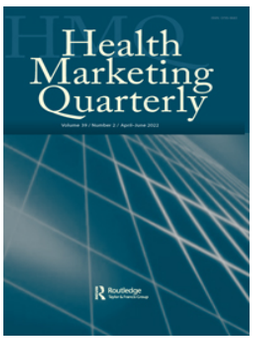

Health Marketing Quarterly

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/whmq20

COVID-19 vaccine perceptions among South Asian communities in the UK: An application of the theory of planned behavior

M. Bilal Akbar, Lakhbir Singh, Sameer Deshpande & Nihar Amoncar

To cite this article: M. Bilal Akbar, Lakhbir Singh, Sameer Deshpande & Nihar Amoncar (2022): COVID-19 vaccine perceptions among South Asian communities in the UK: An application of the theory of planned behavior, Health Marketing Quarterly, DOI: 10.1080/07359683.2022.2092325

To link to this article: https://doi.org/10.1080/07359683.2022.2092325

Published online: 05 Jul 2022.

HEALTH MARKETING QUARTERLY
https://doi.org/10.1080/07359683.2022.2092325

COVID-19 vaccine perceptions among South Asian communities in the UK: An application of the theory of planned behavior

M. Bilal Akbar[a], Lakhbir Singh[b], Sameer Deshpande[c], and Nihar Amoncar[d]

[a]Nottingham Business School, Nottingham Trent University, Nottingham, UK; [b]Department of Marketing, The University of the West of Scotland, UK; [c]Social Marketing, Griffith University, Australia; [d]Department of Management, Institute of Management Technology, Ghaziabad, India

ABSTRACT

Based on the Theory of Planned Behavior, this paper explores the perceptions of the COVID-19 vaccine among South Asian communities residing in the UK. Thirty-eight semi-structured interviews were conducted using a qualitative approach and analyzed using thematic analysis. Participants represented Indian, Pakistani, Bangladeshi, Sri Lankan, Afghani, and Nepali backgrounds. The participants revealed that family and community influence their perceptions of the COVID-19 vaccine. The results suggest that normalizing vaccine acceptance, addressing unknown side effects, and popularizing vaccine efficacy data will increase vaccine uptake within the South Asian community in the UK.

KEYWORDS

COVID-19; intention; perception; South Asians; UK; vaccine

Introduction and background

A considerable share of the world's population needs to be vaccinated to bring the COVID-19 pandemic to an end. A combined global effort in this regard has resulted in the availability of several promising options for the COVID-19 vaccine. The efforts to develop and distribute vaccines within a year into the pandemic are exemplary, as vaccine development typically takes 8 to 15 years (Wang et al., 2020). The US, UK, China, India, and Russia have developed and approved more than a dozen COVID-19 vaccines for general and emergency purposes. As of April 2021, 710 million vaccines have been administered worldwide (Mathieu et al., 2021). The US, UK, Bahrain, and South Korea have performed well in immunizing their citizens, while others have vaccinated only a tiny fraction of their population (J. F. R. Robertson & Sewell, 2021). However, the new and dangerous

CONTACT M. Bilal Akbar bilal.akbar@ntu.ac.uk Nottingham Business School, Nottingham Trent University, Nottingham, UK.

strains of the virus (Hossain et al., 2021), the limited supply of the vaccine doses (Torjesen, 2021), and public hesitation toward the vaccine (Pivetti et al., 2021; N. S. Williams & Dienes, 2021) have prevented governments from immunizing the world's population. The limited supply of vaccines and relaxed restrictions has sharply hit places like India, where there has been a recent huge spike in cases (The Lancet, 2021). Additionally, WHO has confirmed the third wave of COVID-19 in regions like Africa, where most of the population has not been fully vaccinated yet, administrating only 18 million doses (Tulloch et al., 2021; Mwai, 2021).

The UK became the first country to approve a COVID-19 vaccine for emergency use in December 2020. As of March 2022, 141 million doses were administrated; more than 49 million people (73.3%) are fully vaccinated in the UK (GOV.UK, 2021). However, being a multi-cultural country, the UK faces vaccine hesitancy among Black, Asians, and other ethnic minorities (Razai et al., 2021; N. S. Williams & Dienes, 2021). One primary reason for hesitation toward the COVID-19 vaccine is the unclear information from the government and other authorities regarding the effectiveness, risks, and duration of protection of the vaccine. Another reason for vaccine hesitancy is the surety that the vaccine's safety is not compromised due to its speedy development process (Razai et al., 2021; Woolf et al., 2021).

According to a survey conducted by the Royal Society for Public Health (RSPH, 2021), the highest vaccine hesitancy ratio occurs among ethnic minorities in the UK, mainly among the South Asian communities (RSPH, 2021). In the UK, the South Asians comprise 1.45 million Indians, 1.17 million Pakistanis, 0.45 million Bangladeshis, Sri Lankan, Nepali, and the rest (Office for National Statistics UK, 2020). Research suggests that the COVID-19 vaccine hesitancy exists among these UK-based communities due to fake news that the vaccine contains animal byproducts that are not halal (Razai et al., 2021) and that the vaccine causes infertility (Reid & Mabhala, 2021). There is also a perception that the vaccine is not safe, resulting in a lack of trust in the vaccination process (Loomba et al., 2021).

Numerous studies have evaluated the existence of COVID-19 vaccine hesitancy among the general population in the UK, including a small sample of the BAME community (Iyengar et al., 2022; Loomba et al., 2021; Razai et al., 2021; Shmueli, 2021; L. Williams et al., 2021; N. S. Williams & Dienes, 2021). Some studies have focused on ethnically diverse communities in the UK, including Pakistani, Bangladeshi, Indian, Black African, or Caribbean communities (Jong & Tulloch, 2021; Razai et al., 2021). However, as per the authors' knowledge, no study explicitly focuses on the South Asian communities in the UK.

