Face Challenging Perception and Media Feature Preference for The Task of Delivering Bad News: A Cross-Cultural Comparison

Nan (Tina) Wang  
Eastern Illinois University  
nwang@eiu.edu

Traci A. Carte  
Kennesaw State University  
tcarte@kennesaw.edu

Abstract

Delivering bad news is a frequently occurring, unpleasant and challenging communication task. Literature on bad news communication attributes the challenge of delivering bad news to individuals’ concern about hurting other’s face, a concept originated and dominant in China but applicable to other cultures. As the interactions at the workplace become increasingly computer-mediated, communication media may be leveraged to deliver bad news. The existing literature offered some insights on technology (including communication media) preference as well as cultural differences in it. However, existing research focused on the technology aspect. This study examines cultural differences in technology preference due to the task aspect. Specifically, focusing on the task of delivering bad news, this study distinguishes between the two mechanisms via which cultural differences may emerge, i.e., task perception (i.e., face challenging perception) and task response (in terms of media feature preference). Data is collected using surveys from clients of a multinational public relations company. Results show that there is no cultural difference (China versus non-China) in face challenging perception, that individuals’ face challenging perception increases their preference for high reheasability and for less natural symbol sets, and that, holding face challenging perception constant, there is marginally supported cultural difference in the preferences for reheasability but no difference in the preference for symbol sets. Theoretical and practical implications are discussed.

Keywords: Media preference, task-technology/media fit, culture, bad news communication, face concern, task perception, task response, media feature


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Introduction

In organizations, individuals deliver bad news routinely (Bies, 2013; Krone et al., 1997; Waldron and Krone, 1991), e.g., negative performance feedback (Ilgen and Davis, 2000), customer service failures (Michel, Bowen and Johnston, 2009), and the refusal of requests (Izraeli and Jick, 1986). However, delivering bad news is an unpleasant communication task and many individuals struggle with it. For example, research on the MUM effect found that people sometimes keep mum and do not transmit the bad news at all (Rosen and Tesser, 1970); or even if people actually transmit the bad news, they may delay the communication (Tesser et al., 1971) or positively distort the bad news (Fisher, 1979). However, effectively and appropriately delivering bad news may diminish negative consequences (e.g., damage to interpersonal relationships) associated with this unpleasant task while ineffective or inappropriate delivery may amplify negative consequences (e.g., Maitlis and Ozcelik, 2004; Sussman and Sproull, 1999).

Modern communication technology may facilitate delivering bad news (e.g., O’Sullivan, 2000; Westerman et al., 2014). For example, researchers found that message senders prefer to deliver bad news via computer-mediated communication (CMC) and that the communication of bad news becomes more timely and accurate when communication medium (i.e., email) is employed (Sussman and Sproull, 1999). So how do individuals select communication media for the unpleasant and challenging task of delivering bad news?

The existing IS literature offers several theoretical perspectives for understanding individuals’ technology (including communication media) preference (or utilization or choice). One widely used theory is task-technology fit (TTF) theory (e.g., Goodhue and Thompson, 1995). TTF argues that “for an information technology to have a positive impact on individual performance, the technology must be utilized, and the technology must be a good fit with the tasks it supports” (p.213). Implicit in their arguments is that what drives individuals' utilization of technology is their subjective evaluations of fit while what determines performance is objective fit, a point that was made explicit recently (Goodhue, 2007). However, a review of the literature shows that existing research on TTF focused extensively on objective fit (Cane and McCarthy, 2009). Subjective evaluations of fit, which drives technology utilization, has received very limited attention but is nevertheless important as technology “must be utilized before they can deliver performance impacts” (Goodhue and Thompson, 1995). It is also necessary to point out that TTF discusses tasks in general and empirical TTF research has utilized a number of different tasks.

Focusing specifically on communication tasks, media synchronicity theory (MST) (Dennis et al., 2008) is a recent and widely recognized theoretical perspective to understand communication media utilization. MST argues that different media capabilities (and features) are suitable (or fit) for different communication processes (i.e., conveyance process which focuses on information transmission and convergence process which focuses on developing shared understandings). MST also emphasizes the importance of understanding media preference at the feature (rather than medium) level, i.e., media feature preference. Empirical studies have applied MST to understand, for example, individuals’ media feature preference for deceptive communication (e.g., Carlson and George, 2004; Carlson et al., 2004).

Overall, both TTF and MST, which might be viewed as a special case of TTF for communication tasks, recognizes that individuals’ technology (including media) preferences depend on their subjective assessments of task-technology/media fit.
Moreover, such assessments of fit depend on both the task and the technology aspects. Another factor that may affect individuals’ technology (including media) preference is culture. The importance of individual characteristics (e.g., culture) for technology preference was recognized in earlier TTF research (e.g., Goodhue, 1995; Goodhue and Thompson, 1995), but a recent meta-analysis found that individual characteristics have received far less attention than other factors (Cane and McCarthy, 2009).

Existing research on cultural differences in technology preference focused on the impact of culture on the technology aspect, which consequently affects individuals’ subjective evaluations of fit and ultimately technology preference (see Kappos and Rivard, 2008; Leidner and Kayworth, 2006 for reviews). For example, Straub (1994)’s cross-cultural comparison found that Japanese workers have lower perceptions of social presence and information richness towards e-mail compared to US workers, leading Japanese workers to be less likely to choose email compared to their US peers. However, the potential impact of culture on the task aspect has received little attention.

Goodhue, when reflecting on the progress of TTF research, argued that “a key missing construct that is too often not part of our thinking is the task of the user and the fit of the IT artifact to that task” (2007, p.221).

