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## Task-Technology Fit and Culture: Perceptions of and Media Feature Preferences for The Task of Delivering Bad News

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### ABSTRACT

Task-technology fit (TTF) suggests that what drives technology utilizations is individuals' subjective evaluations of fit. The technology aspect that gives rise to task-technology fit has received extensive attention, and researchers recently called for more attention to the task aspect. In this paper, we examine how culture may affect the task aspect of TTF, consequently leading to differences in subjective evaluations of fit and ultimately technology utilizations. Moreover, we distinguish the two mechanisms via which culture may affect the task aspect of task-technology fit, i.e., task perception and task response. Focusing on the task of delivering bad news, we examine cultural differences (China vs. Non-China) in the perception of and responses to (in terms of media feature preferences) the task of delivering bad news. Data was collected using surveys from clients of a multinational public relations company. Results show that there was no difference in task perception for delivering bad news between Chinese and Non-Chinese participants, marginally supported difference in the preferences for rehearsability, and no difference in the preference for symbol sets.

*Keywords:* Task-technology fit, culture, media feature, media preference, bad news communication, task perception, task response.

### INTRODUCTION

Task-Technology Fit (TTF) theory [1] 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 people's *utilization* of technology is their subjective evaluations of fit while what determines *performance* is objective fit, a point that was made explicit only recently [2]. However, a review of the literature shows that existing research on TTF focused extensively on objective fit [3]. We argue that subjective evaluations of fit, which drive utilization, deserve more attention as “systems must be utilized before they can deliver performance impacts” [1, p.216]. One driver of subjective evaluations of fit is culture. The impacts of culture on the technology side of TTF (and consequently subjective evaluations of fit) have received extensive attention in the IS literature [see 4 for reviews, 5]. For example, Straub [6]'s cross-cultural comparison found that Japanese workers have lower perceptions of social presence and information richness towards e-mail compared to their US peers, leading Japanese workers to be less likely to choose email compared to US workers. However, the potential impacts of culture on the task aspect of TTF have received little attention. Goodhue [2], 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” (p.221).

Culture may affect the task aspect of TTF via two major mechanisms [7], i.e., how individuals perceive the task (i.e., task perception) and how individuals respond to the task should they have the same perception (i.e., task response). On one hand, researchers have long recognized that an individual's perception of task characteristics is socially constructed [e.g., 8, 9]; 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?”

The influence of culture is likely to be especially prominent for communication tasks. Culture is argued to be the foundation for communication. For example, Samovar et al.[10] 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). Previous studies related to culture and communication media tend to treat culture as simply the *context* of the study without paying much attention to how culture affects *perceptions of and/or responses to* (in terms of media choices or preferences) the communication task. Hence, we believe that a focus on how culture interacts with task perceptions and/or task responses potentially impacting communication media fit evaluations may produce a potentially more fruitful investigation. Moreover, consistent with recent emphasis on media features [11], we focus on understanding feature-level evaluations of fit – that is to say, we investigate the perceived fit of certain media features for a communication task.

The communication task we examine in this paper is delivering bad news. We choose this particular communication task for two major reasons. First, delivering bad news is a communication task where cultural differences are likely to be more notable. Researchers recognized that when communicating, individuals are likely to have three potentially competing and overlapping 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 with the receivers as well as others who

become party to the contents of the communication) [e.g.,12, 13]. Subjective evaluations of TTF 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. Second, delivering bad news is an unpleasant task that many people struggle with. Hence, focusing on this task may provide practical understandings regarding what kinds of media are deemed appropriate for delivering bad news and why.

In summary, culture may affect the task aspect of TTF via affecting task perceptions and/or responses, consequently leading to subjective evaluations of fit. Focusing on the task of delivering bad news, 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 (i.e., media feature preferences) regarding delivering bad news?*

The remainder of this paper is organized as follows. We first discuss the theoretical bases, i.e., task-technology fit and media synchronicity theory. Next, we discuss the chosen communication task (i.e. delivering bad news), and also the perceptions of and responses to (in terms of media feature preferences) this task. Finally, 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 of and responses to the task of delivering bad news, leading to our hypotheses.