It is crucial to analyze the South Asian communities primarily and their intention and perception toward the COVID-19 vaccine, considering people

with a South Asian background have a 10-50% higher risk of death due to COVID-19 than the white British population (Cook et al., 2022). It is also imperative to understand the perspective of the South Asian communities living in the UK, bearing in mind sociodemographic and economic factors associated with these communities. These factors include poverty, deprivation, overcrowded housing, income inequality, occupations with a higher risk of COVID-19 exposure, and poorer health experiences of healthcare (Cook et al., 2022).

Research has revealed that vaccination decision-making must be understood in a broader socio-cultural context. Various social factors influence vaccine decision-making, including past experiences with health services, family history, feelings of control, conversations with family and friends, and many more (Stefanoff et al., 2010). "The local vaccination culture develops from shared beliefs about disease etiology, potency, efficacy, and safety of modern medicine and vaccines and views related to preventive measures and local health service experiences and vaccination settings" (Stefanoff et al., 2010, p. 5). These factors influence individual decisions about vaccination (Kumar et al., 2016), suggesting that cultural consideration in public health and health communication campaigns can reduce health inequalities and enhance life for all (Thomas et al., 2004).

The COVID-19 vaccine hesitancy is highest among the South Asian communities living in the UK (Cook et al., 2022). However, it is vital to understand the influential factors to reduce hesitancy. There is increasing evidence that interrelated social determinants influence the intention to vaccinate among ethnically diverse communities in the UK (E. Robertson et al., 2021; L. Williams et al., 2021). Less is known about the South Asian communities' perception of vaccination and the intention to uptake the vaccine. This research addresses this gap and, using semi-structured qualitative interviews, explores the perceptions and intention of the COVID-19 vaccine among the UK-based South Asian communities (Indian, Pakistani, Bangladeshi, Afghani, Nepali, and Sri Lankan).

Theoretical background

Researchers employed the Theory of Planned Behavior (TPB) to guide conversations in this study (Ajzen, 2012). TPB is based on the values-expectancy model, which proposes that the behavior intention predicts the actual behavior, and three concepts predict the latter: attitude, subjective norms, and perceived behavioral control. The theory presents clearly defined concepts that are easy to operationalize and has been utilized in several contexts to describe a variety of public health contexts and beyond. A systematic literature review revealed the strong ability of the TPB

concepts to understand nutrition-related behaviors (Riebl et al., 2015). More recently, TPB has been applied to predict the intention to receive the COVID-19 vaccine in the general population (Shmueli, 2021) and particularly among Pakistanis (Ullah et al., 2021). At the same time, the TPB has been criticized for its applications to predict behaviors. For example, the explanatory nature of the TPB does not allow researchers and practitioners to predict future behaviors (McEachan et al., 2011; Schwarzer, 2014).

The lack of attention on the role of emotions beyond anticipated effective results is another weakness of the theory (Conner et al., 2013). The theory is also criticized for emphasizing rational reasoning and ignoring the unconscious influences on behavior (Sheeran et al., 2013). However, TPB elucidates that attitude, perceived behavioral control, and subjective norms play a strong role in predicting, understanding, and changing health behaviors (McEachan et al., 2011; Schwarzer, 2014).

The role of TPB in this study is contextual by testing an established theory and exploring COVID-19 vaccine hesitancy among UK-based South Asian communities. Using TPB in a new audience-oriented context makes the current research exploratory rather than confirmatory. This approach allowed respondents to voice their cognitive, emotional, and relational perceptions on the topic.

To employ the TPB model in a survey, Ajzen (2019) recommends the construction of a questionnaire relevant to the audience and their behaviors and starting the process by conducting elicitation technique semi-structured interviews. This technique has been successfully employed in the binge-drinking context (Deshpande & Rundle-Thiele, 2011). The current study follows the same process and presents findings from the first step, i.e., formative research.

Material and method

This study is based on 38 interviews conducted by two authors during the second half of the third lockdown in the UK (May–July 2021). Ethical approval for this study was received in April 2021 from Nottingham Trent University. The participants of this study were recruited using the following criteria:

- The participants must be UK residents from Indian, Pakistani, Bangladeshi, Sri Lankan, Afghani, and Nepali backgrounds.
- The participants must either be born in the UK or have lived in the UK for six or more years, which is considered a reliable and valid duration to measure acculturation (Berry, 2008; Delavari et al., 2013; Massey et al., 2004).

Table 1. Sample characteristics.

Ethnic background	Indian (34.2%), Pakistani (34.2%), Bangladeshi (5.3%), Nepali (13.2%), Sri Lankan (7.9%) and Afghani (5.3%)
Gender	Female (47.4%), Male (52.6%)
Age	Participants belong to different age groups from 19 to 72 years old. 18-25 (18.4%), 26-35 (50%) 36-45 (13.2%), 46-55 (7.9%) 55+ (10.5%)
Education (These educational levels are explained in the following link: https://www.gov.uk/what-different-qualification-levels-mean/list-of-qualification-levels)	Level 1 (2.6%), Level 2 (2.6%), Level 3 (Zero) Level 4 (7.9%), Level 5 (5.3%), Level 6 (15.8%) Level 7 (42.1%), Level 8 (23.7%)

A total of five interviews were conducted in the pilot study, which tested the feasibility of the questions and language (all interviews were conducted in English for consistency purposes). The interview questions were amended based on the feedback received during the pilot study. No pilot study interviews were included in the final sample. The participants were recruited using convenience sampling (Arcury & Quandt, 1999; Merriam, 2009) through Twitter and LinkedIn, including WhatsApp and telephonic contacts. Further details on sample characteristics are given in Table 1.

