

# Health Communication in Pakistan: Establishing Trust in Networked Multilingualism



Hina Ashraf

**Abstract** This case study of covid literacy addresses a vital question about how language practices can reflect and transform social realities to create trust and social capital. Language is central to this exchange, and with the technologically supported affordances of digital social media, users actively co-construct, translate and disseminate information to both known and unknown audiences. However, during the last two and half years of the pandemic crisis so far, information flows from the Global North to the South primarily in English, and is often complemented with conflicting discourses and ambiguous scientific information. Often this information is convoluted in issues related to translations, limited functional literacy, and access to trustworthy resources of knowledge in developing countries of the South. Yet some studies claimed clarity in health literacy in Pakistan's relatively successful communication campaign during the covid pandemic despite the country's highly populous status, its multilingual repertoires, and 50% literacy rates. Using Gee's relationship building tool as a cue, in this chapter I delineate the knowledge, assumptions and inferences embedded in translanguing language practices that contribute to trustworthy information. I specifically present findings from an investigation of the literacy practices from a popular Facebook group in Pakistan during the first two episodes of the covid pandemic. The findings demonstrate that trust is embedded in communication comprising an intriguing interplay of languages and digital tools representing the evolving features of contemporary communicative practices among plurilingual English speakers.

**Keywords** Plurilingual · Covid literacy · Trust · Social capital · Networked multilingualism · Pakistan

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## 1 Introduction

The global pandemic brings to limelight aspects of communication that are not just those of language, but also of trust and relationship building, complicated in countries in the Global South, where, in general, public access to information is limited by internet, media and literacy rates. In linguistic research, during the last two and half years of the covid<sup>1</sup> global pandemic crisis thus far, many issues have been covered with regard to language and culture related inequities. In the Asian context, for example, Piller et al. (2020) detailed the multilingual settings that have been impacted by digital emergency communication being mostly in English or by translations of pandemic information not sitting well with oral traditions or minoritized languages and cultural practices. Efforts launched in response to those challenges include using local languages in public service announcements, interviewing local leaders to ensure culturally appropriate information reaches the public, or drawing from the genre of story-telling and oral traditions to disseminate scientific pandemic content (see for example Binder & Gago, 2020, for South America; see Vita, 2020, for Central Africa). These studies raise questions of how the efficacy of health communication is impacted by availability of translations, accessibility to disadvantaged populations, acceptability of accuracy and appropriateness of covid literacy, and adaptability of provisions for the shifting requirements of diverse populations (Piller et al., 2020; Jang & Choi, 2020). By comparison, elements of trust and relationship building within covid-19 discourse are yet to be explored in multilingual research. This chapter is a step in that direction.

I draw attention to the roles that languages and shared repertoires of multilingual speakers play in establishing trust and exchange of information in online communities during the covid pandemic. Diverse groups network and access shared language resources, information channels, and opportunities to increase their social mobility and social capital (Ashraf, 2008; Bourdieu, 1986; Nahapiet & Ghoshal, 1998; Putnam, 1994; Thoresen et al., 2021). Capabilities of social media platforms to build trust derive from a range of associated factors, and taking an analytical view of a social media platform's linguistic features can illuminate textual and discourse elements that inspire bonding and networking among people with diverse backgrounds. I argue that because language practices create the bridges to facilitate discussion, and are the vehicle to promote health literacy and collaboration, there is a need to recognize and theorize how through multilingual literacies as deployed by many plurilingual online communities, collaborations, dissemination of information, and advancement of scientific knowledge are nurtured. I use Androutsopoulos's (2015) "networked multilingualism", Bourdieu's (1985) theory of social capital, and Gee's (2010) discourse as relationship building tool to analyse the literacy practices of a Pakistani online community during the Covid-19 pandemic.

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<sup>1</sup>I refer to the Covid-19 Sars-II virus as Covid capitalized when it is used as a proper noun. All other uses are covid.

Pakistan, similar to some other densely populated and linguistically diverse countries in the Global South, was also impacted by the lack of accuracy in translations (Abbasi, 2020), low literacy rates and poor access to information. Yet owing to various communication campaigns, in Pakistan the covid crisis was regarded relatively mild despite its highly populous status, and 50% literacy rates (Akhtar et al., 2021; Anwar et al., 2020; Noreen et al., 2021; Siddiqui et al., 2021, WHO, 2020). It would be helpful, therefore, to shed light on the language in the communication practices that have bridged intercultural diversity and built trust and networking during the pandemic. For this case study, these communicative practices are located in informally structured and locally grounded horizontal information channels in a Pakistani Facebook group. My own background as a multilingual Pakistani gives me the advantage of insight into the intercultural practices and linguistic ecology in which the online community operates. In an effort to systematically document these communicative practices, and articulate how trust and social capital is cultivated, I postulate that Pakistan's online community offers a window into the interpersonal strategies that create health literacy within the uncertainty of a pandemic.

## 2 Theoretical Framework

Below I detail the social capital theory, networked multilingualism, and the relationship building tool to explain how I conceptualize users' ways of interacting, valuing and connecting contribute to the D/discourses underlying multilingual health communication.

### 2.1 *Social Capital in Online Health Communities*

In the works of Pierre Bourdieu (1986), James Coleman (1988), and Robert Putnam (2001), social capital is conceptualized as intangible elements and dispositions (e.g., education or individual and collective habitus) that contribute to social and economic mobility, and opportunities. Nahapiet and Ghoshal (1998) include the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships that provide access to information channels or intellectual capital. With some differences, three primary dimensions of social capital stand out in these formulations. Accordingly, the *cognitive dimension* enables members to access information through networks of shared knowledge (i.e., what one knows about individual and social mobility); the *structural dimension* is concerned with the configuration of network ties, their density, hierarchy, and connectivity; the *relational dimension* of social capital is embedded within one's personal relationships formed through shared identity or common destiny that influences behaviours and self-identification (Ashraf, 2008; Nahapiet & Ghoshal, 1998).

Similarly, a correlation between health outcomes of an individual and their network contacts demonstrates the potential influences of the diffusion of information and belief on health behaviours, social learning, norm adoption, and peer imitation, and in creating a sense of community, trust, and solidarity among their members (Kawachi et al., 2008; Kye & Hwang, 2020; Zhang & Centola, 2019). In Norway, Thoresen et al. (2021) compared levels of personalized and generalized trust via Facebook to study their influence on behavioural tendencies. In South Korea, Jang & Choi, (2020) highlight the role of the online community of *Fenhan* in providing international students with information and emotional support through language brokering that involved translating, mediating, highlighting and disseminating key information, thereby promoting trust, a sense of belonging and connectedness. Advances in free online translation services and translanguaging offer opportunities to network on the web, overcome intercultural barriers, and increase user participation (Lee & Barton, 2013; Sato, 2022).

## 2.2 *Plurilingual or Translingual Norms in Online Communities*

Given the literacy practices and unique orthographies of each language, the normative discourses, indexicalities and subjectivities of members are juxtaposed in novel traditions in online communities (Androutsopoulos, 2020; Spilioti, 2019). Urdu on the web is written through the Perso-Arabic script *nasta'liq* from right to left unlike English, or is transliterated to Romanized Urdu. In a combination of these different techniques the multilingual users' choice of script, directionality, and competence reflect different identities and motivations. Additionally, trans-scripting involves creative semiotic resources that are not legitimized in offline literacy practices but accepted in ingenious meshing of codes to serve different purposes. Since the affordances of social media and keyboards offer more options to plurilingual web users and audiences in Pakistan, in this investigation, I mostly refer to these unique multilingual literacy encounters as *translingual*.

