INTRODUCTION

The COVID-19 pandemic disrupted our most mundane activities in an unimaginable way, and the retail industry took an especially hard hit during the COVID-19 pandemic. According to the U.S. Census Bureau, retail sales plunged a record 16.4% in April when the pandemic hit consumer spending (Cox, 2020). Many well-known specialty brands (e.g., J. Crew, Brooks Brothers, Lucky Brand) and department stores (e.g., Neiman Marcus, Lord & Taylor) filed chapter 11 bankruptcy between March and September of 2020 (Ilchi, 2020). While some retail sectors may fare better than others, it has become clear that the majority of retailers are negatively affected due to consumer panic (Ghosh, 2020). Consumer’s concerns and fears during this pandemic drastically reduced store visits and leisure shopping, while boosting panic buying behaviour of essential hygiene items (Prentice et al., 2021).

As a result, COVID-19 brought about the sharp rise of digital and contactless shopping (Tran, 2021). Contactless shopping refers to consumer’s purchase behaviours that minimize face-to-face contacts with other people (e.g., employees, shoppers) during the course of shopping. The common contactless shopping includes zero-contact shopping (e.g., online and mobile shopping in which consumers shop from their own home and get the purchased products delivered to their doorstep) and minimal contact shopping (e.g., buy online pickup in store (BOPIS), contactless payment). Consumers rapidly adopted contactless shopping during the pandemic as a way to protect themselves from the virus. Retailers quickly created or expanded contactless shopping options (e.g., curbside pickup or fully digital shopping...
experience) to comply with health and safety guidelines (Berthene, 2020a; Yohn, 2020) and to meet the consumer demand for safe shopping. Thus, contactless shopping, which was a technology-enhanced convenience shopping option, became one of the safest shopping options for those who were greatly concerned about the risk of COVID-19.

However, not everyone perceived the same level of threat from the virus, especially at the outset of the pandemic. Many consider the politicization of the pandemic in the U.S. as a significant reason for such varied public understanding of the pandemic (Hart et al., 2020; Hetherington & Mehlhaff, 2020; Rothgerber et al., 2020). Republicans and Democrats took a contrasting stance towards the pandemic. Since the beginning of the COVID-19 pandemic, Republicans including President Trump have continuously downplayed the severity of the virus, whereas Democrats have exhibited greater concern towards its dangers (Gittleson, 2020; Tyson, 2020). In the media, several conservative political commentators repeatedly referred to the coronavirus as a ‘hoax’ and expressed skepticism about the threat of the virus (Peters & Grynbaum, 2020).

Consequently, U.S. public opinion towards the pandemic is not just varied but has been highly divided along partisan lines (Hart et al., 2020; Pew Research Center, 2020). The public poll data collected in July 2020 indicate that while 85% of Democrat-leaning Americans perceive COVID-19 to be a critical threat to the health of Americans, only about a half of Republican-leaning Americans (46%) share the same sentiment (Tyson, 2020). Studies further show that conservatives are less likely to be informed about the coronavirus, believe the media’s coverage of the pandemic to be accurate, and thus perceive lower risk than liberals and moderates (Calvillo et al., 2020; Rothgerber et al., 2020; Shao & Hao, 2020).

Importantly, this different perception of the danger of the pandemic seemed to result in corresponding differences in behaviours. The protective health measures like mask wearing, social distancing, and compliance with stay-at-home orders have been met with polarized reactions (Hetherington & Mehlhaff, 2020). Poll data in June 2020 show that Republican-leaning Americans are twice as likely to say that masks should rarely or never be worn (Pew Research Center, 2020).

If contactless shopping is a protectionary behaviour to defend oneself from the pandemic, it is likely that the belief about the risk of the pandemic is also associated with consumer’s use of contactless shopping. Then, could a seemingly irrelevant factor, the political orientation of a consumer, predict consumer’s use of contactless shopping? This study explores this possibility based on the protection motivation theory. Specifically, the purpose of this study is to explain consumer’s intention to increase contactless shopping as a way to protect themselves and others in response to the pandemic. To explain the rise of contactless shopping in the unique situation of the pandemic in the U.S., we incorporated political orientation into the protection motivation theory as an integral antecedent of beliefs and appraisals of threatening circumstances.

This study aims to make several contributions. Theoretically, this study will highlight the political orientation as a critical consumer motivation factor that further influences consumer perception, beliefs, and evaluations. This study will also provide timely insights for professionals in the retail industry who need to quickly adapt to the unprecedented disruption (Unglesbee, 2020). Based on our findings, retailers will be able to develop different marketing strategies and frame messages regarding contactless shopping based on their target consumers’ political orientations.

## 2 | THEORETICAL BACKGROUND AND HYPOTHESIS DEVELOPMENT

### 2.1 | Politicization and polarization of COVID-19

While the pandemic is a global threat, the U.S. especially is suffering with the largest number of confirmed COVID-19 cases and deaths in the world as of April 2021 (Johns Hopkins Coronavirus Resource Center, n.d.). Even with the explosive transmission of the virus in the country, Americans do not seem to agree on the degree of danger the virus poses. COVID-19 has been a highly politicized and polarized topic especially in the U.S. largely due to the stark discrepancies in media and political leaders’ rhetoric on the threat of COVID-19 (Hart et al., 2020). As such, it has been reported that the assessment of COVID-19 risks and the resulting social distancing behaviours differ among Americans depending on their political orientation (Chicago Booth Review, 2020).

Recent empirical studies have also found evidence of polarization (Abbas, 2020; Hart et al., 2020). A content analysis of the U.S. newspapers and televised network news of COVID-19 between March and May 2020 reveals that overall news coverage was highly politicized (i.e., more frequent appearance of politicians than scientists in COVID-19 news) and polarized (i.e., language differences across partisans) (Hart et al., 2020). Such disparity in perceptions has led to individual differences in behavioural responses. The analyses of smartphone geolocation data suggest that Republicans are less likely to engage in social distancing when controlling for other potential influences such as public policies and population density (Allcott et al., 2020; Painter & Qiu, 2020).