This paper contributes to the literature in the following ways. First, we extend the TTF research by examining how culture affect the task aspect of TTF, consequently leading to different subjective evaluations of fit and ultimately different technology choices. Second, we distinguish the two mechanisms via which culture may affect the task aspect of TTF, i.e., task perception and task response. Current research often blurs the two mechanisms together, leading to an inadequate understanding regarding why exactly does culture make a difference. In this paper, we examine potential cultural differences in individuals' task perceptions and/or task responses for a frequently occurred communication task (i.e., delivering bad news). Also, consistent with the recent emphasis on understanding communication medium at the feature level, we extend previous study by focusing on understanding feature-level evaluations of fit.

## LITERATURE REVIEW

We integrate two theoretical domains to develop an understanding of individuals' media feature preferences for a certain communication task (see Figure 1). We start with TTF [e.g.,14] which provides a general understanding of the need for individuals to evaluate technology characteristics and task characteristics in order to develop a perspective on the fit of a given technology to a given task. Next, we turn to media synchronicity theory [11] which focuses specifically on communication tasks, 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 insight by opening the black box of technology to offer a set of media capabilities (consisted of media features) that individuals need to be aware of in order to assess media fit.

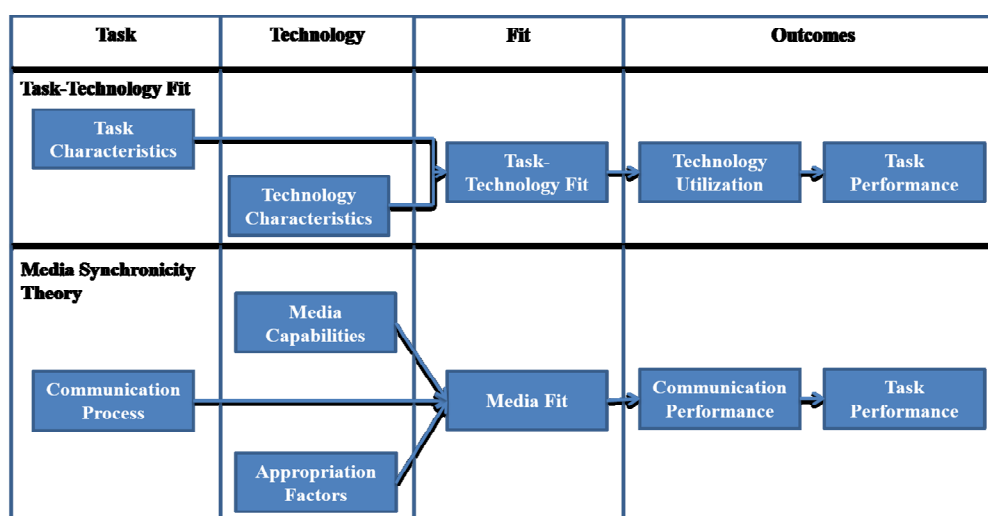


Figure 1: Theoretical Bases

### Task-Technology Fit

Empirical studies of TTF have supported the impact of fit on technology utilization (or adoption) at both individual and organizational levels [e.g.,15, 16]. However, what is implicit in TTF arguments is that the “fit” evaluation driving technology utilization or adoption is actually the individual’s subjective evaluation of fit. Individuals can interpret the same technology or task characteristics differently resulting in different evaluations of fit, leading to different technology utilizations or adoptions [14, 16]. While past studies have focused on subjective evaluations of fit resulting from differences in *technology* interpretations (e.g., the characteristics of a certain technology and how technology characteristics should be used), 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.,8]. 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.,17, 18].

In summary, TTF essentially argues that interpretations of technology characteristic *and* of task characteristics affect subjective evaluations of fit, which consequently effects technology utilization and ultimately performance. One research direction deserving greater attention is subjective evaluations of fit due to the potential cultural differences in the *task* interpretations.

