

Hope, fear, and consumer behavioral change amid COVID-19: Application of protection motivation theory

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Abstract

Using protection motivation theory (PMT), this study investigates the influence of cognitive assessment and affective response on customers' behavioral intention amid COVID-19 in the context of restaurants. More specifically, this research draws attention to (1) the influence of protection motivation (i.e., perceived vulnerability, perceived severity, maladaptive reward, response efficacy, self-efficacy, response cost) on hope and fear, (2) hope and fear as mediators between protection motivation and behavioral intention, and (3) diverse customer behavioral intentions that have emerged during the COVID-19 pandemic (i.e., health-focused behavior, conscious consumption, and the supporting of local businesses and products). A total of 473 completed responses were obtained through an online survey. Structural equation modeling (SEM) was employed to test the hypothesized relationships. The research model proposed in the study successfully explained the process in which individuals commit to hygienic behaviors, prioritize local restaurants, and engage in conscious consumption under the threat of COVID-19. The proposed model can be utilized in examining consumer behaviors in the hospitality industry, especially in the COVID-19 era.

KEYWORDS

behavioral intention, COVID-19, fear, hope, protection motivation theory

1 | INTRODUCTION

COVID-19 has brought massive market disruptions on a global scale, forcing service organizations to significantly alter their method of service delivery (Kabadayi et al., 2020; Mehroliya et al., 2020). With the imposition of state-level restrictions to minimize close contact between people, the COVID-19 pandemic has significantly reshaped the restaurant industry (Gössling et al., 2020). A total restaurant sales loss of \$185 billion was reported (National Restaurant Association [NRA], 2020b) as nearly 40% of the restaurants in the United States had to close at the beginning of the COVID-19 outbreak (NRA, 2020a), and there was a 90% decline in restaurant visitations (Dube et al., 2020).

As significant changes in customers' behaviors have occurred (e.g., Prentice et al., 2020), understanding the factors that lead to

customer retention has become critical for restaurants' success. Few recent studies on COVID-19 have addressed the changing consumer behavior and perception in diverse hospitality contexts, including the use of technology in hotels (Shin & Kang, 2020), peer-to-peer accommodation platforms (Farmaki et al., 2020), online food delivery (Mehroliya et al., 2020; Zhao & Bacao, 2020) and socially distanced dine-in services (Taylor, 2020). However, the current literature lacks a sufficient accounting of the factors that influence customers' behavioral intentions as they consider using hospitality services during the COVID-19 pandemic (Foroudi et al., 2021). Further, research has yet to focus on perceived risk and protection motivation as an antecedent for consumer affective and behavioral responses in the restaurant setting. As the dine-in experience is influenced by customers' thresholds of protective motivations, norms, and feelings toward the pandemic, this study aims to investigate the influence of

protection motivation factors and affective response on behavioral intention that pertains to the changing conditions amid COVID-19.

A few recent studies investigating the impact of COVID-19 in the hospitality setting have adopted a portion of protection motivation theory (PMT) or included some of the PMT constructs as antecedents to consumers' engagement in protective behavior (e.g., Foroudi et al., 2021; Laato et al., 2020; Mehroliya et al., 2020). However, none to our knowledge has tested the comprehensive model of PMT in assessing the diverse behavior of customers that reflects their changing values in terms of social, economic, and environmental responsibility amid the pandemic. In addition to protective behavior that directly mitigates the spread of the virus, it has been reported that a growing number of consumers are engaging in conscious consumption (Accenture, 2020; Sharma et al., 2021). It has been observed that consumers have altered their shopping behavior, becoming more cautious about the environmental impact, and are shopping more cost consciously during the COVID-19 pandemic (Accenture, 2020; Sharma et al., 2021). Further, there is an increased interest in shopping locally for the products consumers buy (e.g., buying locally sourced items and supporting locally owned businesses) (Accenture, 2020; Sharma et al., 2021). It is interesting to note that consumers' willingness to become socially responsible members of society during COVID-19 has brought about unexpected patterns of consumer behavior that were not observed in past pandemics. Therefore, our research proposes that protection motivation factors and affective response play a critical role in shaping such behavioral change (i.e., toward health-focused behavior, conscious consumption, shopping local).

The contribution of the affective response along with cognitive evaluation in formulating behavioral intention has been well documented in previous literature (e.g., Taylor, 2020). Appraisal theorists suggest that an individual's cognitive assessment or appraisal of the environment predicts emotional responses (Roseman, 1991). Especially in an uncertain situation, it has been found that cognitive assessment predicts affective responses, which lead to behavioral responses (Dunn & Schweitzer, 2005; Laato et al., 2020; Slovic, 2002; Smith & Ellsworth, 1985). While fear is an affective response naturally associated with a threat such as COVID-19, it has been found that hope also tends to emerge in a threatening situation (Lazarus, 1999). Hope is often mixed with negative feelings such as fear (Halevy, 2017) as the feeling of hope develops when people are "fearing the worst but yearning for better and believing the wished-for improvement is possible" (Lazarus, 2006, p. 16). Therefore, our study proposes that protection motivation (resulting from a cognitive evaluation) influences fear and hope (affective responses), which lead to behavioral intention, as supported by appraisal theories.

The purpose of this study is to investigate the influence of cognitive and affective responses on a customer's behavioral intention amid COVID-19 in the context of restaurants. Based on PMT, the model employed here draws attention to (1) the influence of protection motivation (i.e., perceived vulnerability, perceived severity, maladaptive reward, response efficacy, response cost, self-efficacy) on hope and fear, (2) hope and fear as mediators between protection

motivation and behavioral intentions, and (3) diverse customer behavioral intentions during COVID-19 (i.e., health-focused behavior, conscious consumption, and the supporting of local businesses and products).

2 | LITERATURE REVIEW

2.1 | Protection motivation theory

Rogers (1975) introduced PMT, which conceptualizes individuals' motivation to participate in protective behaviors in the presence of a threat stimulus. In the bifurcated approach of PMT, the decision on whether to engage in protective behaviors is governed by two distinct cognitive processes—threat appraisal and coping appraisal (Rogers, 1983). Threat appraisal is a cognitive process that individuals use to estimate the level of threat. Threat appraisal includes three important elements considered antecedents of individuals' adaptive actions: threat vulnerability, threat severity, and maladaptive rewards (Rippetoe & Rogers, 1987). According to the theory, perceptions of high severity and vulnerability trigger individuals to engage in risk-preventative behaviors (Rippetoe & Rogers, 1987). However, high reward perception is known to diminish risk-preventative behaviors (Rippetoe & Rogers, 1987). Moreover, coping appraisal is described as an individual's ability to carry out protective behaviors when a threat is present (Janmaimool, 2017). The elements of the coping appraisal are response efficacy, self-efficacy, and response cost (Rogers, 1983; Rogers & Prentice-Dunn, 1997). For individuals to engage in recommended behaviors, a low perceived cost of performing preventative behavior is critical (Rogers, 1983). When the coping appraisal results in a positive evaluation, individuals are more likely to engage in adaptive actions (Rogers, 1983).

Several studies have applied and tested the protection motivation variables to assess the behavioral intention to engage in self-protective behavior during the 2009 H1N1 influenza pandemic (e.g., Cho & Lee, 2015; Prati et al., 2011, 2012). In the context of the current COVID-19 pandemic, few studies have applied the protection motivation variables in assessing customer behavior. Laato et al. (2020) investigated perceived severity and self-efficacy as antecedents to intention to make unusual purchases. Foroudi et al. (2021) tested the moderating effect of perceived risk in their study to assess customers' future desire to visit a restaurant. However, these studies have only partially adopted the theory in their model and have not tested the comprehensive model of the effects of coping appraisal and threat appraisal on the behavioral outcome.