### 2.2 | Protection motivation theory

Protection motivation theory (PMT) is a frequently utilized theoretical model that explains how individuals adopt protectionary measures in case of a threatening event (Maddux & Rogers, 1983). PMT was initially developed to understand the effects of fear appeals on individuals’ health attitudes and behaviours in contexts such as cigarette smoking, dental hygiene, tuberculosis, and others (Maddux & Rogers, 1983; Rogers, 1975). This theory is formulated along two cognitive processes: the threat appraisal process and the coping appraisal process. PMT suggests that an individual’s coping response or their protection motivation results from the combined evaluation of threat appraisal and coping appraisal (Floyd et al., 2000).
Threat appraisal refers to a person’s assessment of a threat based on two factors: perceived severity (i.e., the extremity of the consequence of the threat) and perceived vulnerability (i.e., the probability of the threatening event). Coping appraisal refers to the individual’s evaluation of the ability to endure the situation. It consists of self-efficacy (i.e., the person’s belief that they are able to perform the recommended behaviour) and response efficacy (i.e., the person’s belief that the suggested behaviour will work). PMT predicts that individuals will be motivated to engage in protective behaviours when they perceive higher levels of threat and have sufficient coping resources (Farooq et al., 2020; Woon et al., 2005). Studies show that threat and coping appraisals work independently of each other (Maddux & Rogers, 1983; Vance et al., 2012), and coping appraisals tend to exhibit greater power than threat appraisals (Milne et al., 2000).

The PMT framework has been applied to a variety of health contexts, including virus outbreaks and pandemics such as H1N1 and SARS (Jiang et al., 2009; Sharifirad et al., 2014). The literature indicates that in the face of a virus outbreak, both threat and coping appraisals influence individual’s adoption intentions of protective measures such as mask wearing, hygiene behaviours, vaccination, and compliance with quarantine (Ling et al., 2019; Miller et al., 2012; Teasdale et al., 2011). In addition, external factors such as trust in authorities, levels of anxiety, and demographic variables (e.g., gender, age, race, education level) have been found to affect one’s protection motivation (Barr et al., 2008; Bish & Michie, 2010; Quah & Hin-Peng, 2004). For example, older, non-White females with higher education level are associated with greater likelihood of adopting protection measures during a pandemic (Bish & Michie, 2010).

More recently, a few studies have applied the PMT model to examine factors affecting preventive behaviours against COVID-19. Farooq et al. (2020) found that one’s self-isolation intention during COVID-19 was affected by cyberchondria (i.e., obsessive online searching for health-related information) and information overload, which subsequently affected the threat and coping appraisals. Yet, among the appraisal variables, only perceived severity, self-efficacy, and response cost (i.e., cost associated with recommended behaviour) were discovered as significant predictors of self-isolation intention. Similarly, in Laato et al.’s (2020) study, cyberchondria and information overload also affected consumers’ intentions to make unusual purchases (i.e., hoarding). In the Philippines, Prasetyo et al. (2020) revealed that the knowledge of COVID-19 significantly affected perceived vulnerability and severity and ultimately intention to follow prevention measures (no coping appraisal was assessed in this study). For South Koreans, only the efficacy beliefs significantly influenced their social distancing and recommended behaviours (Lee & You, 2020). Such inconsistency in findings warrants further investigation of the PMT framework in the context of COVID-19 pandemic.

Given the heavy politicization and polarization of COVID-19 in the U.S., individual political orientation may have a profound influence on how individuals evaluate the level of threat COVID-19 poses and the effectiveness of their subsequent coping responses. Research findings, polls, and media data alike suggest that Republicans have generally displayed greater skepticism about the potential threat of COVID-19 while Democrats placed greater emphasis on its threat to public health (Calvillo et al., 2020; Green et al., 2020; Pew Research Center, 2020; Rothgerber et al., 2020; Shao & Hao, 2020). As a result, we expect politically conservative individuals will perceive themselves to be less likely to catch COVID-19 and perceive its consequences less severe. Likewise, consumption of biased information about COVID-19 may lead conservatives to view recommendations like the stay-at-home order as ineffective and unnecessary (Rothgerber et al., 2020), as evidenced by their unwillingness to comply with social distancing orders and make behavioural changes to minimize contact (Painter & Qiu, 2020). Accordingly, we hypothesize.

**Hypothesis 1** Political orientation affects threat and coping appraisals such that the more conservative a consumer is, the more negative their evaluation of (a) vulnerability, (b) severity, (c) response efficacy, and (d) self-efficacy related to COVID-19.

Without a clear way to combat the virus which spreads through person-to-person contacts, protection of individuals against COVID-19 is achieved through limiting social contacts (CDC, 2020b). Accordingly, public health officials have developed social isolation mandates and recommendations as primary protective measures against the spread of the virus. During the month of March 2020, most states in the U.S. imposed mandatory stay-at-home orders (Moreland et al., 2020), forcing many Americans to isolate themselves at home for weeks. Even after the mandates were lifted, various kinds of social distancing actions (e.g., large gatherings ban) are still in place in many states (Kaiser Family Foundation, 2020), and many continue to feel anxious about getting out of their homes (McKinsey & Company, 2020).

Because social distancing and isolation are still strongly recommended, yet not mandated, the degree of individuals’ willingness to limit social activities and stay home varies. While consumers are still not confident enough to go back to normalcy, they are willing to engage in certain social activities more than others, according to a survey conducted in July 2020 (Nielson, 2020). Over 65% of respondents felt uncomfortable engaging in crowded activities (e.g., live concerts, riding public transportation, sporting events) while more than 50% of respondents were willing to return to smaller, regular social activities (e.g., going to retail stores, attending religious service, eating at a restaurant). This result also suggests that there are different levels of comfort or confidence among the people. For example, 45% of respondents feel uncomfortable eating at a restaurant; in other words, 55% of respondents are willing to eat at a restaurant.

The PMT proposes that one’s intention to adopt protectionary measures is a product of one’s threat and coping appraisals. Individual’s intention to stay home can be a result of factors affecting threat appraisal such as one’s confidence in health and perception of the degree of severity or danger. Data suggested the
risk for severe illness from COVID-19 was disproportionately high among older adults and people with underlying medical conditions (CDC, 2020a). These high-risk populations or people living with high-risk populations are likely to perceive a higher level of threat and thus intend to mostly isolate themselves and stay home. Political conservatives who have followed the news and commentaries that downplay COVID-19 are likely to perceive a lesser degree of threat and thus be less willing to stay home. A public attitude, behaviours, and belief survey confirmed this differential perception of threat level among individuals (Czeisler et al., 2020). Thus, Hypothesis 2 is postulated.

Hypothesis 2 Perceived (a) vulnerability and (b) severity will increase stay-at-home intention.

