Culture Matters: A Survey Study of Social Q&A Behavior

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Abstract

Online social networking tools are used around the world by people to ask questions of their friends, because friends provide direct, reliable, contextualized, and interactive responses. However, although the tools used in different cultures for question asking are often very similar, the way they are used can be very different, reflecting unique inherent cultural characteristics. We present the results of a survey designed to elicit cultural differences in people's social question asking behaviors across the United States, the United Kingdom, China, and India. The survey received responses from 933 people distributed across the four countries who held similar job roles and were employed by a single organization. Responses included information about the questions they ask via social networking tools, and their motivations for asking and answering questions online. The results reveal culture as a consistently significant factor in predicting people's social question and answer behavior. The prominent cultural differences we observe might be traced to people's inherent cultural characteristics (e.g., their cognitive patterns and social orientation), and should be comprehensively considered in designing social search systems.

Introduction

The recent rise in popularity of online social networking services (SNS) has not only provided a platform for creating and maintaining social ties, but also offers new ways for people to more effectively reach out to others in their information seeking and sharing. For example, online status messages are sometimes used to broadcast questions to one's social network (Morris et al. 2010).

People turn to their social networks to find information instead of searching on their own for many reasons. It is often easier to phrase a request in natural language than in keywords, and friends can provide more direct, reliable, contextualized, and interactive responses. However, now that the questions people ask their networks are often digitally mediated, we believe that there is an opportunity to use algorithmic search to augment this natural question asking behavior, as well as to use social structures to improve the solitary search experience.

People present distinct cognitive patterns and social orientations across cultures. These can affect how they ask questions, seek information, and socialize. Because social search involves intensive information and social processes, it is important to understand the role culture plays when designing mechanisms to support it. We explore cultural differences in people's social question and answer (Q&A) behaviors across two Western countries (the United States and the United Kingdom) and two Asian countries (China and India). It has been shown that Western cultures are associated with an analytic and low-context cognitive pattern, along with individualism, while Asian cultures are associated with a holistic, high-context cognitive pattern, along with interdependence and collectivist social orientation (Nisbett et al. 2001; Varnum et al. 2010). One can expect to see these differences reflected in social question asking behavior.

To study the impact of culture on social search, we conducted a survey of 933 people from the four aforementioned countries, but within one organization and from similar job roles. The survey asked participants about the questions they ask of their social network, their motivations for asking and answering questions, and their preferences among different SNS tools for social Q&A. Cultural differences emerged in all of these aspects of social Q&A. In particular, compared with other demographic factors, cultural characteristics (as correspond to the individual's country) appear to be the most significant in shaping people's perception and behavior. Our high-level findings suggest that Asian users are more likely to use SNS for social Q&A, and that they involve more social considerations in the Q&A process. This is consistent with their high-context, interdependent, and socially-oriented cultural characteristics, and should be comprehensively considered in designing social search systems.

Related Work

Social Search

The term social search broadly refers to the process of information seeking with the assistance of social resources, and includes the processes of search that draw upon user-generated content or latent social structures (Morris et al. 2010). In order to understand the role and potential of social search, Pirolli (2009) developed a model of social information foraging, and Evans and Chi (2008) identified different stages when social interactions are involved during a search process.

Online social tools enable people to reach others efficiently in information seeking. Evans et al. (2009) distinguished between *public asking* and *targeted asking*, which can be supported by different types of social media. Question-answering sites support public asking by allowing people to seek answers from the world at large, and have gained tremendous popularity across countries; examples include Yahoo! Answers and Baidu Knows (Adamic et al. 2008; Yang & Wei 2009). On the other hand, people might target a specific community or part of their social network via SNS tools such as Instant Messaging (IM) (Nardi et al. 2000) or status message updates (Morris et al. 2010).