While PMT has been well validated in the studies related to previous pandemics, the unique circumstances that COVID-19 brings to the restaurant industry should lead to a critical examination of the theory in the context of this new pandemic. The economic impact poses critical risks to industries, especially those that cannot adapt to digital platforms (Sharma et al., 2021). Compared to previous pandemics in which the economic impact was more localized, the economic shock of the current pandemic has been

observed across every sector, and with prolonged effect (Sharma et al., 2021). Due to the restrictions on social distancing and travel, the restaurant industry has seen a massive decline in its profits and in customer traffic. According to a recent report published by the National Restaurant Association (2021), the restaurant industry is still not back on the path to recovery, as indicated by lower same-store sales and customer traffic. Therefore, it is critical to holistically study the PMT constructs regarding the subsequent emotional response and changing behavioral patterns that have emerged during the COVID-19 outbreak. A detailed discussion of the PMT constructs, emotional responses, and behavior intention during the COVID-19 pandemic will be presented in the following sections.

2.2 | Protection motivation and consumer response

Based on the concepts of PMT, this study tests a series of hypotheses drawn from risk analysis studies in various contexts such as infectious disease (e.g., Cho & Lee, 2015; Prati et al., 2011), health communication (e.g., Block & Keller, 1995; Nabi & Myrick, 2019), pro-environmental behavior (e.g., Janmaimool, 2017; Zhao et al., 2016), terrorism (e.g., Lee & Lemyre, 2009), and defensive aggression (e.g., Halevy, 2017). Further, our study proposes that the protection motivation pertains to not only the evaluation of individuals but also the society. It has been well documented by previous studies that the evaluation of threat and the coping ability of an individual have a significant influence on emotions as well as protective behavior (e.g., Burns et al., 2017; Cho & Lee, 2015). However, in the context of the current pandemic, there is a critical need to study the societal level assessment of the threat and perception of the society's preparedness for risk. Several studies have stressed the importance of socio-contextual factors in understanding protective behavior. Lee and Lemyre (2009) found that preparation intention depends on social-contextual factors related to "whether individuals transfer responsibility for preparedness onto others, whether they have a strong sense of community, whether they trust the sources from which they receive information, and whether they perceived hazard activity to be infrequent" (p. 1266). Marshall et al. (2007) explained that terrorist attacks create societal and individual trauma within countries, but societal level trauma has a broader consequence than that at the individual level. It was found that socio-contextual factors strongly influence individuals' behavioral reactions in response to terrorism (Kobbeltved et al., 2005). This indicates that the individuals' preventative behaviors are influenced by how they think the threat should be regulated by the society to which they belong. Therefore, our study focuses on the individual's evaluation of threats to society and the society's coping ability as antecedents to their affective and behavioral response.

Based on previous literature (Rippetoe & Rogers, 1987; Rogers, 1983; Rogers & Prentice-Dunn, 1997), operational definitions for the protection motivation variables are established. For purposes of COVID-19 threat appraisal, perceived vulnerability is

defined as the individual's perceived susceptibility to the COVID-19 threat, while perceived severity is defined as the individual's perceived seriousness of the possible threat that COVID-19 might bring. Maladaptive rewards are defined as the perceived benefits of maintaining current practices considered risky. For coping appraisal, response efficacy is defined as the perceived effectiveness of the behaviors recommended to minimize the impact of COVID-19, while self-efficacy is defined as an individual's perceived ability to perform the recommended behaviors. Response cost is defined as the perceived cost to the individual associated with recommended behaviors.

2.3 | Hope, fear, and protection motivation amid COVID-19

Appraisal theorists suggest that an individual's interpretation or appraisal of the environment causes an emotional response (Roseman, 1991). The appraisal theory of emotion holds that people appraise their situation along several appraisal dimensions (i.e., goal congruency, personal agency, certainty, normative/moral compatibility, and importance) that combine to evoke a specific emotional response. In line with appraisal theory, previous studies on the risk-as-feelings hypothesis (Loewenstein et al., 2001) and the "affect heuristic" (Slovic et al., 2007) suggest that risky prospects stimulate affective reactions, subsequently shaping individuals' judgments and choices.

Affective reactions emerge from varying degrees of certainty (Smith & Ellsworth, 1985). For example, emotions such as disgust, anger, happiness, and contentment are associated with certainty; these feelings are derived from understanding the past events that have led to the current situation and are based on the belief that the prediction of the near future is possible (Baumgartner et al., 2008). Moreover, fear, worry, surprise, and hope are future-oriented emotions associated with uncertainty, emerging from an ambiguous current situation and an unpredictable future (Baumgartner et al., 2008; Winterich & Haws, 2011). According to Halevy (2017), hope, along with fear, emerges as a response to the cognitive assessment of threats and uncertainty. The mixed affective response that develops in the current COVID-19 pandemic also occurs in the conditions in which hope arises: the existence of a high level of threat along with a high level of uncertainty.

While fear is a negative emotion that emerges as a response to a threat (Witte, 1992), hope is conceptualized as a positive emotion with an expectation of a favorable development (Cavanaugh et al., 2011). As hope carries complex and mixed feelings of distress, worry, and even anxiety in a threatening and uncertain situation (Halevy, 2017), it is distinct from the effects of other positive emotions (e.g., empathy: Rosler et al., 2016) and negative emotions (e.g., fear: Cohen-Chen et al., 2014). Based on previous literature, the current study defines hope as the feeling of wishing for a positive outcome or relief from the negative impact that COVID-19 brings to the individual and society. Moreover, fear is defined as an unpleasant

emotion aroused by the negative impact that COVID-19 brings to the individual and society.

In line with notions in appraisal theories, previous studies have suggested that cognitive assessment predicts feelings such as fear and hope in an uncertain situation (Dunn & Schweitzer, 2005; Smith & Ellsworth, 1985). In his study of COVID-19 and customers' preference for different socially distanced servicescapes, Taylor (2020) revealed that cognitive factors influence the affective dimensions. In their study of military operations, Kobbeltved et al. (2005) provided evidence for the influence of cognitive evaluations on affective responses amid a threatening situation. They found that the perception of a threat leads to increased worry or concern, a negative emotion. In their study of the H1N1 pandemic, Prati et al. (2011) concluded that the perceived severity of a threat increases one's worry, while coping ability decreases worry. Further, Halevy (2017) revealed that a higher level of a perceived risk of being attacked leads to a decreased level of hope. These studies provide empirical evidence that fear and hope are influenced by the assessment of a threat. Therefore, we hypothesize the following.

Hypothesis 1a *The feeling of hope is negatively influenced by perceived vulnerability.*

Hypothesis 1b *The feeling of hope is negatively influenced by perceived severity.*

Hypothesis 1c *The feeling of hope is positively influenced by maladaptive reward.*

Hypothesis 1d *The feeling of hope is positively influenced by perceived response efficacy.*

Hypothesis 1e *The feeling of hope is negatively influenced by perceived response cost.*

Hypothesis 1f *The feeling of hope is positively influenced by perceived self-efficacy.*

Hypothesis 2a *The feeling of fear is positively influenced by perceived vulnerability.*

Hypothesis 2b *The feeling of fear is positively influenced by perceived severity.*

Hypothesis 2c *The feeling of fear is negatively influenced by maladaptive reward.*

Hypothesis 2d *The feeling of fear is negatively influenced by perceived response efficacy.*

Hypothesis 2e *The feeling of fear is positively influenced by perceived response cost.*

Hypothesis 2f *The feeling of fear is negatively influenced by perceived self-efficacy.*

2.4 | Hope, fear, and consumer behavioral intention during COVID-19

The affective response has been widely acknowledged as a contributing factor to an individual's protective behavior (Slovic, 2002).