Intention to stay home also is likely to be a result of the coping appraisal. Essential workers (e.g., healthcare professionals, grocery store employees, agricultural workers) who could not opt to stay home continued to be present at worksites even during the shutdowns (Naskar, 2020; Rodríguez, 2020). According to an analysis of the U.S. Bureau of Labor Statistics based on American Time Use Survey and National Longitudinal Surveys, only about 44% of Americans can work from home (Dey et al., 2020). Therefore, self-efficacy will be positively related to stay-at-home intention. Also, from early on, stay-at-home orders were clearly communicated as a way to save other’s lives (Godoy, 2020) and it is predicted that stay-at-home orders could have saved over 200,000 lives (Milling, 2020). This consistent association between one's action to stay home and ‘flatten the curve’ to protect lives is likely to result in a positive relation between response efficacy and stay-at-home intention. Therefore, Hypothesis 3 is posited.

Hypothesis 3 Perceived (a) response efficacy and (b) self-efficacy will increase stay-at-home intention.

The threat consumers felt from COVID-19 led consumers to search for ways to shop while minimizing social contacts. As a result, recent consumer trend reports unanimously found a strong increase in consumer interest for contactless shopping. For example, safe self-checkout, especially BOPIS or click and pickup shopping model, is gaining popularity (Melvin, 2020). One report estimated that the pandemic is responsible for extra $107 billion in online sales between March and August of 2020 (Berthene, 2020b). Contactless shopping is likely to continue to increase in the future. Despite the relative stabilization of new COVID-19 cases in the U.S. as of August 2020, a consumer sentiment survey revealed that consumers intend to continuously use contactless services (e.g., self-checkout) and to increase their online purchases across all categories (e.g., food and grocery, apparel, household, entertainment) (McKinsey & Company, 2020). This report also states that consumer's concern for health and safety is what deters consumers from out-of-home activities. Because contactless shopping is a way to continue social distancing, consumer's intention to stay home is likely to be reflected in their intention to increase contactless shopping in the future. Therefore, we hypothesize Hypothesis 4.

Hypothesis 4 Stay-at-home intention will be positively related to an increase in contactless shopping service intention.

3 METHODS

3.1 Study design and data collection

The current study employed an online survey to test the hypotheses. An online survey method ensured the safety of participants and respondents when the stay-at-home mandate was in effect across most states in the U.S. (Mehrolia et al., 2020). Data were collected using market research panels from Qualtrics Research Services. U.S. adult consumers were invited to participate in an online survey via email. The participation was voluntary. An information sheet, briefly describing the purpose of the study, was provided to all participants. In order to establish an even representation of sample demography (e.g., age and gender), a self-selection, quota sampling method was used. Respondents indicated their gender and age at the beginning of the survey, and the survey closed after the desired number of gender and age groups were collected (e.g., 50% male, 50% female). For the main survey questions, respondents were asked to answer questions regarding COVID-19 at the time at which the survey was taken. It received a total of 311 responses from May 28th, 2020 to June 5th, 2020. The respondents’ demographic information is given in Table 1.

3.2 Measures

All PMT variables—perceived severity (SEV), perceived vulnerability (VUL), response efficacy (RES), self-efficacy (SELF), behavioural intention—were measured by items previously used and validated (Teasdale et al., 2011). The items were adapted to relate to the COVID-19 pandemic (e.g., perceived severity of consequences of contracting COVID-19, perceived vulnerability of contracting COVID-19, intention to stay home). All items were measured using a 7-point Likert scale (1 = strongly disagree and 7 = strongly agree). In addition to the PMT measures, respondents’ political orientation (PO) was assessed with three semantic differential items (1 = democrat, left, progressive; 7 = republican, right, conservative), which is a widely used method for political ideology (Conway et al., 2016). Lastly, one’s intention to increase contactless shopping services in the near future (SHOP) was measured by three items developed by the authors (e.g., curbside pickup, delivery services, self-checkout services). To reduce the common method bias, the measurement items were shown separately and in random order (Gabriëls et al., 2012). We further ensured the confidentiality of the responses and informed respondents that there was no right or wrong answer to each question. Items and inter-item reliability measures are presented in Table 2.
AMOS 26 was used to analyse the data. AMOS is one of the most widely used structural equation modelling (SEM) computer programs that allow an examination of relations between observed and latent variables (Byrne, 2001). The measurement model exhibited a good fit ($\chi^2 = 215.449, df = 149, \chi^2/df = 1.446, GFI = 0.937, AGFI = 0.911, PGFI = 0.665, CFI = 0.982, RMSEA = 0.038 [0.026; 0.046]$). Evaluation of the square root of average variance extracted (AVE) and correlations between the constructs confirmed discriminant validity of the measurement model. The measures exhibited good inter-item reliability and the latent variables displayed good explanatory power of the variables (see Table 2 for results).

Next, we evaluated the structural model to assess the hypothesized relationships. The structural model also fitted the data well ($\chi^2 = 360.489, df = 159, \chi^2/df = 2.267, GFI = 0.905, AGFI = 0.874, PGFI = 0.685, CFI = 0.946, RMSEA = 0.064 [0.055; 0.073]$). Structural coefficients were evaluated to understand the relationships between the research variables. Political orientation was negatively related to both threat appraisal variables, perceived vulnerability (Hypothesis 1a: $\beta = -0.298, p < .001$), and perceived severity (Hypothesis 1b: $\beta = -0.203, p < .01$). However, political orientation was only associated with one of the coping appraisal variables (Hypothesis 1c: response efficacy $\beta = -0.215, p < .001$; Hypothesis 1d: self-efficacy $\beta = -0.077, ns$). Because a higher score on political orientation meant a more conservative stance in our measurement, this finding means that the more conservative consumers are, the less likely they perceive severity and vulnerability of COVID-19 and believe their action will make a change. Thus, the results provided support for Hypothesis 1a, Hypothesis 1b, Hypothesis 1c, but not for Hypothesis 1d. Threat appraisal influenced stay-at-home intention mostly through perceived vulnerability. Perceived vulnerability was positively related to stay-at-home intention (Hypothesis 2a: $\beta = 0.393, p < .01$), but perceived severity was not significantly associated with stay-at-home intention (Hypothesis 2b: $\beta = -0.047, ns$). Therefore, Hypothesis 2 was partially supported. Coping appraisal significantly and positively predicted stay-at-home intention. Both response efficacy (Hypothesis 3a: $\beta = 0.447, p < .001$) and self-efficacy (Hypothesis 3b: $\beta = 0.383, p < .001$) were positively related to stay-at-home intention, providing support for Hypothesis 3. Lastly, consistent with Hypothesis 4, stay-at-home intention was positively associated with increased interest in contactless shopping services in the future (Hypothesis 4: $\beta = 0.187, p < .01$). The results are presented in Figure 1.