Questions asked of one's social network can lead to a more personalized, interactive answers than broadly targeted questions, and, in addition to finding information, can help strengthen social bonds. Morris et al. (2010) surveyed how people ask their social network through Facebook and Twitter status messages, and Efron and Winget (2010) analyzed questions asked on Twitter; both studies found a high proportion of subjective and socially-oriented questions.

Cultural and Computer Mediated Communication

In this paper, we look at the impact of culture on social search. In cultural sociology and psychology, East Asian cultures are often considered to demonstrate a more holistic pattern in contrast to the more analytic pattern of Western cultures. Thus Westerners tend to be context-independent, more narrowly focused, and use formal logic, while East Asians are field-dependent, broadly focused, situational, and dialectical (Nisbett et al. 2001; Varnum et al. 2010). This difference corresponds to cultures' social orientation between individualism vs. collectivism: Western cultures value independence, individualism, autonomy, and self-achievement (Hofstede 1980); in contrast, Asian cultures emphasize interdependence, harmony, relatedness, and connection (Hofstede 1983; Singelis 1994; Triandis 1995). In addition, many generic differences associated with each culture may also interact with and shape the culture, such as value systems (Aristotelian vs. Confucian intellectual traditions) (Lloyd 1996; Pye 1985), religions (Dollinger 1988), economic ideology (Ralston et al. 2007), and industrialization and geographic mobility (Kitayama et al. 2009).

Several dimensions have been identified to characterize culture: power distance, individualism, masculinity, uncertainty avoidance, context, and time (Hall 1976; Hofstede 1983; Hofstede & Bond 1988). With regard to the most relevant dimensions to the current study, Asian cultures are associated with high-context cognitive and social patterns, high tolerance for uncertainty, and polychronic time perception. Thus people tend to maintain deep, long-term, and multifaceted relationships that have high value and distinct boundaries, communicate with implicit and high-context information, be social-process oriented, and be highly distractible and susceptible to interruptions. In contrast, Western people are characterized by an explicit communication style, open-grouping, short and low-commitment relationships, linear time manner, and high uncertainty avoidance (Hall 1976; Hall 1990).

There is a rapidly growing literature on cultural issues related to how people interact with computers (Setlock & Fussell 2010), with a focus on the adoption and usage of collaboration tools. Asian users have been found to prefer multi-party chat, audio-video chat, and emoticons in IM (Kayan et al. 2006), to benefit more from rich communication media in negotiation (Veinott et al. 1999), and to be less satisfied with asynchronous communication (Massey et al., 2001). Setlock and Fussell (2010) found Asians involve additional considerations when deciding on appropriate communication tools, especially related to their ability to support social processes. Yang et al. (2010) found the social dynamics of an American-based Q&A site, Yahoo! Answers, to be more conversational than the Chinese site Baidu Knows and the Korean site Naver KnowledgeIn.

These differences in people's online collaboration may reflect the inherent cultural characteristics as suggested by cultural theories. Social Q&A and social search integrate information and social processes that are highly culture-specific; understanding this motivates our current study.

Survey Methodology

In order to understand how culture affects people's social question asking behavior, we designed a survey and deployed it in four different countries. We selected two countries each from two cultural groups: the United States (US) and United Kingdom (UK) as representing a Western cultural orientation, and China (CN) and India (IN) as representing East and South Asian high-context cultures. Although the two countries in each group are generally similar, there are divergences within group as well as across group. For example, China has much higher long-term orientation and lower individualism indexes than India, according to Hofstede's cultural measures (Hofstede 2011).

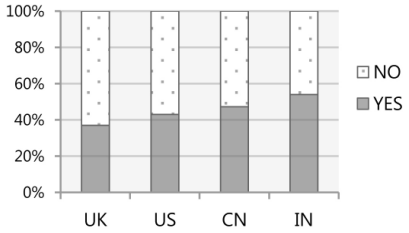

Figure 1. Percentage of participants with SNS status message Q&A experience, by country.