The influence of culture is likely to be prominent for communication tasks in general and for the task of delivering bad news in particular. Culture is argued to be the foundation for communication. For example, Samovar et al.(1981) argued that “culture and communication are inseparable because culture not only dictates who talks with whom, about what, and how the communication proceeds, it also helps to determine how people encode messages, the meanings they have for messages, and the conditions and circumstances under which various messages may or may not be sent, noticed, or interpreted.” (p.24). When it comes to delivering bad news, cultural differences are likely to be especially noticeable. Researchers recognized that individuals are likely to have three potentially competing and overlapping communication goals: task efficiency (i.e., communicating effectively), relationship preservation (i.e., maintaining existing relationships between message senders and receivers), and self-presentation (i.e., maintaining a positive image in front of communication partners as well as others who become party to the contents of the communication) (e.g., Canary et al., 2003; Sheer and Chen, 2004). Individuals’ media preferences depend on individuals’ assessments of a medium’s fit to one, two, or all three of these goals. In the task of delivering bad news, there are conflicts between the three goals, which provides space for cultural differences to emerge.

Culture may affect the task aspect via two major mechanisms (DiMaggio, 1997), i.e., task perception (i.e., how individuals perceive the task) and task response (i.e., how individuals respond to the task should they have the same perception). On one hand, researchers have long recognized that an individual’s perception of task characteristics is socially constructed (e.g., O’Reilly and Caldwell, 1979; Salancik and Pfeffer, 1978); on the other hand, culture may affect an individual’s “ideal response” or “logics of action” to the focal task holding the task perception constant. That is, even if individuals perceive the focal task similarly, they may still have different answers regarding “how should I respond to the task?” Hence, although communication media may potentially help with delivering bad news, individuals from different cultures may have different perceptions and/or responses towards this task. In this paper, we seek to address the following two research questions:

**RQ1:** Are there cultural differences in task perception regarding delivering bad news?

**RQ2:** Are there cultural differences in task response (in terms of media
The rest of this paper is organized as follows. We first discuss the theoretical bases, i.e., task-technology fit (TTF) and media synchronicity theory (MST). Next, we discuss the chosen communication task (i.e. delivering bad news). Then, we discuss the relevant culture phenomenon for delivering bad news (i.e., face) and how cultural differences in the emphasis on face may lead to differences in the perceptions (i.e., face challenging perceptions) of and/or responses to (in terms of media feature preferences) the task of delivering bad news, leading to our hypotheses. After that, we discuss data collection, analysis and findings. Finally, we discuss theoretical and practical implications as well as limitations and future research directions.

This paper contributes to the literature in the following ways. First, this study contributes to the technology preference literature by answering the recent call for more attention to the task aspect (Goodhue, 2007) and by examining the potential impact of culture on the task aspect. Moreover, we distinguish between the two mechanisms via which culture may affect the task aspect, i.e., task perception and task response, a distinction often neglected in the existing research. Second, this study contributes to the bad news communication literature in three ways, i.e., focusing on the well-being of message receivers (i.e., not hurting receivers’ face) (rather than the well-being of message senders), suggesting additional factors relevant for bad news communication in computer-mediated environment, and examining media preference at the feature level. Finally, this study contributes to the literature on conversational constraints theory by suggesting the importance of considering the role of communication media.

Literature Review

We start with discussing two major theoretical perspectives on technology preference. Then we discuss the focal communication task, i.e., delivering bad news. Finally, we discuss how may culture affects individuals’ perceptions of and/or responses to the task of delivering bad news.

Theoretical Perspectives on Technology Preference

Here we first briefly discuss TTF which provides a general understanding of individuals’ technology preference for *tasks in general*. After that, we move on to MST which focuses specifically on *communication tasks* (and hence might be viewed as a special case of TTF for communication tasks) and is the major theoretical perspective used in this paper. MST elaborates two communication processes (i.e., conveyance and convergence), and indicates that how a technology gets used (i.e., appropriation factors) is also important. Further, it adds additional insights by offering a set of media capabilities (consists of media features). The two theoretical perspectives are summarized in Figure 1.

TTF argues that task characteristics and technology characteristics together determine fit, which affects technology utilization and ultimately task performance. However, what is implicit in TTF arguments is that the “fit” evaluation driving technology utilization or adoption is actually individuals’ subjective evaluation of fit. Individuals can interpret the same technology or task characteristics differently resulting in different evaluations of fit, consequently leading to different technology preferences (Davis, 1989; Goodhue, 1995). Empirical studies of TTF have supported the impact of fit on technology utilization at both individual and organizational levels (e.g., Cooper and Zmud, 1990; Davis, 1989).
Focusing specifically on communication tasks, MST examines the fit between media capabilities and communication processes underlying the task (Dennis and Valacich, 2002; Dennis et al., 2008). According to MST, a communication task has two underlying processes, a conveyance process, the focus of which is to transmit information and enable the analysis of information, and a convergence process, the focus of which is to develop shared understandings. MST argues that for a conveyance process, which usually involves transmission of large amounts of information as well as retrospective processing and deliberation, higher processing capability characterized by less natural symbol sets, higher rehearsability and higher reprocessability is beneficial; while for a convergence process, which involves rapid, back and forth transmission of small amounts of information, less processing and more verification to develop shared understandings, higher transmission capability characterized by higher transmission velocity, lower parallelism and more natural symbol sets is beneficial. A summary of MST can be found in Table 1.

In summary, MST (and its general form TTF) essentially argues that interpretations of technology characteristics and of task characteristics effect subjective evaluations of fit, which consequently effect technology/media preference. While past studies have examined subjective evaluations of fit resulting from differences in technology interpretations (i.e., the characteristics of a certain technology and how technology characteristics should be used, e.g., Straub,1994), the other possibility (i.e. differences in task interpretations) has been understudied. One important factor that may lead to different task interpretations is culture (e.g., O'Reilly and Caldwell, 1979). For example, freely sharing different opinions may be seen as a way to contribute to the organization in some cultures, but may be interpreted negatively (e.g. embarrassing or challenging to the organization’s leadership) in other cultures (e.g., Hwang, 1987; Tjosvold et al., 2005). The influence of culture is likely to be especially prominent for the task of delivering bad news.
Table 1 - Communication Processes, Media Capabilities and Features in MST (Dennis et al., 2008)

<table>
<thead>
<tr>
<th>Underlying Communication Process</th>
<th>Conveyance Process:</th>
<th>Convergence Process:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Transmission − new, diverse, larger</td>
<td>Transmission − familiar, distilled, smaller</td>
</tr>
<tr>
<td></td>
<td>Processing − retrospective, deliberation</td>
<td>Processing − verify, adjust, negotiate</td>
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<table>
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<tr>
<th>Supporting Media Capability for Each Communication Process</th>
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<tbody>
<tr>
<td>Processing capability</td>
</tr>
<tr>
<td>Feature</td>
</tr>
<tr>
<td>Rehearsability (+)</td>
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<tr>
<td>Reprocessability (+)</td>
</tr>
<tr>
<td>Symbol sets (-)</td>
</tr>
</tbody>
</table>

Note: +/- indicates the direction for the influence of features on media capabilities. For example, rehearsability is positively related to processing capability.