Technology also enables contextualized actions through the modalities of status updates, posts, images, content sharing, and user comments referred to as *affordances* (Earl & Kimport, 2011; Faraj & Azad, 2012). A combination of translingual communication with the social media affordances, inspires online community members to engage in the use of multiple languages within a single literacy event through multiple and online keyboards, or transliteration and translations that Androutsopoulos (2015) conceptualizes as “networked multilingualism”. Networked multilingualism encompasses how individuals deploy the entire range of linguistic resources within three sets of constraints: mediation of written language by keyboard-and-screen technologies, access to network resources, and orientation to networked audiences. Users create their own rules for establishing in-group

solidarity, familiarity and proactive content in languages of their own choices (Pérez-Sabater, 2022; Androutsopoulos, 2015) simultaneously opening windows into several communicative encounters (Androutsopoulos, 2015), presenting increasing fluidity, diversity and mobility as people move resources across online and offline spaces (Spilioti, 2019).

Societal multilingualism is typical of Global South contexts, and it is widely accepted that plurilinguals in these contexts fluidly switch between languages without any specific or consistent pattern of code switches (Canagarajah, 2009) that are complementary, unique in each context, and inherent to the linguistically diverse repertoire of South Asia (Ashraf, 2022; Canagarajah & Ashraf, 2013).

### 2.3 *Discourse/discourse, Context, Language-in-Use*

Code-meshing to co-construct trust and promote health literacy during the covid pandemic in Pakistan is more of a process rather than a product. While trust is an intangible concept, which may be traced in discourse in co-constructed acts of mutual aid, the expectation of receiving and providing help, and a sense of common faith and destiny (Liu et al., 2019). According to Gee (1999), while “discourses” are forms of “language in use” when melded in non-language phenomena (e.g., actions, interactions, history, values and beliefs) through which individuals and groups enact certain activities and identities, the big D Discourses are involved (p. 2). In this sense, members of the online group engage in the Discourse of Health Literacy and Covid Literacy, and the Discourse of Public Health, and the Discourse of Facebook Groups, who enact certain identities and roles to be able to “walk the walk, and integrate the walk with the talk” (Gee, 1999, p. 2), adjusting, hybridizing, and evolving in different *contexts* to enable trust, networking or social capital.

Gee (2010) regards *context* as a space of reflexive perspective in which relationship building occurs in a synergy of language-in-use, non-verbal cues, and shared cultural knowledge. For the purpose of the present study, this *context* is a Pakistani Facebook group that covers covid literacy and support. *Language-in-use* in this sense is not just language for saying or doing things, but also building and sustaining relationships that are enacted in a series of actions in related contexts, over a long stretch of time. Building on these elements of discourse, to explicate the construction of social capital in online communities, Gee’s (1999) Discourse “relationship building toolkit” offers a set of questions through which an analyst can unpack the Discourses in discourses. The guiding principle is how words and various grammatical devices are used to build and sustain or change relationships of various sorts among the speaker, other people, social groups, cultures, and/or institutions (Gee, 2010, p. 116).

### 3 Methodological Framework

My interest in this chapter is to build on the above-detailed conceptualization of networked multilingualism and the theory of social capital as integrated in the D/discourses of plurilingual online communities, in order to understand better how they communicate about the pandemic and what roles trust and information exchange play in that communication.

#### 3.1 The Present Framework

In this chapter, I reason people’s habitus is disposed to the affordances of social media, and they accommodate to the interface and online communities to increase their reach and access the resources, which is how social capital is created in these online networks. The following research questions are asked to explore how the cognitive, relational and structural social capital are cultivated with language practices in the networked multilingual space of a Pakistani Facebook group:

- (a) What knowledge, assumptions, and inferences do users bring to bear to create clear and understandable health communication as they alternate their language-in-use preferences?
- (b) What knowledge, cultural resources and grammatical devices are privileged and de-privileged (e.g., translation vs transliteration, words vs images) to achieve clarity and increase social capital?
- (c) How are various discourse strategies used to build and sustain, or change relationships of various sorts among users, social groups, cultures, and institutions?

Table 1 presents the theoretical model that guides my analysis of social capital and the construct of its key dimensions in Pakistani online communities through language practices. The investigation foregrounds the premise that during the covid pandemic successful networks generated trust, and thereby promoted health literacy through networked multilingualism, both of which are the product and the cause of shared cultural communication and discourses.

**Table 1** Theoretical and analytical framework

Dimensions of social capital in discourse	Social mobility	Language preferences
Cognitive—building information through networks of shared knowledge in assumptions and inferences	<i>What you know</i>	} {English, Urdu, Translingual}
Structural—developing societal, kinship bonds, or knowing people with cultural knowledge and linguistic elements	<i>Who you know</i>	
Relational—identifying with network members who have similar identities or common destiny	<i>Who you want to be</i>	

### 3.2 Data

Data for this study come from a health-related Facebook group, *Corona Warriors Recovered!* (*CWR!* onwards). The virtual hub serves a “home base” (Stellefson et al., 2019) for different contextualized actions e.g., covid health literacy, alternative medication, nutrition, disease-management and its prevention. The success of the group’s solidarity campaign was recognized in national and international forums to offer crisis support, network building and information channels (e.g., *Reuters*; see Farooq, 2020). When I began collecting the data for this study, *CWR!* had more than 338,000 members that open a window into symbiotically created diverse literacy practices and covid discourses in Pakistan. To narrow down the scope of the communication on the Facebook group, I first created boundaries through an event-based approach (see also Lee, 2022). Using the search option in Facebook terms related to health, its Urdu variant *sehat*, vaccination, and the oldest and latest posts, data were copied and then manually coded for analysis. Details of the data, and the number of posts from each time period are provided in Table 2. This resulted in a total of 308 posts, in addition to user comments.

## 4 Analysis

### 4.1 Assumptions and Inferences in Alternate Language-in-Use Preferences

Building on the framework presented in Table 1, the initial coding of data identifies seven different functions performed by members through different languages. Each function corresponds to social capital dimensions as created through member’s interactional intentions, and the context of the language-in-use itself that fulfils their motivations and needs. This is summed up in Table 3.

**Table 2** Description of data from facebook

Data	Time period		Total no. of posts
	From	To	
Posts tagged COVID (the oldest posts)	July 8, 2020	December 19, 2020	39
Posts tagged “vaccination”	December 30, 2021	March 24, 2022	65
Posts tagged “sehat”	January 20, 2022	January 26 2022	55
Posts tagged COVID (the latest posts)	January 21, 2022	March 8 2022	45
Unfiltered latest posts	February 25, 2022	March 8, 2022	104
			308

