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# Customers' social interactions and panic buying behaviour: Insights from social media practices

Muhammad Naeem; Wilson Ozuem

## Abstract

The Covid-19 pandemic led to social distancing and lockdown practices, which increased social interactions and information exchange on social media for timely decision making. This study explores how social practices and social influence generated through social media created panic buying behaviour among customers. A social constructionist epistemological position was taken in order to understand the social practice of information sharing and to ask why different meanings were ascribed to Covid-19 pandemic. Qualitative data collection and analysis methods were used to understand these subjective realities. A total of 40 UK customers participated in semi-structured interviews in which they were asked about their usage of social media during the pandemic. Results revealed that social media increased the sharing of viral video evidence, such as empty shelves and quarrelling in grocery stores, which increased fear and uncertainty; as a result, people shared recommendations to stay at home and buy extra for survival. Analysis revealed that social media increased awareness of stock unavailability in other parts of world, such as the USA, China, and Germany; therefore, people took proactive actions, such as stockpiling or panic buying, to avoid risks and uncertainties. The major theoretical contribution of this study is that the researcher merged social practice theory and social influence theory, and constructed a research framework which provides understanding of the social factors generated through social media platforms that increased socially influenced panic buying practices among UK customers. This study suggests that there is a need to control socially shared information and panic buying behaviour and how socially shared information can influence different people in different contexts.

## Keywords

Fear, impatient, nervous, panic, stress, unease, Worry

## 1 Introduction

Covid-19 has had a negative impact on economies, businesses, employment, service industries, supply chains, innovation, value chains, and retail stores (Roggeveen & Sethuraman, 2020; Verma & Gustafsson, 2020). During the Covid-19 pandemic, demand for groceries and healthcare items sometimes exceeded supply; therefore, many retail stores face challenges in online delivery and effective supply chain management while practicing social distancing to maintain a safe work environment (Roggeveen & Sethuraman, 2020). Outbreaks of Covid-19 have confined consumers to their homes; therefore, they have limited opportunities to go outside due to social distancing and lockdowns (He & Harris, 2020). The fearful environment of Covid-19 has changed normal behaviour to hoarding behaviour (Kirk & Rifkin, 2020), even when the prices of groceries and other necessary items are either stable or increased. There is evidence that this pandemic increased consumer's irrational decisions, such as accumulation of food items, sanitation and hygiene products, medicines, and toilet paper (He & Harris, 2020; Mollenkopf et al., 2020). However, there is limited understanding regarding how this irrational decision making

grew at global and local levels and what factors contributed to changing consumers' rational behaviour into consumers' panic behaviour.

According to recent statistics, 369,504 cases of coronavirus and 41,628 deaths due to coronavirus were reported in the UK from March to September 2020 (Worldometer, 2020). The fearful environment during Covid-19 pandemic created uncertainty and misinformation (Chen et al., 2020; Pennycook et al., 2020). As a result, people have started to buy extra goods because of misinformation that Covid-19 can be transmitted through groceries; therefore, they buy stock and store it for a long time (Heuvelmans, 2020). The Edmonton Journal (2020) reported that many grocery store workers were infected and had died due to Covid-19, which increased service industries employees' fear of illness during this critical period. There are many statistics which show changes in the behaviour of UK customers, such as 45% felt uneasy about trying on clothes in stores during the pandemic, 64% stated they would continue to buy extra next year, 57% used more hygiene products than they did pre-pandemic when visiting stores, and 17% preferred to buy online only (Carlyle & Rindone, 2020). There is evidence of an increase in sales of groceries during Covid-19 pandemic (Edmonton Journal, 2020; Heuvelmans, 2020). Although there is evidence of changes in customers' shopping habits, there is limited information regarding what social factors and practices developed through social media that increased panic buying among customers of retail stores. This study intends to develop a research framework that can provide understanding of common social practices over social media and how social and psychological factors changed normal buying behaviour into panic buying behaviour during Covid-19 pandemic. This study aims to use different relevant theories to support understanding of social practices that emerged through interactions on social media platforms which developed into socially influenced panic buying among UK-based customers.

## **2 Literature Review**

Social media plays an important role in influencing customers' intentions and buying patterns (Alalwan, 2018; Appel et al., 2020); therefore, many businesses have shifted from traditional media channels to interactive media channels (Algharabat et al., 2020; Ashley & Tuten, 2015) which promote social practices of collective buying. Thomas et al. (2020) argued that the presence of social media and a socially engaged society has changed the focus from individual customers to collective customers' buying practices. According to Hargreaves (2011), social practices divert attention from individual behaviour to collective behaviour; therefore, the importance of social actors, experts, opinion leaders, and similar/diverse thoughts is increased due to advent and rise of technology. However, there is limited understanding regarding how social media interaction and information sharing practices influenced the purchasing patterns of customers of retail stores during the Covid-19 outbreak.

In any practice, there are generalized rules, such as knowledge about how to behave within a specific context in accordance with our past experience and knowledge about the social world in which we live and influence (Gross et al., 2014; Keller & Ruus, 2014). Schatzki (2002) stated that social practices are affected by people's expectations, and by the knowledge and understanding they have about situations. In other words, social practices are a sum of connected psychological and social activities that are composed of a configuration of three elements: competence, meaning and material; these elements are mutually connected and have different degrees of freedom. In addition to triggering our attention toward what is going on around us, social practices through social media strongly influence people's expectations and buying behaviour as they are continually involved in generating socially influenced content (Felix et al., 2017).