It is well documented in the previous literature that hope and fear motivate people to engage in mitigating behaviors toward a threat (Makarem, 2016; Smith & Leiserowitz, 2014). For example, Botzen et al. (2019) explained that the decision to engage in flood preparedness stems from fear of loss of property due to a flood and hope that preparedness will save that property. Janmaimool (2017) found that the fear of environmental threats leads to engagement in protective behaviors. McCaughey et al. (2017) noted that hopeful individuals are likely to use sandbags to protect their homes when they believe a flood is likely to occur.

During the COVID-19 pandemic, specific guidelines for protective behaviors have been promoted by the CDC, focusing on proper hygiene management, mask-wearing, and social distancing (CDC, 2020a). These recommendations were expected to alleviate the impact of COVID-19 on individuals and society by slowing the spread of the virus (CDC, 2020a). As a result, health-conscious behaviors among restaurant customers have been well-observed as many adopted the recommended actions (Accenture, 2020). Therefore, based on the previous literature on fear, hope, and protective behavior, we hypothesize that hope and fear influence an individual's intention to engage in health-focused behavior.

Hypothesis 3 *Affective responses (a. hope b. fear) positively influence a customer's intention to engage in health-focused behavior.*

While previous literature on PMT has focused primarily on protective behavior as an outcome of a perceived threat, an interesting pattern of customer behavior that has little implication for public health has emerged during the current COVID-19 pandemic (Accenture, 2020). It was observed that consumers exhibit increased concern for a broader social and ecological system (Accenture, 2020), a behavioral change that was not reported in past pandemics (e.g., the H1N1 2009 pandemic). While self-interest-based purchase decisions (e.g., panic buying) have been noted as a significant phenomenon during the current pandemic (Laato et al., 2020), consumers continue to exhibit altruistic intentions that reflect their care for society and the environment (Sharma et al., 2021).

The existence of a threat is found to encourage collective action and mutual helping, encouraging members of the community to value the broader societal well-being (Smith & Leiserowitz, 2014). Such a behavioral pattern is supported by previous literature that has studied the relationship between threat, perceived risk, and altruistic behavior. For example, a recent study by Sharma et al. (2021) suggested that local emphasis developed during the COVID-19 pandemic has encouraged people to make decisions based on the feeling of belongingness among the local community. They further noted that changing patterns include preferences for shopping locally and contributing to society's well-being (Sharma et al., 2021). Kaniasty and Norris (1995) noted that in the context of natural disasters, community members rely on each other's good deeds and reciprocity as recipients and providers of help are both victims. Further, Smith and Leiserowitz (2014) also found that hope and fear emerging from a threat lead people to engage in collective actions. Therefore, we

hypothesize that fear and hope will influence an individual's intention to support local businesses during the pandemic.

Hypothesis 4 *Affective responses (a. hope b. fear) positively influence a customer's intention to support local businesses.*

Further, it is observed that consumers engage in conscious consumption by limiting food waste, shopping more cost-consciously, and choosing more environmentally sustainable options during the COVID-19 pandemic (Accenture, 2020). Sharma et al. (2021) predicted the post-pandemic re-orientation of the consumer culture toward environmental and social justice. Benjamin et al. (2020) encouraged the social and political system to develop sustainable and equitable programs to meet the changing needs of consumers during and after the pandemic. Further, recent changes in consumer sentiment toward the environment have been found to strengthen during the COVID-19 pandemic. This was predicted by Kotler (2020) as he wrote that due to health, economic, and social trauma caused by COVID-19, consumers may "become more conscious of the fragility of the planet, of air and water pollution, of water shortages, and other problems...citizens will reexamine what they consume, how much they consume..." (Kotler, 2020). This brings the protective behavior commonly discussed within the realm of the protection of self to the societal dimension, where consumers are acting collectively to protect the society in its social, economic, and environmental aspects. Based on the ideas put forward in the previous literature, we hypothesize that hope and fear will influence an individual's intention to engage in protective behavior not only for the self but also for the planet and the environment. See Figure 1 for the research model and hypotheses.

Hypothesis 5 *Affective responses (a. hope b. fear) positively influence a customer's intention to engage in conscious consumption.*

Prior literature has indicated that both cognitive and affective systems play a critical role in determining responses to a threat (Finucane et al., 2000; Slovic et al., 2004). In his study of socially distanced servicescapes, Taylor (2020) revealed that cognitive factors have influenced the affective dimensions which have led to customer behavioral response during the COVID-19 pandemic. In their recent study of COVID-19 and consumer intention to make unusual purchases, Laato et al. (2020) applied the S-O-R theory to explain the relationship between the online environment, perceived severity and cyberchondria, and behavioral intention. According to the Stimulus-Organism-Response model, environmental stimuli influence an individual's emotional state, which leads to behavioral responses (Mehrabian & Russell, 1974). This implies that the influence of stimuli on consumer behavior is mediated by the consumer's emotional state (Jang & Namkung, 2009). Laato et al. (2020) concluded that the consumer's internal state mediates the relationship between online stimuli and behavioral intention. While several studies have defined affective response as a key mediator that shapes behavior in a threatening situation, no study thus far has tested the mediating effect of emotional responses to COVID-19 on the relationship between protection motivation and behavioral intention. Therefore, we propose that hope and fear will act as mediators in determining consumer behavioral responses to protection motivation.

Hypothesis 6 *Affective responses (a. hope b. fear) mediate the relationship between protection motivation and consumer behavioral intention.*