**Table 3** Initial coding of data: function, feature, language and social capital dimension

Function	Facebook tools	Language and grammatical features	Language-in-use	Social capital dimension
Covid information: direct, literal communication	Status updates Images: screenshots User comments	Epistemic: facts, figures, statistical data, news headlines Personal information: telephone number, address Legitimacy	English	Cognitive aspect building information channels
Affirmation of faith; Prayer: pragmatic	User posts User comments Images	Request: asking for help, inviting Lexical pragmatic markers to bring about an action Persuasive; Lending authenticity; Emphatic Arabic script, centrality of religion	Translingual English	Relational dimension; identification with members through common destiny and belief
Seeking help	User posts User comments	Request; Emotion; Persuasive	English Urdu Translingual	Cognitive: seeking information
Clarification about medical report	User posts User comments Images	Personal narrative: patterns of personal reference; Emotion; Synopsis of events Personal information Enquiry; Anticipation; Modals	English; Translingual	Cognitive: seeking information Structural: establishing connections; knowing people
Health literacy: medical information	Status updates User comments Images	Epistemic; Assessment: emphatic; Predicting often with conditionals; Evaluative: positive	English Urdu Translingual	Cognitive: seeking information Structural: providing connections; knowing people
General updates; news, group rules	Admin User posts Images	Deictic: anaphoric; contextualized; Progressive aspect (continuous tense)	English Translingual	Cognitive: sharing information Structural: contacts; knowing people
Personal experiences	User posts User comments	Personal narratives: synopsis of events; emotion; distrust/gratitude; request for prayer or prayer; Agentive; perfect aspect; Evaluative	English Translingual	Relational dimension: identification; ways of doing things; commonalities Structural: knowing people Cognitive: information about

A few deductions can be made here. *One*, members produce, attend to, and respond to the emerging conversation in the posts revealing rich and complex translingual practices in a collaboratively sustained online space. And *two*, scrutiny of the knowledge, assumptions, and inferences that users bring to the group in their



distinct roles and functions, contribute to the three dimensions of social capital. In line with the theories of social capital the dimensions are inter-related. Below I elucidate how the languages, cultural practices, and lexical devices that users bring to the group to network facilitate trust and action.

## 4.2 *The Cognitive Dimension in Information Exchange*

People employ languages to build or sustain relationships, distribute or hold back social goods and share information using different vocabulary and grammatical devices (Gee, 1999, p. 138). As information exchange is central to social capital formation, an analysis of the cognitive dimension shows how it is created and accessed by *CWR!* members in the knowledge and inferences they bring to the posts or to their requests of information in the group.

### 4.2.1 **Informational Posts**

By leveraging their agency, social media administrators negotiate the terms for members, and moderate topics and languages that were critical during the pandemic. Through different modalities, *CWR!* administrators (henceforth “admin”) disseminate general covid literacy, vaccine information, medical and plasma treatment, invitations to provide details through google forms, captions for expert interviews, and group and membership rules. The informational updates from official bureaucratic organizations privileging English over Urdu, are supported epistemically with data, and characterized by shorter, straightforward statements. A significant number of these posts include screenshots of official tweets with number of vaccines administered, the count of cases, and updates from the government agencies e.g., *National Command and Operation Center* (NCOC, a central organization to synergize and articulate the national covid policy), and *National Institute of Health, Islamabad* (NIH) as shown in Fig. 1. In this sense, *CWR!* includes as Paton and Irons (2016) indicate, not just timely information, but also the ability of its recipients to interpret it, use it and respond to it.

These covid updates in English imply its official language status for transmitting covid related news, in spite of the fact that by and large these practices conflict with the status and ideologies of languages in a postcolonial country like Pakistan (Abbasi, 2020; Ashraf, 2022). In conflating these two contrasts, whenever state information is presented in English, it glosses over the absence of languages besides English in professional, STEM, and higher education, and over the vast majority of the 50% literate population of Pakistan who do not necessarily learn their school science or STEM courses in English. Nonetheless, as English is part of the plurilingual repertoire, these posts reveal that both admin and members do seek out and attempt to interpret health literacy transmitted in English by the group, make sense of it, and make decisions about how to act when dealing with the pandemic.

**Fig. 1** NCOC post shared by administration



From time to time, members function through translingual codes presenting information with Urdu, English, Romanized Urdu or trans-scripting literacy practices within the same post or comment. Language and local knowledge are, in fact, key to this sense-making and relation-building where local literacies, religion, homeopathic and home remedies offer cure as is illustrated in Example A in Fig. 2 below.

For the admin, local knowledges and language brokering to address myths, and bridge gaps between the physicians and laypersons is mostly translingual. Interviews incorporate a blend of English and Urdu codes, translations and repetitions that facilitate connections and health communication. In the interviews, the founder of the group, Zoraiz, opens up the session, introduces and thanks the invited medical expert, and moderates the conversation between the experts, live audiences, and their posted comments. In Example B (Box 1), I provide the admin's introduction of a pulmonologist's interview that was run live and involved audience questions, with Urdu words in bold. Transmitting information from both ends, and mediating the information to and from, he takes on the role of a health literacy language broker. He selects and highlights topics to support informed decision and understanding of the pandemic, and remediates key information by rephrasing, translating or expanding it. While doing this, he fluidly shifts between Urdu and English, translates some of his own words and of the invited expert, thereby exhibiting a dynamic plurilingual competence in which Urdu or English can interchangeably be the matrix language of an exchange.

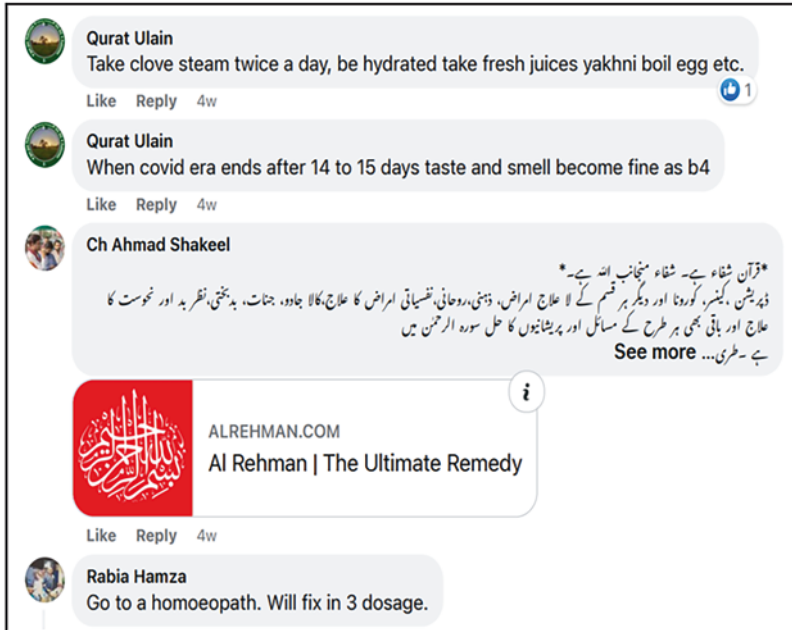


Fig. 2 Example A of user comments in a translingual script and local health literacies

**Box 1 Example B: A Post by the Founder of the Group Depicting Plurilingual Competence**

Eik mahina complete honay per... is important moqa per, jinhun nay concept diya hae, jinhun nay plasma therapy ka concept diya hae, hopeless logon ko umeed di hae, mushkil se nikala hae; humaray saath live haen, public ke saath direct inquiries ko handle bhi kerein gay; ye hoti kya hae; doctor sahab will update us what is this. Thank you so much for coming to this session. It is an honor for us; aap ka bari shiddat se intezaar tha is pooray group ko, aur un ki basic queries ko solve bhi kerein. Logon ko is se kya kya cheezein jaan ni haen. Salam Everyone. Jitni bhi der aap chahin gay hum is per beth ker baat kerein gay, status kya hae is ka poori dunya mein; pandemic is half way through; buhut time aesa guzray ga is ko buhgata rahay houn gay; is ki tabahkariyon ko dekhein gay.”

In the above example, Zoraiz says that after a month of plasma treatment advances, it was important to have the person on the show who had introduced it, as he has given hope to hopeless people and taken them out of hardship (literal translation). Unlike the continuous shifts in the first part, the last 5 lines use detailed Urdu clauses with English noun insertions only.