Reckwitz (2002) developed social practice theory (SPT) on the basis of Giddens's (1984) structuration theory and argued that there are many interconnected elements that not only configure or shape social practices, but also create the

circumstances for the existence of such practices. Reckwitz's (2002) elements included: things as well as their uses; forms of human activities; background knowledge, not only in terms of understanding but also in terms of motivational knowledge; know-how; and specific emotions. According to Reckwitz (2002), SPT can be understood with the help of three major elements:

- Materials, include human body, hardware, tools, infrastructure and objects. Therefore, instead of considering social practices as inflexible structures that rigidly prescribe the behaviour of an agent, they must be considered a broad playing area that is accessible to agents, for which Wittgenstein used the term "Spielraum". Typically, the nature of social practices provides freedom to agents, behaving in social practices, to extend and customize these practices in accordance with their habits and personal experience, or to combine and retrieve various practices as per situation.
- Meanings, include symbolic meanings, aspirations and ideas. Meaning, simply speaking, refers to those issues that are considered most relevant to the material (emotions, beliefs, and understandings). For example, social status and price could be relevant for shopping: parents of similar social status and budget co-shop as a social practice because it helps them to buy items for their children and they enjoy the experience and each other's company (Keller & Ruus, 2014).
- Competences, include the knowledge and skills required to execute social practices. For example, knowledge and skills to create attractive marketing content that can enhance customers' engagement and buying intentions, such as the influence of social media on the buying behaviours of social networks (Solomon et al., 2012).

In SPT, individuals are not considered "subject of analysis," they are viewed as carriers of social practices (Reckwitz, 2002). In this regard, in SPT, ecologically damaging types of consumption are not considered an issue that originated from an individual consumer's behaviour, but are viewed as rooted in the prevailing entity of practices. This conceptualization highlights the association of such types of consumption with the mutual establishment of what individuals practice in their normal lives (Shove, 2003). We can determine the nature of social practices with the help of some of the people performing these practices along with the ways (i.e., social media applications) through which they perform these practices (Felix et al., 2017; Hargreaves, 2011). We can change the practices by manipulating or influencing the elements that would, in turn, change the overall behaviour of groups of people (Felix et al., 2017; Hargreaves, 2011).

As social practices are structures of different types of knowledge, they allow socially shared ways of assigning meanings to the surrounding world. In other words, social practices signify the behaviour that people typically share and perform on a routine basis (such as using social media accounts and going to retail stores to buy). These routinized kinds of behaviours not only trigger the attention of people, but also influence the importance they give to their needs, as well as determine their expectations about other participants' behaviour who participate in social practices (Reckwitz, 2002). Although there is some understanding of co-shopping as a social practice (Keller & Ruus, 2014) and consumption practice (McEachern et al., 2020), there is limited understanding of how the nature and features of social media platforms support the development of socially influenced panic buying practices. There is consensus that social media enhances consumers' engagement and buying (Habibi et al., 2016; Heinonen, 2011; Schivinski & Dabrowski, 2016), but there is limited understanding of what materials and meanings shared through social media generate socially influenced practices of panic buying among the customers of retail stores. To understand socially influenced panic buying behaviour, it is important to understand social influence theory (SIT); SIT was introduced by Kelman (1958), it is based on the assumption that referent others influence the beliefs, attitudes, and subsequent behaviours and actions of an individual through three procedures: identification, internalization, and compliance. According to Kelman (1958), social influence alters the actions and attitudes of an individual to different degrees and at

different levels. Such differences may be due to differences in the procedures through which people accept social influence. The three key procedures of influence that Kelman (1958) defined are:

- It is assumed that compliance occurs when people accept social influence and then adopt the induced behaviour to gain approval or reward and to avoid disapproval or punishments. Thus, “the satisfaction derived from compliance is due to the social effect of accepting influence” (p. 53).
- Identification takes place when induced behaviour is adopted by individuals for the sake of creating or maintaining a beneficial and desired relationship with another group or a person. Therefore, the satisfaction is said to occur because of “the act of conforming” (p. 53).
- Internalization is considered to take place when influence is accepted by many people when they perceive that the induced behaviour contains rewarding content, particularly when the content specifies the actions and opinions of others. In other words, individuals only adopt such induced behaviour if it is congruent with the value system of the people. Therefore, satisfaction in this case occurs because of the shared content that can change behaviour.

Social practices and social influence emerged from social constructivist theories that seek to understand the nature of meaning, knowledge, material and learning in social contexts (Gross et al., 2014; Naeem, 2020). SIT helps to explain how various actors on social media can engage and influence customers' behaviour; customers' buying patterns can be influenced at an individual level and group level (Naeem, 2020). According to Hou et al. (2020), social distancing and extensive use of social media during Covid-19 pandemic increased misinformation, rumours, and fear, which can create stress and panic among people. As a result, some people took actions based on rumours and misinformation, which could influence the lives of other people (Hou et al., 2020). The present study aims to understand what social practices and socially influenced factors can increase the level of uncertainty as well as panic buying among customers. The present study has developed a theoretical framework based on the above discussed SPT and SIT (see Figure 1).

### 3 Methodology

Relativists believe that people experience the same reality differently based on their ethnicity and social class (Barry, 2000; Boghossian, 2006a; Kukla, 2000), which is why a relativist ontological position is taken in order to understand how different meanings were drawn from the same material and information shared through social media about Covid-19. Understanding the meaning of language and social classes is also aligned with social constructionism because social constructionists believe that knowledge of the world is socially constructed (Machery & Faucher, 2005; Mallon, 2004) and the knowledge is socially constructed in a specific social context (Griffith & Griffith, 2018; Mallon, 2003). Hence, a social constructionist epistemological position is taken in order to understand the social practice of information sharing to answer the question: How were different meanings ascribed to Covid-19?

Social construction theory holds that knowledge arises from human relationships (Armon-Jones, 1986; Boghossian, 2006b). Thus, it is appropriate to generate knowledge through understanding the development of social meaning that generated socially influenced panic buying among consumers during Covid-19 pandemic. Additionally, understanding social media relationships in the context of social influence would help to develop knowledge of the world in the social context of uncertainty that arose from the Covid-19 pandemic by understanding the meanings, materials and competences of social

actors who influenced or were influenced by others to panic buy. Figure 2 summarizes the complete research process used in this study.