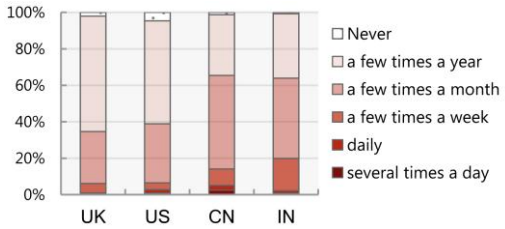

Figure 2. Question posting frequency via SNS status message, by participant's country.

Thus Chinese might place greater value on long-term connectedness, harmony, and responsibilities to the collective.

The survey was designed to elicit usage and preference of SNS as a social Q&A tool, and the underlying motivations and concerns during the informational and social process. Building on work by Morris et al. (2010), we collected instances of people's social Q&A experience via SNS status messages by asking participants to copy and paste into our survey the most recent question they posted to their social network. These collected questions can thus be examined as a sample from the general distribution of all questions people ask to their social network through online SNS tools. In addition, respondents shared the motivations behind their asking and responding behaviors.

Participants

In total, 933 people completed the survey (UK: 265, US: 251; CN: 165, IN: 252). Participants were recruited by randomly sampling 1200 people from each country from the address book of a large multinational software corporation. The average response rate was 22% for each country except China, where it was 14%. Respondents received an entry in a drawing in exchange for their participation.

All participants were employees of the software company, to better control for other background variables. As such, they do not necessarily reflect a representative sample within a country's general population. However, they do represent people in similar job roles with similar education levels and technology access across the four countries. Additionally, educated, technologically savvy people tend to be early adopters whose behavior may lead the trend of the following few years.

Analysis

Since the primary focus of this study is to evaluate the cultural effects in people's social Q&A behavior, the main goal of the analysis has been to discover the cultural differences in the dimensions we measured. Since cultural differences are often susceptible to various confounding factors such as gender and age, we conducted regression analyses to control for these variables.

Our measures are of three types: 1) binomial (e.g., have SNS experience or not?); 2) nominal (e.g., question type); and 3) ordinal (e.g., frequency of posting). We employed logistic regression models with specific modifications for each data type. We report the *p*-value for the Wald test of each factor in the regression model, controlling for all other factors. The *p*-value of a factor corresponds to the change of the goodness of fit (AIC or BIC) between models; thus, the *p*-value describes the size of the predictive power of culture relative to other factors.

SNS Use

Overall, there was no significant difference in the amount of SNS use across culture, as measured by the frequency of status message updates. We use status message updates to quantify usage because it is a representative function of SNS and relevant for the social Q&A behavior we are studying. Respondents rated frequency on a six-level scale, from "never" to "multiple times a day." Although culture and gender were not significant factors, age was, with younger people updating more frequently ($p<10^{-10}$).

Almost half (45%) of respondents reported that they had used SNS status messages to ask questions of their social network. The proportion varied by age ($p<0.0001$) (with younger users more likely to ask questions) and by country ($p<0.05$). As shown in Figure 1, individuals in the two Asian countries were more likely to have adopted SNS status messages for social Q&A. Respondents who reported asking questions through SNS tools were further asked to assess how often they did so. Figure 2 shows that participants from Asian countries reported higher frequencies of this kind of social Q&A behavior ($p<0.001$).

The rate at which status message updates were used for question asking shows that in addition to asking questions more often, participants in China and India were more likely to co-opt their SNS status to ask a question. The regression on the difference of the frequency of updating status message versus asking questions (measured as a pseudo-ratio of status updates that are used to ask questions) indicates that culture is significant ($p<10^{-6}$) while other variables (specifically, age and gender) are not.