A revised model that included a direct relationship between political orientation and contactless shopping intentions was analysed and compared with the original model. As shown in Table 3, the revised model showed a small amount of decrease in chi-square ($\Delta \chi^2 = 8.773, df = 1, p = .00$), suggesting an improvement in model fit and a significant path coefficient for the direct path (PO → SHOP). There are four potential mediation paths (PO → VUL → STAY → SHOP; PO → SEV → STAY → SHOP; PO → RES → STAY → SHOP; PO → SELF → STAY → SHOP), and if one or more of these indirect effects contains paths that are significant, then the model supports partial mediation (Hair et al., 2010). In the original model, significant indirect effects were supported, confirming the presence of mediating effects of vulnerability, severity, and response efficacy. The results from the revised model with the direct relationship path revealed that, although the indirect effects did decrease, they remained statistically significant and contributed to the total effects of political orientation. Also note that the direct effect was significant, added considerably to the total effects, and constituted the majority of the total effects (see Table 4). These results suggest that protection motivation variables partially mediate the political orientation effect. Lastly, results demonstrated that the larger mediating effects came from the mediators of vulnerability and response efficacy.

### 5 | DISCUSSION AND IMPLICATIONS

#### 5.1 | Discussion of major findings

This study set out to discover the psychological factors that contribute to individual differences in protectionary consumption intention amid COVID-19. First, findings reveal that political orientation had a
significant effect on perceived severity (Hypothesis 1a), vulnerability (Hypothesis 1b), and response efficacy (Hypothesis 1c), but not on self-efficacy (Hypothesis 1d). The significant influence of political orientation on the threat appraisals (e.g., severity and vulnerability) is in accordance with earlier studies and national poll data, which indicated that conservatives tend to perceive COVID-19 as less threatening than liberals (Calvillo et al., 2020; Pew Research Center, 2020; Rothgerber et al., 2020; Shao & Hao, 2020). This is likely due to political leaders’ polarized response to COVID-19 including President Trump’s initial downplay and the resulting polarized media coverage (Calvillo et al., 2020; Hart et al., 2020). This finding lends support to Shao and Hao (2020)’s study that cues from political leaders and biased media rhetoric can exert substantial influence in shaping followers’ understanding of issues like COVID-19.

On the other hand, for coping appraisals, only response efficacy was significantly predicted by political orientation. In other words, while political orientation plays a critical role in one’s evaluation of the effectiveness of following the stay-at-home mandate, it does not affect whether one is capable of following the stay-at-home order. This may be because whether one is actually capable of staying at home during the pandemic is more contingent upon external factors like job functions (e.g., essential vs. nonessential workers) and financial stability rather than their perceptions of the pandemic itself. Meanwhile, conservatives’ skepticism towards the severity of

| TABLE 2 Measurement items and factor analysis results |
|-------------------------------------------------------|
| **Items**                                             | **Factor loadings** | **AVE** | **Composite reliability** | **Cronbach’s alpha** |
| Perceived severity                                   | 0.864               | 0.962   | .907                       |
| If I catch COVID-19, I am likely to become seriously ill | 0.862               |          |                            |
| Catching COVID-19 could have severe consequences for my health | 0.898               |          |                            |
| Catching COVID-19 could have major consequences for my life | 0.875               |          |                            |
| If I catch COVID-19, it will cause me serious problems | 0.878               |          |                            |
| Perceived vulnerability                              | 0.661               | 0.795   | .754                       |
| If I don’t take preventative action, I am likely to catch COVID-19 | 0.668               |          |                            |
| My chances of catching COVID-19 are high if I don’t take action to prevent it | 0.786               |          |                            |
| Response efficacy                                    | 0.848               | 0.944   | .929                       |
| If I stay at home, I will be protecting others from COVID-19 | 0.861               |          |                            |
| If I stay at home, I will be protecting the people I care about from COVID-19 | 0.875               |          |                            |
| If I stay at home, I will be protecting others who are at high risk from COVID-19 | 0.862               |          |                            |
| Self-efficacy                                         | 0.813               | 0.897   | .930                       |
| It will be possible for me to stay at home, if I want to | 0.816               |          |                            |
| If I want to, I am confident that I can stay at home | 0.861               |          |                            |
| Stay at home intention                               | 0.745               | 0.894   | .841                       |
| I will try to stay at home                           | 0.893               |          |                            |
| I intend to stay at home                             | 0.886               |          |                            |
| I want to stay at home                               | 0.569               |          |                            |
| Political orientation                                | 0.768               | 0.908   | .874                       |
| Democrat – Republican                               | 0.702               |          |                            |
| Left – Right                                         | 0.893               |          |                            |
| Progressive – Conservative                          | 0.814               |          |                            |
| Intention to use contactless shopping services        | 0.685               | 0.860   | .777                       |
| In the next month, I will have greater interest in using curbside pickup services | 0.973               |          |                            |
| In the next month, I will have greater interest in using delivery services | 0.716               |          |                            |
| In the next month, I will have greater interest in using self-checkout services | 0.517               |          |                            |
COVID-19 may explain why they are critical of the protective measures and its effectiveness in curtailing the spread of the virus. In fact, Republic pundits like Tucker Carlson made several claims that no evidence suggests stay-at-home orders save lives (Bump, 2020), and Fox News has been promoting conservative protestors demonstrating against stay-at-home orders citing that the government mandate is not only unnecessary but also a breach of individual freedom (Brewster, 2020). Such misinformation and sentiment spawned by the media presumably affected conservatives’ perception of their response efficacy.

Second, among the threat appraisals, perceived vulnerability (Hypothesis 2a) positively influenced stay-at-home intention while perceived severity (Hypothesis 2b) did not. The insignificant relationship between perceived severity and intention was rather surprising as it contradicts the recent findings of Farooq et al. (2020) on COVID-19, where perceived severity influenced self-isolation intention whereas perceived vulnerability did not. However, in their study, cyberchondria was examined as the antecedent of threat appraisal, suggesting that increased perception of COVID-19’s severity was likely due to those with heightened motivation for learning more about COVID-19. Furthermore, their study’s sample was university students in Finland, while ours was the general public in the U.S. The variation in the demographic characteristics of the samples and the resulting differences in COVID-19 perception may have contributed to the discrepancy in findings. Instead, our results align more closely with Tang and Wong (2004), where perceived severity of SARS did not predict face mask wearing but perceived vulnerability did. It could be argued that the general public may be underestimating the severity of the disease as they did in the case of SARS, and unless they feel personally vulnerable to contracting the virus, the need to practice preventive behaviour is low.