### 4.2.2 Requesting Information

Requests for information are curated differently from the admin posts. First, beginning mostly in English, members present a synopsis of events that opens with the prognosis and duration of the covid infection, and a self-evaluation of symptoms interwoven with emotion. As in Examples C to G, informational requests are structured tentatively, and informally in similar trends to online posts as hybrids of speech and writing, with abbreviated words e.g., *Dr* or *doc* (doctor), and lexical pragmatic markers as *Plz* or *pls* (please) (Figs. 3, 4, 5, 6).

Second, there are few exceptions of Urdu posts in the dataset where members privilege transliteration over the nasta'liq script. Transliteration is a phonetic rendering of an enunciation in Urdu employing the English keyboard, indexed more with the discourse function than the spelling. In Examples F and G, the members open the post with the Muslim greetings of salam presented in a variety of forms: transliterated as *Assalam o alaikum* and *Assalam u Alaikum*, abbreviated as *Aoa*, *AOA*, *AoA* or typed out as *Salam*. Symbolizing a common faith, it serves to engage the larger audience with the post and introduces the poster through shared cultural etiquette.

Third, in providing details when encountered with high-risk novel situations, people actively seek out the views of others for decision-making (Paton & Irons, 2016), which is different from their general disposition as passive risk-perceivers (Lion et al., 2002). Answers to difficult but direct questions like, *Should we be wearing masks around each other?* and *How can two people living together have different results?* as in Examples C and D, remain vague in members' responses. In Example E, a member provides a disclosure of their covid experience, followed by an expression of gratitude i.e., *Allhumdollillah* (all praise to Allah; also spelt *Alhamdollillah* elsewhere in the dataset), repeated after describing convalescence, and ending with the request for information from any doctor.

Fourth, explicit knowledge to disambiguate myths is constructed in the interaction itself. The symptoms of fever, chest x-ray, weakness, chest heaviness, and relapse after some days are helpful to document the varied complications of the coronavirus. Members seek clarifying questions about the test results, x-rays, blood

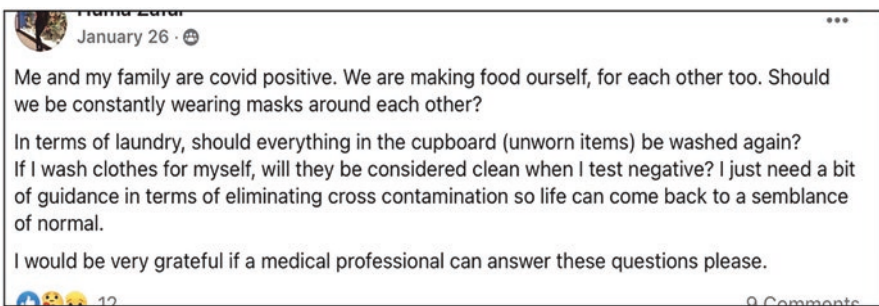


Fig. 3 Example C of request

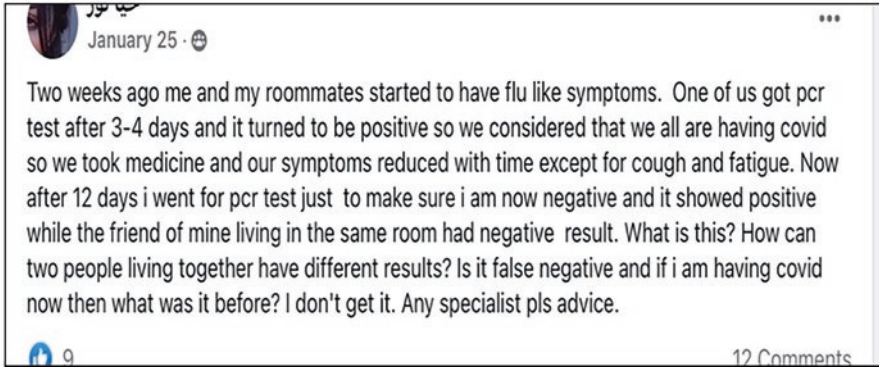


Fig. 4 Example D of seeking information

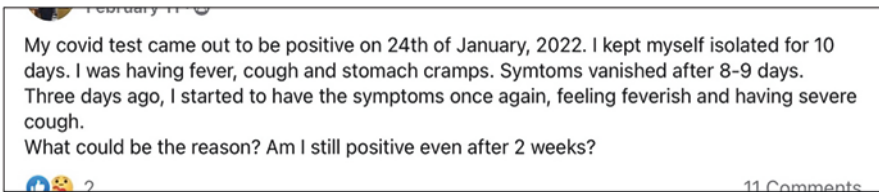


Fig. 5 Example E of seeking medication information

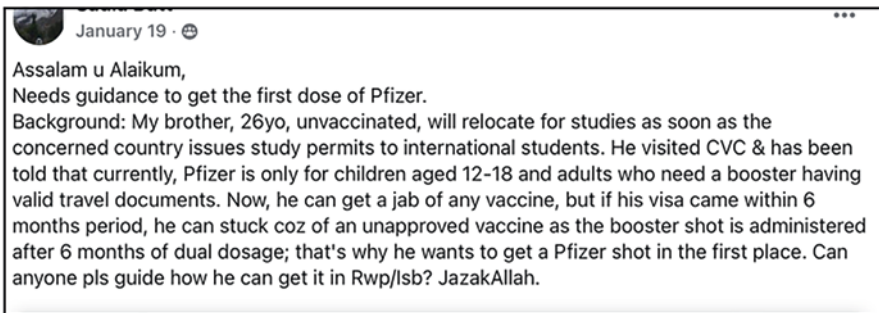


Fig. 6 Example F about Pfizer vaccine

tests, prescriptions, and resources to access that information. Often the medical information request is authenticated with a snapshot of the test results or doctor’s prescription. In Example G (Fig. 7), information about CRP blood test, as a marker of infection, engages members with similar experience, but also provides knowledge about the symptoms for members unfamiliar with it. Response comments continue to enrich covid literacy as Example H illustrates (Box 2).

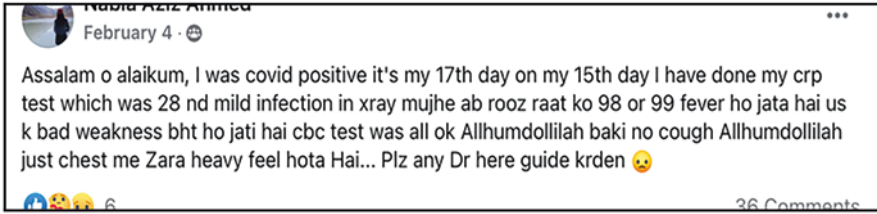


Fig. 7 Example G about CRP blood test

### Box 2 Example H: User Comments Creating Covid Literacy while Deploying both English and Urdu

A: Allah **pak sehatyaab**

B: Aameen

C: Bump

D: Rest **na lenay say b hota hai**. (Also happens if rest is not taken) Dr suggested only panadol for fever. Take proper rest if all other reports r ok

X: only crp is high cbc is all okay

D: i cant say anything about high crp as i m not dr. But fever **mujhe b hota tha** after **recovering jab mai nay kam start kia aik dam**. **Tu** tiredness caused fever in my case **jo aik do** panadol n surbex z dr **nay** recommend **kia tha bas**.