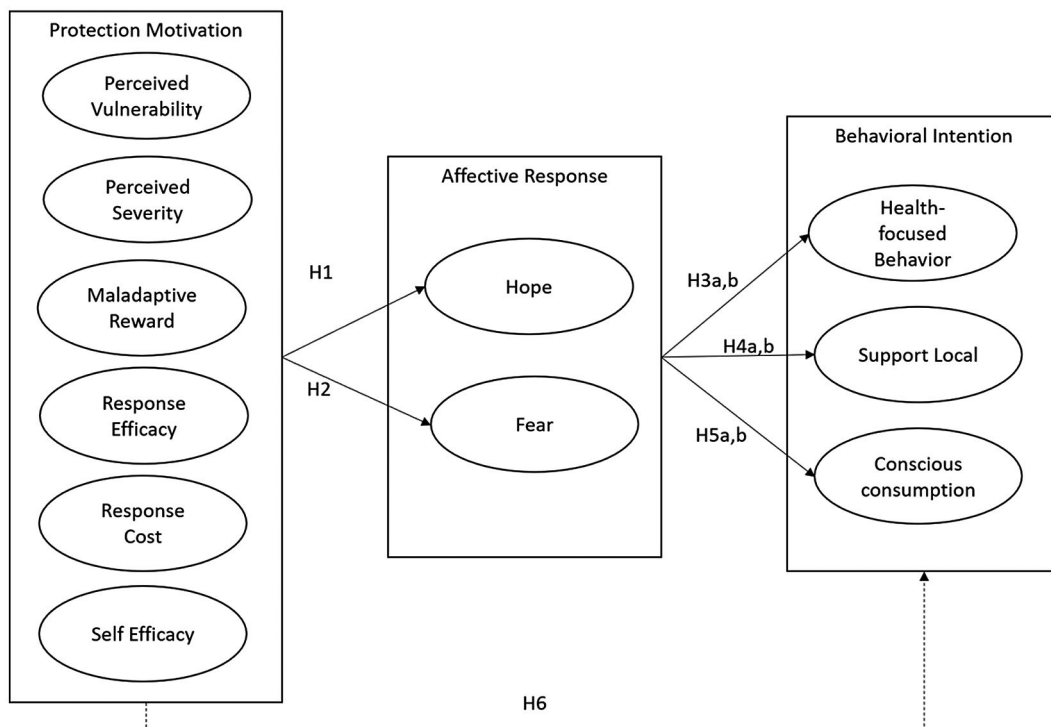


FIGURE 1 Research model and hypotheses. The dotted lines indicates the mediation effect

3 | METHOD

3.1 | Sample

The population of the study consisted of restaurant customers between the ages of 18 and 55. As people 56 or older were limiting their restaurant visits due to their high risk associated with COVID-19 (World Health Organization [WHO], 2020a), this age group was not included in the study's population.

Data were collected through a third-party marketing research company that distributed a self-administrative online survey to the study participants, who resided in the United States. The marketing research company provided incentives to the research panel, and the researchers were not responsible for the payment personally. The data collection period ranged from August to September 2020. At the time of the data collection, restaurants were open for delivery, dining in was allowed with restrictions (e.g., outdoor dining only, limited occupancies), and retail stores were open with restrictions (e.g., limited occupancies, face-covering required). The United States had endured the first wave of COVID-19 with over 5.8 million COVID-19 cases (World Health Organization [WHO], 2020b). Of the 813 responses initially collected, a total of 473 completed and valid responses were used for analysis after poor quality data had been deleted. During this stage, the restaurant names indicated by the participants through the screening question were inspected by the researchers to ensure that the participants had provided names of existing restaurants. Most of the respondents were female, and 34% were between 18 and 35 years old. Eighty-two percent of respondents had physically visited a restaurant 2–4 times in the past month at the time of the data collection. The sample characteristics are provided in Table 1.

3.2 | Instrument

Our study adapted items with good internal consistency from existing literature and modified the items to the current situation of COVID-19. For protection motivation, two items measuring perceived severity, three items measuring perceived vulnerability, four items measuring self-efficacy, and three items measuring response efficacy were adopted from Zhao et al. (2016). Three items measuring maladaptive rewards were adapted from Burns et al. (2017). Protection motivation variables were measured with a five-point Likert-type scale, ranging from strongly disagree (1) to strongly agree (5). For affective responses, three items for hope were adapted from Nabi and Myrick (2019), and three items for fear were adapted from Block and Keller (1995). A five-point Likert-type scale was used to measure hope and fear, ranging from not at all (1) to extremely (5). For behavioral intentions, six items measuring health-focused behavior were adapted from the guideline published by the CDC (2020a). Three items measuring intention to shop local and three

TABLE 1 Sample characteristics

	Frequency	(%)
<i>Gender</i>		
Male	113	24
Female	360	76
<i>Ethnicity</i>		
Caucasian/White	286	61
African American	78	17
Hispanic	59	13
Asian/Pacific Islander	38	8
Others	3	1
<i>Income (annual household)</i>		
Under \$19,999	94	20
25,000–39,999	114	24
40,000–59,999	82	17
60,000–79,999	67	14
80,000–99,999	33	7
100,000–149,999	47	10
150,000–199,999	22	5
Over 200,000	14	3
<i>Education</i>		
Middle school or some high school	15	3
High school	120	25
Associate's/Technical degree	57	12
Some college	140	30
Bachelor's degree	91	19
Graduate/Professional degree	50	11
<i>Age</i>		
18–25	162	34
26–35	140	30
36–45	98	21
46–55	73	15
<i>Physical restaurant visit in the past month</i>		
Less than 2	0	0
2–4	387	82
5–6	52	11
More than 7	32	7
Total	473	100

items measuring conscious consumption were adapted from the report published by Accenture (2020). A five-point Likert-type scale was used to measure the three behavioral intentions constructs, ranging from definitely not (1) to definitely (5). Further, screening questions were included in the questionnaire to ensure the recruitment of a representative sample: (1) What is your age? (2) Have you physically visited a restaurant either to order pick-up or to dine-in in the past month? and (3) Please write down the name of the restaurant that you visited most recently.

3.3 | Pretest

The initial questionnaire was pretested on a smaller sample to investigate the underlying factor structure and validate the dimensionality of the constructs. The pretest data were collected through a marketing research company using an online survey. With a total of 142 valid responses obtained, Exploratory Factor Analysis (EFA) with a Maximum Likelihood (ML) approach using the varimax rotation was conducted employing SPSS 25. The analysis was performed on the measures for protection motivation variables (i.e., perceived vulnerability, perceived severity, maladaptive rewards, self-efficacy, response cost, response efficacy) affective response variables (i.e., hope, fear), and behavioral intentions (i.e., health-focused behavior, support local, conscious consumption).

While the initial research model proposed six factors under protection motivation theory, the EFA result indicated a 5-factor solution in which perceived severity and perceived vulnerability were merged into one factor. In contrast to the previous literature on PMT that identified the two constructs as separate (e.g., Zhao et al., 2016), our pretest result indicated that, under the current situation of COVID-19, the respondents were not able to differentiate their perception of the severity of the COVID-19 and that of the society's vulnerability to the disease. This may be due to the timing of the data collection, which occurred when the citizens of the United States were not able to assess the magnitude of the threat or predict how vulnerable the population would be to COVID-19. Considering how quickly the pandemic hit a nation that had not made much preparation, it was unsurprising that citizens were not able to evaluate the situation and make an informed decision. In addition, several studies in public health (e.g., Kok et al., 2013) have measured the threat appraisal construct using questions related to perceived susceptibility (i.e., vulnerability) and seriousness (i.e., severity). These studies have indicated that the assessment of threat depends on the personal assessment of the seriousness of a problem and the likelihood of the occurrence of such a problem. Especially as we focus on the societal level evaluation of a threat, it is interesting to find that the severity of the disease and vulnerability of the society are conceptually merged into a single construct as we survey the respondents. Therefore, based on the EFA result and the supporting literature, we chose a model with five protection motivation factors, re-labeling the new factor "perceived threat," for further analysis. The related hypotheses were re-numbered H1a/b and H2a/b.

Further, one item from the self-efficacy factor loaded poorly and was thus deleted for the main test. The loadings of the items for behavioral intention revealed that three items from health-focused behavior loaded poorly, and they were thus discarded for the main test. After the deletion, the remaining three items all corresponded to the "clean hands" aspect of the CDC guidelines (2020a). Therefore, the construct was re-labeled to "hygienic behavior" to accurately reflect the items it included.

A new EFA was performed using the remaining items and the items appeared to be good indicators for each construct. Cronbach's alpha coefficients were computed for the internal consistency of the

dimensions. The alpha coefficients of the ten factors ranged from 0.80 to 0.95, all above the cut-off recommended by Nunnally (1978). See Table 2 for the pretest EFA result. The revised research model after the pretest is presented in Figure 2.