FIGURE 1 Theoretical framework here. SMUs, social media users

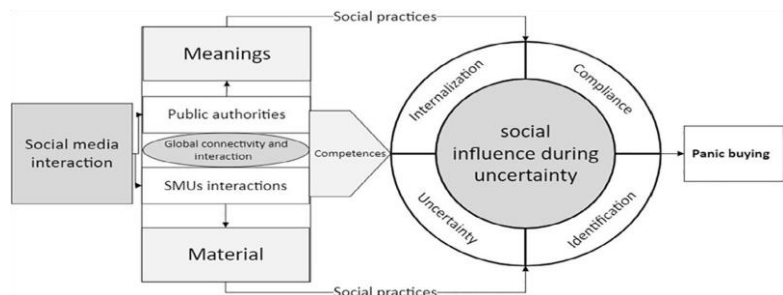
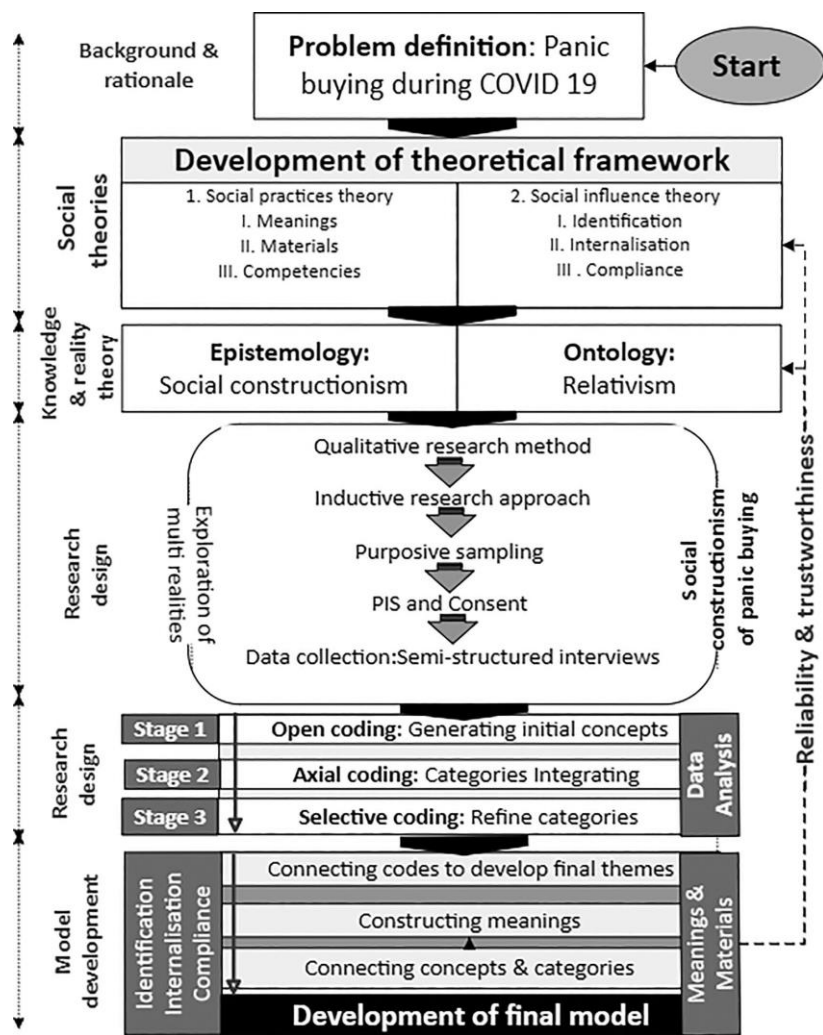


FIGURE 2 Research process here. PIS, participant information sheet



### **3.1 Population and Sampling**

Researchers argued that understanding of culture, social structure, social media communities, and government communication can support understanding of subjective realities that can influence different people differently in different contexts (Aslam et al., 2018; Muqadas et al., 2017). There is a statistic that the death rate of workers in shopping stores is 75% higher than the general public's (Roberts, 2020); as a result, both employees and customers of stores are afraid of Covid19 infection. The UK was one of the five countries with the highest death rate from Covid-19 (Worldometer, 2020); therefore, there are strict social distancing measures for the safety of workers and the public. Due to social distancing, people are more connected through local groups through social media where they share relevant information regarding their routine lives during Covid-19 pandemic in the UK. The researcher targeted social media platforms to search for UK customers who were knowledgeable and ready to voluntarily participate in this study. According to Polgar and Thomas (2011), purposive sampling is suitable when a researcher aims to select specific participants based on their knowledge about the proposed objective of study, so this study used purposive sampling technique.

The researcher initially contacted 80 participants in the UK through the researcher's social media account and asked them to share information through a telephonic interview to maintain social distancing practices. Of these, only 40 participants were willing to provide voluntary data. The 40 participants were selected by applying specific inclusion criteria: they had to be 18 years of age or above, they actively use social media account(s), they were willing to provide data voluntarily, and they actively use a social media account for information sharing or consumption purposes. The research data were collected by the researcher in March 2020 from UK-based customers using telephonic interview method. "The researcher followed European General Data Protection Regulation guidelines concerning research ethics and provided the respondents with a consent form and information about the objectives of the research." The researcher informed the participants that they could quit any question or interview session without informing the researcher. The researcher also requested permission to audio record the interview with the purpose to transcribe the data. The participants were also informed that their audios would not be shared with anyone and would be discarded when the study completed its objectives. Sample questions of the semi-structured interviews are: "Do you think that your use of social media platforms increased during Covid-19?"; "Which information was commonly shared and received through social media platforms and how did it influence your routine practices?"; "Do you think that shared information on social media changed your spending for groceries and items?"; "Which videos, pictures, or posts through social media did you commonly see and how did they influence you?"; "Do you think your purchases of groceries and other items increased as compared to before the start of this pandemic, if yes/no, then why?"