### Media Synchronicity Theory

Media synchronicity theory (MST) focuses on the fit between media capabilities and communication processes underlying the task [11, 19]. 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 [错误!未找到引用源。](#)

Table 1: Communication Processes and Media Capabilities in MST (Dennis, et al 2008)

Underlying Communication Process			
Conveyance Process: Transmission – new, diverse, larger Processing – retrospective, deliberation		Convergence Process: Transmission – familiar, distilled, smaller Processing – verify, adjust, negotiate	
Supporting Media Capability for Each Communication Process			
Processing capability		Transmission capability	
Feature	Definition	Feature	Definition
<b>Rehearsability (+)</b>	The extent to which the medium enables the sender to rehearse or fine tune a message during encoding before sending.	<b>Transmission velocity (+)</b>	The speed at which a medium can deliver a message to intended recipients.
<b>Reprocessability (+)</b>	The extent to which the medium enables a message to be reexamined or reprocessed, during decoding, either within the context of the communication event or after the event has passed.	<b>Parallelism (-)</b>	The extent to which signals from multiple senders can be transmitted over the medium simultaneously.
<b>Symbol sets (-)</b>	The number of ways a medium allows information to be encoded for communication.	<b>Symbol sets (+)</b>	The number of ways a medium allows information to be encoded for communication.

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

In organizations, individuals deliver bad news routinely [20, 21], e.g. telling employees that their performance does not meet requirements. 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 [12]. 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.,13, 22]. 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 message 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 [23-26]. As a result, message senders are reluctant to deliver the bad news, often delaying the delivery [27], positively distorting the bad news [28], and sometimes not transmitting the bad news at all [22].

### **Task Perception of Delivering Bad News: Face Challenging**

Politeness theory [29] suggests 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” [30, p.18]. From the message senders' perspectives, if they cannot enhance others' face, they are at least expected to help save others' face [31], such as avoiding criticizing people in public [17]. 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 [30].

### **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 of the communication. Existing research on bad news communication suggests that the three features comprising processing capability (i.e., symbol sets, rehearsability, and reprocessability) are highly relevant to 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.,32]; 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.,28]; reprocessability should be considered as well because research has found that *receivers* often have trouble processing messages upon receiving bad news [e.g.,33] but may or may not be able to re-process the messages after the initial emotional period fades away depending on the level of reprocessability provided by the communication medium. While the study of message *receivers'* preferences for communication media would likely make for an interesting study, it is beyond the scope of this study. As such, we focus on the two media features relevant to message *senders*, i.e., symbol sets and rehearsability.

#### ***Symbol Sets***

The feature of less natural symbol sets may be preferred for the favorable impacts on the relational and self-presentational goals of the communication. The inability of some media to transmit symbol sets may influence social perceptions [34, 35]. That is, when social cues are reduced, the social context and presence of others is also reduced [32, 36, 37], creating interpersonal distance, a sense of detachment, and a lower sense of personal responsibility about the content of the message [13]. The reduced social contexts and presence of others may reduce the embarrassment of the bad news receivers [38], help preserve the 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 the relationship between message senders and receivers. Thus, message senders may prefer the media feature of less natural symbol sets to make the bad news communication less face challenging for receivers.

#### ***Rehearsability***

Message senders may prefer high rehearsability for the relational and self-presentational goals of the communication. In general, media with high rehearsability provide individuals opportunities to frame the message to make sure that the message is delivered appropriately. In the case of delivering bad news, rehearsability 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. The carefully crafted message is likely to help preserve interpersonal relationship between message senders and receivers, and the self-presentation of message receivers. A recent review on emotion and computer-mediated communication (CMC) found that the opportunity to carefully think about and craft the message before-hand is a major reason for the preference of CMC over face-to-face communication in emotional communication [39]. Thus, message senders are likely to prefer the media feature of high rehearsability to deliver bad news.

In summary, bad news communication is face-challenging to the message receivers, and may impair the interpersonal relationship between senders and receivers and damage the self-presentations of message receivers. To mitigate the face-challenging impacts on receivers and the potential damages to the interpersonal and self-presentational goals of communication, message *senders* may prefer the media features of less natural symbol sets and higher rehearsability to deliver the bad news.

### **Cultural Differences in Face Challenging Perception and Media Feature Preference**

Although the concept of face is not unique to China, it originated in China and is of greater importance in Chinese society [30]. In China, face plays a dominant role in social relations and communications [40], and people demonstrate a great concern for face [41],

42]. Cardon [40] provided a model of face practices in the 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 [30]. The greater emphasis on face concern in Chinese culture may affect message senders' perceptions of the task of delivering bad news (i.e., face challenging) and their responses to the task of delivering bad news (i.e., media feature preferences).

The impact of culture on perception has been recognized [e.g., 7, 43, 44]. "Perception is a retrospective process: though the experience is immediate, it derives from recall and reconstruction" [9, 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) [45]. 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" [9, p.229] of the task.