4 | RESULTS

4.1 | Measurement model assessment

The measurement model was evaluated by means of confirmatory factor analysis (CFA) using AMOS 26.0. The model fit indices were acceptable and exceeded the recommended values ($\chi^2 = 771.402$ with 351 *df*, CFI = 0.937, and RMSEA = 0.050). Cronbach's alpha for each construct ranged from 0.75 to 0.91, exceeding the recommended level of 0.70 (Hair et al., 1998), indicating reliability for each construct. Convergent validity was tested by determining whether all items loaded on the construct were above 0.65; composite reliability for each construct was above 0.70, and average variance extracted (AVE) for each construct was above 0.50 (Fornell & Larcker, 1981). As shown in Table 3, the results confirmed that convergent validity was acceptable for all constructs.

For the testing of discriminant validity among constructs, this study compared the AVE and the squared correlations between the two constructs of interest (Fornell & Larcker, 1981). The analysis supported discriminant validity among the constructs (see Table 4). The result of the measurement model evaluation indicated that all measures were satisfactory for testing the hypotheses using the structural model.

4.2 | Hypothesis testing

Structural equation modeling (SEM) using AMOS 26.0 was employed to test the hypothesized relationships. The fit statistics of the structural model indicated an acceptable fit to the data ($\chi^2 = 949.050$ with 367 *df* at *p*-value = 0.000, CFI of 0.913, and RMSEA of 0.058). The results indicated that the influence of perceived threat (H1a/b: $\Gamma = -0.233$, $t = -4.197$, *p*-value < 0.001), maladaptive reward (H1c: $\Gamma = 0.154$, $t = 1.967$, *p*-value = 0.049), response efficacy (H1d: $\Gamma = 0.141$, $t = 2.031$, *p*-value = 0.042), and self-efficacy (H1f: $\Gamma = 0.255$, $t = 4.056$, *p*-value < 0.001) on hope were significant, supporting H1a/b, H1c, H1d, and H1f. However, response cost did not significantly influence hope, rejecting H1e.

Further, the study results found that perceived threat (H2a/b: $\Gamma = 0.499$, $t = 8.901$, *p*-value < 0.001) and response efficacy (H2d: $\Gamma = -0.157$, $t = -2.400$, *p*-value = 0.016) had a significant impact on fear, supporting H2a/b and H2d. Maladaptive reward, perceived response cost, and self-efficacy did not have a significant influence on fear, rejecting hypotheses H2c, H2e and H2f.

The results of the study indicated that hope positively influenced customers' intention to support local businesses (H4a: $\beta = 0.130$, $t = 2.479$, *p*-value = 0.013), supporting H4a. However, hope did not significantly

TABLE 2 Pretest EFA result

Constructs	Factor										Cronbach's α	
	1	2	3	4	5	6	7	8	9	10		
<i>Perceived threat</i>												
PT 1					0.75							0.81
PT 2					0.83							
PT 3					0.85							
<i>Maladaptive rewards</i>												
MA 1			0.72									0.89
MA 2			0.95									
MA 3			0.87									
<i>Self-efficacy</i>												
SE 1				0.62								
SE 2				0.70								
SE 3				0.72								
<i>Response cost</i>												
RC 1	0.72											0.91
RC 2	0.74											
RC 3	0.77											
<i>Response efficacy</i>												
RE 1		0.81										0.80
RE 2		0.67										
RE 3		0.82										
<i>Hope</i>												
HO1						0.86						0.92
HO2						0.61						
HO3						0.67						
<i>Fear</i>												
F1							0.83					0.88
F2							0.75					
F3							0.85					
<i>Support local</i>												
LOC 1								0.94				0.83
LOC 2								0.70				
LOC 3								0.64				
<i>Conscious consumption</i>												
CON 1									0.62			0.89
CON 2									0.72			
CON 3									0.78			
<i>Hygienic behavior</i>												
HYG1										0.64		0.95
HYG2										0.89		
HYG 3										0.78		

influence hygienic behavior or conscious consumption, rejecting H3a and H5a. Fear significantly influenced hygienic behavior (H3b: $\beta = 0.225$, $t = 4.043$, p -value < 0.001), local support (H4b: $\beta = 0.200$, $t = 3.742$,

p -value < 0.001), and conscious consumption (H5b: $\beta = 0.308$, $t = 5.592$, p -value < 0.001), supporting H3b, 4b, and 5b. The results of the hypothesis testing are shown in Figure 3 and Table 5.

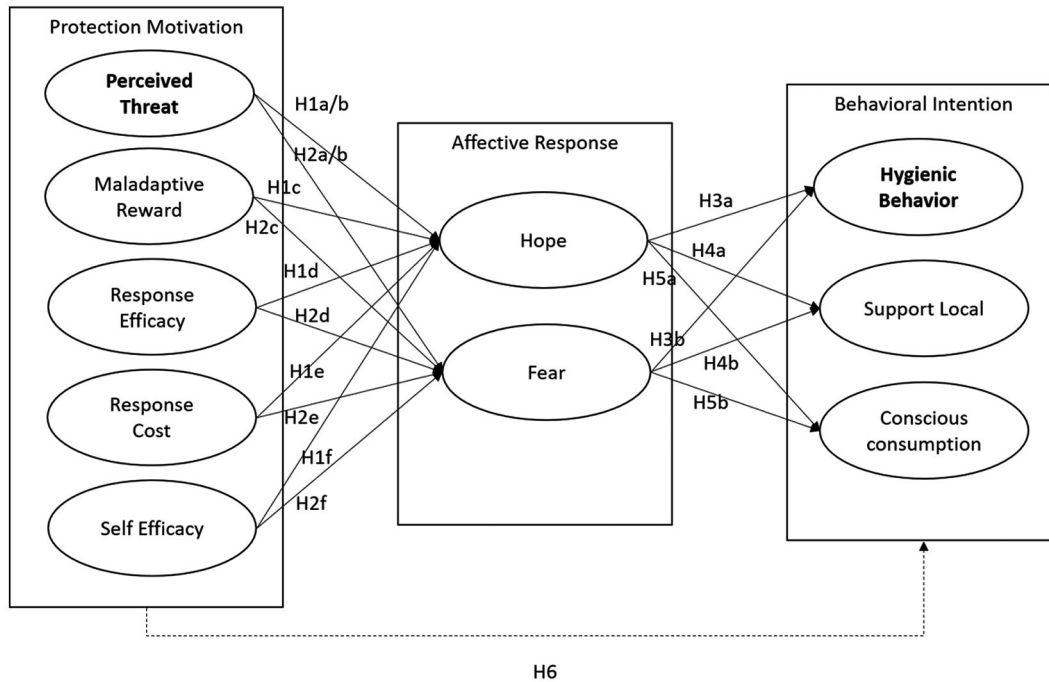


FIGURE 2 Revised research model after pre-test. Revised constructs are in bold.

H6 was tested via the conducting of a mediation analysis using the bootstrapping procedure for each path mediated by hope and fear. As SEM does not follow a normal distribution, the bootstrap method for testing the significance of the indirect path was considered more appropriate (Zhao et al., 2010). The results revealed that hope mediated the relationship between perceived threat and support local ($\beta = -0.025$, p -value = 0.05) and self-efficacy and support local ($\beta = 0.027$, p -value = 0.047). The result indicated that fear mediated the relationship between perceived threat and support local ($\beta = 0.083$, p -value = 0.15), perceived threat and hygienic behavior ($\beta = 0.089$, p -value = 0.01), and perceived threat and conscious consumption ($\beta = 0.124$, p -value = 0.01). Fear also mediated the relationship between response efficacy and support local ($\beta = -0.026$, p -value = 0.043), response efficacy and hygienic behavior ($\beta = -0.028$, p -value = 0.045), and response efficacy and conscious consumption ($\beta = -0.039$, p -value = 0.045). See Table 6 for the results.