Third, both response efficacy (Hypothesis 3a) and self-efficacy (Hypothesis 3b) positively influenced stay-at-home intention. That is, those who perceive stay-at-home action to be an effective protective measure against COVID-19 and are capable of carrying out the action are more likely to display stay-at-home intentions. Such results confirm previous research where the coping appraisals were positively correlated with other preventive behavioural intentions such as mask-wearing, hand-washing, and social distancing (Kaspar, 2020; Sharifirad et al., 2014). Yet, given that political orientation was not significantly related to the self-efficacy variable, response efficacy proved to be the essential link between political orientation and stay-at-home intention. This signifies how the public communication of preventive actions and its effectiveness is crucial in generating a unified response against the pandemic. Our result further confirms previous findings that coping appraisals tend to have greater association with behavioural intentions than threat appraisal, possibly because adopting protective behaviour helps people feel less vulnerable to the threat; thus, the correlation between threat appraisal and intention may seem weaker than coping appraisal (Milne et al., 2000).

Finally, the mediation analysis demonstrated that the effect of one’s political orientation on contactless shopping intentions was partially mediated by the variables of the PMT model (e.g., threat and coping appraisals) and one’s stay-at-home intentions. Hence, it implies that consumers’ motivations to utilize contactless shopping services during COVID-19 can be partially explained by such underlying motivations for protection. This result confirms the findings of Painter and Qiu (2020)’s geolocation analysis that political beliefs play a significant role in people’s compliance behaviours with social distancing orders, which also shows correlation with increased e-commerce shopping behaviour. Moreover, the significant direct effect of the political orientation on contactless shopping intentions suggests that liberal consumers are willing to utilize contactless shopping services for reasons other than protection against COVID-19. While such reasons (possibly the availability of contactless shopping services) remain unknown given the scope of our study, it warrants further examination.

In conclusion, it was discovered that one’s political orientation affects how they perceive the threat of COVID-19 and the efficacy of staying at home in such a way that liberals tend to assess greater threat and coping efficacy than the conservatives. Such relationship continued to affect individuals’ willingness to stay at home and, in
turn, engage in contactless shopping activities. Taken together, our findings suggest that, in order to encourage social distancing behaviours and effectively prevent the spread of the virus, a clear and bipartisan response from the political leaders and unbiased media coverage is imperative.

5.2 | Academic and practical implications

Our research contributes to the literature in the following ways. As one of the earliest attempts to examine contactless shopping as a protectionary health measure rather than a technology-supported innovation as seen in previous studies (Giovanis et al., 2019; Kokkinou & Cranage, 2015). Researchers have mainly relied on the technology adoption frameworks (e.g., Technology Acceptance Model, Innovation Diffusion Theory, Theory of Planned Behaviour) to explain consumers’ intentions to utilize contactless shopping services such as self-service kiosk, BOPIS, and grocery delivery (Giovanis et al., 2019; Hansen et al., 2004; Kaushik & Rahman, 2015; Kim et al., 2017). These researchers have investigated contactless shopping in the context of self-service technologies (Giovanis et al., 2019; Kokkinou & Cranage, 2015) and studied consumer’s personal and situational factors that predict adoption and usage of the technology such as innovativeness, trust in technology, and technology anxiety (Kaushik & Rahman, 2015; Meuter et al., 2005). The fact that contactless shopping is void of social contact was rarely a focus, and the few studies that attended to the lack of human contact viewed the fact as a barrier for technology adoption (Lee et al., 2013; Lee & Leonas, 2020; Meuter et al., 2005). As the COVID-19 pandemic caused an unprecedented shift in consumer behaviour that required immediate adoption of social distancing measures in all aspects of lives, there is a need to investigate contactless shopping as an essential means to minimize social contact. To that end, our study theorized contactless shopping with the emphasis on the lack of social contacts as a benefit rather than a barrier and provided empirical evidence that consumers intend to increase the use of contactless shopping services based on their motivations to protect themselves from the perils of COVID-19.

In addition, the application of Protection Motivation Theory in consumer research context is novel in the literature as PMT has been primarily studied in health-related contexts like cancer prevention, smoking, exercising, and alcohol consumption (Milne et al., 2000). The significant findings from our PMT model help validate the theory in the consumer research setting and open a new window
of research, where PMT may be applied to other contexts of consumer behaviour that involve risk and need for protection (e.g., identity theft). Moreover, we employed political orientation as a key antecedent of threat and coping appraisals of COVID-19, a demographic variable that has not been commonly associated with protective behaviours (Bish & Michie, 2010). Doing so, we advance the current knowledge on the PMT literature and offer deeper insights into the factors that shape the public’s perception of pandemics.

The findings also have practical implications. Our results suggest consumers perceive high risks to engage in normal shopping activities and show increased desire to socially distance themselves from others. Our findings corroborate industry surveys of consumer sentiment that highlighted consumer concerns for health and safety (McKinsey & Company, 2020; Melvin, 2020). The immediate practical implication from this finding is the sharply increased consumer preference for online and mobile shopping and for omnichannel shopping options that minimize interactions with other people. The findings particularly call for retailers’ attention to store management. Placing the highest emphasis on health and safety of shoppers by clearly following health guidelines and showing commitment in various ways is critical. As retailers are struggling to attract shoppers back to their physical stores, it is imperative that they care for the health and safety of both shoppers and employees. Consumers feel vulnerable and helpless during such health crisis (Milaković, 2021) and need reassurance to find stores as a safe place to visit. Failure to do so will likely make consumers feel vulnerable and avoid the retailer. Retailers are also advised to streamline the shopping process so that consumers can feel that the in-store experience is seamless and quick with minimal human contact.

Furthermore, we recommend developing different marketing strategies surrounding contactless shopping based on individuals’ political orientations. Our results show that liberals tend to perceive greater severity and vulnerability associated with COVID-19 than conservatives, which subsequently determines their intentions to adopt contactless shopping methods. Thus, for liberals, retailers should emphasize the protectionary effect (e.g., safety, hygiene) of engaging in contactless shopping. On the other hand, for conservatives, retailers may highlight other benefits of contactless shopping modes such as convenience and speed.