While individuals in general may perceive the task of delivering bad news to be face challenging for message receivers [46], individuals within different cultures may perceive so to varying extent. Due to the greater emphasis on face in Chinese society in general, we expect that message senders from China will perceive delivering bad news to be more face-challenging for receivers than message senders from other cultures where face is emphasized to a lesser extent. Our argument can find support in research on conflict where cultural differences in how individuals perceive the same conflict have been found. For example, individuals from Western cultures may perceive conflict to be more beneficial than peers from other cultures such as Japan [e.g., 47]. Thus, we hypothesize

*H1: Message senders from culture where face is greatly emphasized (i.e., China) will perceive the task of communicating bad news to be more face-challenging.*

Culture may also affect how individuals respond to the task holding the task perception constant. Culture may affect individuals' ideal types [48], decision rules [49], or logics of action [7], 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" [50, 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., 51].

The greater emphasis on face concerns in a culture may also lead individuals within that culture to have higher preferences for media features appropriate for protecting receivers' face. 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 the communication [e.g., 47]. 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 the receivers, and hence help achieve the relational and self-presentation goals of the communication.

*H2: Message senders from culture where face is greatly emphasized (i.e., China) are more likely to prefer less natural symbol sets and 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., 52]. Each participants was presented, in random order, with two scenarios (Appendix), a bad news scenario and a good news scenario developed from previous studies [e.g., 22, 30, 32]. After each scenario, questions regarding face challenging concern and media feature preferences were asked.

Surveys were distributed to a contact person, who was exclude 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 response rate was 43.2% (i.e., 62 out of 143). Demographic information for our participants is provided in Table 2.

Table 2: Demographic Information Summary

Gender	54.8% Male, 45.2% Female
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Age	Mean =37.7, std= 6.58
Work experience	Mean= 14.22, std=7.12

### Measures

**Objective Task Characteristic.** This was manipulated using different communication scenarios developed from existing literature [e.g.,22]. 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 vs. Non-China comparison may maximize the potential cultural differences on task perceptions and/or task responses related to 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 participants “when choosing a 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 [53]. 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 responses to the task.

### Hypothesis Testing

Descriptive statistics are listed in Table 3. We first checked to make sure that our manipulation of message valence (i.e., good vs. bad) was successful. Results (Figure 2) demonstrate that participants perceive the bad news scenario to be significantly more face challenging to receivers than the good news scenario ( $p < 0.0001$ ). Hence, our manipulation of message valence was successful.

Table 3: Descriptive Statistics

Variable	Mean	s.d.	1	2	3	4	5	6	7
1.Rehearsability	5.94	1.029	.277**	1.000					
2.Less Natural Symbol Sets	4.21	1.892	.271**	.334**	1.000				
3.Face concern	3.48	1.987	.172**	.239**	.568**	1.000			
4.Objective Task Characteristic	0.50	0.501	-0.049	.200**	-0.037	0.000	1.000		
5.Culture	0.31	0.462	0.454	0.002	0.573	1.000			
6. Age	37.70	6.578	0.059	-0.087	0.022	0.000	-.164*	1.000	
7. Experience	14.22	7.122	.140*	-0.101	0.050	0.000	-0.116	.895**	1.000
8. Gender	0.45	0.499	0.067	0.035	0.007	0.000	-0.111	-.216**	-.134*