5 | DISCUSSION AND IMPLICATIONS

The study investigated the application of customers' protection motivation and affective responses for predicting their behaviors amid COVID-19 in the restaurant setting. The proposed conceptual framework contributed to the ability to predict a customer's risk-preventive behavior in the current COVID-19 pandemic situation. The research model proposed in the study successfully explained the process by which individuals commit to hygienic behaviors, prioritize local restaurants, and engage in conscious consumption under the threat of COVID-19.

When lockdown orders were put in place in most states in the United States, dining in at a restaurant was restricted to minimize customers' exposure to the health threat. As the restaurant industry experienced a steep decline in customer visitations (Dube et al., 2020), it had been predicted that it would take some time for restaurant businesses to recover (NRA, 2020b). As unique customer behaviors have been observed during the pandemic, understanding the trends is vital in suggesting new expectations for the restaurant industry, while protecting customers and society from the threat. However, little research has focused on restaurant customer behaviors during the COVID-19 pandemic (c.f. Yang et al., 2021) even though the pandemic has caused an unprecedented crisis in the restaurant industry. Therefore, there is an urgent need to fill the gap in the current literature and facilitate a deeper understanding of changing customer behaviors amid COVID-19.

This study made several notable findings. First, customers' perceived threat was found to influence hope negatively, which in turn influences people's motivation to support local restaurants. Moreover, perceived threat positively influences fear, leading to all the subsequent behaviors examined in the study. These results were consistent with the study's expectations, indicating that the threat-generated fear is a significant trigger for changing consumer behaviors amid COVID-19. In the literature on pandemics, studies have suggested that perceived threat is closely associated with negative psychological consequences such as fear and worry (Yıldırım & Güler, 2020). These emotions make people engage in protective behavior and take situation-adaptive actions under a threat (Slovic, 2002). Hence, the observed behavioral intention is derived from individuals' attempts to protect themselves from the threat by

TABLE 3 Main test CFA result

Constructs	Factor loadings ^a	CR	AVE
<i>Perceived Threat</i> ($\alpha = 0.80$)		0.82	0.61
Our society is vulnerable to the harmful effects of COVID-19	0.84		
Our society is a victim of the COVID-19	0.67		
Our society is threatened by COVID-19	0.83		
<i>Maladaptive rewards</i> ($\alpha = 0.83$)		0.84	0.64
It is likely that our society would receive gain benefits for not following the measures to respond to COVID-19	0.77		
Our society could benefit from not following the measures to respond to COVID-19	0.82		
Our society benefits financially for choosing not to follow the measures to respond to COVID-19	0.81		
<i>Self-Efficacy</i> ($\alpha = 0.75$)		0.77	0.53
Our society will be able to find ways to deal with COVID-19	0.67		
Our society knows how to deal with the situation under the COVID-19	0.76		
I believe our society manages the unexpected situation that the COVID-19 might bring	0.74		
<i>Response cost</i> ($\alpha = 0.78$)		0.79	0.56
It is very expensive for our society to follow the measures to respond to COVID-19	0.72		
It is very time-consuming for our society to follow the measures to respond to COVID-19	0.85		
Too much effort is needed for our society to follow the measures to respond to COVID-19	0.67		
<i>Response efficacy</i> ($\alpha = 0.69$)		0.78	0.54
I am sure that our measures to respond to the COVID-19 can have a positive effect on curving the impact	0.67		
I am confident that together we can cope with the situation under the COVID-19	0.73		
We can do nothing to help control the situation under COVID-19 (R)	0.79		
<i>Hope</i> ($\alpha = 0.90$)		0.89	0.74
When thinking about the COVID-19, to what extent do you feel... – Hopeful	0.82		
When thinking about the COVID-19, to what extent do you feel... – Optimistic	0.95		
When thinking about the COVID-19, to what extent do you feel... – Encouraged	0.80		
<i>Fear</i> ($\alpha = 0.91$)		0.88	0.71
When thinking about the COVID-19, to what extent do you feel... – Fearful	0.98		
When thinking about the COVID-19, to what extent do you feel... – Afraid	0.78		
When thinking about the COVID-19, to what extent do you feel... – Scared	0.76		
<i>Support local</i> ($\alpha = 0.79$)		0.81	0.58
Shop for locally sourced goods	0.78		
Order food from locally-owned restaurants	0.79		
Support locally-owned restaurants by sharing positive reviews	0.73		
<i>Conscious Consumption</i> ($\alpha = 0.75$)		0.78	0.54
Go for fewer trips to the restaurant	0.75		
Order food more cost consciously	0.68		
Make more environmentally sustainable choices when eating out	0.76		
<i>Hygienic behavior</i> ($\alpha = 0.81$)		0.82	0.61
Use hand sanitizer right after paying If I must handle money, a card, or use a keypad	0.73		
Use hand sanitizer after leaving the restaurant	0.86		
Wash my hands with soap and water for at least 20 s when I get home	0.73		

^aAll factor loadings were significant at $p < 0.001$, $\alpha =$ Cronbach's alpha.

Abbreviations: AVE, average variance extracted; CR, composite reliability.

TABLE 4 Discriminant validity

Latent constructs	1	2	3	4	5	6	7	8	9	10
1. Perceived threat	0.61									
2. Maladaptive rewards	0.01	0.64								
3. Self-efficacy	0.01	0.06	0.53							
4. Response cost	0.02	0.33	0.04	0.56						
5. Response efficacy	0.07	0.21	0.05	0.07	0.4					
6. Hope	0.03	0.02	0.08	0.00	0.00	0.74				
7. Fear	0.20	0.00	0.01	0.02	0.00	0.07	0.71			
8. Support local	0.20	0.12	0.03	0.01	0.15	0.01	0.05	0.61		
9. Conscious consumption	0.21	0.03	0.00	0.00	0.10	0.00	0.08	0.39	0.54	
10. Hygienic behavior	0.09	0.01	0.05	0.01	0.07	0.01	0.03	0.38	0.52	0.61

Note: The AVE of each construct is reported in bold on the diagonal.