The Task of Delivering Bad News

When people are delivering bad news, they are facing not just the objective, instrumental goal (i.e., effectively communicating the news), but also more subjective, relational (i.e., maintaining relationship with receivers) and self-presentational (i.e., preserving one’s image in the eyes of others) goals of communication (Canary et al., 2003). The dilemma here is that in the situation of delivering bad news, there are conflicts between the instrumental goal, and the relational and self-presentational goals (e.g., Rosen and Tesser, 1970; Sheer and Chen, 2004). That is, to achieve the instrumental goal individuals may have to compromise relational and self-presentational goals. From the message senders’ perspective, researchers have found that delivering bad news, apart from being psychologically unpleasant to senders, may have negative impacts on the interpersonal relationships between message senders and receivers, even if message senders are simply transmitters (instead of decision makers) of the bad news; the bad news communication may also affect the self-presentation of both message senders and receivers (Bond, 1987; Maynard, 1996; Tesser and Rosen, 1975; Yariv, 2006). As a result, message senders are reluctant to deliver the bad news, often delaying the delivery (Tesser et al., 1971), positively distorting the bad news (Fisher, 1979), and sometimes not transmitting the bad news at all (Rosen and Tesser, 1970).
Task Perception of Delivering Bad News: Face Challenging Perception

The literature on bad news communication agrees on the role of face challenging concern in explaining the challenge of delivering bad news. Politeness theory (Brown and Levinson, 1987) suggested that the difficulty of delivering bad news may be due to the implicit social norm to not harm others' face. Face can be defined as “the respectability and/or deference which a person can claim for himself from others, by virtue of the relative position he occupies in his social network and the degree to which he is judged to have functioned adequately in that position as well as acceptably in his general conduct” (Ho, 1976, p.883). From message senders’ perspectives, if they cannot enhance others’ face, they are at least expected to help save others’ face (Chiao, 1981), such as avoiding criticizing people in public (Hwang, 1987). Hence, message senders may perceive the task of delivering bad news to be face challenging for message receivers, a situation that message senders generally try to avoid considering the potential damages to relational and self-presentational goals (Ho, 1976). Similarly, Bond and Anderson (1987) argued that senders’ hesitation to deliver bad news is mainly due to concerns about interpersonal display of sensitivity. Recently, a synthesis of literature suggested that face threatening concern (i.e., senders’ fear of distressing receivers) mediates the link between news valence and hesitation to share the news (i.e., senders’ felt reluctance and behavioral delay, Dibble, 2014).

Cultural Differences in Face Challenging Perception

The impact of culture on perception has been recognized (e.g., DiMaggio, 1997; Hong et al., 2000; Markus and Kitayama, 1991). “Perception is a retrospective process: though the experience is immediate, it derives from recall and reconstruction” (Salancik and Pfeffer, 1978, p.228). Individuals’ cognitive values create a screen between the situation and their eventual perception of the situation and affect individuals’ field of visions (i.e., the directions they look and listen), selective perceptions (i.e., what they actually see and hear), and interpretations (i.e., how they attach meaning to what they see and hear) (Hambrick and Mason, 1984). Thus, when individuals face a task, their culturally-bounded cognitions make them more sensitive to certain aspects of the task and affect their “perception and judgment of the affective components” (Salancik and Pfeffer, 1978, p.229) of the task.

Although the concept of face is not unique to China, it originated in China and is of greater importance in Chinese society (Ho, 1976). In China, face plays a dominant role in social relations and communications (Cardon, 2009), and people demonstrate a great concern for face (Cai et al., 2000; Kim and Nam, 1998). Cardon (2009) provided a model of face practices in Chinese culture (e.g., giving face, protecting face, vying for face, and not considering face practices). For each individual, while it is not necessary to strive to gain face, losing face is a serious matter that affects one’s ability to function effectively in society (Ho, 1976). The greater emphasis on face in Chinese culture may affect message senders’ perceptions of the task of delivering bad news (i.e., face challenging perception).

While individuals in general may perceive the task of delivering bad news to be face challenging for receivers (Brown and Levinson, 1978), individuals within different cultures may perceive so to varying extents. Due to the greater emphasis on face in Chinese society, we expect that message senders from China will perceive delivering bad news to be more face-challenging to receivers than message senders from other cultures where face is emphasized to a lesser extent. Our argument can find indirect support in research on conflict which suggests that culture affects individuals’ perceptions of conflict (e.g., Wall and Callister, 1995). Thus, we hypothesize
**H1**: Message senders from culture where face is greatly emphasized (i.e., China) will perceive the task of delivering bad news to be more face-challenging to message receivers.

**Task Response to Delivering Bad News: Media Feature Preferences**

Modern communication media provide a variety of features that may facilitate the task of delivering bad news. Applying MST to the problems associated with delivering bad news, it would appear that the conveyance process may be more problematic. That is, message senders are not effectively transmitting the information they are supposed to transmit, compromising the instrumental goal for relational and self-presentational goals.