### **3.2 Data analysis**

In order to ensure rigor in research, the researcher used open coding, axial coding, and selective coding as recommended by Auerbach and Silverstein (2003). Open coding refers to the researcher's collection of the initial concepts or major themes from gathered data. For example, the initial major themes of this study were: social practices, uniformity, and stampeding. These major themes were derived from and discussed with the help of existing literature and the findings of this study provided definitions and descriptions using examples from interviews. Using axial coding, various categories or codes were presented with compressive explanations. These codes are meanings, material, herding, competition, scarcity, and anxious reaction. Finally, selective coding was used to refine and integrate these major themes and codes with keywords and written descriptions. In selective coding, each code and keyword are aligned with major themes. Figure 3 shows how major themes,

codes, and keywords were selected and used for the final development of the research framework. Figure 3 explicitly shows the process of thematic analyses used to develop a social practice of stockpiling model.

## **4. Findings and Analysis**

### **4.1.1 Theme 1: Social practice**

Social practice includes the routine activities, things, know-how, emotions, and collective understanding which help to understand the social behaviour of people (Città et al., 2019; Thomas et al., 2020). For example, social media platforms help to create content which can generate panic buying practices. For example, viral videos from Australia and America in which people rushed to buy toilet paper, gave a message to globally engaged people that either prices will increase, or toilet paper will be out of stock; as a result, these videos generated socially influenced panic buying behaviour for toilet paper at global level. Social practice is discussed with the help of two theoretical codes: material and meanings.

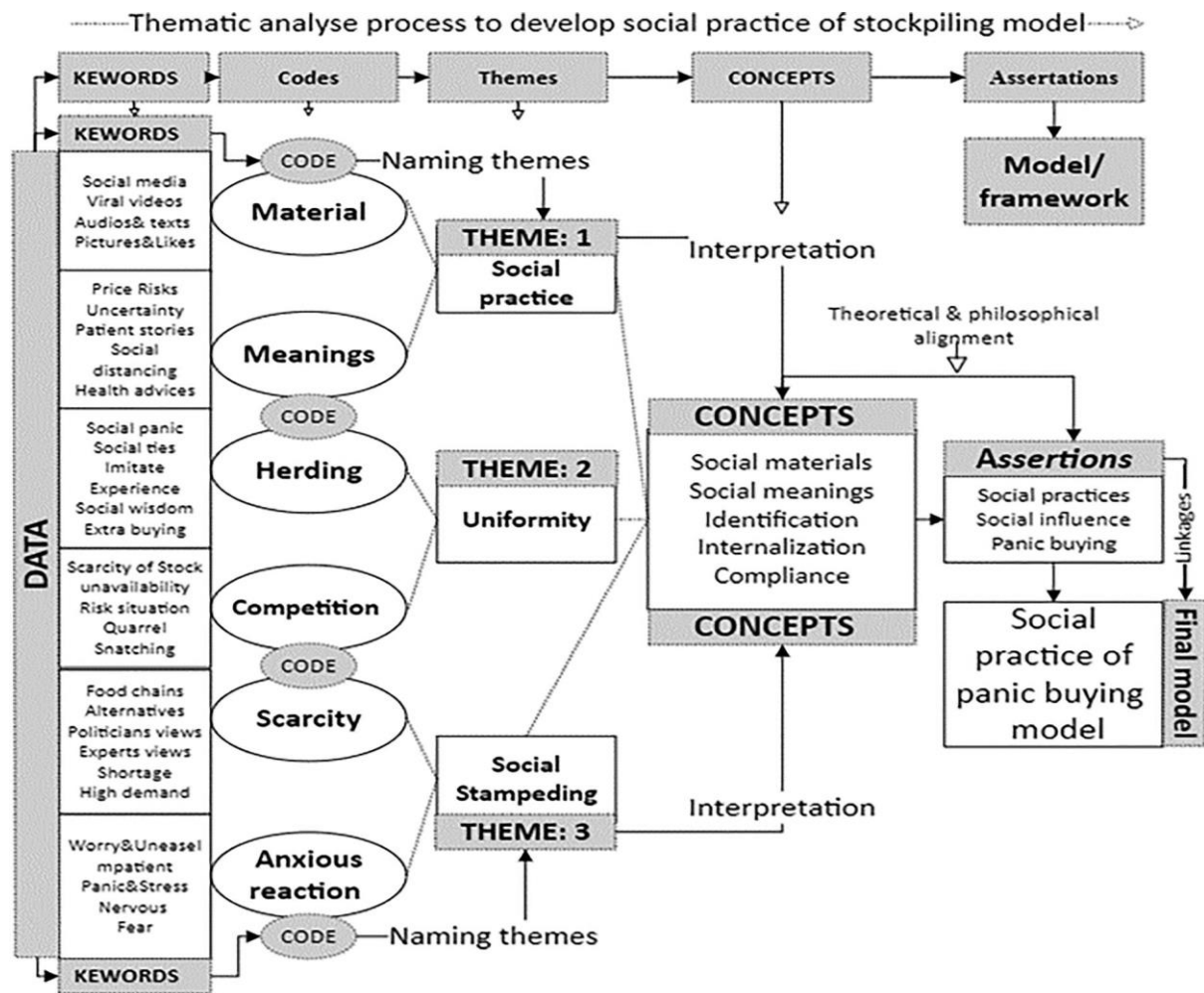
### **4.2.1 Code 1: Material**

Keywords: Social media, viral videos, audios, messages, pictures, likes, resources.