Respondents reported which SNS services they used to post questions. In the US, UK, and India, Facebook was dominant (being reported by 97%, 78%, and 87% of participants respectively). Twitter was also popular (10%, 20%,

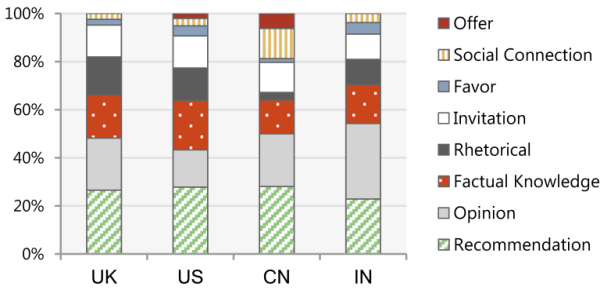

Figure 3. The distribution of sampled question type, by country.

and 4%), with some Indian respondents also using Orkut (9%). Chinese users used diverse SNS services. Kaixin and Renren, clones of Facebook in Chinese, accounted for one-third of the usage. Chinese respondents also used Windows Live Messenger (MSN) frequently (13%). A few users used Facebook (12%) and Twitter (4%), which must be accessed through virtual private network (VPN) services.

Participants who indicated having used SNS status messages for Q&A on any of these services were asked to copy and paste their most recent question into the survey. The variation among these questions provides a rich picture of the differences in Social Q&A across cultures.

The Questions Posed to Social Networks

We collected 420 examples of status message questions. The provided questions were, on average, asked within one month of the survey. Here we examine the different habits across cultures regarding the types, topics, and importance of these questions, as well people's motivations for asking. The reader should bear in mind that the survey population might tend to ask more technology questions than typical, and may have self-censored the questions chosen to share.

Question Types

We begin by looking at how question ***type,*** or the nature of a question, varied across culture. We adopt the categories from Morris et al. (2010)'s study that identified eight frequent types of questions people ask their social network through SNS tools. Respondents self-classified the type of the questions they provided. Figure 3 displays the distributions of the sampled questions across the 8 types. Consistent with prior findings in (Morris et al., 2010), questions belonging to the ***Recommendation***, ***Opinion***, and ***Factual Knowledge*** question types compose the majority of the questions in all four countries.

Cultural differences emerge in ***Rhetorical*** and ***Social Connection*** questions. In particular, Asians (and especially Chinese) tended to ask more ***Social Connection*** questions ($p<0.01$), and were less likely to ask ***Rhetorical*** questions ($p<0.05$). This might suggest that Chinese users tend to utilize social Q&A for very practical social purposes. For example, one participant directly asked, "Who knows [person's name] and [another person's name]?" and another requested, "Please contact me if you are going to Renqiu [a city] from Beijing on New Year's day."

#	Reason	Culture
a	Travel	$p = 0.63$
b	Technology	$p = 0.01$
c	Shopping	$p = 0.58$
d	Science	$p = 0.61$
e	Restaurants	$p = 0.03$
f	Relationship	$p = 0.15$
g	Home/Family	$p = 0.89$
h	Health/Beauty	$p = 0.45$
i	Finance	N/A
j	Ethics	$p = 0.34$
k	Entertainment	$p = 0.005$
l	Current events	$p = 0.099$
m	Career	$p = 0.003$
n	Art/Lit	$p = 0.86$

Table 1. Cultural effects of question topic. ($p<0.05$) marked in gray.

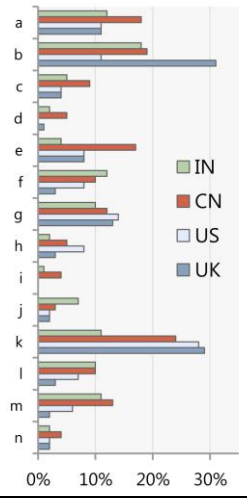

Figure 4. Frequencies of topics, by country.

There are some differences across gender and age as well. For example, older people were more likely to ask ***Factual Knowledge*** ($p=0.01$) questions, and men were less likely to ask ***Social Connection*** ($p<0.05$) and ***Rhetorical*** ($p<0.05$) questions.

Question Topics

Another dimension of a question is its ***topic***. Building on the social Q&A topics identified by Morris et al. (2010), we asked participants to self-categorize their sampled questions into 14 categories. As shown in Figure 4, ***Entertainment*** and ***Technology*** are the most popular topics respondents asked their social networks about, followed by ***Travel*** and ***Home/Family***.