All relevant interview material, including the information sheet, informed consent form, and interview questions, was sent to the participants before the interview. The participants signed a copy of the consent form before the interviews. The interviews were conducted online via MS Teams, Zoom, WhatsApp, and telephone, considering COVID-19 restrictions on physical gathering in the UK. The interviews, on average, lasted for 20 min. The interview questions were divided into two main sections: demographic and health information of the participants and COVID-19 vaccine perceptions that mirrored the TPB concepts. An interview guide is presented in Table 2.

From a method perspective, theories make sense of complex social interactions and phenomena, and articulating a theoretical framework helps the sense-making process be more explicit (Collins & Stockton, 2018). Coding is a prescribed analytical tool to uncover an emergent concept from available data (Mills et al., 2006). The connections between the theoretical framework need to be explicit when coding and analyzing qualitative data using a theoretical framework. For this purpose, the literature-driven pre-determined themes are clearly stated against the emergent themes, the former acting as a scaffolding. The data were analyzed using the thematic analysis protocol (Braun & Clarke, 2006). Interview transcripts were individually coded and cross-checked by two authors before analyzing the data to avoid research bias. A cross-case approach was adopted to strengthen the relevance of the emerging themes (García & Welter, 2013), keeping in

Table 2. Interview guide.

Subject	Sample questions	Probe
COVID-19 attitude perceptions	What are the advantages and disadvantages of COVID-19 vaccine uptake?	• What are the advantages of you vaccinating for COVID-19 prevention? • What are the advantages of you not vaccinating for COVID prevention? • What are the disadvantages of you vaccinating for COVID prevention? • What are the disadvantages of you not vaccinating for COVID prevention?
COVID-19 subjective norms perceptions	Whose opinion do you value when it comes to the COVID-19 vaccine?	• Please list any individuals or groups who would approve of your vaccination for COVID-19 prevention? Whose opinion do you particularly value? • Please list any individuals or groups who would approve of you not vaccinating for COVID-19 prevention? Whose opinion do you particularly value? • Please list any individuals or groups who would disapprove of you vaccinating for COVID-19 prevention? Whose opinion do you particularly value? • Please list any individuals or groups who would disapprove of you not vaccinating for COVID-19 prevention? Whose opinion do you particularly value?
COVID-19 perceived behavioral control perceptions	What factors may influence your decision to take the COVID-19 vaccine?	• What factors or circumstances (physical, relational, or emotional) would enable you to vaccinate for COVID-19 infection? • What factors or circumstances (physical, relational, or emotional) would keep you from vaccinating for COVID-19 infection? • If you are not comfortable getting vaccinated, what (if anything) would it take for you to do so? • Is there anything else you want to discuss regarding the COVID-19 vaccine?
Behavior intention	Intention to take the vaccine	• Do you intend to vaccinate in the next six months?
Actual behavior	Vaccine uptake	• Did you take the COVID-19 vaccine? • Which vaccine have you taken?

mind the aim of the study. TPB helped ground the emergent themes after axial coding (Charmaz & Bryant, 2009; Corley, 2015).

Results and discussion

The findings are categorized into first-order themes (emergent from the analyzed data), second-order themes (TPB aspects), and the definitions of themes and coding frequency (see Table 3). The themes of the TPB collated the findings.

Attitude

In terms of attitude to vaccination, respondents described both advantages and disadvantages. The study found that the perception of COVID-19

Table 3. Key results emerged from the data.

First-order themes	Definition	Coding frequency	Second-order themes (literature premise)
Protection	• Protection of self, family, community, and society from virus	59 24	(Attitude) Advantages of vaccination
	• Fear of unknown consequences/long-term benefits of vaccination, fear of new variants	32 3	
Resumption of normalcy in life	• Continue living with family, socializing, use public transport, curb virus spread		
	• Return to work, ability to travel		
Fear	• Occurrence of side effects, consequences on health, hospitalization	34 13	(Attitude) Disadvantages of vaccination
Uncertainty	• Lack of know-how on vaccine composition, efficacy, and long-term effects on health		
Professional	• Scientists and health professionals (including NHS, GP and doctors within the family and friend circle)	26 33	(Subjective norms) Pro-vaccination individual/ group influences
Family	• Immediate and extended family members	3	
Work	• Work colleagues and employers		
Family	• Immediate and extended family members (mostly younger and older generation)	20 4	(Subjective norms) Anti-vaccination individual/group/ social influences
Religion	• Stakeholders of religion	11	
Society	• Anti-vaxxers/skeptics and conspiracists within the community	6 2	
Social media	• Connections on social media networks	5	
Work	• Colleagues at work		
Professionals	• The scientific and medical community		
Relational and emotional	Existence of family members categorized as "vulnerable" (pregnant, aged, existing adverse health conditions), the occurrence of extreme Covid related illness or Covid related death within the family	20	(Perceived behavioral control) Enabling factors of vaccination
Misinformation	Misinformation and rumors spread via mainstream and social media creates confusion	11	(Perceived behavioral control) Disabling factors of vaccination
Distrust	Lack of trust in institutions (Government "rushing" vaccination program, compulsion to vaccinate missing out on vaccine passport)	16	Moderating factors

vaccine uptake is based on two key factors: (1) protection from the virus and (2) resumption of normality of life. Most respondents believed that taking the vaccine would help protect themselves, their immediate family, friends, and society.

> While I am protecting myself by getting vaccinated, I limit the virus spread and protect others. (P6)

> I have a few vulnerable people in my household so that it would protect them, and in general, the vaccination will help the people in the society as well. (P19)

The advantages of taking the vaccine are mainly attributed to natural tendencies of human behavior, including protection of self, society (Bavel et al., 2020), and continuing to resume routine. The resumption of normalcy in life (such as returning to work, traveling, and socializing) is strongly echoed as another reason for taking the vaccine resulting in a high intention of vaccine uptake as soon as allowed by the National Health Service (NHS). It is noted that the intention to take the vaccine is high among the participants; however, some raised concerns about the unawareness of the aftereffects of taking the vaccine.