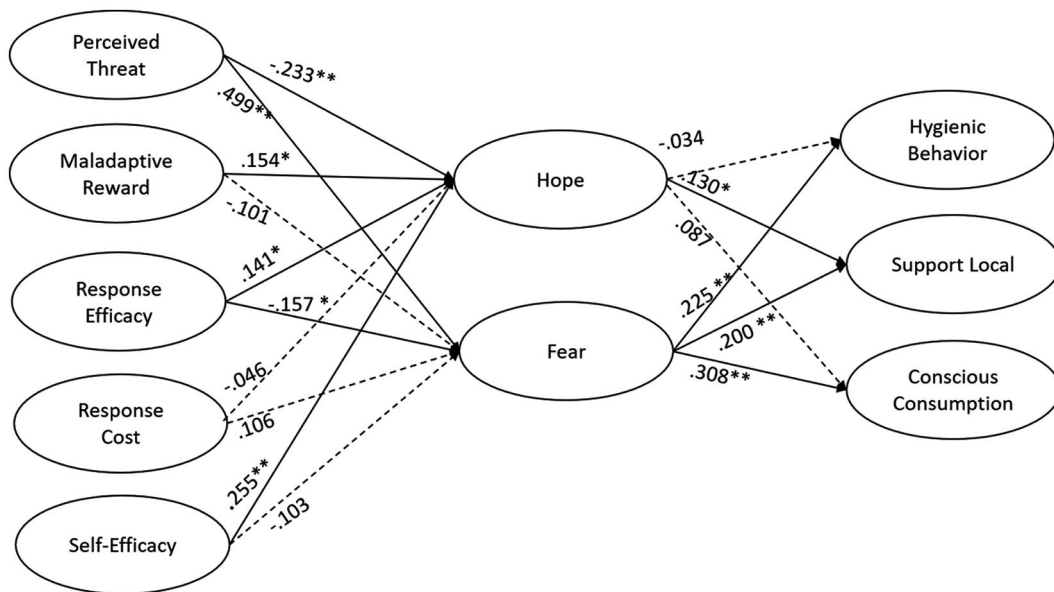


FIGURE 3 The results for standardized paths coefficients for hypothesized paths.

controlling their behaviors. These actions may intensify as individuals' perceived threat becomes higher (Yıldırım & Güler, 2020).

Further, maladaptive reward has a significant positive influence on hope. However, it has no significant negative effect on fear, counter to the study's expectation. Along with the results from the threat appraisal process, the results indicate that maladaptive rewards may be weighted less heavily than threat-generated fear. During the COVID-19 pandemic, the recommended health guidelines in public spaces have been dogged by continual accusations of impropriety or infringement upon individual freedom of choice. For individuals who do not believe in the detrimental impacts of COVID-19, maladaptive reward does not reduce fear toward the situation as they may not perceive the situation to be serious. Also, the result could be related to the participants' age distribution. The

study surveyed individuals aged between 18 and 55 years, and this group is considered to be at a lower risk than other age groups from COVID-19 risk (WHO, 2020b). The perceived benefits of continuing risky practices (e.g., not wearing face masks) include increasing hope as individuals may perceive that their health is not seriously threatened by the virus. In light of this, future studies may include participants over 55 and investigate generational differences in terms of their perceived risk, emotions, and behaviors.

Self-efficacy has a significant positive impact on hope, whereas response-efficacy negatively influences fear. The results are in line with the study's expectations and indicate that people perceive the recommended risk preventative behaviors, such as mask-wearing and social distancing, as effective and implementable by an individual. Therefore, self-efficacy is effective in making people feel

hopeful, and response-efficacy is important in helping people to feel less fearful, which leads to the increased practicing of the observed behaviors. The results are somewhat consistent with the finding from Cho and Lee (2015) that people engage in adaptive health risk behaviors when they feel confident in their ability to engage in the action. However, the individual's perceived ability to deal with COVID-19 does not reduce his/her fear level, and the perceived

effectiveness of the recommended behaviors to minimize the impact of COVID-19 also fails to increase the individual's feeling of hope. These results were in contrast to the study's expectations based on findings from Baumgartner et al. (2008) and Winterich and Haws (2011). Unlike observations of previous literature in the field that indicated emotions are derived from past experiences with similar events, people may not have had sufficient experiences comparable to the COVID-19 pandemic, so the prediction of the near future from the current situation was more complex than was the case in other studies.

Response cost was found to have no significant positive or negative influence on emotions. The results were different from the study's expectations. In this regard, the perceived costs associated with recommended behaviors may not have been a significant indicator of hope and fear in this particular situation, as the health threat of COVID-19 can result in human deaths. Studies have indicated that the increased levels of psychological consequences to individuals are caused primarily by the risk of death related to COVID-19 (Xiao, 2020; Yıldırım & Güler, 2020). People are more aware of the health consequences of COVID-19 than of those of other virus infections (Dryhurst et al., 2020). Although the low perceived cost may be effective in increasing people's likelihood to take adoptive actions (Rogers, 1983; Rogers & Prentice-Dunn, 1997), the cost may not be a strong determinant of an individual's emotions when the consequence could be a matter of life and death.

Last, the results reveal that customers' affective responses such as hope and fear mediate the relationship between their cognitive assessment of the threat and their behaviors. Particularly, a positive feeling (i.e., hope) was found to mediate the effects of perceived threat

TABLE 5 Results of hypotheses testing H1-5

Hypothesized paths	Parameter estimates (t-value)
H1a/b: Perceived Threat ->Hope	-0.233 (-4.197)**
H1c: Maladaptive Reward->Hope	0.154 (1.967)*
H1d: Response Efficacy ->Hope	0.141 (2.031)*
H1e: Response Cost ->Hope	-0.046 (-0.662)
H1f: Self-efficacy->Hope	0.255 (4.056)**
H2a/b: Perceived Threat->Fear	0.499 (8.901)**
H2c: Maladaptive Reward ->Fear	-0.101 (-1.384)
H2d: Response Efficacy ->Fear	-0.157 (-2.400)*
H2e: Response Cost ->Fear	0.106 (1.594)
H2f: Self-efficacy ->Fear	-0.103 (-1.780)
H3a: Hope ->Hygienic Behavior	-0.034 (-0.626)
H3b: Fear ->Hygienic Behavior	0.225 (4.043)**
H4a: Hope ->Support Local	0.130 (2.479)*
H4b: Fear ->Support Local	0.200 (3.742)**
H5a: Hope ->Conscious consumption	0.087 (1.160)
H5b: Fear ->Conscious consumption	0.308(5.592)**

* $p < 0.05$; ** $p < 0.001$.

TABLE 6 Mediating effects of affective responses

	Indirect Paths	Path coefficients	
		Hope (H6a)	Fear (H6b)
Perceived threat	Hygienic behavior	0.006	0.089*
	Local support	-0.025*	0.083*
	Conscious consumption	-0.016	0.124*
Maladaptive reward	Hygienic behavior	-0.004	-0.018
	Local support	0.017	-0.017
	Conscious consumption	0.011	-0.025
Response efficacy	Hygienic behavior	-0.004	-0.028*
	Local support	0.015	-0.026*
	Conscious consumption	0.010	-0.039*
Response cost	Hygienic behavior	0.001	0.019
	Local support	-0.005	0.017
	Conscious consumption	-0.003	0.026
Self-efficacy	Hygienic behavior	-0.007	-0.018
	Local support	0.027*	-0.017
	Conscious consumption	0.018	-0.026

* $p < 0.05$.

and self-efficacy on support for local restaurants. Further, a negative feeling (i.e., fear) generated from risk perception was found to stimulate all behaviors examined in the study, and it was also found to mediate the relationships between response efficacy and the behaviors negatively. The results indicate that fear generated from individuals, cognitive evaluations of the threat, and their ability to engage in risk preventative actions were significant indicators of the observed customer behaviors relating to their restaurant visits. The results also showed that emotions play a critical role in restaurant consumer behaviors vis-a-vis the threat. Several studies in disease and health communication (e.g., Cho & Lee, 2015; Prati et al., 2012) have supported the direct relationship between customers' protection motivation and their health-focused behaviors. However, our study adds to the current literature by providing strong evidence that customers' protective motivation regarding COVID-19 can result in positive or negative emotions, which lead to people's behavioral judgments and choices.