Existing research on bad news communication suggests that the three features comprising processing capability (i.e., symbol sets, rehearsability, and reprocessability, as in Table 1), which supports conveyance process, are highly relevant for bad news communication. Specifically, the amount of social cues transmitted (i.e., symbol sets) has been found to be associated with social presence, and consequently, how people communicate (e.g., Sproull and Kiesler, 1986); rehearsability is also relevant according to the findings that senders may fine tune a negative message before sending so that they are comfortable with the content of the message (e.g., Fisher, 1979); reprocessability is a feature relevant for message receivers only. Research has found that receivers often have trouble processing messages upon receiving bad news (e.g., Feather, 1968) but may or may not be able to reprocess the messages after the initial emotional period fades away depending on the level of reprocessability provided by media. While the study of message receivers’ preferences for communication media would likely make for an interesting study, it is beyond the scope of this research. As such, we focus on the two media features relevant to message senders for delivering bad news, i.e., symbol sets and reprocessability.

**Symbol Sets**

Face challenging concern may increase individuals’ preferences for less natural symbol sets due to the favorable impacts on the relational and self-presentational goals of communication. The inability of communication media to transmit symbol sets may influence social perceptions (Daft and Lengel, 1986; Williams, 1977). That is, when social cues are reduced, the social context and presence of others is also reduced (Rice, 1993; Short et al., 1976; Sproull and Kiesler, 1986), creating interpersonal distance, a sense of detachment, and a lower sense of personal responsibility about the content of the message (Sheer and Chen, 2004). The reduced social contexts and presence of others may reduce the embarrassment of bad news receivers, help preserve self-presentation of receivers who do not need to be so concerned about their self-presentations (e.g., reactions) in front of others upon receiving the news, and help main relationship between message senders and receivers (O’Sullivan, 2000; Sheer, 2012; Westerman et al., 2014). Thus, face challenging concerns may increase individuals’ preference for less natural symbol sets to make the bad news communication less face challenging for receivers.

**Rehearsability**

Face challenging concern may also increase individuals’ preferences for high reprocessability. In general, media with high reprocessability provide individuals opportunities to frame the message to make sure that the message is delivered appropriately. In the case of delivering bad news, reprocessability enables message senders to craft the message so that they are comfortable with the message and have an opportunity to consider potential face-challenging impacts on receivers caused by the bad news (e.g., Dibble et al., 2015; O’Sullivan, 2000; Westerman et al., 2014).
The carefully crafted message is likely to help preserve self-presentation of message receivers as well as interpersonal relationship between message senders and receivers. A recent review on emotion and computer-mediated communication (CMC) found that the opportunity to carefully think about and craft messages before-hand is a major reason for individuals’ preference of CMC over face-to-face communication in emotional communication (Riordan and Kreuz, 2010). Hence, message senders’ face challenging perceptions may increase their preference for high rehearsability to deliver bad news.

In summary, to mitigate the face-challenging impacts on receivers and the potential damages to the interpersonal and self-presentational goals of communication, message senders may utilize the media features of less natural symbol sets and higher rehearsability to deliver the bad news. The greater senders’ face challenging perceptions, the higher their preferences for less natural symbol sets and for high rehearsability. Hence,

\[ H2: \text{Face challenging perceptions are positively related to individuals’ preferences for less natural symbol sets and for high rehearsability to deliver bad news.} \]

### Cultural Differences in Media Feature Preference

Culture may also affect how individuals respond to the task holding task perception constant. Culture may affect individuals’ ideal types (Orru, 1991), decision rules (Nisbett and Wilson, 1977), or logics of action (DiMaggio, 1997), consequently leading to different responses. For example, research on consumer product choices found that, when there are conflicts between product quality and price, individuals from East Asian cultural, which emphasize “moderation and harmony in a conflict” (Briley et al., 2000, p.158), are more likely to choose compromise products (i.e., balanced between quality and price) than their North American peers who have higher tendency to sacrifice one for the other. More related to face, conflict research has found that cultural differences in face concerns led to differences in conflict management styles. For example, individuals from China, who have higher concern for others’ face, are more likely to use the avoiding style to manage conflict than their US peers who are more likely to use the dominating style (e.g., Ting-Toomey et al., 1991).

A culture’s greater emphasis on face may also lead individuals within that culture to have higher preferences for media features appropriate for protecting receivers’ face, holding face challenging perception constant. Cultural differences in the emphasis on face lead to differences in the priority of relational and self-presentation goals compared to the instrumental goal of communication (e.g., Wall and Callister, 1995). Consequently, individuals within culture where face is greatly emphasized may have higher preferences for media features (i.e., less natural symbol sets and high rehearsability) that may make the bad news communication less face-challenging to receivers and that help achieve the relational and self-presentation goals of communication.

\[ H3: \text{Holding face challenging perception constant, message senders from culture where face is greatly emphasized (i.e., China) have higher preference for less natural symbol sets and for high rehearsability to deliver bad news.} \]

### Method

We collected data from clients of a multinational public relations company located in four countries (i.e., China, Germany, Sweden and UK) using policy capturing (e.g., Webster and Trevino, 1995). Each participant was presented, in random order, with two scenarios (Appendix), a bad news scenario and a good news scenario.
developed from previous studies (e.g., Ho, 1976; Rosen and Tesser, 1970; Sproull and Kiesler, 1986). After each scenario, questions regarding face challenging perception and media feature preferences were asked.

Surveys were distributed to a contact person, who was excluded from the study, in each client company so that appropriate participants within their organization (i.e., people who perform the role of delivering bad/good news as described in the scenarios) could be identified. In total, 143 participants were identified. Participants from UK were provided with English surveys, those from China were provided with Chinese surveys, and those from Germany and Sweden were provided with surveys in both English and their native language (i.e., German or Swiss) and had the freedom to choose the version that they were more comfortable completing. The Chinese, German and Swedish surveys were prepared and translated by bi-lingual graduate students to ensure that no discrepancies existed. The response rate was 43.2% (i.e., 62 out of 143). Demographic information for our participants is provided in Table 2.

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<tr>
<th>Table 2 - Demographic Information Summary</th>
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**Measures**

**Objective Task Characteristic.** This was manipulated using different communication scenarios developed from existing literature (e.g., Rosen and Tesser, 1970). We treated objective task characteristic as a dummy variable with bad news scenario coded as 1 and good news scenario coded as 0.