+:  $p < 0.1$ , \*:  $p < 0.05$ , \*\*:  $p < 0.01$ , \*\*\*:  $p < 0.001$

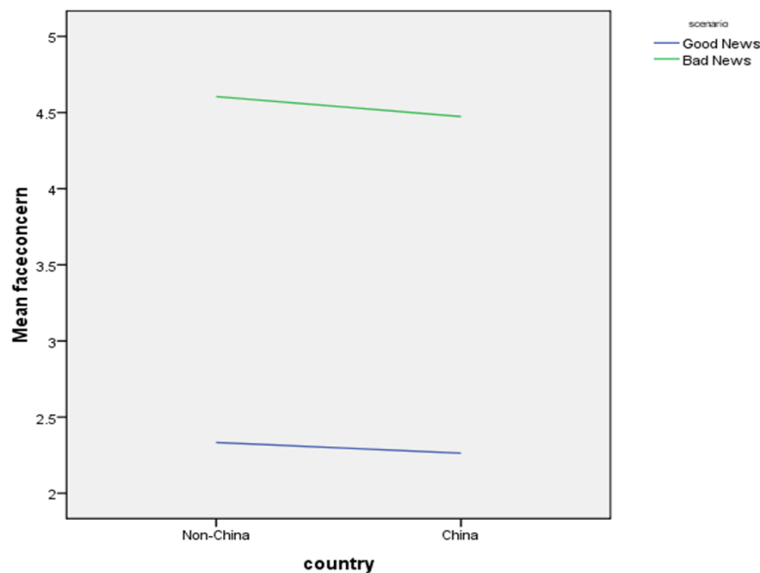


Figure 2: Face Challenging Perception by Scenario and Culture

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 54, 55 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.,56].

To test H2 (i.e. cultural differences in media feature preferences for delivering bad news holding the face challenging perception constant), we ran multivariate regression<sup>1</sup> in SPSS with preferences for the two media features as the dependent variables, objective task characteristic (good news vs. bad news), culture (China vs. Non-China) as well as their interactions as independent variables, and individuals' face challenging perception, gender, age and working experience as covariates. Results are as follows (

Table 4).

Table 4: Multivariate Regression Results

Variables		Rehearsability	Less Natural Symbol Sets
Independent Variables	Objective Task Characteristic (Bad news=1, Good news=0)	-0.080	0.054
	Culture (China=1, Non-China=0)	-0.175	0.535
	Culture*Objective Task Characteristic	0.513+	0.850
Covariates	Face Challenging Perception	0.123**	0.289***
	Age (Male=1, Female=0)	-0.034	0.049
	Work Experience	0.048*	-0.065+
	Gender	0.122	0.180
Adjusted R-Square		9.3%	15.6%

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

The positive impacts of face challenging perception on rehearsability and less natural symbol sets suggest that the more face challenging the task is perceived to be, the higher people's preference for rehearsability and for less natural symbol sets. Moreover, further analysis 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 receiver's face,

<sup>1</sup> We repeated the analysis using MANOVA and got similar results.



the sender's preference for less natural symbol sets increases faster than that for rehearsability. The interaction between culture and objective task characteristic tests H2, which argued that, holding the face challenging perception constant, participants from China are more likely to prefer the features of less natural symbol sets and rehearsability to deliver bad news. Results showed that H2 was marginally supported for rehearsability, but not for less natural symbol sets.

## DISCUSSION

TTF has received extensive attention in the IS literature. While TTF has been tested in many different cultures, most research treated culture as simply the *context* of the study without examining how culture affects TTF, for example, how culture affects individuals' subjective evaluations of fit and consequently technology utilization or adoption. Between the two elements giving rise to fit, the technology side of TTF has received more attention. Recently, researchers have called for more attention to the task side of TTF [2]. Our intent was to understand how culture affects the task aspect of TTF, and consequently subjective evaluations of fit. Specially, we distinguished the two mechanisms via which cultural differences may occur, i.e., task perception (how individuals perceive the focal task) and task responses (how individuals respond to the focal task holding their task perception constant). The task we examine in this paper is delivering bad news. Understanding how individuals perceive this task and how they respond to this task (in terms of media feature preferences) may shed light on how to "appropriately" (e.g., leveraging certain media features) carry out this important yet unpleasant communication task.

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 [46]. Face is argued as "one of the most important yet under-studied concepts that could help clarify Asian-Western differences in organizational behavior" [42, p.523]. To increase potential cultural differences in the perception of and response to the task of delivering bad news, we did a China vs. non-China comparison to test our hypotheses.

As to task perception, our manipulation successfully elicited different face challenging perceptions between the two tasks (i.e., communicating good news vs. bad news). However, contrary to our expectations, there was no cultural difference in senders' 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 [42]. However, differences exist in the priority of individual vs. collective goals [57]. It has been argued that Chinese employees' face challenging concerns are woven into desires to achieve and foster harmony within the work environment including putting collective goals ahead of individual goals [42, 58]. Hence, cultural differences in the face challenging perception would have been elicited, should individuals' unsatisfying performance were linked to poor collective outcomes in the scenario [44]. That is, Chinese participants are likely to perceive delivering bad news regarding hurting collective goals to be more face challenging than non-Chinese participants.