6 | IMPLICATIONS

6.1 | Theoretical implications

COVID-19 has had a severe negative impact on the restaurant industry, leading to drastic changes in customer behaviors. Unfortunately, research regarding restaurant customer behaviors under a global pandemic is scarce, calling for a theoretical framework that is of aid for understanding changing consumer behaviors. In this aspect, the current study makes significant theoretical contributions to the current stream of literature by examining consumer behaviors under the situation of COVID-19. First, the study adopts PMT to facilitate an understanding of the influence of individuals' cognitive and affective responses on the behavioral intention that pertains to changing conditions due to COVID-19. While few recent studies have adopted the PMT constructs as antecedents to customer behavioral intention amid the COVID-19 pandemic (e.g., Foroudi et al., 2021; Laato et al., 2020), these studies have selectively adopted the PMT variables without providing a comprehensive investigation of consumers' perceived threat and coping ability. For example, Laato et al. (2020) applied perceived severity and self-efficacy to explain consumers' intention to make unusual retail purchases, and Foroudi et al. (2021) utilized the perceived risk variable, testing its moderating effect among consumers' perception, belief, and emotion. Therefore, this study provides a deeper understanding of how customers' threat and coping evaluations can be assessed amid COVID-19 by applying the comprehensive model of PMT and of how these assessments positively/negatively influence their affective responses, resulting in behavioral intentions. In this regard, the study not only fills a gap in the research but also provides a foundation for understanding unexpected patterns of consumer behavior.

While previous literature utilizing PMT constructs have focused primarily on consumers' protective behavior as an outcome of the perceived threat (e.g., Cho & Lee, 2015; Prati et al., 2012), this study extends the model by including behavioral intentions that encompass customers' changing values in terms of social, economic, and

environmental responsibility amid the pandemic. During the current COVID-19 pandemic, consumers have exhibited increased concern for the broader social and ecological system (Accenture, 2020) by shopping more consciously and actively supporting local businesses. The increased attempts of consumers to engage in pro-social behaviors during the pandemic are explained by PMT and their emotional responses in the current study; these factors have not to the best of the authors' knowledge been empirically tested in the previous literature. Further, the study explains the relationship between customers' cognitive and affective responses in their behavioral decision-making process. Although the previous literature has focused primarily on the relationship between customers' cognitive responses and behavior evaluation (i.e., Cho & Lee, 2015; Janmaimool, 2017; Lu & Chi, 2018; Nabi & Myrick, 2019), the proposed research model suggests that emotional responses (i.e., hope and fear) generated from cognitive evaluations of the threat play an important role in shaping customer behaviors. Emotions such as fear and hope were found to affect consumers' product evaluation, product choice, and purchase behavior (Krishen & Bui, 2015; MacInnis & de Mello, 2005). However, a few research studies have suggested a possible connection between consumers' cognitive and affective evaluation systems that result in behavioral responses under a threat (i.e., Kobbeltved et al., 2005; Lee & Lemyre, 2009). Our study results provide empirical evidence to support appraisal theory, indicating that cognitive evaluations are antecedents of both positive and negative emotional responses to a threat. Therefore, this study adds to the current stream of literature by providing strong empirical evidence supporting appraisal theory and enhances our understanding of customer behaviors amid COVID-19 in terms of individuals' cognitive and affective responses toward the threat.

6.2 | Practical implications

The proposed model in this study can be utilized for examining consumer behaviors in the hospitality and retail industries, especially in the post-COVID-19 era. The impact of COVID-19 on consumer behavior is expected to be prolonged as the recovery will not be a short-term process. In cases where unexpected threats such as COVID-19 affect consumers' behavior in the restaurant industry, managers and policymakers will be better prepared to adapt to the changing needs of the customers by employing the framework proposed in the current study. Consumers' risk perception and their evaluation of how well individuals and society are prepared for the risk are closely related to their affective responses, resulting in particular behaviors. While it is obvious that diseases or threats to health are not easily controllable, consumers' perceived threats and their evaluation of coping ability can be maintained by an industry-level implementation of health-focused protocols and societal efforts to encourage safe behaviors. The perceived effectiveness and easy-to-follow recommendations can help customers develop self-efficacy and positive emotional responses such as hope, which can lead to positive behavioral intentions such as participation in hygienic behaviors. Also,

fear can lead to rapid behavioral intention changes from a trigger in emotional arousal and radically influence customer behaviors during uncertain times (Halevy, 2017). Therefore, marketers can actively advertise the ways in which a business is utilizing hygienic behaviors and implementing safety practices to soothe consumers' fears regarding the threat. As both hope and fear are found to influence individuals' health-protective and adaptive behaviors, hope- and fear-inducing campaigns and society-level behavioral recommendations can be useful in bringing about positive consumer behavioral responses (Krishen & Bui, 2015). For example, fear-inducing campaigns can highlight the current death tolls for the virus and harm to the lives of victims to emphasize the importance of following health-protective behaviors. Hope-inducing campaigns can showcase several research-based facts as recent research indicates such as that the risk of getting the virus from food or food packaging is very low (CDC, 2020b). Industry-level campaigns and active communication with customers can be helpful by highlighting the low risk of virus transmission from handling and consuming food. In response to customers' increased interest in pro-social actions, hospitality and retail marketers can develop strategies to earn brand or industry-level trust by engaging in socially responsible behaviors and developing a system to better communicate with customers in delivering their messages and statements of commitment to consumers.

7 | LIMITATIONS AND FUTURE RESEARCH

The current study has several limitations and raises suggestions for future research. The study was implemented as a cross-sectional study after the declaration of COVID-19 as a global pandemic, but customers' behavioral outcomes may need to be observed from a longitudinal perspective to understand the trends and changes in consumer behaviors. It would be meaningful to investigate post-COVID-19 consumer behaviors and compare the results to those of the current study to observe differences in risk perception, cognitive and affective responses, and behavioral outcomes. As the study focused on testing future-oriented affective responses such as hope and fear, other affective responses focusing on future and past-oriented emotions such as anger, disgust, and contentment would be interesting to investigate to discover how other affective responses influence customer behaviors in light of their risk perception. Last, while this was not intended, the majority of the responses came from females (76%), thus providing stronger implications for restaurants that cater to female guests. Future studies may focus on comparing customers' perceptions and behavioral intentions regarding different restaurant types to provide more targeted implications for the restaurant industry.

8 | CONCLUSION

The COVID-19 pandemic has brought a significant impact on the restaurant industry mainly caused by the change in customer behavior. Using Protection Motivation Theory, this study examines the influence

of protection motivation (i.e., perceived threat, maladaptive award, response efficacy, response cost, self-efficacy) and affective responses (i.e., hope, fear) on customer behaviors (i.e., health-focused behavior, support local, conscious consumption) amid COVID-19. The research result indicates that perceived threat and response efficacy influence hope and fear, while maladaptive awards and self-efficacy influence the feeling of hope. In other words, the fear generated from risk perception, cognitive evaluations of the threat, and the ability to engage in risk preventative behaviors act as significant predictors of the restaurant customer behaviors under the COVID-19 threat. Further, the study reveals the critical role emotions play in restaurant consumer behaviors vis-a-vis the threat. The analysis result provides that hope influences the customers' intention to support local restaurants, while fear leads to all behaviors examined in the study. The current study brings meaningful theoretical and practical implications by offering insight into the role customers' protective motivation plays in generating positive or negative emotions that further lead to behavioral choices under the COVID-19 pandemic.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

Research data are not shared.

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