**Culture.** Literature on face suggests that face plays a more dominant role in China than Western cultures. Hence, a China versus non-China comparison may maximize the potential cultural differences on task perceptions and/or task responses for delivering bad news. We asked participants “with which culture do you primarily identify” and the collected data was treated as a dummy variable with China coded as 1, and the other countries coded as 0.

**Task Perception (i.e., Face Challenging Perception).** Task perception was measured by asking participants to what extent do they perceive the communication as described in each scenario will cause the employee (i.e., message receiver) to lose face (i.e., experience embarrassment or a loss of dignity/prestige). A score 7 (out of 7-point Likert scale) indicates that participants perceive the communication to be highly face-challenging for receivers.

**Task Response (i.e., Media Feature Preference).** To capture media feature preferences, we asked “when choosing a communication medium to deliver this news, what capabilities would you like the medium to provide?” Preference for each feature was measured with a single item following Carlson and George (2004). Rehearsability was captured by the item, “[the medium]
should enable me to carefully think about the message before delivering it to the employee," and less natural symbol set was captured by "[the medium] should provide some buffering between the employee and I." Preferences for both features were measured using 7-point Likert scale.

Control Variables. We controlled for participants’ gender, age and work experience, which might affect participant’s perceptions of or responses to the task (e.g., Ahuja and Thatcher, 2005; Dishaw and Strong, 2003; Gefen and Straub, 1997).

Hypothesis Testing

Descriptive statistics are listed in Table3. We first checked to make sure that our manipulation of message valence (i.e., good versus bad news) was successful. Results (Figure 2) demonstrate that participants perceive the bad news scenario to be significantly more face challenging to receivers (p<0.0001). Hence, our manipulation of message valence was successful.

The test of H1 (i.e., cultural differences in face challenging perception) is essentially a measurement invariance/equivalence test. Existing research on measurement invariance test focused on multi-item composite measures (see Vandenberg, 2002; Vandenberg and Lance, 2000 for reviews). For single item measure as in our case (i.e., face challenging perception is measured using a single-item), the test of measurement invariance across populations (i.e., culture) can be executed by looking at the correlation between face challenging perception and culture. That is, whether culture predicts face challenging perception. Results show that subjects from China do not differ in their face challenging perception with their non-China peers. Thus, H1 was not supported. Future analysis shows that the majority of variances is within-culture variance, suggesting the absence of hidden culture-level effect (e.g., Markham, 1988).

To test H2 (i.e., face challenging perception affects media feature preferences for delivering bad news) and H3 (i.e. cultural differences in media feature preferences for delivering bad news holding face challenging perception constant), we ran multivariate regression with preferences for the two media features as the dependent variables, individuals’ face challenging perception, objective task characteristic (good news versus bad news), culture (China versus non-China) and the interaction between objective task characteristic and culture as independent variables, and gender, age and working experience as covariates. Results are as follows (Table 4).

The positive impacts of face challenging perception on preference for rehearsability and for less natural symbol sets suggest that the more face challenging the task is perceived to be to receivers’ face, the higher individuals’ (or senders’) preferences for rehearsability and for less natural symbol sets, supporting H2. Moreover, we tested whether the impacts of face challenging concern on preference for rehearsability (p<0.01) and on preference for less natural symbol sets (p<0.001) are statistically different. F-test result showed that the impacts of face challenging perception on the preference for the two features are significantly different (F= 5.88, P<0.001), suggesting that as the communication task is perceived increasingly challenging to receivers’ face, senders’ preference for less natural symbol sets increases faster than that for rehearsability. The interaction between culture and objective task characteristic tests H3, which argued that, holding face challenging perception constant, participants from China have higher preferences for the features of less natural symbol sets and of rehearsability to deliver bad news than their non-China peers. Results showed that H3 was marginally supported for rehearsability, but not for symbol sets.

1 We repeated the analysis using MANOVA and got similar results
Table 3 - Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>s.d.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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<td>1. Rehearsability</td>
<td>5.94</td>
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<td>2. Less Natural Symbol Sets</td>
<td>4.21</td>
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<tr>
<td>3. Face concern</td>
<td>3.48</td>
<td>1.987</td>
<td>0.271</td>
<td>0.334</td>
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</tr>
<tr>
<td>4. Objective Task Character</td>
<td>0.50</td>
<td>0.501</td>
<td>0.172</td>
<td>0.239</td>
<td>0.568</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Culture</td>
<td>0.31</td>
<td>0.462</td>
<td>-0.049</td>
<td>0.200</td>
<td>-0.037</td>
<td>0</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Age</td>
<td>37.70</td>
<td>6.578</td>
<td>0.059</td>
<td>0.087</td>
<td>0.022</td>
<td>0</td>
<td>-0.164</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>7. Experience</td>
<td>14.22</td>
<td>7.122</td>
<td>0.140</td>
<td>-0.101</td>
<td>0.050</td>
<td>0</td>
<td>-0.116</td>
<td>0.895</td>
<td>1</td>
</tr>
<tr>
<td>8. Gender</td>
<td>0.45</td>
<td>0.499</td>
<td>0.067</td>
<td>0.035</td>
<td>0.007</td>
<td>0</td>
<td>-0.111</td>
<td>-0.216</td>
<td>-0.134</td>
</tr>
</tbody>
</table>

Note: +: p<0.1, *: p<0.05, **: p<0.01, ***: p<0.001

Figure 2 - Face Challenging Perception by Scenario and Culture

Table 4 - Multivariate Regression Results

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Preference for Rehearsability</th>
<th>Preference for Less Natural Symbol Sets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face Challenging Perception</td>
<td>0.123**</td>
<td>0.289***</td>
</tr>
<tr>
<td>Objective Task Characteristic (Bad news=1, Good news=0)</td>
<td>-0.080</td>
<td>0.054</td>
</tr>
<tr>
<td>Culture (China=1, non-China=0)</td>
<td>-0.175</td>
<td>0.535</td>
</tr>
<tr>
<td>Culture*Objective Task Characteristic</td>
<td>0.513+</td>
<td>0.850</td>
</tr>
<tr>
<td>Gender (Male=1, Female=0)</td>
<td>-0.034</td>
<td>0.049</td>
</tr>
<tr>
<td>Work Experience</td>
<td>0.048*</td>
<td>-0.065+</td>
</tr>
<tr>
<td>Age</td>
<td>0.122</td>
<td>0.180</td>
</tr>
</tbody>
</table>