> I do not want to get severely ill from COVID-19 and potentially die. If the vaccines are helping to prevent that, then I am happy to take it [… .]. However, not knowing the side effects would be the main factor. (P31)

The study found that fear and uncertainty contribute to vaccine hesitancy. Fear is driven by the anxiety of side effects of the vaccine and suffering from hospitalization, which would affect one's family life. Participants gave examples of side effects such as blood clotting, death in some cases, prolonged illness, and miscarriage among pregnant women as drivers of their concern,

> I will say you are exposed to the side effects of this vaccine as not enough research has been done. I was reading yesterday that two women had miscarriages who had COVID-19 vaccine, and if you look at social media, there are so many rumors about this vaccine which makes things very hard to believe. (P7)

Some participants provided examples of their illnesses that followed the first jab. The study found several participants drew upon examples they saw and heard from within their social circle, which created anxiety and confusion due to mixed reviews and experiences. Circulation of such mixed reviews and experiences informed attitudes of vaccine hesitancy, particularly among women who believed the vaccine had relatively unknown effects on pregnancy.

> There are research and people outside saying that vaccinated people experience side effects. Some people have the infection and negative effects. So as far people see such facts, they will not vaccinate. (P8)

A lack of clarity drives the uncertainty in terms of the composition of vaccine, its efficacy, and its adverse effects on one's health also noted by

studies focused on the wider ethnic UK population (Razai et al., 2021; Woolf et al., 2021).

Subjective norms

Family views positively influence our participants.

> I value what my family says, not because they are my family member. However, they have witnessed the suffering, and they so value life. Moreover, my sister is a physician; we get what is updated and what is not. (P3)

On the contrary, the family views also inform anti-vaccination attitudes, thereby demonstrating a unique behavioral aspect of South Asian communities (Shariff, 2009).

> If my family decided against it, I wouldn't think twice because my family's opinions matter most to me. (P29)

> Within my family, we would not be approving getting the vaccine. I value my family's opinion on these matters more than anyone else. (P36)

One of the inimitable features observed in the family aspect of the participants was that the rigidly hierarchical and patriarchal structures (Ballard, 1982; Shariff, 2009) of South Asian communities dominate a family's stance on vaccination.

> Within our community, I feel we have problems. You know the older generation has views passed down to their kids. It is a problem. I see it within my age group, particularly at home. It is as though it has been decided for them. My mother has not had the vaccine yet, and she has underlying conditions. (P24)

The issue seems aggravated due to the lack of flexibility of elders' opinions within the family and their evangelistic tendencies observed in several cases.

> I had an interesting chat with one of my uncle's friends, he must be in the mid-60s, and he was against the vaccine. I tried to understand his reasoning, but he did not want to take it. He was trying to persuade my uncle and aunty not to take it. (P31)

While the family factor emerges more strongly within the study, the community factor is also prominent. Participants argued that seeing individuals and families from their community vaccinate informed their vaccination attitude. Hence, herd behavior is evident in the South Asian communities (Singh & Misra, 2020), which resonates with their collectivist culture (Hofstede & McCrae, 2004).

> Herding refers to an alignment of thoughts or behaviors of individuals in a group. Most importantly, such convergence often emerges through local interactions among agents rather than through purposeful coordination by a central authority or a leading figure in the group. (Kameda & Hastie, 2015).

Emotionally driven family perspectives are considered important in South Asian communities, which can also blindly follow untrusted advice (Singh & Misra, 2020).

However, the noteworthy aspect of the findings is that the participants rated family-based relational and emotional factors and family and friends' views on vaccination as crucial as advice from medical professionals such as GPs, NHS, scientists, government Scientific Advisory Group of Emergencies. A surprising and concerning aspect is that a few participants received anti-vaccination advice from medical professionals. As previously noted in the findings, this type of information tends to circulate among social circles.

> I have a couple of doctors' friends, they do not approve of any vaccination for their children, and I value their concern. (P20)

Another noteworthy finding from this study is that religion did not significantly inform the participants' vaccination stance or behavior, different from the broader perception held against South Asian communities (Iyengar et al., 2022; Woodhead et al., 2021). Instead, the study finds that anti-vaxxers, vaccine skeptics, and conspiracy theorists from within and beyond their community are spreading irrational arguments and rumors among gullible members of society.

> Many people argue on microchips being installed through a vaccine to control you. (P15)

> I think in a few years, we will see who was behind this Covid as I strongly believe it is a man-made weapon. (P7)

> Issues such as fertility, the vaccine not being halal, or even silly things such as we are all going to turn into zombies … … yet you have people believing in this. (P25)

Hence, the results suggest that the South Asian communities face resistance from the family in the form of conservative views of the older generation and family power and social networks in the form of conspiracy theories.

Perceived behavior control and moderating factors

External factors play an essential role in influencing uptake or resistance to COVID vaccination. The immediate life situation influences participants.

> My wife was pregnant, and it was the key issue that I went for the vaccination. I think about them [mother and baby], so that were the circumstances to vaccinate as soon as possible. (P2)

However, external factors also contribute to the perceptions; these include the misleading information circulating on mainstream and social

media and conflicting messages from the politicians. These observations are coupled with the moderating factor of distrust toward the government. Some respondents linked misleading information circulating on social media to anti-vaxxers and conspiracy theories. The respondents believe that even though the anti-vaccine views should be respected, the government must monitor the false information. The misleading information from media such as newspapers and news channels on the COVID-19 vaccine and its impact on health is compared to recent political events such as Brexit (see P34 quote). The respondents were critical of the media's role in spreading misleading information. The respondents believed that media should play an ethical position in presenting the correct information to various communities living in the UK.

