focal moderator, direct-

ly influences behavior change ($\beta = 0.209, p < 0.001$), and the moderating hypothesis is confirmed, which means that the interaction between attitudes toward the pandemic and perceived risk negatively and significantly influences behavioral intention, confirming Hypothesis 6.

Given that the analyses were based on regression, the basic regression assumptions (i.e., normality, homoscedasticity, and multicollinearity) were also tested. The tests for both dependent variables confirmed that there was no problem with the normality of the data in either model or multicollinearity, but there was a problem with heteroskedasticity. Because of this problem, the analysis was repeated, and the statistical inference was used to account for the problem of heteroskedasticity, i.e., the Huber-White heteroskedasticity-consistent (HC) approach was used for standard errors, with the selection of HCo (Long & Ervin, 2000). Correcting for heteroskedasticity yields unchanged results for the model relationship, i.e., unstandardized coefficients, and there is no need to replicate the results already presented in Tables 3 and 4. It can be said that the principle of robustness is satisfied in this case and that the constraint of heteroskedasticity of the regressions in question has been considered.

When it comes to moderation, i.e., testing Hypothesis 6, a detailed examination of the results of this analysis is very interesting. First, the primary or essential effect of attitudes toward the Covid-19 pandemic on the intention to change behavior is insignificant. Thus in isolation, attitudes toward Covid-19 do not affect the intention to change behavior. On the

TABLE 4. Intention to change behavior as a dependent variable

Constructs	B coefficient (Unstandardized)	Std. error	LLCI	ULCI	R ²
<i>Independent variables</i>					
Information Search	0.133***	0.199	0.057	0.208	
Emotional Characteristics	0.046 ^{NS}	0.029	-0.010	0.102	
Campaign Exposure	0.127**	0.059	0.011	0.243	
Attitudes toward the Covid-19 pandemic	0.011 ^{NS}	0.018	-0.024	0.045	
Perceived risk	0.209***	0.053	0.105	0.314	0.219
<i>Moderation</i>					
Attitudes toward the Covid-19 pandemic x Perceived risk	-0.084***	0.020	-0.124	-0.044	
<i>Control Variables</i>					
Gender	0.251***	0.063	0.128	0.374	
Age	0.002 ^{NS}	0.002	-0.002	0.007	
Education	-0.052 ^{NS}	0.060	-0.169	0.065	

SOURCE: Authors.

NOTES: Dependent variable: Intention to change behavior. PROCESS Model 14 (5,000 bootstrapped samples, 95% confidence intervals); LLCI – Lower level confidence interval; ULCI – Upper-level confidence interval; *** - $p < 0.001$; ** - $p < 0.05$; * - $p < 0.1$;

other hand, risk perception has a positive and significant effect on (and is a predictor of) behavior change intention. Furthermore, the interaction effect, moderation itself, is negative and significant ($\beta = -0.084$,

$p < 0.001$). Further analysis of the interaction effects, i.e., examining the underlying relationship for different levels of risk, reveals that the main effect is indeed significant at certain levels of risk (Figure 2).

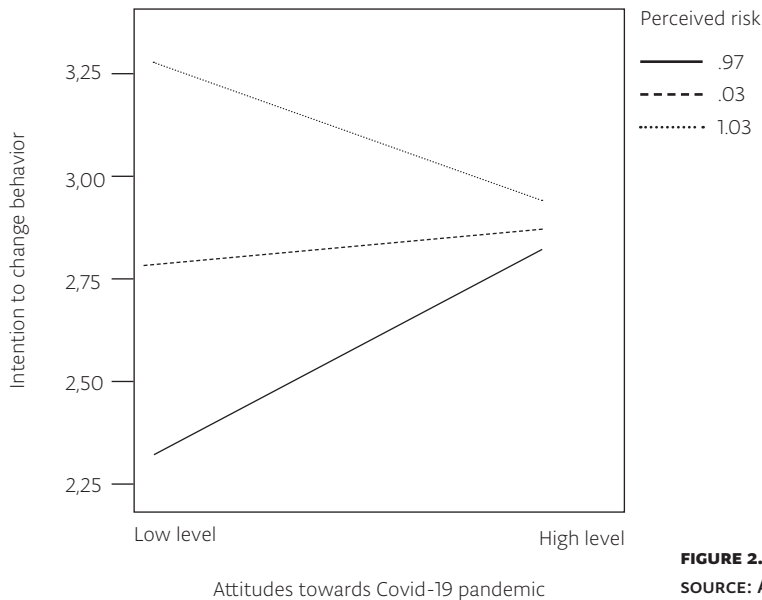


FIGURE 2. The moderating effect of perceived risk
SOURCE: Authors.