Topical differences among countries emerge. Table 1 presents the regression results of cultural effects controlling for other demographic variables. The largest difference appears in the ***Entertainment*** category, in that Indian respondents were the least likely to ask questions of this topic while it is the most common topic for the other three countries. Asian respondents tended to ask more questions about ***Career***/***Professional*** (e.g., "Anybody looking for Developer openings we have DEV openings"). This is consistent with social networks playing a more pronounced role in China and India in actual *networking*, or finding jobs and opportunities through one's acquaintances (Bian & Ang 1997; Iversena et al. 2009; Knight & Yueh 2008).

Interestingly, Chinese respondents were more likely to ask for restaurant recommendations. This might be related

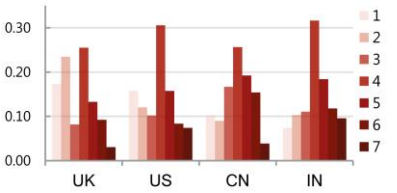

Figure 5. Frequencies of importance scores.

UK	3.337
US	3.731
CN	3.962
IN	4.169

Table 2. Mean value

to a tradition of frequent banquets and information needs for the diverse Chinese cuisine. In addition, in topic ***Current Events***/***News***, there is a marginal difference between Asian countries and the UK. There can be relatively limited access to news through mainstream media in China. For example a Chinese participant asked, "I heard there was an earthquake in Shanghai today?" However, this is not the case for India, and follow-up studies are necessary to examine this relationship in greater detail.

The regression tests indicate that culture explains more of the variance in individuals' topic preference in social Q&A than other variables. Less significant effects include women tending to ask about ***Home***/***Family*** (p<0.001), and older respondents tending to ask about ***Careers*** (p<0.01).

Perceived Importance of Questions

Participants tended to perceive their questions as more important in Asia than in the West (UK < US < CN < IN). Participants who reported having a recent experience of social Q&A through SNS status messages were asked to evaluate how important it was for them to obtain an answer. Importance was measured on a 7-point Likert scale, from 1 = very unimportant to 7 = very important. Figure 5 shows the distribution of importance scores respondents assigned to their questions. The cultural effect is significant (p<0.005), while the control demographic variables are non-significant in this measure.

Motivations for Asking

Respondents further selected the reason(s) that made them choose to pose their question to their social network. Figure 6 shows the frequencies of each reason and Table 3 presents the regression results of cultural effect controlling for other demographic variables.

The main reasons cited for engaging in social Q&A were that information obtained from one's social network was more trusted, of higher quality, more contextual, and more personal. Many reported deriving social utility from asking by, for example, staying socially connected, letting others know about their interests, and having fun. Relative to the above cited social and informational utilities, few cited having difficulty finding information with traditional search engines as a motivation for turning to social Q&A.

Culture again plays a role in people's motivations to ask their social networks. Chinese respondents were less likely

#	Reason	Culture
a	Not urgent	p = 0.43
b	It is fun to ask network	p = 4.6e-06
c	Aware of my interest	p = 0.036
d	Stay socially connected	CN/US p = 0.098
e	I had asked some people but did not get useful result	CN/IN p = 0.060
f	It is faster	p = 0.016
g	It is easier	p = 0.078
h	I didn't know how to search	p = 0.77
i	Search engine won't work	p = 0.5
j	I tried web search but did not get answer	CN/US p = 0.082
k	Need subjective opinion	CN/US p = 0.047
l	Quality is high	p = 0.76
m	Personalized answer	p = 0.65
n	From targeted people	p = 0.074
o	I trust people/answers from my network	IN/CN p =0.044

Table 3. Cultural effects on motivations for asking.[2]