> But I feel strongly that more needs to be done about spreading false information. How can large corporations get away with this? It is as though they do not care. What is happening is that you are corrupting the minds of some people. This false information can easily sway people. It is like what happened with Brexit. The public did not understand what was going on. (P34)

In addition, participants strongly argued that the media and the government created language barriers, particularly for those who cannot speak fluent English, which is a cause of concern in South Asian communities. Some participants argued that the inability to communicate in English resulted in vaccine hesitancy and expected the government of a diverse country to act on this matter.

Despite community and family factors dominating South Asian perceptions and behaviors toward vaccination, the results also revealed that several respondents showed faith and trust in medical and scientific advisors in the UK government. However, conflicting messages from politicians and lack of clarity on the COVID-19 vaccine were mainly attributed as the reasons for developing hesitancy. For example, P33 mentioned:

> Watching and listening to scientists such as Dr. Fauci and Chris Witty. All the medical people but not the politicians. I must stress that. Because I do not trust the politicians.

Interestingly, work-related aspects or employers did not influence participants' behavior toward vaccination, except for a tendency to comply to avoid discrimination at work.

To summarize, the South Asian communities reflect unique perceptions toward the COVID-19 vaccine. They are heavily informed by the family and community, consistent with the collectivist nature of South Asian societies in the UK (Ballard, 1982). Family-based relational and emotional factors enable and inhibit vaccination behavior among the participants. Protecting one's family and vulnerable members emerges as a significant determinant from an enabling perspective. From a barrier perspective, the

hierarchical structures within South Asian communities (Shariff, 2009), conservative views, and rigidity of thought drive vaccine hesitancy. Contrary to the philosophy that religion dominates the behavior of South Asian communities toward vaccines (Iyengar et al., 2022; Woodhead et al., 2021), this factor does not emerge prominently.

The results show that broader concerns such as unknown side effects of the vaccine, potential hospitalization, and lack of vaccine efficacy data create uncertainty which causes fear and vaccine hesitancy. Addressing these aspects will increase confidence within the communities and motivate vaccination among South Asian communities in the UK. The South Asian communities also expect the government to make concerted efforts to curb misinformation, rumors, and conspiracy theories prevalent on mainstream and social media to clear the confusion about COVID-19 and its vaccine. Social media, in particular, emerged as a significant influencer of views among the participants, highlighting how it can lead to polarization due to fake news and propaganda, as observed during elections (Amoncar, 2020). It is also observed that the tightly knit social circles of South Asians allow mixed and uninformed views (Singh & Misra, 2020) about the vaccines and their effects to spread within the communities (Razai et al., 2021; Reid & Mabhala, 2021).

Implications

This study highlights the relative importance of subjective norms and societal influence in the collective cultures of South Asians despite residing in the individualistic UK culture. The normative influence acts upon behavior intention directly and through the other concept of attitude. In the current context, the normative influence is experienced not just by family, friends, and colleagues but also by the larger societal influence. These influences create both favorable and resistant opinions to the COVID-19 vaccine. Additionally, attitudinal factors negatively and positively influence acceptance of the COVID vaccine. On the contrary, perceived behavioral control plays a minor role in determining vaccine acceptance. As most TPB studies have been investigated in the individualistic western world, the current research plugs a vital gap in highlighting the role of norms, as highlighted by the collectivist communities.

The study further elucidates the critical need to employ positive peer influence to promote vaccination on the managerial front. Community leaders should organize forums to have open discussions on such sensitive issues, where expert knowledge is presented, and influential individuals speak out favoring the vaccine. When promoting the polio vaccine in India, UNICEF and other organizers recruited Muslim religious leaders to

spread the message of vaccine benefits among their patrons. This tactic worked, and eventually, India became polio-free in 2014 (Deshpande & Lee, 2013).

The findings indicate that a deeper understanding of attitudes, subjective norms, and perceived behavior control can be useful in promoting healthcare-related messages. For practitioners, it is imperative to highlight positive norms in the communication initiatives. When targeting a multi-cultural audience, healthcare-related messages and communication should be delivered in multiple languages. For example, when explaining the vaccine benefits, or staff speaking at vaccination centers, the use of multiple languages can help overcome the language barrier, resulting in positively influencing behaviors.

Limitations and future research

Several limitations were observed. Some respondents were initially reluctant to share their hesitancy toward the COVID-19 vaccination; however, they were very open about these feelings before the interview. They curtailed the free-flowing discussion once the interview recording started. This behavior was noted across members of every South Asian community, which shows the fear of how their responses would be shared and how they would be perceived if their views went public. It must be noted that before they agreed to participate in this study, all respondents were assured of confidentiality and no disclosure of their identities. The respondents were also made clear that the interviews would be recorded solely for the research purpose. One of the respondents voluntarily explained their reasoning for not being fully open about their feeling during the interview.

> I did not feel comfortable expressing my views; as soon as the recording started, a barrier came down, and I just thought I had to get through the interview. (P32)

Whilst recruiting participants for this research, it became evident that some potential participants were unwilling to participate despite happily sharing their views regarding the vaccines. We can only speculate that this may be because of the formal setting for conducting online interviews, as face-to-face data collection was impossible because of the COVID-19 restriction. On the other hand, most participants were happy to express their perceptions of the COVID-19 vaccination. One could argue that these participants understood the importance of getting their viewpoints across and were not shy to express their opinions.

Several potential participants, particularly those with anti-vaccine views, took an interest in the study; however, they shared concerns about the formal process of conducting research, such as interviews being recorded and research being published academically. Even though these concerns were

clarified, a few decided not to participate in the study highlighting self-selection bias (Harvey & James, 2006); however, the researchers argue that the selected sample represents the overall population of South Asian communities in the UK. People were hesitant to record their anti-vaccine views due to the social stigma attached to such opinions. Another reason for not participating in the study included no permission for females from male family members.