TABLE 5. The mediating effect of attitudes toward the Covid-19 pandemic

Perceived risk level	Indirect effect estimate (Information Search → Intention to Change Behavior)	St. error (HC0) (Bootstrapped)	LLCI (Bootstrapped)	ULCI (Bootstrapped)
-0.973	0.057	0.018	0.025	0.094
0.027	0.005	0.011	-0.016	0.028
1.027	-0.046	0.019	-0.085	-0.011

SOURCE: Authors.

NOTE: Perceived risk values are taken for the 16th, 50th, and 84th percentile;

Results show that when perceived risk is low, the influence of attitudes toward the Covid-19 pandemic on the intention to change behavior becomes positive and significant (value of perceived risk = -0.973; $\beta = 0.092$, SE = 0.026; $p < 0.001$, LLCI = 0.042 and ULCI = 0.143). When risk perception is at the medium level, the effect is shown in the primary results, i.e., no significant relationship exists between attitudes and behavior intention. However, when risk perception is high, the effect of attitudes toward the Covid-19 pandemic on the intention to change behavior becomes significant and negative (value of perceived risk = 1.027; $\beta = -0.075$, SE = 0.028; $p < 0.05$, LLCI = -0.131 and ULCI = -0.019). These results show that Hypothesis 4 is, in fact, partially confirmed, while Hypothesis 6 is fully confirmed.

The advantages of conditioned process analysis (PROCESS analysis) come into play here, as it allows further analysis of the conditioned indirect (mediation) effect. This was also done, and Hypothesis 5 - the mediation hypothesis - was tested considering different levels of the moderator (perceived risk). The estimation of the conditioned indirect effect of information search (H5a) on the intention to change behavior as this is the only determinant significantly related to the mediator (see Table 5).

Hypothesis 5a is partially confirmed because the indirect effect is significant for both low perceived risk ($\beta = 0.057$, $p < 0.05$) and high perceived risk ($\beta = -0.046$, $p < 0.05$). In contrast, it is not significant for the average level of perceived risk. It is also important to note that the index of moderated mediation (IMM) can be observed in this case, which quantifies the relationship between the indirect effect and the moderator. In the case of H5a, there is a significant and negative IMM (IMM = -0.052, $p < 0.05$). Hypotheses H5b and H5c are neither confirmed nor tested because the direct main effect between the predictor and the attitudes toward the Covid-19 pandemic as a mediator is insignificant.

5. DISCUSSION AND CONCLUSIONS

The results of this study provide an interesting addition to both theory and policy regarding health-related behavior and behavior change intentions. First, the study found that information search was positively and significantly related to attitudes toward the Covid-19 pandemic. Moreover, the conceptual framework did not predict. Still, it confirmed that information search and exposure to the campaign continued to have a direct and positive relationship with the intention to change behavior. These results suggest that public health campaigns focused on information searches related to the Covid-19 pandemic can effectively motivate people to change their behavior directly. Therefore, policymakers and public health officials should continue to invest in effective communication strategies to inform the public about the importance of taking appropriate measures to prevent the spread of the virus. Second, the study found that respondents' emotional characteristics and exposure to the campaign, which was the focus of the research, were not related to their attitudes toward the Covid-19 pandemic.

Third, the study found a gap between attitudes and intentions, as described in the Theory of Planned Behavior (Ajzen & Madden, 1986). In this study, attitudes toward the Covid-19 pandemic are positively related to behavior change intention only when conditioned, which is an important theoretical addition to the previous model. Furthermore, this finding suggests that policymakers and public health officials should focus on developing interventions that promote positive attitudes and address the underlying factors that influence behavior change. In addition, the study found that the interaction between attitudes toward the pandemic and perceived risk negatively and significantly influenced behavioral intention, confirming the moderating hypothesis and thus bringing the research in line with previous studies

that have shown that risk perception is related to behavioral intentions and behaviors in health models (Wise et al., 2020). This finding suggests that behavior change interventions should consider people's perceptions of the risk associated with the pandemic and tailor their messages accordingly. In addition, this finding contributes to the results of previous studies that found that interpersonal communication and exposure to social media affect health behavior intentions during the Covid-19 pandemic (Duong et al., 2023).