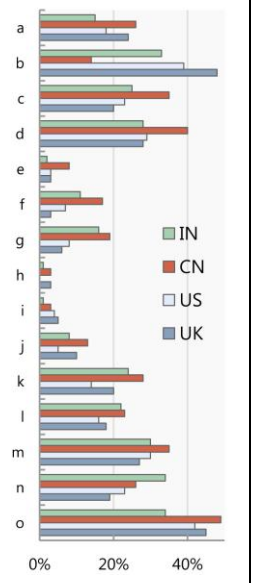

Figure 6. Frequencies of motivations.

to ask questions just for fun, although they did pose questions to make others aware of their interests and to stay socially connected. This is consistent with two social characteristics associated with Chinese culture: 1) in a high-context and collectivist culture, people maintain deep, long term and multifaceted social relationships (Hall 1976, 1990); and 2) as a prevention regulatory focused culture which seeks safety and responsibilities and avoids losses, Chinese might prioritize "fun" less than in a promotion focused culture (Higgins 1997; Lee et al. 2000). In addition, Chinese and Indian respondents were more motivated to seek information provided by their particular social network, as reflected in a higher need for answers "from targeted people" and "subjective opinions." This echoes their high-context culture, in that people in such cultures might prefer that flexible and contextualized information that can be generated by through social Q&A interactions.

Interestingly, people from both China and India reported asking questions of their networks because it was easier. This might reflect two interrelated factors: 1) a highly socially-bonded culture could foster a more efficient mechanism for mutual help (e.g., undirected social reciprocity); 2) people in these cultures may feel comfortable and familiar with the strategies for social Q&A. This suggests that Chinese and Indians might have a higher readiness for social search mechanism designs that involve incentives.

[2] The p-values correspond to Wald tests of combined culture variables in the model. Individual pairs (e.g., "CN/US") correspond to the significance of dummy variables in the logistic regression.

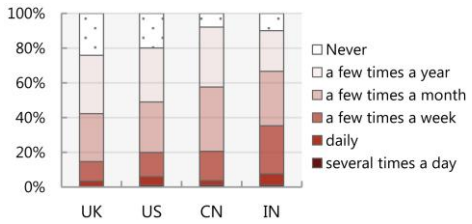

Figure 7. Frequency of answering questions.

We also notice that although trust is the primary reason among Indian participants for asking a question, they were less likely to report this reason than Chinese participants. Trust was particularly important to Chinese participants, and we observed three instances where they asked for receipts from others to use for their own reimbursement. This is a common way for Chinese people to get paid by their employer; they submit irrelevant receipts to get "reimbursed" and thus avoid taxes. This kind of social request can only be conducted within a reliable social network.

(De)Motivations for Answering

Participants were also asked about how they typically respond when they see a Q&A request from their social network. Figure 7 plots the distribution of respondents who have different frequencies of answering questions through SNS tools. Age plays a significant role ($p<10^{-8}$), in that younger people tend to answer more frequently, just as they also more frequently ask and update status through SNS tools. Cultural effects are the second most significant ($p<10^{-4}$) as we can see that Asian countries are associated with higher answering frequencies, which is consistent with their preference of asking through SNS.

Motivations for Answering

Participants reported on the factors that they believed motivated them to answer questions posted on SNS (see Table 4 and Figure 8). Altruism ("I want to help my friends/colleagues") and feeling good ("I enjoy being helpful to others") are the most common reasons across all countries, followed by "I am interested in the question," "I have good relationship with the asker," and "I want to be connected through these interactions."

Culture interacts with motivation in the following way. Asians, and especially Chinese, were motivated by the expectation of social reciprocity. A particularly common motivation for those two countries was that they "will be helped if [they] help others." They were also more likely than Westerners to consider answering as a way of maintaining social bonds. Both motivations imply a higher emphasis on social ties and obligations. Further indications that obligation is a motivating factor in social question answering in India is that respondents were more likely to feel that they were "expected" to answer, and less likely to be interested or have time.

Other demographics only entered into motivations to answer in that women were more likely than men to factor how much time they had into motivation ($p<0.01$).