As discussed earlier, our sample represented two groups: (1) those born in the UK but of South Asian descent and (2) those who migrated to the UK. It was interesting to note the comparison between these two groups. The group born in the UK was willing to share its views about the vaccine, regardless of their views, either in favor or against the vaccine. Whereas those who moved to the UK were reluctant, even though they met the acculturation criteria set for this study (Berry, 2008; Delavari et al., 2013; Massey et al., 2004).

Another limitation was the collection of data during the lockdown; all interviews were conducted remotely. The limitation was that the researchers could not observe body language and offer follow-up questions, which is possible in face-to-face interviews. Conducting interviews online is not the same experience as conducting interviews in the same room.

There is a scope for further research. One area of further research could be to interview more participants within the South Asian community. This would allow more opinions to be shared and credibility to what we have accumulated. Future research should also test the findings of these interviews in a survey setting with a larger sample and assess their representativeness and reliability. The second scope for future research is to delve deeper into why some participants do not trust the vaccines. The notion of trust has received a great deal of attention in marketing and management. Trust is seen as a critical construct in a range of discipline areas (Nicholson et al., 2001), such as psychology (Rotter, 1971), economics (Shim et al., 2013), political theory (Weigert, 2012), and relationship marketing (Kumar, 2005). The notion of not trusting the vaccine, the pharma industry, the politicians, and the government is widespread. Future research could focus on this aspect to better understand participants' meaning when they state that they do not trust the vaccines. Future research needs to urgently investigate several behavioral theories in the non-Western world and compare the influence of factors. Such studies will inform approaches and throw new light.

Conclusion

This is the first study that explicitly focused on the South Asian communities in the UK from a qualitative perspective and investigated their

opinions on the COVID vaccine and factors that influence these opinions using the TPB model. This study is topical and urgent; government and healthcare organizations should heed these findings if they want to move the needle on vaccinating all UK residents and restore the country to pre-COVID normalcy.

Funding

The author(s) reported there is no funding associated with the work featured in this article.

ORCID

M. Bilal Akbar http://orcid.org/0000-0003-3092-6878
Sameer Deshpande http://orcid.org/0000-0002-9832-8383

References

Ajzen, I. (2012). The theory of planned behavior. *Handbook of Theories of Social Psychology*, *1*, 438–459.

Ajzen, I. (2019). TPB questionnaire construction constructing a theory of planned behavior questionnaire. https://people.umass.edu/aizen/pdf/tpb.measurement.pdf

Amoncar, N. (2020). Entrepreneurial marketing and digital political communication – A citizen-led perspective on the role of social media in political discourse. *Journal of Research in Marketing and Entrepreneurship, 22*(2), 145–159.

Arcury, T. A., & Quandt, S. A. (1999). Participant recruitment for qualitative research: A site-based approach to community research in complex societies. *Human Organization*, *58*(2), 128–133. https://doi.org/10.17730/humo.58.2.t5g838w7u1761868

Ballard, R. (1982). South Asian families. In R. N. Rapoport, M. P. Fogarty and R. Rapoport (Eds.), *Families in Britain*. Routledge and Kegan Paul.

Bavel, J. J. V., Baicker, K., Boggio, P. S., Capraro, V., Cichocka, A., Cikara, M., Crockett, M. J., Crum, A. J., Douglas, K. M., Druckman, J. N., Drury, J., Dube, O., Ellemers, N., Finkel, E. J., Fowler, J. H., Gelfand, M., Han, S., Haslam, S. A., Jetten, J., … Willer, R. (2020). Using social and behavioral science to support COVID-19 pandemic response. *Nature Human Behaviour*, *4*(5), 460–471. https://doi.org/10.1038/s41562-020-0884-z

Berry, J. W. (2008). Globalisation and acculturation. *International Journal of Intercultural Relations*, *32*(4), 328–336. https://doi.org/10.1016/j.ijintrel.2008.04.001

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Charmaz, K., & Bryant, A. (2009). *Grounded theory. International encyclopedia of education* (3rd ed.). pp. 406–412.

Collins, C. S., & Stockton, C. M. (2018). The central role of theory in qualitative research. *International Journal of Qualitative Methods*, *17*(1), 160940691879747. https://doi.org/10.1177/1609406918797475

Conner, M., Godin, G., Sheeran, P., & Germain, M. (2013). Some feelings are more important: Cognitive attitudes, affective attitudes, anticipated affect, and blood donation. *Health Psychology*, *32*(3), 264–272.

Cook, E. J., Elliott, E., Gaitan, A., Nduka, I., Cartwright, S., Egbutah, C., Randhawa, G., Waqar, M., & Ali, N. (2022). Vaccination against COVID-19: Factors that influence vaccine hesitancy among an ethnically diverse community in the UK. *Vaccines*, *10*(1), 106–113. https://doi.org/10.3390/vaccines10010106

Corley, K. G. (2015). A commentary on "what grounded theory is … ": Engaging a phenomenon from the perspective of those living it. *Organizational Research Methods*, *18*(4), 600–605. https://doi.org/10.1177/1094428115574747

Delavari, M., Sønderlund, A. L., Swinburn, B., Mellor, D., & Renzaho, A. (2013). Acculturation and obesity among migrant populations in high-income countries - A systematic review. *BMC Public Health*, *13*(1), 458. https://doi.org/10.1186/1471-2458-13-458

Deshpande, S., & Lee, N. (2013). *Social marketing in India.* Sage Publications Inc.

Deshpande, S., & Rundle-Thiele, S. (2011). Segmenting and targeting American university students to promote responsible alcohol use: A case for applying social marketing principles. *Health Marketing Quarterly*, *28*(4), 287–303.