Material includes the infrastructure and tools which help people to share personal experiences as well as social experience and habits (Città et al., 2019). People may find the material shared through social media, such as audios, videos, posts, tweets, and likes, useful to save time, effort, and financial resources. For example, social media increased people's engagement and connection through its unique features; socially engaged people can take timely decisions especially when they are facing uncertainty at a global level. Interviewee 5 shared, "you know social media helps us to share information especially when we are in isolation. Like at the start of this pandemic, we saw how people rush to buy hand sanitizer, so we bought it timely and suggested it to my relatives and friends too." People were aware that they could stay at home and protect their lives; as a result, they took proactive actions with the aim to avoid those risks and uncertainties which were ongoing in other parts of the globe. For example, Interviewee 1 said, "I saw many messages on Twitter about how groceries shortage is coming due to Covid-19. So, I am surprised how fast it reached our retail stores as many stores are out of stock of basic necessities." When people shared pictures and messages about how retail stores were out of stock, then it created panic buying as many people tried to adopt those social practices which could save them from uncertainty and stress. For example, Interviewee 5 said, "we are now more connected through social application



FIGURE 3 Thematic analyses process to develop social practice stockpiling model



tools, so now we have habit to monitor and participate in what is going on in the world. I saw many viral videos where people shared how they are suffering for basic items because of people's high demand and buying with fear." Social media led to the development of social practice among people as they felt that they were socially responsible in guiding their social network to take those actions which could save their lives and help them survive in a time of crisis, such as staying at home and buying necessary items.

#### 4.2.3 Code 2: Meanings

Keywords: Price, uncertainty, risk, patient stories, social distancing, nurses' messages, doctors' advice.

Meanings refers to particular ideas, thoughts, emotions, and motivations (Thomas et al., 2020) which can generate socially influenced panic buying behaviour among the customers of retail stores. For example, videos, audios, and messages are the

material exchanged through social media and people draw specific meanings from that shared material, such as ideas, thoughts, emotions, and motivations, which ultimately help them to develop social

practices. For example, Interviewee 13 said, "I saw a viral video of critical patients who were dying due to Covid-19. In their viral videos, they said to not go outside; so, I shared this with my friends and family members so that they can stay at home after buying necessities." These viral videos were shared with the purpose to send emotional advice to others that they should not go outside, but people drew their own meanings, such as, if they have to stay at home for an uncertain period, then they have to accumulate groceries for their long-term survival. Furthermore, some doctors and nurses shared how hand sanitizer, masks, and social distancing practices can provide protection from Covid-19, but people started to emotionally buy these items, which led to demand for these items exceeding supply. For example, Interviewee 22 stated, "I saw viral videos of doctors and nurses where they requested use of hand sanitizer, mask, and social distancing. They also said to not visit outside. So, many people shared these videos as a care, but unfortunately people started to stock these items." This uncertain situation also provided opportunities to businesses to earn abnormal profits from the sale of hand sanitizers and masks. Some participants shared that social media helped them to take timely buying decisions because during Covid-19 outbreaks the price of necessities goes up, especially when many people are unable to afford these items when businesses are closed and people lose their jobs. For example, Interviewee 32 shared, "I am thankful for social media which sent timely information and we bought hand sanitizer and mask, as prices of these things goes up; so, people are in further panic to buy especially when millions have lost their jobs."

### **4.3 Theme 2: Uniformity**

According to Van Dijck (2013), the extensive use of social media promotes a culture of uniformity, for example, many students preferred to buy their favourite brand with friends, especially when a brand offers a promotional discount. Van Dijck (2013) argued that uniformity develops from the social practice of imitating each other's behaviour, because people think that if others are buying a brand, then that particular brand has more advantages than other brands. In the context of this study, uniformity means similar views toward a specific context. For example, various social actors recommended to their social circle that they should buy stock because they wanted to help save their social circle from the panic of unavailability of stock in retail stores. Uniformity is elaborated by using two theoretical codes: herding and competition.

#### **4.2.1 Code 1: Herding**

Keywords: social panic, social ties, imitate, experience, wisdom, extra buying.

Herding is a specific collective behaviour which usually arises when people think that they have to imitate others to take right decision, especially in an uncertain situation. People love to follow the practices, actions, and recommendations of others, this was particularly the case when the Covid-19 outbreak started to impact businesses and social lives. Evidence shared on social media further increased herding behaviour as people engaged with social actors who initiated recommendations for buying during high uncertainty. For example, Interviewee 20 said, "many of my friends and relatives who are close to me shared how people started to buy additional groceries and they suggest to me to do the same before it's too late." During social distancing and isolation, people were more connected through social media instant messaging apps where they actively shared advice with their social circle. For example, when people saw the long queues and empty shelves

of retail stores, they suggested to their social circle to buy goods now for their family before it was too late. As a result, social media developed a practice of imitation of each other which resulted in panic buying of groceries. For example, Interviewee 28 shared, "I saw videos and messages of people about increasing death in China, Germany, USA. Everyone knows that many supplies of the world come from China and the USA, so people started excessively buying necessities before situation became worse." Social media helped engagement with social experts who were credible, trustworthy, and able to initiate buying recommendations for their social circle; as a result, they were able to generate panic buying in their social circle because people usually imitate those who have more knowledge and information. For example, Interviewee 33 stated, "my friend is a retail store manager and he told us timely, through social media, how people started excessive buying; so, the store management is worried as shipments of stock are late. So, we started buying extra groceries."

#### **4.2.2 Code 2: Competition**

Keywords: Scarcity, stock unavailability, risk situation, quarrel, snatching, uncertainty.

The combination of perceived scarcity and perceived rivalry appears as competition. For example, when people saw the rush to buy products and the empty shelves in local grocery stores, then they thought that they would be unable to get groceries if they did not purchase them now; this started the socially influenced practice of competition among people so that they could save themselves from uncertainty and future risks by staying at home and buying larger quantities. For example, Interviewee 5 highlighted, "honestly, I am one of those who do not want to see risk situation so, when I saw that groceries and hand sanitizer could go out of stock, then I purchased extra and also advised my relatives and friends to buy extra." The viral videos of people quarrelling over toilet paper also increased competition at a global level. For example, Interviewee 9 said, "I saw many of my friends and relatives queueing in local retail stores to buy toilet paper as they saw the viral video of quarrelling and snatching of toilet paper." Uncertainty and perceived fear of scarcity usually arises when people see evidence that a situation is going out of control and they may not be able to fulfil their basic needs, such as the buying of groceries, especially when everyone is trying to stock up. This panic situation was beneficial to many local retailers that are not usually busy, because when demand for groceries went out of control at big retail stores, then local retail stores sold groceries at higher prices because of people's competition to buy and store groceries in their homes. For example, Interviewee 14 shared, "believe me, those stores which are normally not busy on normal days, now become attractive for everyone as people are in competition to buy and store, as they are seeing everyone doing the same even at higher prices." There is evidence that many local unpopular retailers became more popular because of competition of people for buying and stocking more goods, as well as supply of goods not meeting demand.