Covariates

<table>
<thead>
<tr>
<th>Preferences</th>
<th>R-Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusted R-Square</td>
<td>9.3%</td>
</tr>
<tr>
<td></td>
<td>15.6%</td>
</tr>
</tbody>
</table>

Note: +: p<0.1, *: p<0.05, **: p<0.01, ***: p<0.001; n=124
Discussion

Focusing on a frequently occurring, unpleasant and challenging communication task (i.e., delivering bad news), this paper examined potential cultural differences in task perception and/or task response. Literature on bad news communication suggests that the (most) relevant culture phenomenon for bad news communication is the varying extent of concerns for challenging others’ face (Brown and Levinson, 1978). Face, which originated and dominant in Chinese society but applicable to other cultures, is argued as “one of the most important yet under-studied concepts that could help clarify Asian-Western differences in organizational behavior” (Kim and Nam, 1998, p.523). To increases potential cultural differences, we did a China versus non-China comparison to identify potential differences in task perception (i.e., face challenging perception) and task response (in terms of media feature preferences).

For task perception, contrary to our expectations, there was no cultural difference in face challenging perception. A deeper look into the related literature helps shed some light on this unexpected result. Existing research on face concerns between Chinese and non-Chinese cultures suggests that individuals in both cultures have an overarching drive to present themselves positively to others (Kim and Nam, 1998). However, differences exist in the priority of individual versus collective goals (Hofstede, 1984). It has been argued that Chinese employees’ emphases on face are woven into desires to achieve and foster harmony within the work environment including putting collective goals ahead of individual goals (Kim and Nam, 1998; Triandis et al.,1990). Hence, cultural differences in face challenging perception would have been elicited, should individuals’ unsatisfying performance were linked to poor collective outcomes in the scenario (Markus and Kitayama, 1991). That is, Chinese participants are likely to perceive delivering bad news regarding hurting collective goals to be more face challenging than non-Chinese participants.

As to task response (i.e., media feature preference), previous research on media preference for bad news communication tends to focus on senders’ well-being, e.g., a lower sense of personal responsibility, reduced anxiety, and being physically protected from negative responses from receivers (e.g., Bond and Anderson, 1987; Canary et al., 2003; Folger and Skarlicki, 2001; Riordan and Kreuz, 2010; Sheer and Chen, 2004; Sheer, 2012; Sussman and Sproull, 1999; Tripp and Bies, 2009; Uysal and Oner-Ozkan, 2007; Weenig et al., 2014). Our study focused on receivers’ well-being (i.e., protecting receivers’ face) and found similar results.

This study found that individuals’ preferences for rehearsability increase with the extent to which the task is perceived to be face challenging to receivers. Rehearsability has been well studied and well-promoted as an “additive capability” (Carte and Chidambaran, 2004) resulting in improved conveyance process (i.e., message transmission) (Dennis et al., 2008). In the context of delivering bad news, senders, who are concerned that the message they are charged with communicating is face challenging to receivers, may prefer high rehearsability to craft the message to find that “sweet spot” of effectively communicating the message and dampening the damage on receivers’ self-presentation and their relationship. Also, it is important to note that carefully wording a message in recognition of face challenging potential to receivers does not necessarily mean that the message will be distorted (Sussman and Sproull, 1999).

As to symbol sets, our study found that individuals’ preferences for less natural symbol sets increase with face challenging perception. Literature on self-disclosure suggests that social cues and social presence of others increase individuals’ self-awareness and consequently their
concerns about maintaining self-presentation and image in front of others, potentially increasing receivers’ negative experiences (e.g., feeling stressed, embarrassed) upon receiving bad news. In their review on emotion and CMC, Riordan and Kreuz (2010) found that one reason for the preference of electronic communication is to soften negative consequences on receivers, as “It hurts more when done in person” (p. 1669).

What we are more interested in is cultural differences in task response (i.e., media feature preference) holding task perception (i.e., face challenging perception) constant. Our results showed that after controlling for face challenging perception, cultural differences existed in the preference for rehearsability (but not for symbol sets) between Chinese and non-Chinese participants. That is, to deliver bad news, Chinese participants have higher preferences for rehearsability than their non-Chinese peers even when their task perceptions are the same, but there is no cultural difference in the preference for symbol sets. A deeper understanding of cross-cultural differences in communication style helps us understand the (marginally) supported cultural difference in the preference for rehearsability and the not supported cultural difference in the preference for symbol sets.

Literature on Eastern-Western communication style suggests that one major dimension to understand cultural difference is high-versus low-context communication (e.g., Markus and Kitayama, 1991). According to Hall (1976), “a high-context (HC) communication or message is one in which most of the information is either in the physical context or internalized in the person while very little is in the coded, explicit, transmitted part of the message. A low-context (LC) communication is just the opposite; i.e., the mass of the information is vested in the explicit code” (p. 79). Eastern culture, which is suggested to have a high context communication style, uses more indirect communication and is receiver-oriented (i.e., meaning is in receiver’s interpretation), while Western culture is suggested to have a low context communication style which uses more direct communication and is sender-oriented (i.e., meaning is in the message delivered by the sender). It is necessary to point out that both Easter and Western cultures use direct as well as indirect communications, but Eastern cultures use significantly more indirect communication than Western cultures (e.g., Hall, 1983; Markus and Kitayama, 1991; Ting-Toomey et al., 1991), especially when concerned about other’s face (e.g., Brew and Cairns, 1993; Ting-Toomey, 1988).

The high-versus low-context communication is relevant to the concern for other’s face in delivering bad news. According to Goffman (1967) and related empirical studies (e.g., Brown and Levinson, 1978; Hall, 1983; Ting-Toomey et al., 1991), the greater tendency to use indirect communication indicates that high-context communication cultures (e.g., China) are more sensitive and more motivated to save others’ face and preserve interpersonal relationships.