X: **Mera b jb kaam Thora krlon tu start ho jata raat mein Apko kitny days raha Tha**

D: 2 days **shayad bus ziada** fatigue **say bachein**

**mujhe buhat** days **hogye hn 99 py fever rehta hai** fatigue **Har waqt** weakness **se hath b** shiver **krty** sometimes (it's been several days for me 99 fever stays fatigue all the time weakness also causes hands to shiver) Box [Example 8] ends

Finally, how the translingual code glosses over the fluid shifts between both languages is striking. As represented in the post and comments, both Examples G & H are in a mix of Urdu and English codes transliterated into the Roman script, and non-standard punctuation. Composed translingually, this parlance with English and transliterated Urdu comments does not follow the normative literacy practices of medical scripts, or the syntax expected in writing. Amidst these unconventional practices, covid literacy evolves in the flow of user comments including lay knowledge about the levels of the CRP blood tests and over the counter medicine that may help people lacking access to medical experts.

Posts and comments convey anticipation and expectation as both the poster and commenter tentatively share information about their covid experience, and make recommendations. Cultural and religious etiquette is visible in the responses to the

post serving different purposes. A, B and C in Example H offer good wishes through supplications that God may grant health followed by an amen and “Bump” that increases audience to the post. Members perceive the group’s potential in understanding their account, and audiences assisting them with symptom management, emotional support and optimism constituting a literacy event of information exchange. This is similar to a medical history often taken down in a doctor’s office, sans the questions being asked of the patient. With limited physical interaction impacting patients’ ability to access medical care in person, the indirect, greater social support from the members of the group, and friends of those members illuminates the passive but robust engagement of the online community in building covid literacy. I suggest that this evolving health discourse supplemented with non-medical information in a translanguing code augments the exchange of covid information in Pakistan.

In this section, I delineated how pragmatic and discourse markers, and the choice of languages, contribute to the cognitive dimension of social capital. Next, explicating the structural dimension, I show members’ acceptability of information is tied to the strength of their relationship with the people disseminating the information.

### ***4.3 Tracing the Structural Dimension in Shared Norms***

The structural dimension of social capital is related to the strength of members’ bonds in their network and reflected in the trust created through shared norms and values (e.g., beliefs) that promote a stable pattern of interaction, cooperation and social relationships (see Borgonovi & Andrieu, 2020; Liu et al., 2019). In this section, I draw on the networking norms of Facebook, and the distinctive use of hashtags that contribute to the cultivation of trust.

#### **4.3.1 Establishing Trust Through Norms of Hierarchy, Appropriacy, and Shared Values**

With the Facebook technology that enables meshed languages, images, gifs, and emojis, user options surpass the offline literacy norms in establishing linkages and trust. In Example I while strictly detailing the rules of the group, emotions and emojis lend more clarity to the norm expectations of membership. Choosing to begin with a personal sentiment, the founder, Zoraiz Riaz, shares the experience of losing a loved one to covid, commits to not leaving the general (unknown) audience or the Pakistani people without information and resources, and inserts URLs of websites and emojis (e.g., lightning bolt, the big red cross). These alternative semiotic practices are multi-layered. For example, the flag of Pakistan symbolizes a nation itself, but also invites nationalism or patriotism, prioritizing commitment to bring together both online and offline Pakistanis. Such affordances lead to a sense of community



and belonging among members and support the information channels (Jang & Choi, 2020; Paton & Irons, 2016). Zoraiz's reference to a digital community of 250,000 members is indicative of the strength of the connections and significance of relationships. The note of optimism to rise to the challenge lends more credence to his role, while simultaneously establishing his hierarchy as a group administrator. Similarly, the use of block letters, and punctuation to convey the good news are resounding and dialogical. Towards the close, a marked shift to Urdu in the insertion of the single word, *Baqi* (*The rest*), and the return to personal tone strengthens trust in his message, and in the appropriacy of these translanguing practices. The use of the term *Baqi* also implies a sense of resignation with an underlying religious faith that there is also much that is beyond human control. This tone is sustained in "I pray," and "Love!" at the end of the post, weaving together common faith, destiny and the perils of the pandemic. We see here the group does not just provide information on specific issues, but also creates "an embryonic space" of emotional support (Paton & Irons, 2016), and value co-creation (Liu et al., 2019) (Fig. 8).

Trust is often created in tacit ways. Blurring the boundaries between the public and the private, the members' norm of keeping their data private is frequently

**Zoraiz Riaz**  
June 11, 2020 · 🌐

Yesterday was rough as I had lost my friend's father because of Covid-19, I had a lot of queries but let me tell you, I'm not leaving you all alone in this.

Enough negativity! ❌  
Let's fast forward and look up to the new stats, voice notes, pictures of the donors and screenshots 📸

- 1- Group Strength of 250,000 in 13 days. ⚡
- 2- Plasma requests across Pakistan on [www.plasmaportal.org](http://www.plasmaportal.org) were 530. ⚡
- 3- 350 Donors have been connected. (Difference because of donor unavailability) ⚡
- 4- 75+ cases connected themselves through the group themselves as the donors are they are secretly looking for potential recipients. ⚡
- 5- Up to 75% recovery reports have been recorded in the mild/moderate cases because of plasma therapy and YES IT IS SOME GOOOOOD NEWSSS!!! ⚡ ⚡ ⚡
- 6- Patients on ventilators develop multiple complications and hence plasma therapy is not very effective in them but let me tell you one thing, when they were injected plasma, they were recovered and stable but after a few days their condition was back and not much could be done. 😞
- 7- Convalescent plasma therapy is not always effective and not always recommended but the patients who are moderate and have the tendency to worsen can definitely improve through this.

Baqi progress is visible in the following stuff.

I pray that this small idea of connecting people which has become so big saves a lot of lives!

Love!  
Zoraiz Riaz

#WeWillWinThisWar #GoodTimesAhead #CoronaWar — with Sarim Saeed Bhatti.

Fig. 8 Example I: Presenting admin post with hashtags and emoticons



abandoned in favour of sharing their personal information signalling trust and benevolence in the organization of information by this group. Incorporating personal introductions and contact information lends legitimacy and continuity to the online interaction (Burke et al., 2007), and facilitates the overall pattern of relationships, helping *CWR!* members decide who to reach and how.

**4.3.2 Hashtags and Pinned Topics**

Predictably, *CWR!* makes use of several hashtags that draw attention to people and topics, and increase accessibility of information. In Example 1 above, before signing off, Zoraiz adds the tags, “We Win!”, “Good Times Ahead”, and “Corona War”, all of which are metaphors of hope, commitment, and optimism amidst the despair of the pandemic. As with other studies, Zoraiz’s hashtags serve the discourse functions of fact, opinion, and emotion (Papacharissi, 2015) convey self-presentation and linguistic acts of evaluation (Lee, 2022), and inclusivity as captured in the collective pronoun *we*. The widespread use of the war metaphor for the Covid-19 pandemic implies resonance, improved communication, an ability to simplify complex issues, and an all-in-this-together mentality (e.g., Isaacs & Priesz, 2021); but also, an inappropriate personification of the virus as a vilifying opponent, producing anxiety and unrest (Semino, 2021). Zoraiz’s post suggests both of these impressions in the details of his personal experience, converting it into the bigger purpose of the group that reiterates who members should reach out to when in need of any kind of help (Fig. 9).