#### **4.3 Theme 3: Stampeding**

Stampeding means similar socially influenced messages from many people on some specific event which can guide others to take a decision. For example, social media played an important role in disseminating people's appeals and suggestions during Covid-19 outbreak. For example, on Twitter and other social media platforms there were many messages, such as stay home and stay safe, social distancing please, do not cough on others so wear masks please, please isolate yourself if you feel specific symptoms, and wash your hands; in response to these messages, people shared videos showing hand sanitizers, masks, and grocery shelves out of stock due to high demand and delay in supplies at global level. The stampeding theme is described by using two theoretical codes: scarcity and anxious reaction.

### **3.2.1 Code 1: Scarcity**

Keywords: Food chains, alternatives, politicians, experts, shortage, high demand.

Many retail stores and experts suggested buying groceries for 1 or 2 weeks because they saw that retail stores' inventories were not sufficient to fulfil customers' demand. However, many people saw videos and pictures of long queues and shortages of stock items, which they regularly used; therefore, their panic increased and they started to search for alternatives. For example, Interviewee 23 shared, "during Covid-19 outbreak we saw food chains are out of products like beef, pork, meat items, then, ultimately, many people purchased extra vegetables so they can cut them and store them in their freezer for longer period." Findings also revealed that people contacted their local politicians for help during the shortage of supplies in retail stores; the politicians suggested that people change their food consumption habits and use alternative food items so that the system can come back on track and release the stress of high demand. For example, Interviewee 2 said, "many people have seen worst situation and wrote emails to our members of parliament who advised on social media that shortage of groceries is a temporary situation, so, please buy alternative items or change your food behaviour so that retail store system can come back on track." Furthermore, some experts communicated with the public and told them to try another day if they did not find their desired groceries from local retail stores, but people started to buy alternatives or other items because of high uncertainty about shortage of groceries. For example, Interviewee 7 highlighted, "many experts say that if we cannot find our groceries then come back tomorrow, but it is not possible as there is a high chance of illness. So, we bought for months even those items which we don't really like because of fear of shortage and to stay at home."

### **4.3.2 Code 2: Anxious reaction**

The fear of Covid-19 outbreak increased impatience and unease among customers; therefore, they preferred to buy extra as many retail stores' employees and customers shared that they were infected with the virus when they visited retail stores for groceries. The unprecedented situation increased their panic and they wanted to stay at home; therefore, they started socially influenced panic buying. For example, Interviewee 13 highlighted, "it is really worrying for us to visit retail stores in person as many employees and customers of retail stores are infected with Covid-19. So, my social network said to order online, but it increased our fear further when I saw stores were out of stock for most of the groceries we wanted." The increasing number of employees infected with the virus also created panic among customers as a lower number of employees cannot manage the store shelves in a timely manner, especially when the demand for groceries is high due to socially influenced panic buying. Interviewee 35 said, "you know it is an unprecedented situation, so everyone is nervous and buying extra in fear that supply and demand of retail stores is imbalanced, which increased panic among the public." It was also found that there was more uncertainty among older people as they perceived that going outside was the same as going into a war zone without preparation; therefore, they started socially influenced panic buying. For example, Interviewee 18 said, "You know we, as older people, find it really hard to go outside for groceries. So many from my network suggested to not go outside as we cannot fight Covid-19 with a weak immune system; that is the reason why we spent extra on groceries."

## **5. Discussion**

This study intends to understand how the use of social media as a tool generated socially influenced panic buying practices among customers during Covid-19 pandemic. Although previous studies have described the importance of social media for increasing socially influenced group buying behaviour, especially when there are similar social beliefs, needs, status, likings,

and budget (Lee et al., 2016; Shi & Liao, 2017; Xiao, 2018), there is limited understanding of how socially generated evidence through social media can enhance socially influenced panic buying behaviour, especially when there is an unprecedented situation all around the world and people connect through social media to take right and timely decisions. Findings reveal that social practices led to the sharing of viral evidence through social media features (i.e., audio, video, post, picture, likes), such as retail stores' employees and customers infected with virus in retail stores, which further increased uncertainty; as a result, people shared recommendations and suggestions to stay at home and buy extra for survival. During social distancing and isolation, the use of social media increased awareness; therefore, people took proactive actions to avoid risks and uncertainties (i.e., stock unavailability) that were ongoing in other parts of world, such as USA, China, and Germany. Results also reveal that people drew their meanings from the shared information of health professionals, patients, and politicians, such as stay at home and protect your families; this led to panic buying so that they could save their lives and stay at home without stress.

A phenomenon in which people collectively act as members of a group and make decisions that would only be possible when made as a group rather than as an individual, is known as “herding” behaviour. Such kind of behaviour can be described through two widely accepted explanations. With the advent and increase in use of social media platforms, people are more willing to accept buying recommendations from those who are socially trustable, close, and knowledgeable. It is also a fact that people usually love to imitate each other, especially when they face an uncertain situation (Shi & Liao, 2017; Shin et al., 2017). Such a tendency leads to the development of herd behaviour, in which people do what others are doing (Banerjee, 1992). Typically, herd bias, also termed the “bandwagon effect,” refers to a psychological phenomenon in which individuals rationalize a particular action as the right one because everyone else is doing it. For example, findings reveal that when customers saw that everyone was purchasing extra because going outside meant increasing the chances of illness and death, they imitated each other and started panic buying, which ultimately led to the imbalance of the inventories of many retail stores. Doing something in numbers is safer than doing it alone, and such responses are hardwired responses. Images of individuals purchasing rice and pasta, and other kinds of household items, such as toilet paper and soap, promoted a herding bias that resulted in competition of buying and shortage of groceries.