The high-versus low-context communication may explain Chinese participants’ higher preference for rehearsability. In Chinese culture, “The attentiveness and sensitivity to others……result in a relatively greater cognitive elaboration of the other or of the self-in-relation-to-other.” (Markus and Kitayama, 1991, p.231) Hence, the more attentive and sensitive Chinese participants, who are more motivated to accommodate incompatible communication goals (i.e. task efficacy, interpersonal relationship, and self-presentation) when delivering bad news, may put more effort into anticipating and directing receivers’ interpretations of and responses to bad news to make sure that the meaning is effectively delivered to receivers and that the communication is conducted in a sensitive and appropriate way. In contrast, non-Chinese participants, for who the more important goal is explicit
communication, may focus on getting the message crossed effectively and spend less effort trying to anticipate receivers’ potential interpretations and responses (and hence less effort trying to craft messages). As a result, our Chinese participants showed higher preference for high rehearsability when delivering bad news.

The high- versus low-context communication may also explain the lack of cultural difference in the preference for symbol sets. Initially, we suspected that Chinese participants have higher preferences for less natural symbol sets than their peers as less natural symbol sets may reduce receivers’ concerns about self-presentation in front of others and related negative consequences (e.g., feeling embarrassed) that the bad news may have on receivers (e.g., Richman et al., 1999). However, our results showed that Chinese and non-Chinese participants do not differ in their preferences for symbol sets. The lack of cultural difference may be due to a counteracting preference for more natural symbol sets from Chinese participants: research suggests that in high-context communication cultures (e.g., China), individuals are more attentive and sensitive to contextual factors such as facial expressions, body languages, and relationships between communication partners (e.g., Singelis and Brown, 1995). Hence, Chinese participants may prefer more natural symbol sets to carry out their communication task effectively and appropriately, e.g., using facial expressions and eye contacts to show both the urgency of improving performance and their encouragements. That is, Chinese participants, who use more indirect communication and are more receivers-oriented, may want less natural symbol sets to reduce receivers’ concerns about their self-presentation, and meanwhile may want more natural symbol sets to effectively and appropriately carry out the task of delivering bad news. The simultaneous existence of a preference for less natural symbol sets and a preference for more natural symbol sets among Chinese participants may cancel each other out; the net result is a similar preference for symbol sets between Chinese and non-Chinese participants.

In summary, this study found that there was no cultural difference (i.e., China versus non-China) in how individuals perceive the task of delivering bad news (i.e., face challenging perception); interestingly, holding face challenging perception constant, there was (marginally) supported cultural difference in the preference for rehearsability but no cultural difference in the preference for less natural symbol sets, both might be due to the cultural differences in communication style (i.e., high- versus low-context communication).

Theoretical and Practical Implication

This study has several theoretical implications. First, this study contributes to the technology preference literature by answering the recent call for more attention to the task aspect (Goodhue, 2007) and by examining the potential impact of culture on the task aspect. TTF and MST, which might be viewed as a special case of TTF for communication tasks, recognized the importance of both task and technology aspects in affecting individuals’ subjective evaluations of fit and consequently technology preference. Yet the task aspect has received inadequate attention in the existing literature. When individuals choose a technology, they are selecting it for a certain task. Hence, technology (including communication media) preference is not meaningful without a good understanding about the task that technology support.

As to the influence of culture on technology preference, existing research either treated culture as simply the context of study without examining how culture affects individuals’ technology preference or focused on cultural differences on the technology aspect (e.g., cultural difference
in technology perception, e.g., Straub, 1994). This study focused on cultural differences on the task aspect, and more importantly, distinguished between the two mechanisms (i.e., task perception and task response) via which culture differences may emerge. This study found that for the task of delivering bad news, culture differences existed in task response (i.e., media feature preference) but not in task perception (i.e., face challenging perception). That is, even though delivering bad news is perceived similarly, individuals from different cultures (i.e., China vs. non-China) still have different preferences for media features supporting this task. Our findings suggest that the distinction between task perception and task response needs more attention in future research.

Second, this study contributes to the literature on bad news communication in three ways. Firstly, this study examined individuals’ technology preference with a focus on receivers’ well-being. Previous research largely focused on senders’ well-being (e.g., senders’ anxiety) and how senders’ concerns about their own well-being affects their media preference (e.g., Canary et al., 2003; Riordan and Kreuz, 2010). This study, on the other hand, focused on receivers’ well-being (i.e., not hurting receivers’ face) and found similar results. Hence, individuals’ deliberate media preferences for delivering bad news may be a win-win result for both parties (i.e., senders and receivers) of the communication exchange. That is, when concerned about ones’ own and receivers’ well-being, message senders prefer high reheasability and less natural symbol sets to deliver the bad news.

Secondly, this study suggests that there might be additional factors (besides face challenging concern as argued by the existing literature) relevant for bad news communication in computer-mediated environment. This study found that the preference for high reheasability was especially salient among those from culture emphasizing face (i.e., China). However, there was no cultural difference in the preference for less natural symbol sets as we suspected. We explained this unexpected finding using the high- versus low- context communication -- Chinese participants’ simultaneous preferences for less natural symbol sets (due to face challenging concern) and for more natural symbol sets (due to high-context communication style) cancel each other out, resulting in similar preferences for symbol sets with non-Chinese participants. This suggests that while politeness theory (and related works, Brown and Levinson, 1978; 1987; Dibble, 2014) alone might be sufficient to understand bad news communication in face-to-face contexts, it becomes more complicated when the communication is computer-mediated where individuals have the opportunity to leverage communication media for this unpleasant task. Future research may examine other factors relevant for bad news communication in computer-mediated environment.

Thirdly, this study contributes to the literature on bad news communication by examining media preference at the feature (rather than communication medium) level. Despite the existence of theories such as MST that open the black box of communication media, many IS researchers still understand media preference at the medium level—exceptions include some research on CMC (e.g., deception, trust, social presence) (e.g., Altschuller and Benbunan-Fich, 2013; Carlson and George, 2004) and human computer interaction (e.g., Peffers and Tuunanen, 2005). However, communication media keep on changing, e.g., phones used at some organizations may support video calls. Hence, understanding media preference at the medium level may constrain the development and applicability of our research. This study focused on media preference at the feature level, which allows our findings to apply to many communication media with related features (e.g., both email and instant messaging
have less natural symbol sets). We strongly encourage future research on bad news communication (or other communication in general) to think about communication media at the feature level.