#	Reason	Culture
a	I want to help friends	p = 0.96
b	I will get help if I help	p = 4.7e-08
c	To be connected	p = 2.7e-05
d	I enjoy being helpful	p = 0.16
e	Answering is fun	p = 0.76
f	I am an expert	p = 0.6
g	I have time	p = 0.0005
h	I am interested	p = 0.0008
i	We have good a relationship	p = 0.35
j	The asker helped me	p = 0.51
k	It is expected of me	p = 0.0033

Table 4. Cultural effects in answering motivation. Significant values ($p<0.05$) marked in gray.

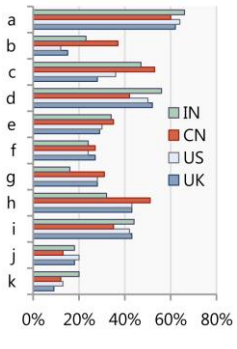

Figure 8. Frequencies of reasons.

Reasons to Not Answer

The main reasons cited for not answering included being uninterested, being too busy, or not knowing the answer, with Chinese participants admitting to not knowing the answer slightly more often than others (see Table 5 and Figure 9). For Chinese, privacy was the most cited reason for not answering. Potentially, in a high-context culture where government censorship is common, people might want to provide more personalized and contextualized answers to the asker individually. On the other hand, Indian respondents consistently gave less consideration to interestingness and time availability as constraints.

Not knowing the asker very well appears to be a more important reason for not answering among the two Western countries than for the two Asian countries. Previously we saw that Chinese and Indian participants were more likely

#	Reason	Culture
a	Don't know the answer	p = 7e-04
b	I am afraid to be wrong in public	p = 0.12
c	Have privacy concern	p = 2.2e-06
d	Questions posted publicly do not seem serious to me	p = 0.17
e	I don't have time	p = 0.045
f	Not interesting	p = 0.026
g	Don't know the asker very well	p = 0.0047
h	The asker was not very responsive before	p = 0.82
i	Asker is lazy and could have found the answer	p = 0.069

Table 5. Cultural effects in answering demotivation. Significant values ($p<0.05$) marked in gray.

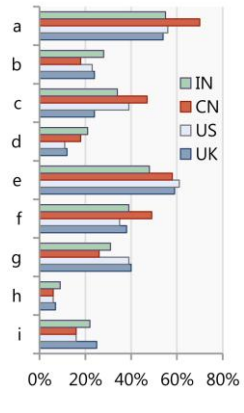

Figure 9. Frequencies of reasons.

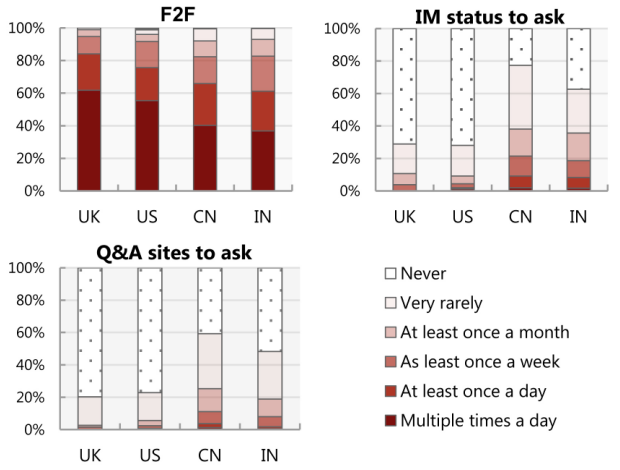

Figure 10. Examples of Q&A method comparison.

to answer to develop connections and build reciprocity, and this may lead them to be more likely to want to build social capital by replying to their weak ties.

We also detected a couple of gender and age differences in reasons for answer avoidance. Women were more likely to consider privacy an issue (p<0.001), and the strength of tie was less important to older individuals (p<0.01).