5.3 | Limitations and future research suggestions

Like any research, this study has some limitations that also provide future research opportunities. Although the sample and context of this study was specific to the U.S, globally, all countries are battling against the virus. Different countries implemented different strategies to respond to the disease, and some countries have been more successful in containing the virus than others. Therefore, the findings of this study may not be generalized in other countries, and there could be interesting divergence in consumer beliefs and intention to adopt the contactless shopping options. A future study to compare different countries will warrant a deeper understanding of the influence of political climates on consumer behaviours. The second limitation is that the current study measured future intention as the best proxy for future behaviour changes. While intention is widely considered as a good indicator of actual behaviour, the intention—behaviour gap has been also well acknowledged in the literature. A study to track actual behaviours and correlate the four results with the intention in the future will help us close this gap. The third limitation is associated with a weakness of cross-sectional methodology. Because the COVID-19 situation (e.g., policy, case number increase rate) has been changing rapidly, consumer sentiments also have been fluctuating in response to the situation. Yet, assessing consumer response at a single point of time cannot capture the dynamic changes. An investigation to evaluate the longitudinal changes in the influence of the pandemic on consumer willingness to use contactless shopping will help us understand the full scope of the impact over time as the level of threat changes. Also, many believe that the pandemic simply accelerated the inevitable change that the retail industry was anticipating (Luna, 2020; Unglesbee, 2020) and predict that contactless shopping is likely to remain popular even after the pandemic (Accenture, 2020; Ryan, 2020; Yan et al., 2021). Following the trajectory of consumer’s intention to use contactless shopping after the threat of the virus is diminished, which will provide an insight for how quickly and well this new shopping method may become integrated into consumer’s daily life. The fourth limitation concerns the possibility of external factors that may affect consumers’ contactless shopping intentions. Those factors may include the availability of contactless shopping technology (i.e., urban versus rural), gender and age of consumers (i.e., older consumers may not feel comfortable using new technology). Identification and inclusion of additional variables in the current model warrant further examination. The last limitation is that this is a self-reported survey which cannot determine causal relationships between the research variables, just like other survey studies. While we proposed the causal relationships based on the theory and our results largely supported the proposed causal relationships, the results should be interpreted with caution. It is advisable that future studies investigate the relationships with an experimental design to confirm the causal relationships.

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CONFLICT OF INTEREST
The authors declare that they have no competing interests.

DATA AVAILABILITY STATEMENT
The datasets used and analyzed during the current study are available from the corresponding author on reasonable request.

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REFERENCES
Abbas, A. H. (2020). Politicizing the pandemic: A schema analysis of COVID-19 news in two selected newspapers. *International Journal for the Semiotics of Law*, 1–20. https://doi.org/10.1007/s11196-020-09745-2

Accenture. (2020, August 13). COVID-19: Retail consumer habits shift long-term. *Accenture*. https://www.accenture.com/us-en/insights/retail/coronavirus-consumer-habits

Allcott, H., Boxell, L., Conway, J., Gentzkow, M., Thaler, M., & Yang, D. Y. (2020). Polarization and public health: Partisan differences in social distancing during the coronavirus pandemic. *Journal of Public Economics*, 191, 104254. https://doi.org/10.1016/j.jpubeco.2020.104254

Barr, M., Raphael, B., Taylor, M., Stevens, G., Jorm, L., Giffin, M., & Lujic, S. (2008). Pandemic influenza in Australia: Using telephone surveys to measure perceptions of threat and willingness to comply. *BMC Infectious Diseases*, 8, 117. https://doi.org/10.1186/1471-2334-8-117

Berthene, A. (2020a, August 4). Ecommerce is 38.6% of all apparel sales. *Digital Commerce*. https://www.digitalcommerce360.com/article/online-apparel-sales-us/

Berthene, A. (2020b, September 14). Online merchants gain an extra $107 billion in 2020 thanks to pandemic. *Digital Commerce*. https://www.digitalcommerce360.com/article/coronavirus-impacts-online-retail/

Bish, A., & Michie, S. (2010). Demographic and attitudinal determinants of protective behaviours during a pandemic: A review. *British Journal of Health Psychology*, 15(4), 797–824. https://doi.org/10.1348/135910710X485826

Brewster, J. (2020, April 17). Fox News prime-time hosts rally around right wing stay-at-home order protesters. *Forbes*. https://www.forbes.com/sites/jackbrewster/2020/04/16/fox-news-hosts-rally-around-right-wing-stay-at-home-order-protesters/

Bump, P. (2020, May 22). Tucker Carlson claims there’s no evidence stay-at-home orders saved lives. He’s wrong. *Washington Post*. https://www.washingtonpost.com/politics/2020/05/22/tucker-carlson-claims-theres-no-evidence-stay-at-home-ordered-saved-lives-hes-wrong/

Byrne, B. M. (2001). Structural equation modeling with AMOS, EQS, and LISREL: Comparative approaches to testing for the factorial validity of a measuring instrument. *International Journal of Testing*, 1(1), 55–86. https://doi.org/10.1207/S15327574IJT0101_4

Calvillo, D. P., Ross, B. J., Garcia, R. J. B., Smelter, T. J., & Rutchick, A. M. (2020). Political ideology predicts perceptions of the threat of COVID-19 (and susceptibility to fake News about it). *Social Psychological and Personality Science*, 11(8), 1119–1128. https://doi.org/10.1177/1948550620940539

CDC. (2020a, February 11). Coronavirus disease 2019 (COVID-19): Older adults. *Centers for Disease Control and Prevention*. https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/older-adults.html

CDC. (2020b, September 11). Coronavirus disease 2019 (COVID-19) – Prevention & treatment. *Centers for Disease Control and Prevention*. https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html

Chicago Booth Review. (2020, August 5). Why partisanship affected Americans pandemic perceptions. https://review.chicagobooth.edu/public-policy/2020/video/why-partisanship-affected-americans-pandemic-perceptions

Conway, L. G., III, Gornick, L. J., Houck, S. C., Anderson, C., Stockert, J., Sessoms, D., & McCue, K. (2016). Are conservatives really more simple-minded than liberals? The domain specificity of complex thinking. *Psychological Science*, 37(5), 777–798. https://doi.org/10.1111/psyc.12304

Cox, J. (2020). Retail sales plunge a record 16.4% in April, far worse than predicted. *CNBC*. https://www.cnbc.com/2020/05/15/us-retail-sales-april-2020.html

Czeisler, M. É., Tynan, M. A., Howard, M. E., Honeycutt, S., Fulmer, E. B., Kidder, D. P., Robbins, R., Barger, L. K., Facer-Childs, E. R., Baldwin, G., Rajaratnam, S. M. W., & Czeisler, C. A. (2020). Public attitudes, behaviors, and beliefs related to COVID-19, stay-at-home orders, nonessential business closures, and public health guidance—United States, New York City, and Los Angeles, May 5–12, 2020. *Morbidity and Mortality Weekly Report*, 69(24), 751–758. https://doi.org/10.15585/mmwr.mm6924e1