Finally, this study contributes to the literature on conversational constraints theory (CCT) by suggesting the importance of considering the role of communication media. CCT (Kim, 2005) was developed to explain cultural differences in conversational tactic or strategy (i.e., why individuals from different cultures say what they say). CCT identifies five constraints affecting individuals’ choice of conversational tactic or strategy, i.e., two task-oriented constraints (concern for clarity and effectiveness) and three relationally-oriented constraints (concern for avoiding hurting the receiver’s feelings, concern for minimizing imposition, and concern for avoiding negative evaluation by the receiver). Moreover, CCT argues that the five constraints are universal and apply to all cultures, but there are cultural differences in the salience of those constraints. Research at the intersection of CCT and bad news communication suggested that one constraint (i.e., concern for avoiding hurting the receiver’s feelings) is particularly relevant for explaining the challenge of delivering bad news. Existing CCT research, however, neglected the role of communication media. Our findings suggest that one way for individuals to work around their concerns about hurting the bad news receiver’s feelings is to leverage certain communication media features (i.e., reheasability and less natural symbol sets). The more concerned individuals are about hurting bad news receivers’ face, the more they can benefit from leveraging those media futures, especially for those from cultures that greatly emphasize face. At a time when communication media play an increasingly dominant role at the workplace, CCT researcher need to incorporate the role of communication media into their thinking.

This study also offers practical implication by shedding light on how to leverage certain media features to deliver bad news. Despite being an unpleasant and challenging communication task, delivering bad news has to be frequently done in organizations; effectively and appropriately delivering bad news may diminish negative consequences associated with this unpleasant task. The increasing reliance on CMC at the workplace provides individuals opportunities to leverage communication media to carry out this important yet challenging task. This study suggests that when concerned about challenging others’ face, individuals, especially those from cultures that emphasize face (e.g., China), could utility communication media with high reheasability and less natural symbol sets. Moreover, even though this study conducted a China versus non-China comparison, our findings may apply to other cultures that emphasize face (e.g., South Korea).

Limitation and Future Research Direction

As with others, our study is not without limitation. A major limitation is the use of single item scale. MST has become a popular theory in the IS literature. Yet, limited efforts have been expended on developing scales to measure media features proposed by MST; empirical studies using MST generally used single item scale to measure media features (e.g., Carlson and George, 2004). To expand the use of MST in empirical studies, future research needs to develop more reliable multi-item scales measuring media features.

Another future research direction is to examine different types of bad news (e.g., news about difficulties facing one’s organization or department such as reduced resource support) and potential cultural differences in individuals’ perception and media feature preferences. It would also be valuable to investigate contingencies affecting individuals’ perception of and response to delivering bad news. For
example, how does the interpersonal relationship between bad news senders and receivers affect face challenging perception and media feature preference? Finally, as we mentioned before, it is also important to understand the receiver side. Future research may investigate receivers' perception of and media feature preference for bad news communication.

Conclusion

As the interactions at the workplace become increasing computer-mediated, communication media could be potentially leveraged to handle some unpleasant and challenging communication tasks such as delivering bad news. Meanwhile, researchers called for paying greater attention to the task that technology (including communication media) supports when understanding individuals' technology preference—when people are selecting a technology, they select it for a certain purpose or need (i.e., the task at hand). This study examined cultural differences in the perceptions of and/or responses (in terms of media feature preference) to the task of delivering bad news. Findings suggest that even though individuals from different cultures perceive this task similarly, their responses (i.e., selecting media features to support this task) may be different.

Prior Publication

An early version of this research was presented at 2016 International Conference on Electronic Business.

References


Appendix

Summary of Policy Capturing Scenarios

Bad News Scenario
You are going to communicate with an employee who has been working for your organization for many years but with whom you have mostly a professional relationship (i.e., you have very little non-work related interactions). The employee is located in the same building and is usually available through all types of media.

The purpose of your communication is 1) to inform the employee that he/she is not doing an adequate job and will therefore not receive an annual bonus, and 2) to explain why your organization made this decision and where the employee needs to improve in the future.

Good News Scenario
You are going to communicate with an employee who has been working for your organization for many years but with whom you have mostly a professional relationship (i.e., you have very little non-work related interactions). The employee is located in the same building and is usually available through all types of media.

The purpose of your communication is 1) to inform the employee that he/her is doing a good job, and is therefore recommended for promotion, and 2) to explain why your organization made this decision, and to let him/her know that you have the confidence in his/her capability for the new job and that you hope he/she will continue to do well.

About the Authors

Nan (Tina) Wang is an Assistant Professor in Management Information Systems (MIS) at Eastern Illinois University. She received her PhD from the University of Oklahoma. Her research interests include innovation adoption and implementation, computer-mediated communication, affect and affective social processes, managerial cognition, organizational communication and knowledge management. Her research uses both quantitative and qualitative research methods, and has been presented at various conferences such as ICIS and AoM and published at journals such as the Journal of Database Management. She has also worked as associate editor and mini-track chair for conferences such as ICIS and AMCIS, and has served as a reviewer for journals such as MISQ and ISR.

Traci A. Carte is an Associate Professor of IS in the Michael J. Coles College of Business at Kennesaw State University. She received her Ph.D. in MIS from the University of Georgia. Her primary research focus is on leveraging technology to deliver better outcomes for diverse teams. Professor Carte’s award-winning research has been published in such journals as Information Systems Research, MIS Quarterly, Journal of the AIS, Group Decision and Negotiation, Decision Support Systems, Database Advances and numerous national and international conference proceedings, and has been cited more than 2000 times. She served as a co-program chair for ICIS 2015, is a previous Senior Fulbright Scholar, and currently serves on the editorial board of JAIS.