SNS as Social Q&A Tools

Although in this paper we have focused on the use of status message updates for question asking, there are many other ways people can ask questions of their social network. We asked our participants to share their preferences for different approaches, and observed that Asian users tended to adopt emerging SNS tools for social Q&A while people from the United States and the United Kingdom tended to stick to more traditional communication tools such as face-to-face, phone calls, and email. In terms of preference, participants rated their frequencies of using a variety of method on a six-level scale, from "never" to "multiple times a day." As shown in Table 6, people reported different frequencies of using these Q&A methods across countries, and cultural differences were consistently large. Figure 10 shows example plots that compare the frequencies across countries for a few selected Q&A methods, and the pattern seen generally holds for other methods as well.

Less significantly, demographic variables also affected participants' preference for Q&A methods. Age is often related to lower frequency of using each method. Gender sometimes matters as well; for example, females prefer public forums while males prefer private forums and Q&A sites.

Discussion

Online social networking services have enabled and extended people's ability to ask questions of their social networks. In this study we have shown that culture plays an important role in the frequency, motivation, and content of Q&A initiated via SNS status messages. This high-level finding suggests it is important that designers be aware of cultural boundaries when building social knowledge sharing and social search systems. In fact, we find that culture accounts for more of the variance in individual behavior than demographic variables such as age and gender. These differences exist despite the strong similarities of our study population across countries, with all participants coming from similar job roles, working for the same company, and sharing the same rates of posting status updates via SNS.

Method	Culture	Gender	Age	Job-nature	Job-role
F2F	2.35e-12	0.8	0.0054	0.0021	0.049
Phone	0.038	0.83	0.83	3.0e-09	5.6e-10
Email	0.0	0.21	0.74	0.013	0.51
IM	1.6e-07	0.56	0.84	0.0074	0.23
SNS status	1.9e-06	0.32	0.00093	0.031	0.45
Microblog	6.6e-07	0.04	0.0018	0.013	0.77
IM status	0.0	0.56	0.083	0.088	0.085
Q&A sites	6.4e-13	0.044	0.30	0.57	0.018
Public forums	5.6e-14	0.0033	0.082	0.014	0.014
Private forums	2.4e-09	0.0038	0.97	0.32	0.31
p-value for each predictor variable in regression model is listed					

Table 6. Differences in Q&A method preference.

One difference we observed that the propensity to use status updates to ask questions was greater in the two Asian countries we studied, China and India, than in the two Western countries, the United States and the United Kingdom. Users in the Asian countries attached more importance to receiving answers, potentially because of the difference in types of questions asked; Chinese and Indian users were more likely to post professional networking questions in their status updates, but less likely to post questions for fun or to post rhetorical questions. Of the two Asian countries, Chinese users were even less likely to pursue fun in asking questions than Indians, reflecting their prevention regulatory focused culture.

Information seeking conducted via question asking is particularly likely to result in finding information that is subjective and context-aware. Additionally, the process is flexible and supports multitasking with rich social functions. These all cater to Asian users' specific need for both information and social utility. Indeed, we observed that individuals in China and India chose social search over search engines because by providing context it garnered them the subjective opinions they prefer to obtain from their social network.

Possibly because of all the reasons mentioned above, our Asian respondents were particularly likely to find social Q&A through SNS to be a convenient and efficient way to seek information. Beyond convenience, users in China and India tended to engage in social Q&A to enhance social connections and encourage future reciprocity. All these suggest that Asian users weave more social elements in

their Q&A interactions. We might thus expect that they have a higher readiness and motivation for some social search mechanisms that involve incentives. However, their high context-dependence and subtle social norms can bring various challenges.

On the other hand, Q&A tools designed for users in the UK and US may do well to focus on the fun and entertainment aspects of question asking. There may also be an opportunity to encourage users in these countries to expand their use of social networks past what is merely fun or geeky into something that is more valuable. The subtle cultural differences we observe should be comprehensively taken into account when designing for specific cultures.

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