While hashtags in pinned topics are created in translanguaging codes, the practices suggest a pattern. Informative topics related to critical issues e.g., آپ خود چیسٹا کیسے دیکھنا سیکھیں (learn yourself how to view a chest x-ray) or آکسیجن کے استعمال کے متعلق ضروری باتیں (important topics about the use of oxygen), or دم پاور کرونا مریض کو کیسے پہچانیں (how to distinguish between an asthma and corona patient) are in Urdu for outreach. Topics hashtagged in both Urdu and English combine scripts and reading directionality e.g., ventilator ویٹیلٹرز (about the machine ventilator) and خوراک اور دوا کا اور کرونا مریض medical perspective (medical perspective diet and corona patient). Though Urdu is the matrix language in these translanguaging hashtags, English nouns either transcribed in Urdu, or repeated in English, suggesting their higher degree of familiarity with the terms

English	Urdu	translingual
<a href="#">drtahirshamsilive</a>	اکمچنگ کے ایسٹمٹ کے متعلق ضروری باتیں	ویٹیلٹرز ventilator کے بارے میں
<a href="#">helmetmaskventilationabridgetherapy</a>	دم پاور کرو دوا مریض کو کیسے پہچانیں	خوراک اور دوا کا مریض medical perspective
<a href="#">coronadi seasespectrum explained</a>	آکسیجن کے استعمال کے متعلق ضروری باتیں	دم asthma کو کیسے علاج کیا جائے
<a href="#">coronadi seasespectrum explained</a>	آپ خود چیسٹا کیسے دیکھنا سیکھیں	سنگھٹا مریض دوا اور ویٹیلٹرز inhaler
<a href="#">howyoucanreadecg</a>	کرونا مریض کے متعلق ضروری باتیں سمجھیں	
<a href="#">coronarecovervexpectationvsreality</a>	کرونا مریض کو کیسے پہچانیں	
<a href="#">drsomiaiqatadartalksaboutcovid_19</a>	ویٹیلٹرز کیسے پڑھتے ہیں	
<a href="#">coronapatientdietbypulmonologist</a>	کرونا مریض کو کیسے پہچانیں	
<a href="#">recoveryfromcorona</a>		

Fig. 9 Pinned topics Hashtagged in English, Urdu and Translingual codes by the group admin

in English. These translanguaging practices may carry no socio-pragmatic inference (Androutsopoulos, 2020); instead, as Spilioti (2019), suggests, the interplay of languages creates shared semiotics, identities and reciprocity in creative ways that facilitate mobility of resources across online and offline spaces.

#### 4.4 The Relational Dimension in a Common Destiny

The relational dimension of social capital, though tied inextricably to the structural, has its roots in people's dispositions to identify with members and networks having similar interests and stories. In *CWR!*, admin support in dissemination of information is complemented with user stories and reflections attesting to a common interest that emerges in expressions of shared faith and destiny. Below I discuss their role in cultivating and sustaining relationships.

##### 4.4.1 Personal Reflections and Shared Sentiments

By enabling a platform to share personal experiences, *CWR!* also provides a reflexive perspective where users build relationships in a synergy of language-in-use, non-verbal cues, and shared cultural knowledge (Gee, 2010). Example J below, addresses the general unknown audience and engages in three discourse functions: imparting news, bonding, and identifying with readers through a shared faith and common destiny. These discourses are packed in a translanguaging message scripted in English, Romanized Urdu and plurilingual codes as if one language would not be enough to describe the emotional granularity of the experience (Fig. 10).

Opening in Urdu, the first statement fully (*Helping all of you it has been 2 years*), the third partially (*Not to worry*) and last before closing (*Still a lot to do*) are scripted in Roman. The sentiments expressed here, on the one hand, record an instant and personal connection with the readers for having a shared language and identity, and on the other, benefit from the technology of social media and the ease of the English

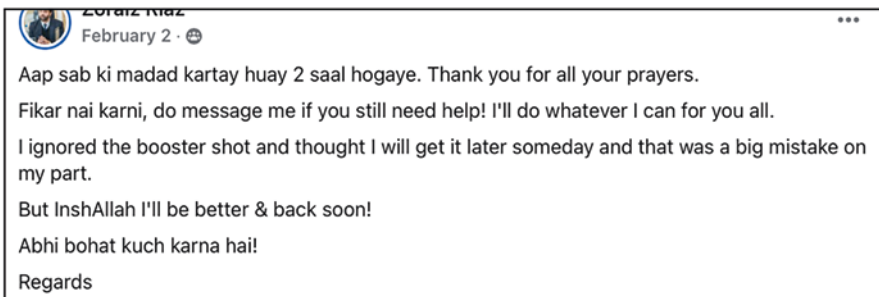
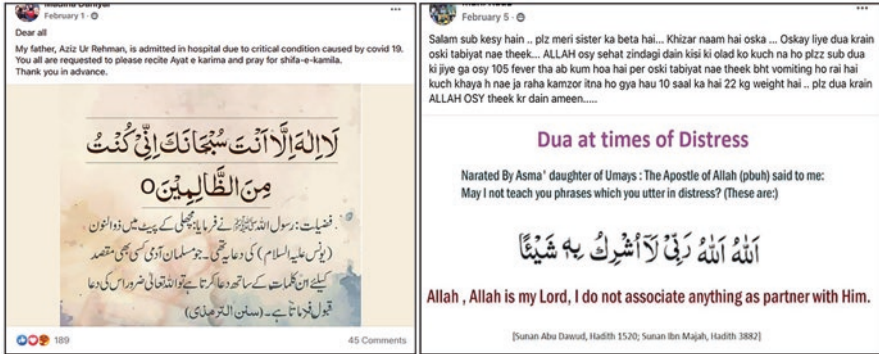


Fig. 10 Example J of personal reflections

keyboard. Carrying personal undertones, each of these Urdu statements has been interspersed with information regarding the covid infection that Zoraiz got for missing a booster shot, admitting the oversight, and affirming the commitment to help even if he is unwell. The sense of shared religion and tenets of religion expressed here in the Arabic expression *Insha'Allah* (God-Willing) in line 5 denote a) commitment, b) faith that God will help him accomplish his goals, and c) a sense of optimism in '*Still a lot to do*', that is bred into cultural and religious commitment not to give up. In such translingual encounters, English and Urdu languages become the vehicle of both connection and information. As identified by studies (e.g., Paton & Irons, 2016; Thoresen et al. 2021), personal stories in *CWR!* also increased generalized trust among participants, and provided a context to members so that those with similar needs and experiences responded more meaningfully to each other, while also making sense of the pandemic travails by identifying with members who shared the same fate and destiny. Thus they lend more weight to the theory that a shared language and faith builds a sense of trust, identity and opportunity that bridge the gaps in the online spaces (Paton & Irons, 2016).