Dey, M., Frazis, H., Loewenstein, M. A., & Sun, H. (2020, June). Ability to work from home: Evidence from two surveys and implications for the labor market in the COVID-19 pandemic. *U.S. Bureau of Labor Statistics*. https://www.bls.gov/opub/mlr/2020/article/ability-to-work-from-home.htm

Farooq, A., Laato, S., & Islam, A. K. M. N. (2020). Impact of online information on self-isolation intention during the COVID-19 pandemic: Cross-sectional study. *Journal of Medical Internet Research*, 22(5), 19128. https://doi.org/10.2196/19128

Floyd, D. L., Prentice-Dunn, S., & Rogers, R. W. (2000). A meta-analysis of research on protection motivation theory. *Journal of Applied Social Psychology*, 30(2), 407–429. https://doi.org/10.1111/1.15159-1816.2000.tb02323.x

Gabrielson, P., Gabrielsonn, M., & Seppälä, T. (2012). Marketing strategies for foreign expansion of companies originating in small and open economies: The consequences of strategic fit and performance. *Journal of International Marketing*, 20(2), 25–48. https://doi.org/10.1509/jim.11.0068

Ghosh, S. (2020, September 30). What will stop the dip in retail sales during the COVID-19 pandemic? *MarTech Series*. https://martechseries.com/analytics/behavioral-marketing/why-stop-dip-retail-sales-covid-19-pandemic/

Giovanas, A., Assimakopoulos, C., & Sarmaniotis, C. (2019). Adoption of mobile self-service retail banking technologies: The role of technology, social, channel and personal factors. *International Journal of Retail & Distribution Management*, 47(9), 894–914. https://doi.org/10.1080/13580294.2018.1512876

Gittleson, B. (2020, September). Trump admitted he deliberately played down coronavirus threat. *ABC News*. https://abcnews.go.com/Politics/trump-admitted-deliberately-played-coronavirus-threat-reports/story?id=72904348

Godoy, M. (2020, March 13). Flattening a pandemic’s curve: Why staying home now can save lives. NPR. https://www.npr.org/sections/health-shots/2020/03/13/815502262/flattening-a-pandemics-curve-why-staying-home-now-can-save-lives

Green, J., Edgerton, J., Naftel, D., Shoub, K., & Cramer, S. J. (2020). Elusive consensus: Polarization in elite communication on the COVID-19 pandemic. *Science Advances*, 6(28), eabc2717. https://doi.org/10.1126/sciadv.abc2717

Hair, J. F., Jr., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis* (7th ed.). Prentice Hall.

Hansen, T., Møller Jensen, J., & Stubbe Solgaard, H. (2004). Predicting online grocery buying intention: A comparison of the theory of reasoned action and the theory of planned behavior. *International Journal of Information Management*, 24(6), 539–550. https://doi.org/10.1016/j.ijinfomgt.2004.08.004

Hart, P. S., Chinn, S., & Soroka, S. (2020). Politicization and polarization in COVID-19 news coverage. *Science Communication*, 42(5), 679–697. https://doi.org/10.1177/1075547020950735

Hetherington, M. J., & Milhaff, I. D. (2020, August 18). American attitudes toward covid-19 are divided by party. The pandemic itself might undo that. *The Washington Post*. https://www.washingtonpost.com/politics/2020/08/18/american-attitudes-toward-covid-19-are-divided-by-party-pandemic-itself-might-undo-that/

Ilchi, L. (2020, August 6). All the major fashion brands and retailers severely impacted by the COVID-19 Pandemic. *WWD*. https://www.wwd.com
Maddux, J. E., & Rogers, R. W. (1983). Protection motivation and self-efficacy: A revised theory of fear appeals and attitude change. *Journal of Experimental Social Psychology*, 19(5), 469–479. https://doi.org/10.1016/0022-1031(83)90023-9

Mckinsey & Company. (2020). COVID-19 Map. Johns Hopkins Coronavirus Resource Center. https://coronavirus.jhu.edu/map.html

Kaiser Family Foundation. (2020, September 21). State data and policy actions to address coronavirus. KFF. https://www.kff.org/coronavirus-covid-19/issue-brief/state-data-and-policy-actions-to-address-coronavirus/

Kaspar, K. (2020). Motivations for social distancing and app use as complementary measures to combat the COVID-19 pandemic: Quantitative survey study. *Journal of Medical Internet Research*, 22(8), e21613. https://doi.org/10.2196/21613

Kaushik, A. K., & Rahman, Z. (2015). An alternative model of self-service retail technology adoption. *Journal of Services Marketing*, 29(5), 406–420. https://doi.org/10.1108/JSM-08-2014-0276

Kim, E., Park, M.-C., & Lee, J. (2013). Gender differences in consumer evaluations of service quality: Self-service kiosks in retail. *Service Industries Journal*, 33(2), 248–265. https://doi.org/10.1080/02642069.2011.614346

Lee, H.-J., Fairhurst, A., & Cho, H. (2013). Gender differences in consumer evaluations of service quality: Self-service kiosks in retail. *Service Industries Journal*, 33(2), 248–265. https://doi.org/10.1080/20697302X20926577

Lee, M., & You, M. (2020). Psychological and behavioral responses in South Korea during the early stages of coronavirus disease 2019 (COVID-19). *International Journal of Environmental Research and Public Health*, 17(9), 2977. https://doi.org/10.3390/ijerph17092977

Ling, M., Kothe, E. J., & Mullan, B. A. (2019). Predicting intention to receive a seasonal influenza vaccination using Protection Motivation Theory. *Social Science & Medicine*, 233, 87–92. https://doi.org/10.1016/j.socscimed.2019.06.002

Luna, N. (2020, May 14). Off-premise: The rise of contactless ordering and curbside pickup amid COVID-19 offer keys to survival. Nation’s Restaurant News. https://www.nrn.com/quick-service/premise-rise-contactless-ordering-and-curbside-pickup-amid-covid-19-offer-keys

Maddux, J. E., & Rogers, R. W. (1983). Protection motivation and self-efficacy: A revised theory of fear appeals and attitude change. *Journal of Experimental Social Psychology*, 19(5), 469–479. https://doi.org/10.1016/0022-1031(83)90023-9

McKinsey & Company. (2020). Consumer sentiment in the US during the coronavirus crisis. https://www.mckinsey.com/business-functions/marketing-and-sales/our-insights/survey-us-consumer-sentiment-during-the-coronavirus-crisis

Milaković, I. K. (2021). Purchase experience during the COVID-19 pandemic and social cognitive theory: The relevance of consumer vulnerability, resilience, and adaptability for purchase satisfaction and repurchase. *International Journal of Consumer Studies*. Advance online publication. https://doi.org/10.1111/ics.12672