Generally, people give high importance to those items that they assume to be very scarce, even when there is (in reality) enough inventory and capacity within the supply chain (Patil & Shah, 2016). For example, results reveal that when customers tried to place online orders for groceries, they saw that some websites crashed and some showed unavailability of stock; as a result, they started buying from those small retail stores which usually were not busy due to their high prices and low range of products. Similarly, the price of toilet roll suddenly increased when the news burst that all supermarkets were facing a shortage of toilet roll on their shelves. Furthermore, the viral video of quarrelling over toilet paper further increased panic among customers who had seen the video, as they thought that toilet paper might be out of stock soon, so purchase it now. The biggest unknown was the long-term influence of Covid-19 pandemic on worldwide supply chains as well as continual availability of goods in badly affected regions. Perceptions of approaching scarcity acted as a strong motivator for people to purchase available items immediately, even when these items were still on stores' shelves. According to Hamilton et al. (2019), people would perceive an object as highly valuable if that object was scarce. For example, when people saw the shortage of pork and beef, then they started to pick vegetables in a panic because they were afraid that they would not find these things too in coming days. The Covid-19 pandemic also reminded individuals of their mortality, which led them to increase their spending in order to offset their fear. Typically, even if a person feels able to overcome distress, they may still purchase more than needed. Empty shelves at stores may motivate people to snatch whatever is left.

Competition in buying occurs as result of fear that if we do not buy groceries, masks, toilet paper, and hand sanitizers today, then we will not be able to buy them tomorrow, especially as retail stores might be out of stock due to high demand and shortage of supplies. Here, loss aversion is another element that may make people feel that they solely “own” the right of purchasing groceries and they never wish to lose that ownership. Even when somebody feels that there is no need to stockpile, stockpiling could develop as a social practice when people experience that everyone is buying more than usual. To a greater extent, panic purchasing is similar to a stampede within a dense crowd and our actions are provoked by observing and mimicking other people. On seeing someone (either a stranger or known) purchasing cases of food items or boxes of toilet rolls, we would be motivated to act in the same manner mainly because very soon no stock would be left at the store for us if we do not do this. During the Covid-19 pandemic outbreak, social media increased people's fear that Covid-19 would physically harm them and it increased their fear of the risk that they may have to survive without basic items and with uncertainty, especially when retail stores had limited employees and stock. This dread together with disruption of daily routines and normal social life ultimately resulted in an uncertain future and isolation. Fear of empty shelves, long queues and wasting time can enhance panic buying as everyone wanted to get control of their lives. It is also found that people who went to stores for groceries once or twice a month began to stand in shopping queues many times a week. This increases the risk of close contact with infected persons and thus enhances their potential exposure to Covid-19.

## **6. Contribution**

The contribution of this research is based on the understanding of the ideas, inspirations, and symbolic meanings of the information sharing and interaction of social media users during COVID-19 pandemic; the research is based on a social constructionist epistemological position because language is central to social constructionism. Through taking a relativist ontological position, it has been established that competition, anxious response, scarcity and herding are different social realities that create social influence, such as panic buying. The development of these social realities is linked back to the social interaction of material and meanings drawn by social actors using social media platforms.

The first theoretical contribution of this study is that the researcher merged SPT and SIT and constructed a research framework that provides understanding of what social factors through social media platforms increased socially influenced panic buying among UK customers. The second contribution is that this study highlighted that the social practice of sharing information increased during Covid-19 pandemic and people extracted meanings from shared communication and took decisions to buy extra based on material and meanings. The shared information about the uncertain environment offered the opportunity to draw different meanings through social practices. This study highlighted the cohesiveness and coherence among the material and meanings, which are the main elements of social practices.

This is the first study to apply the definition of material to material found on social media (i.e., patients' videos, nurses' messages, doctors' recommendations through posts, and pictures of empty shelves). This material communicated certain meanings; the material is created with the purpose to motivate and warn people so that they can develop social practices to stay at home. Social media was used to share communication regarding employees and visitors of retail stores who got Covid-19. Although the purpose of this shared communication was to encourage people to stay at home, people thought it was better to purchase extra groceries so that they should not have to go out frequently and expose themselves to illness. Many people on social media shared pictures of empty shelves of retail stores, which created panic and the view that everyone is buying; this developed into the practice of socially influenced panic buying for groceries, hand sanitizer, masks, and soap. The shared information of stock unavailability also increased competition and fear of scarcity among people; as a result, they