#### 4.4.2 Praying Together During the Pandemic

Coping with a crisis through individual and communal prayers is common among world religions, and studies have shown that shared religion is a source of social capital (Coleman, 1988; Furseth, 2017). Referring to the Quran, and sending goodwill prayers to the wider known and unknown audiences is salient in *CWR!* In fact, almost each post by users or admin is reciprocated in a prayer, an expression of faith or a common destiny in the comments. The most frequent responses to updates about covid, for example, are in the original or transliterated Arabic phrase *Alhamdulillah*, and a translingually composed prayer, *Allah critical patients ko sehat de Ameen* (May Allah bless critically ill patients with health. Amen). The phrase *Alhamdulillah* is a form of gratitude to God literally meaning that all praise is to God, and a popular response in stating one's well-being. This phrase functions along with *Jazak'Allah* (may God reward you) abbreviated as *jzk* to thank, *Masha'Allah* (if God wills) to express faith in God, and *Insha'Allah* (God-willing) to commit. Their deployment illustrates people's dispositions to draw upon local literacies and practices in online groups to create a shared sense of religiosity and contentment among members. Because disaster management in Islam is treated as an opportunity for people to purify their faith (Nuryana & Fauzi, 2020), *CWR!* petitionary requests are often relational. Instead of religious norm enforcement, seeking prayers is invitational, persuasive and interpersonal in *CWR!*, knitting together a diverse virtual community similar to offline religious communities that create civic engagement and social capital (Sarkissian, 2012). Though to actuate how such expressions of faith play a role in the shared happiness or emotional capital of the society would need to be empirically researched, here it suffices that these forms of prayer and the Arabic script itself encapsulate both physical and metaphysical connections that are simultaneously worldly and spiritual. Reference to the suffering



**Figs. 11 and 12** Requests for prayer accompanied by the prayer and its translation

and request for collective prayers are frequently supplemented with images of the original text from Scripture, an authentic reference to religious books, and translation (as in Figs. 11 and 12). Besides English, Arabic and Urdu, a combination of images and other visual resources juxtaposed in the online post with the written word, do not replace the language, but just represent new modes working together in powerful ways (see also Lee & Barton, 2013).

The supplication in Example 12 that God is my Lord, and I do not associate a partner with Him” affirms the Muslim belief that though medical information and aide is helpful, only God has the ultimate power of alleviating the epidemic. The prayer thus strengthens the relational ties among people in Pakistan—a country that has more than 96% Muslim population.

## 5 Conclusion: Social Capital in Networked Translingual Spaces

In some earlier research, I traced the cultivation of social capital in the language of schooling in Pakistan (Ashraf, 2008) that showed people’s affinity with languages is often through varied patterns of their individual and cultural habitus. In this chapter, I have returned to that conceptualization to draw upon the cognitive, structural and relational dimensions of social capital showing how language-in-use fosters health literacy discourse and intercultural communication. I have presented a comprehensive set of data from different time segments and modalities that give an overview of a popular Facebook group’s affordances in building bridges and bonding among a highly diverse population during the pandemic in Pakistan. Doing so, I demonstrate that in influencing health outcomes and healthy behaviours, language as a code and as a discourse of multilingual literacies is reciprocated in the group through norm adoption, cultural terminologies and the affordances of social media thereby granting it legitimacy. The multilingual analysis is illustrative of social capital in

intercultural online communication. Given the dearth of literature on the intercultural communicative practices of Pakistani users' linguistic practices in web-bound spaces, this study is representative of the content and engagement to which a typical Pakistani is generally exposed on Facebook, especially with regard to COVID (health) literacy practices.

Examining the interplay of languages, shifts to and from the two dominant languages, English to Urdu, emoticons and other digital tools, in fact, confer more autonomy upon members of online communities, though such practices are discouraged in educational settings and education policy (Ashraf, 2022; Ashraf et al., 2014). Given that Pakistan's national language is Urdu, the government, or the Facebook group would normally disseminate the information in Urdu or translate English to Urdu. However, the posts by the administrators or the government do not follow a uniform consistent language policy throughout my dataset. Nor do the members. Rather they emerge as participants in the co-construction of a health narrative in the translanguing code. The study probed whether there were any rules that directed these norms. By examining the languages and practices that users privilege, it is obvious that the central languages in their literacy practices are English and Urdu, and are often plurilingual, aligning with the offline Pakistani experience (see also Khan et al., 2022). Though in discussing the varied patterns of member posts and comments, Urdu cannot be decoupled from English, translanguing norms show that phoneme representation outperforms the orthographic representation of Urdu language. Transliteration is privileged over translation, and lay terms over technical. Members exert a distinct control over their language choices and their manner of engaging with the audience. For English language educators, it increases the significance of translanguaging pedagogies, as networked multilingual spaces create their own norms in using English. The wealth of data on language and intercultural communication on the web, in fact, affirms the call to revisit health literacy and general standards as languages which were earlier only recognized as oral repertoires now are increasingly being written down. To conclude, increased trust is conducive to the production of social capital because as theorists acknowledge "who you know" affects "what you know" (Nahapiet & Ghoshal, 1998; Coleman, 1988) and *how you redefine yourself and your options*. This discourse analysis of Pakistani health literacy clearly demonstrates the point.

## References

- Abbasi, K. (2020, December 11). Mismatched public health communication costs lives in Pakistan. *Language on the Move*. <https://www.languageonthemove.com/mismatched-public-health-communication-costs-lives-in-pakistan/>
- Akhtar, H., Afridi, M., Akhtar, S., Ahmad, H., Ali, S., Khalid, S., Awan, S. M., Jahangiri, S., & Khader, Y. S. (2021). Pakistan's Response to COVID-19: Overcoming National and International Hypes to Fight the Pandemic. *JMIR Public Health and Surveillance*, 7(5), e28517. <https://doi.org/10.2196/28517>

- Androutsopoulos, J. (2015). Networked multilingualism: Some language practices on Facebook and their implications. *International Journal of Bilingualism*, 19(2), 185–205. <https://doi.org/10.1177/1367006913489198>
- Androutsopoulos, J. (2020). Trans-scripting as a multilingual practice: the case of Hellenised English. *International Journal of Multilingualism*, 17(3), 286–308. <https://doi.org/10.1080/14790718.2020.1766053>
- Anwar, A., Malik, M., Raees, V., & Anwar, A. (2020). Role of Mass Media and Public Health Communications in the COVID-19 Pandemic. *Cureus*, 12(9), e10453. <https://doi.org/10.7759/cureus.10453>
- Ashraf, H. (2008). The language of schooling and social capital in Pakistan. *National University of Modern Languages Research Magazine*, 1, 73–89.
- Ashraf, H. (2022). The ambivalent role of Urdu and English in multilingual Pakistan: a Bourdieusian study. *Language Policy*. <https://doi.org/10.1007/s10993-022-09623-6>
- Ashraf, H., Hakim, L., & Zulfikar, I. (2014). English for Academic Purposes in Plurilingual Pakistan. In I. Liyanage & T. Walker (Eds.), *English for academic purposes (EAP) in Asia. Critical new literacies* (pp. 33–49). Sense Publishers.
- Binder & Gago (2020). *Radios in the post-pandemic world—Tools and strategies to confront the new normal: Powerful voices*. Community Media in Latin America. <https://www.comminit.com/content/radios-post-pandemic-world-tools-and-strategies-confront-new-normal>. Accessed 3 Dec 2022.
- Borgonovi, F., & Andrieu, E. (2020). Bowling together by bowling alone: Social capital and Covid-19. *Social Science & Medicine*, 265, 113501. <https://doi.org/10.1016/j.socscimed.2020.113501>
- Bourdieu, P. (1985) The forms of capital. In J. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). Greenwood.
- Bourdieu, P. (1986). The forms of capital. In J. G. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). Greenwood.
- Burke, M., Joyce, E., Kim, T., Anand, V., & Kraut, R. (2007). Introductions and requests: Rhetorical strategies that elicit response in online communities. In *Communities and technologies* (pp. 21–39). Springer.
- Canagarajah, S. (2009). The plurilingual tradition and the English language in South Asia. *AILA Review*, 22(1), 5–22. <https://doi.org/10.1075/aila.22.02can>
- Canagarajah, S., & Ashraf, H. (2013). Multilingualism and education in South Asia: Resolving policy/practice dilemmas. *Annual Review of Applied Linguistics*, 33, 258–285. <https://doi.org/10.1017/S0267190513000068>
- Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94, S95–S120.
- Earl, J., & Kimport, K. (2011). *Digitally enabled social change: Activism in the internet age*. MIT Press. <https://www.jstor.org/stable/j.ctt5hhcb9>
- Faraj, S., & Azad, B. (2012). The materiality of technology: An affordance perspective. In *Materiality and organizing: Social interaction in a technological world*, 237, 258.
- Farooq, U. (2020, June 30). *Drugs, doctors and donors: Pakistan turns to Corona Warriors Facebook Group*. Reuters. <https://www.reuters.com/article/uk-health-coronavirus-pakistan-facebook/drugs-doctors-and-donors-pakistanis-turn-to-corona-warriors-facebook-group-idUKKBN2412DO>. Accessed 3 Dec 2022.
- Furseth, I. (2017). Social capital and immigrant religion. *Nordic Journal of Religion and Society*, 21(2), 147–164. <https://doi.org/10.18261/ISSN1890-7008-2008-02-02>
- Gee, J. P. (1999). *An introduction to discourse analysis: Theory and Method*. Routledge.
- Gee, J. P. (2010). *How to do discourse analysis: A toolkit*. Routledge.
- Isaacs, D., & Priesz, A. (2021). COVID-19 and the metaphor of war. *Journal of Paediatrics and Child Health*, 57(1), 6–8. <https://doi.org/10.1111/jpc.15164>