In addition, the research results show that attitudes toward the Covid-19 pandemic, when analyzed separately from other effects, are not significantly related to behavior change intention in this study. However, when risk perception is included as a conditioning factor in the model evaluation, the effects in the model look different. Namely, risk perception directly affects the intention to change behavior - the higher the perceived risk, the greater the propensity of respondents to change their behavior regarding compliance with Covid-19 pandemic measures. Depending on the level of risk, respondents' behavior also results in a completely different set of attitudes that elicit the intention to change behavior. For high and low levels of perceived risk, the influence of attitudes toward the Covid-19 pandemic on the intention to change behavior becomes significant. In this case, attitudes toward the Covid-19 pandemic also mediate the effect of information on the intention to change behavior.

Furthermore, without additional conditioning effects, attitudes toward the pandemic have no mediating function, i.e., they do not act indirectly as predictors of effects on the intention to change behavior. However, in the presence of risk perception, in the regions or levels of perceived risk for which attitudes become significant, the mediating relationship also becomes significant in the case of the effect of information. It can be concluded that, in addition to the direct effect found in this paper, information has an indirect effect on the intention to change behavior by improving attitudes toward the Covid-19 pandemic, but only in the case of very low or very high-risk perception.

One of the main advantages, but at the same time also the limitation of this study, is that a professional research agency conducted it on a relevant sample of individuals without fully considering scientific recommendations for developing the measurement instrument. Because of this, the analysis is limited in capturing only the observed level data and not the latent concepts. However, having been the subject of rigorous analysis, the impact of this limitation is lower. Furthermore, due to the limited avail-

ability of data from the dataset, the theoretical considerations and empirical evaluation do not consider the entire model of the theory of planned behavior but rather focus on the attitude-behavior gap and the determinants of attitudes. Further studies should evaluate the proposed relationships considering the two additional assumptions of the theory of planned behavior. Since exposure to the campaign significantly impacts behavioral intentions, policy professionals and marketers should spend more time evaluating the nature and type of communication and communication campaigns to enhance such positive behavioral changes.

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POTROŠAČKA PERCEPCIJA RIZIKA I NAMJERA PROMJENE PONAŠANJA: DOKAZI IZ PANDEMIJE Covid-19

12

SAŽETAK

Ovaj članak se bavi namjerama promjene ponašanja i percepcijom rizika potrošača u kontekstu neizvjesnosti i krize poput pandemije Covid-19. Na temelju teorije planiranog ponašanja i teorija zdravstvenog ponašanja, razvijen je konceptualni okvir koji se usredotočuje na ulogu stavova prema pandemiji Covid-19, pri čemu se razmatraju njihove determinante u kontekstu provedene javne kampanje te rezultirajuće namjere promjene ponašanja. Empirijska studija, temeljena na stvarnoj kampanji i reprezentativnom uzorku na nacionalnoj razini u zemlji u razvoju, provedena je s ciljem testiranja prezentiranih hipoteza. Rezultati sugeriraju da je pretraživanje informacija relevantno za predviđanje stavova i namjera promjene ponašanja, dok je izloženost kampanji izravno povezana s motiviranjem ciljne publike na promjenu ponašanja. Također postoji jaz između stavova i ponašanja u ovoj studiji, ali taj jaz nadoknađuje percepcija rizika, koja igra vrlo važnu moderirajuću ulogu kad je ocijenjena kao visoka ili niska. Konačno, u prisutnosti ovog moderirajućeg učinka, potvrđen je neizravan učinak pretraživanja informacija na namjeru promjene ponašanja putem stavova prema pandemiji Covid-19. Sveukupno, ova studija pruža vrijedne uvide za istraživanje u području zdravstvenog ponašanja i kriznog menadžmenta.

KLJUČNE RIJEČI: *namjera promjene ponašanja, percepcija rizika, stavovi potrošača, pandemija Covid-19*