Miller, S., Yardley, L., & Little, P. (2012). Development of an intervention to reduce transmission of respiratory infections and pandemic flu: Measuring and predicting hand-washing intentions. *Psychology, Health & Medicine*, 17(1), 59–81. https://doi.org/10.1080/13548506.2011.564188

Milling, M. (2020, May 19). Researchers say stay-at-home orders during coronavirus pandemic have so far saved over 200,000 lives. Forbes. https://www.forbes.com/sites/marlamillying/2020/05/19/stay-at-home-orders-saves-hundreds-of-thousands-of-lives-report-conflrms/

Milne, S., Sheeran, P., & Orbell, S. (2000). Prediction and intervention in health-related behavior: A meta-analytic review of protection motivation theory. *Journal of Applied Social Psychology*, 30(1), 106–143. https://doi.org/10.1177/0021902999115599

Moreland, A., Herlihy, C., Tynan, M., Sunshine, G., McCord, R., Hilton, C., & Poovey, J. (2020). Timing of state and territorial COVID-19 stay-at-home orders and changes in population movement — United States, March 1–May 31, 2020. *Morbidity and Mortality Weekly Report*, 69(35), 1198–1203. https://doi.org/10.15585/mmwr.mm6935a2

Naskar, S. (2020, September 7). Report: Nevada’s communities of color, essential workers are disproportionately affected by COVID-19. This is Reno. https://thisisreno.com/2020/09/report-nevadas-communities-of-color-essential-workers-are-disproportionately-affected-by-covid-19/

Nielson, L. (2020, July 15). Most people aren’t ready to go back to the office yet, but they’re feeling more confident returning to normal life. *Qualtrics*. https://www.qualtrics.com/blog/consumer-confidence-and-employee-preferences-research/

Painter, M., & Qiu, T. (2020). Political beliefs affect compliance with COVID-19 social distancing orders. *Social Science Research Network*. https://ssrn.com/abstract=3569098

Peters, J. W., & Grynbaum, M. M. (2020, March 11). How right-wing pundits are covering Coronavirus. The New York times. https://www.nytimes.com/2020/03/11/us/politics/coronavirus-conservative-media.html

Pew Research Center. (2020, June 25). Republicans, democrats move even further apart in Coronavirus concerns. Pew Research Center - U.S. Politics & Policy. https://www.pewresearch.org/politics/2020/06/25/republicans-democrats-move-even-further-apart-in-coronavirus-concerns/

Prasetyo, Y. T., Castillo, A. M., Salonga, L. J., Sia, J. A., & Seneta, J. A. (2020). Factors affecting perceived effectiveness of COVID-19 prevention measures among Filipinos during Enhanced Community Quarantine in Luzon, Philippines: Integrating Protection Motivation Theory and extended Theory of Planned Behavior. *International Journal of Infectious Diseases*, 99, 312–323. https://doi.org/10.1016/j.ijid.2020.07.074

Prentice, C., Quach, S., & Thaichon, P. (2021). Antecedents and consequences of panic buying: The case of COVID-19. *International Journal of Consumer Studies*. Advance online publication. https://doi.org/10.1111/ics.12910

Prasetyo, Y. T., Castillo, A. M., Salonga, L. J., Sia, J. A., & Seneta, J. A. (2020). Factors affecting perceived effectiveness of COVID-19 prevention measures among Filipinos during Enhanced Community Quarantine in Luzon, Philippines: Integrating Protection Motivation Theory and extended Theory of Planned Behavior. *International Journal of Infectious Diseases*, 99, 312–323. https://doi.org/10.1016/j.ijid.2020.07.074
Shao, W., & Hao, F. (2020). Confidence in political leaders can slant risk perceptions of COVID-19 in a highly polarized environment. Social Science & Medicine, 261, 113235. https://doi.org/10.1016/j.socscimed.2020.113235

Sharifirad, G., Yarmohammadi, P., Sharifabad, M. A. M., & Rahaei, Z. (2014). Determination of preventive behaviors for pandemic influenza A/H1N1 based on protection motivation theory among female high school students in Isfahan, Iran. Journal of Education and Health Promotion, 3(1), 7. https://doi.org/10.4103/2277-9531.127556

Tang, C. S., & Wong, C. (2004). Factors influencing the wearing of face-masks to prevent the severe acute respiratory syndrome among adult Chinese in Hong Kong. Preventive Medicine, 39(6), 1187-1193. https://doi.org/10.1016/j.ypmed.2004.04.032

Teasdale, E., Yardley, L., Schlotz, W., & Michie, S. (2011). The importance of coping appraisal in behavioural responses to pandemic flu. British Journal of Health Psychology, 17(1), 44–59. https://doi.org/10.1111/j.2044-8287.2011.02017.x

Tran, L. T. T. (2021). Managing the effectiveness of e-commerce platforms in a pandemic. Journal of Retailing and Consumer Services, 58, 102287. https://doi.org/10.1016/j.jretconserv.2020.102287

Tyson, A. (2020, July 22). Republicans remain far less likely than Democrats to view COVID-19 as a major threat to public health. Pew Research Center. https://www.pewresearch.org/fact-tank/2020/07/22/republicans-remain-far-less-likely-than-democrats-to-view-covid-19-as-a-major-threat-to-public-health/

Unglesbee, B. (2020, August 25). Retail is “scrambling” to keep up with accelerated disruption in the COVID-19 era. Retail Dive. https://www.retaildive.com/news/retail-is-scrambling-to-keep-up-with-accelerated-disruption-in-the-covid-19-era/584100/

Vance, A., Siponen, M., & Pahnila, S. (2012). Motivating security compliance: Insights from habit and protection motivation theory. Information & Management, 49(3), 190–198. https://doi.org/10.1016/j.im.2012.04.002

Woon, I., Tan, G.-W., & Low, R. (2005). A protection motivation theory approach to home wireless security. In ICIS 2005 Proceedings. 31, 367–380. https://aisel.aisnet.org/ics2005/31

Yan, L. Y., Tan, G. W. H., Loh, X. M., Hew, J. J., & Ooi, K. B. (2021). QR code and mobile payment: The disruptive forces in retail. Journal of Retailing and Consumer Services, 58, 102300. https://doi.org/10.1016/j.jretconserv.2020.102300

Yohn, D. L. (2020, July 6). The pandemic is rewriting the rules of retail. Harvard Business Review. https://hbr.org/2020/07/the-pandemic-is-rewriting-the-rules-of-retail

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