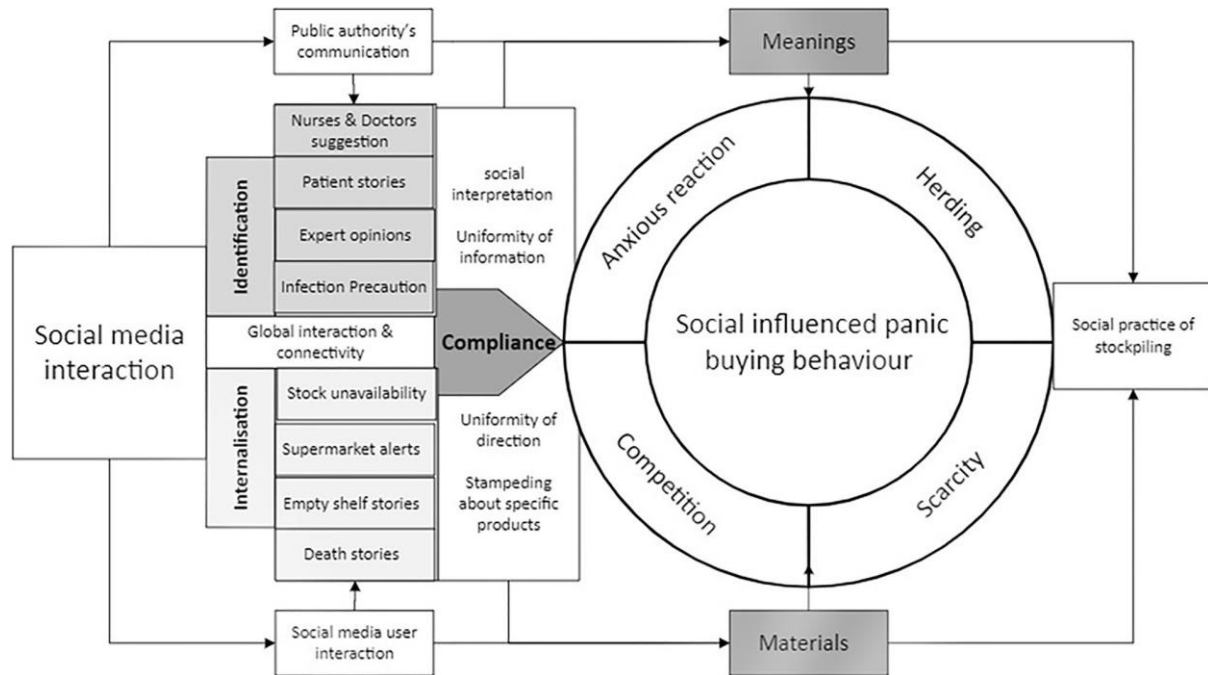
started panic buying from small retail stores, which usually sell things at higher prices and therefore were unpopular before Covid-19 pandemic. This study extended SPT by identifying four psychological factors (i.e., herding, scarcity, competition and anxious reaction) that lead to socially influenced panic buying behaviour (see Figure 4).

The shared information about uncertain environment offered the opportunity to create social influence for panic buying practices. A contribution of this study is the proposal that specific social factors can generate identification, internalization, and compliance that can develop into socially influenced panic buying behaviour. For example, the identification element of SIT indicates that people can be influenced by individuals to panic buy. For example, patients' stories and expert opinion shared through social media created fear among people of older ages and as a result they decided to stay at home after buying extra necessities. Many patients created goodbye messages that went viral on social media and created fear among people, which led them to place online orders for months so that they could stay at home without stress. The internalization element of SIT indicates that the sharing of death statistics and pictures of empty shelves through social media, which went viral due to global interaction and connectivity, could lead people to accumulate alternative stock. The compliance element of SIT explains that people usually accept the opinions of others when they give them rewards or save them from punishment. For example, the findings reveal that when people saw that everyone one is buying, buying developed into a social practice because many stores were out of stock of basic necessities and people started to accumulate groceries to avoid this uncertain situation. People accepted the behaviour of panic buying because it could give them a feeling of relief and comfort; that is, if stock is not available for a temporary period, then they have enough things for the next few months.

These findings are beneficial for marketers because they show how an unprecedented situation can increase the social practice of imitation of each other; as a result, people developed socially influenced panic buying behaviour. The findings of this study provide different social factors and thoughts which developed into panic buying and increased the demand for groceries. For example, older people who have a high risk of illness due to Covid-19 did not want to visit retail stores; they therefore bought extra so that they could minimize their visits to retail stores. Many people who saw shelves empty of their favourite groceries started buying alternatives so they could freeze them and survive in an uncertain situation. When people heard communication from local politicians and experts stating to either buy a maximum of 1- or 2-weeks' groceries or change eating habits, with the intention to release the stress of high demand from retail stores, people took this negatively and thought it was better to buy now before there was no stock available. Results also reveal that panic buying increased local retailers' profits because of people's competition to buy groceries and store them at home; when demand for groceries went out of control at big retail stores, people shopped at their local stores, which were not usually busy because they sold groceries at higher prices.

The practical contribution of this study is to provide understanding regarding how social media interactions and shared evidence created positive and negative meanings which influenced consumers' buying behaviour during an uncertain time and fearful environment. This study provided in-depth understanding regarding the specific social factors on social media that can be assigned positive and negative meanings with respect to consumers' socially influenced panic behaviour. The explanation of material and meanings through social media can be used by crises managers and policy makers in their responses to the public's fears so that people do not develop social practices that may be harmful to others. For example, many people have lost their jobs and do not have enough savings to buy extra groceries; as a result, when they see others buying for stockpiling purposes then this situation could create stress and fear among their families. Therefore, it is the responsibility of policy makers to actively participate through social media so that people should not take those actions which can enhance panic among those who have low incomes.

FIGURE 4      Socially influenced practices of panic buying



## 7. Limitations and Future Directions

Previous studies, such as Naeem (2020) and Aslam et al. (2018), highlighted that although qualitative methods are able to provide rich insights, especially when there is limited understanding of the topic, findings cannot be generalized using this method. So, future studies could use statistical methods to validate the given research framework (i.e., socially influenced practices of panic buying). There are various propositions which can be tested in future studies. For example, the shared evidence of empty shelves on social media can increase socially influenced practices of panic buying behaviour. Health professionals' and patients' stories to stay at home during unprecedented situation can enhance people's intention to buy extra. Recommendations from social network, such as family and close friends, can enhance buying intentions, as people love to imitate each other, especially during times with a high level of uncertainty. Evidence such as long queues in front of retail stores, videos of people quarrelling over toilet paper, virus infection among employees and visitors of retail stores, and unavailability of stock can lead to socially influenced practices of panic buying for groceries, hand sanitizer, and masks. The unavailability of favourite foods can enhance people's intention to buy alternative products during an unprecedented situation, which ultimately develops into socially influenced practices of panic buying.



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