García, M. C. D., & Welter, F. (2013). Gender identities and practices: Interpreting women entrepreneurs' narratives. *International Small Business Journal: Researching Entrepreneurship*, *31*(4), 384–404. https://doi.org/10.1177/0266242611422829

GOV.UK. (2021). *Over 40 million people receive first dose of COVID-19 vaccine in UK.*

GOV.UK. (2022). *Vaccination in the UK.*

Harvey, S., & James, J. (2006). Self-selection bias in business ethics research. *Business Ethics Quarterly*, *16*(4), 559–577. https://doi.org/10.5840/beq200616449

Hofstede, G., & McCrae, R. R. (2004). Personality and culture revisited: Linking traits and dimensions of culture. *Cross-Cultural Research*, *38*(1), 52–88. https://doi.org/10.1177/1069397103259443

Hossain, M. K., Hassanzadeganroudsari, M., & Apostolopoulos, V. (2021). The emergence of new strains of SARS-CoV-2. What does it mean for COVID-19 vaccines? *Expert Review of Vaccines*, *00*(00), 1–4.

Iyengar, K. P., Vaishya, R., Jain, V. K., & Ish, P. (2022). BAME community hesitancy in the UK for COVID-19 vaccine: Suggested solutions. *Postgraduate Medical Journal*, *98*(e2), e134–135. https://doi.org/10.1136/postgradmedj-2021-139957

Kameda, T., & Hastie, R. (2015). Herd behavior. In R. A. Scott & S. M. Kosslyn (Eds.), *Emerging trends in the social and behavioral sciences* (pp. 1–14). John Wiley & Sons, Inc.

Kumar, N. (2005) The power of power in supplier-retailer relationship. *Industrial Marketing Management, 20*, 1–4.

Kumar, D., Chandra, R., Mathur, M., Samdariya, S., & Kapoor, N. (2016). Vaccine hesitancy: Understanding better to address better. *Israel Journal of Health Policy Research*, *5*(1), 2–8.

Loomba, S., de Figueiredo, A., Piatek, S. J., de Graaf, K., & Larson, H. J. (2021). Measuring the impact of COVID-19 vaccine misinformation on vaccination intent in the UK and USA. *Nature Human Behaviour*, *5*(3), 337–348. https://doi.org/10.1038/s41562-021-01056-1

Massey, D. S., Rosenzweig, M. R., & Smith, J. P. (2004). Immigrant health: Selectivity and acculturation. In N. B. Anderson, R. A. Bulatao, & B. Cohen (Eds.), *Critical perspectives on racial and ethnic differences in health in late life* (pp. 227–266). National Academy Press.

Mathieu, E., Ritchie, H., Ortiz-Ospina, E., Roser, M., Hasell, J., Appel, C., Giattino, C., & Rodés-Guirao, L. (2021). A global database of COVID-19 vaccinations. *Nature Human Behaviour*, *5*(7), 947–953. https://doi.org/10.1038/s41562-021-01122-8

McEachan, R. R. C., Conner, M., Taylor, N. J., & Lawton, R. J. (2011). Prospective prediction of health-related behaviors with the theory of planned behavior: A meta-analysis. *Health Psychology Review*, *5*(2), 97–144. https://doi.org/10.1080/17437199.2010.521684

Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation revised and expanded from qualitative research and case study applications in education*. Jossey-Bass A Wiley Imprint.

Mills, J., Bonner, A., & Francis, K. (2006). The development of constructivist grounded theory. *International Journal of Qualitative Methods*, *5*(1), 25–35. https://doi.org/10.1177/160940690600500103

Mwai, P. (2021, July 16). *Coronavirus in Africa: Concern grows over third wave of infections.* BBC News.

Nicholson, C. Y., Compeau, L. D., & Sethi, R. (2001). The role of interpersonal liking in building trust in long-term channel relationships. *Journal of the Academy of Marketing Science*, *29*(1), 3–15. https://doi.org/10.1177/0092070301291001

Office for National Statistics UK. (2020). *Coronavirus and the social impacts on Great Britain: 29 January 2021*.

Pivetti, M., Melotti, G., Bonomo, M., & Hakoköngäs, E. (2021). Conspiracy beliefs and acceptance of COVID-vaccine: An exploratory study in Italy. *Social Sciences*, *10*(3), 108. https://doi.org/10.3390/socsci10030108

Razai, M. S., Osama, T., McKechnie, D. G. J., & Majeed, A. (2021). Covid-19 vaccine hesitancy among ethnic minority groups. *The BMJ*, *372*, 1–2.

Reid, J. A., & Mabhala, M. A. (2021). Ethnic and minority group differences in engagement with COVID-19 vaccination programmes – at Pandemic Pace, when vaccine confidence in mass rollout meets local vaccine hesitancy. *Israel Journal of Health Policy Research*, *10*(1), 1–9.

Riebl, S. K., Estabrooks, P. A., Dunsmore, J. C., Savla, J., Frisard, M. I., Dietrich, A. M., Peng, Y., Zhang, X., & Davy, B. M. (2015). A systematic literature review and meta-analysis: The Theory of Planned Behavior's application to understand and predict nutrition-related behaviors in youth. *Eating Behaviors*, *18*, 160–178. https://doi.org/10.1016/j.eatbeh.2015.05.016

Robertson, E., Reeve, K. S., Niedzwiedz, C. L., Moore, J., Blake, M., Green, M., Katikireddi, S. V., & Benzeval, M. J. (2021). Predictors of COVID-19 vaccine hesitancy in the UK household longitudinal study. *Brain, Behavior, and Immunity*, *94*(January), 41–50.