Jang, I., & Choi, L. (2020). Staying connected during COVID-19: The social and communicative role of an ethnic online community of Chinese international students in South Korea. *Multilingua*, 39(5), 541–552. <https://doi.org/10.1515/multi-2020-0097>

Kawachi, I., Subramanian, S., & Kim, D. (2008). Social capital and health. In I. Kawachi, S. Subramanian, & D. Kim (Eds.), *Social capital and health* (pp. 1–26). Springer.

Khan, U., Khan, A., Khan, W., Su’ud, M., Alam, M., Subhan, F., & Asghar, Z. (2022). A review of Urdu sentiment analysis with multilingual perspective: A case of Urdu and roman Urdu language. *Computers*, 11(3), 1–29. <https://doi.org/10.3390/computers11010003>

Kye, B., & Hwang, S.-J. (2020). Social trust in the midst of pandemic crisis: implications from COVID-19 of South Korea. *Research in Social Stratification and Mobility*, 68, 100523. <https://doi.org/10.1016/j.rssm.2020.100523>

Lee, C. (2022). Researching multilingual digital discourse. In C. Vasquez (Ed.), *Research methods for digital discourse analysis* (pp. 139–158). Bloomsbury.

Lee, C., & Barton, D. (2013). *Language online: Investigating digital texts and practices*. Routledge.

Lion, R., Meertens, R. M., & Bot, I. (2002). Priorities in information desire about unknown risks. *Risk Analysis: An International Journal*, 22(4), 765–776. <https://doi.org/10.1111/0272-4332.00067>

Liu, W., Fan, X., Ji, R., & Jiang, Y. (2019). Perceived Community Support, Users’ Interactions, and Value Co-Creation in Online Health Community: The Moderating Effect of Social Exclusion. *International Journal of Environmental Research and Public Health*, 17(1), 204. <https://doi.org/10.3390/ijerph17010204>

Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. *Academy of Management Review*, 23(2), 242–266. <https://doi.org/10.2307/259373>

Noreen, N., Atta-Ur-Rehman, S., Naveed, I., Khan Niazi, S., & Furqan, I. (2021). Pakistan’s COVID-19 Outbreak Preparedness and Response: A Situational Analysis. *Health Security*, 19(6), 605–615. <https://doi.org/10.1089/hs.2021.0006>

Nuryana, Z., & Fauzi, N. A. F. (2020). The Fiqh of disaster: The mitigation of covid-19 in the perspective of Islamic education-neuroscience. *International Journal of Disaster Risk Reduction*, 51, 101848.

Papacharissi, Z. (2015). *Affective publics: Sentiment, technology, and politics*. Oxford University Press.

Paton, D., & Irons, M. (2016). Communication, sense of community, and disaster recovery: A Facebook case study. *Frontiers in Communication*, 1(4), 1–12. <https://doi.org/10.3389/fcomm.2016.00004>

Piller, I., Zhang, J., & Li, J. (2020). Linguistic diversity in a time of crisis: Language challenges of the COVID-19 pandemic. *Multilingua*, 39(5), 503–515. <https://doi.org/10.1515/multi-2020-0136>

Putnam, R. D. (1994). Social capital and public affairs. *Bulletin of the American Academy of Arts and Sciences*, pp. 5–19.

Putnam, R. D. (2001). *Bowling alone: The decline of social capital in America*. Simon & Schuster.

Sarkissian, A. (2012). Religion and civic engagement in Muslim countries. *Journal for the Scientific Study of Religion*, 51(4), 607–622. <https://doi.org/10.1111/j.1468-5906.2012.01677.x>

Sato, E. (2022). *Translanguaging in Translation: Invisible Contributions that Shape Our Language and Society*. Multilingual Matters.

Semino, E. (2021). “Not Soldiers but Fire-fighters” – Metaphors and Covid-19. *Health Communication*, 36(1), 50–58. <https://doi.org/10.1080/10410236.2020.1844989>

Siddiqui, A., Ahmed, A., Tanveer, M., Saqlain, M., Kow, C. S., & Hasan, S. S. (2021). An overview of procurement, pricing, and uptake of COVID-19 vaccines in Pakistan. *Vaccine*, 39(37), 5251–5253. <https://doi.org/10.1016/j.vaccine.2021.07.072>

Spilioti, T. (2019). From transliteration to trans-scripting: Creativity and multilingual writing on the internet. *Discourse, Context & Media*, 29, 100294. <https://doi.org/10.1016/j.dcm.2019.03.001>

Stellefson, M., Paige, S., Apperson, A., & Spratt, S. (2019). Social Media Content Analysis of Public Diabetes Facebook Groups. *Journal of Diabetes Science and Technology*, 13(3), 428–438. <https://doi.org/10.1177/1932296819839099>

- Thoresen, S., Blix, I., Wentzel-Larsen, T., & Birkeland, M. S. (2021). Trusting others during a pandemic: Investigating potential changes in generalized trust and its relationship with pandemic-related experiences and worry. *Frontiers in Psychology, 12*, 698519. <https://doi.org/10.3389/fpsyg.2021.698519>
- Vita, V. (2020, August 12). Bridging new and traditional media in the fight against Covid-19. *Language on the Move*. <https://www.languageonthemove.com/bridging-new-and-traditional-media-in-the-fight-against-covid-19/>. Accessed 3 Dec 2022.
- WHO (2020). Covid-19 in Pakistan: WHO fighting tirelessly against the odds (Nov. 9, 2020). *World Health Organization*. Accessed from <https://www.who.int/news-room/feature-stories/detail/covid-19-in-pakistan-who-fighting-tirelessly-against-the-odds>.
- Zhang, J., & Centola, D. (2019). Social networks and health: New developments in diffusion, online and offline. *Annual Review of Sociology, 45*, 91–109. <https://doi.org/10.1146/annurev-soc-073117-041421>
- Pérez-Sabater, C. (2022). Mixing Catalan, English and Spanish on WhatsApp: A case study on language choice and code-switching. *Spanish in Context, 19*(2), 289–313.

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