Robertson, J. F. R., & Sewell, H. F. (2021). COVID-19 vaccine efficacy data: Solid enough to delay second dose? *The Lancet*, *397*(10291), 2248–2249. https://doi.org/10.1016/S0140-6736(21)01046-1

Rotter, J. B. (1971). Generalized expectancies for interpersonal trust. *American Psychologist*, *26*(5), 443–452. https://doi.org/10.1037/h0031464

Royal Society for Public Health. (2021). *New poll finds ethnic minority groups less likely to want COVID vaccine*. Available at: https://www.rsph.org.uk/about-us/news/new-poll-finds-bame-groups-less-likely-to-want-covid-vaccine.html

Schwarzer, R. (2014). Life and death of health behavior theories. *Health Psychology Review*, *8*(1), 53–56. https://doi.org/10.1080/17437199.2013.810959

Shariff, A. (2009). Ethnic identity and parenting stress in South Asian families: Implications for culturally sensitive counselling. *Canadian Journal of Counselling and Psychotherapy*, *43*(1), 35–46.

Sheeran, P., Gollwitzer, P. M., & Bargh, J. A. (2013). Nonconscious processes and health. *Health Psychology*, *32*(5), 460–473.

Shim, S., Serido, J., & Tang, C. (2013). After the global financial crash: Individual factors differentiating young adult consumers' trust in banks and financial institutions. *Journal*

of Retailing and Consumer Services, *20*(1), 26–33. https://doi.org/10.1016/j.jretconser.2012.10.001

Shmueli, L. (2021). Predicting intention to receive COVID-19 vaccine among the general population using the health belief model and the theory of planned behavior model. *BMC Public Health*, *21*(1), 804. https://doi.org/10.1186/s12889-021-10816-7

Singh, A. K., & Misra, A. (2020). Editorial: Herd mentality, herds of migrants/people, and COVID-19 in India. Diabetes and Metabolic Syndrome. *Clinical Research and Reviews*, *14*(4), 497.

Stefanoff, P., Mamelund, S. E., Robinson, M., Netterlid, E., Tuells, J., Riise Bergsaker, M. A., Heijbel, H., Yarwood, J., Muchl, R., van Damme, P., Hendrickx, G., Theeten, H., Tack, S., Vladimirova, N., Yarwood, J., Robinson, M., Kemsley, P., Kerbo, N., Bartha, K., … Aksakal, N. (2010). Tracking parental attitudes on vaccination across European countries: The Vaccine Safety, Attitudes, Training and Communication Project (VACSATC). *Vaccine*, *28*(35), 5731–5737. https://doi.org/10.1016/j.vaccine.2010.06.009

The Lancet. (2021). India's COVID-19 emergency. *Lancet*, *397*(10286), 1683. https://doi.org/10.1016/S0140-6736(21)01052-7

Thomas, S. B., Fine, M. J., & Ibrahim, S. A. (2004). Health disparities: The importance of culture and health communication. *American Journal of Public Health*, *94*(12), 2050.

Torjesen, I. (2021). Covid-19 vaccine shortages: What is the cause and what are the implications? *BMJ*, *372*, n781. https://doi.org/10.1136/bmj.n781

Tulloch, O., Jong, T. R. de & Bardosh, K. (2021). *Data synthesis_Covid19 vaccine perceptions Africa_social_behavioural science data Mar 2020–Mar 2021*. https://www.socialscienceinaction.org/resources/data-synthesis-covid-19-vaccine-perceptions-in-africa-social-and-behavioural-science-data-march-2020-march-2021/

Ullah, I., Lin, C. Y., Malik, N. I., Wu, T. Y., Araban, M., Griffiths, M. D., & Pakpour, A. H. (2021). Factors affecting Pakistani young adults' intentions to uptake COVID-19 vaccination: An extension of the theory of planned behavior. *Brain and Behavior*, *11*(11), e2370. https://doi.org/10.1002/brb3.2370

Wang, C., Horby, P. W., Hayden, F. G., & Gao, G. F. (2020). A novel coronavirus outbreak of global health concern. *The Lancet*, *395*(10223), 470–473. https://doi.org/10.1016/S0140-6736(20)30185-9

Weigert, A. (2012) *Pragmatic trust in a world of strangers: Trustworthy actions*. London: Sage.

Williams, L., Flowers, P., McLeod, J., Young, D., & Rollins, L. (2021). Social patterning and stability of intention to accept a COVID-19 vaccine in Scotland: Will those most at risk accept a vaccine? *Vaccines*, *9*(1), 17. https://doi.org/10.3390/vaccines9010017

Williams, N. S., & Dienes, K. (2021). Public attitudes to COVID-19 vaccines: A qualitative study. *PsyArXiv*.

Woodhead, C., Onwumere, J., Rhead, R., Bora-White, M., Chui, Z., Clifford, N., Connor, L., Gunasinghe, C., Harwood, H., Meriez, P., Mir, G., Jones Nielsen, J., Rafferty, A. M., Stanley, N., Peprah, D., & Hatch, S. L. (2021). Race, ethnicity, and COVID-19 vaccination: A qualitative study of UK healthcare staff. *Ethnicity and Health*, *0*(0), 1–20.

Woolf, K., McManus, I. C., Martin, C. A., Nellums, L. B., Guyatt, A. L., Melbourne, C., Bryant, L., Gogoi, M., Wobi, F., Al-Oraibi, A., Hassan, O., Gupta, A., John, C., Tobin, M. D., Carr, S., Simpson, S., Gregary, B., Aujayeb, A., Zingwe, S., Reza, R., … UK-REACH Study Collaborative Group (2021). Ethnic differences in SARS-CoV-2 vaccine hesitancy in United Kingdom healthcare workers: Results from the UK-REACH prospective nationwide cohort study. *The Lancet Regional Health, Europe, 9*, 100180. https://doi.org/10.1016/j.lanepe.2021.100180