The findings that individuals' preferences for rehearsability and less natural symbol sets increase with the extent to which the task is perceived to be face challenging to receivers are consistent with existing literature on bad news communication [e.g.,39]. Rehearsability has been well studied and well-promoted as an "additive capability" [59] resulting in improved conveyance process (i.e., message transmission) [11]. In the context of delivering bad news, senders who are concerned that the message they are charged with communicating may be face challenging for receivers prefer media features that allow them to rehearse the message to potentially find that "sweet spot" of effectively communicating the message and dampen the impact on the receiver's self-presentation and their relationship. Also, it is important to note that carefully wording a message in recognition of face challenging potential to the receiver does not necessarily mean that the message will be distorted [60].

As to symbol sets, our study found that when senders are concerned about receivers' face, they tend to prefer less natural symbol sets to deliver the bad news. Previous research which found individuals' preference for less natural symbol set in 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.,12, 13, 38, 39, 60, 61]. Our study focuses on *receivers'* well-being and finds similar results. 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 negative responses (e.g., feeling stressed, embarrassed) that receivers may experience upon receiving bad news. In their review on emotion and CMC, Riordan and Kreuz [39] 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 responses, i.e., media feature preferences for delivering bad news. Our results show that after controlling for individuals' task perceptions (i.e., face challenging perception), cultural differences exist in the preference for rehearsability (but not symbol sets) between Chinese and non-Chinese participants. That is, to deliver bad news, Chinese participants have higher preferences for rehearsability than their peers even when their task perceptions are the same, but there is no cultural difference in the preference for the amount of symbol sets. A deeper understanding of cross-cultural

differences in the 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 the Eastern-Western communication style suggests that one major dimension to understand the cultural difference is high-vs. low- context communication [e.g., 44]. According to Hall [62], “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 Eastern and Western cultures use direct as well as indirect communications, but Eastern culture uses significantly more indirect communication than Western culture [e.g.,44, 51, 63], especially when concerned about other’s face [e.g.,64, 65].

The dimension of high- vs. low- context communication is relevant to the concern for other’s face in delivering bad news. According to Goffman [66] and related empirical studies [e.g.,46, 51, 63], the greater tendency to use indirect communication indicates that the high-context communication culture (e.g., China) is more sensitive and more motivated to save others’ faces and preserve interpersonal relationships.

The high- vs. low- context communication style 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.” [44, p.231] Hence, the more attentive and sensitive Chinese participants, who are more motivated to accommodate incompatible communication goals (i.e. ask efficacy, interpersonal relationship, and self-presentation) when delivering bad news, may put more effort into anticipating and directing receivers’ interpretations of and responses to the 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 mainly 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 their messages). As a result, our Chinese participants have higher preference for rehearsability when delivering bad news.

The high- vs. low- context communication style may also explain the lack of cultural difference in the preference for symbol sets to deliver bad news. Initially, we suspected that Chinese participants, who are more concerned about challenging receivers’ faces, may prefer less natural symbol sets than their peers as less natural symbol sets may reduce receivers’ concerns about presenting a nice image in front of others and potential negative consequences that the bad news may have on receivers such as feeling embarrassed [e.g.,67]. However, our results show that Chinese and non-Chinese participants do not differ in their preference 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 culture (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.,68]. Hence, Chinese participants may prefer more natural symbol sets in complementary to text-based messages 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-presentations and meanwhile *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.

As with others, our study is not without limitation. A major limitation of this study is the use of single item scale. MST has become a dominate theory for understanding media performance in the IS literature. Yet, limited efforts have been expended on developing scales for media features proposed by MST, and empirical studies using MST generally used single item scale to measure media features [e.g.,53]. To expand the use of MST in empirical studies, future research needs to develop more reliable multi-item scales measuring media features proposed by MST.

## CONCLUSION

Task-technology fit argues that individuals’ subjective evaluations of fit will drive their technology utilization or adoption. Researchers have recognized that culture may affect individuals’ interpretations of the technology side of task-technology fit, resulting in divergent technology choices. Our study contributes to the existing task-technology fit literature by examining cultural differences in the perceptions of and/or responses to the task of delivering bad news. Our results provide both theoretical and practical implications for paying attention to people’s interpretations of the task and the potential cultural differences in it—when people are adopting or utilizing a technology, they adopt or utilize it for a certain *purpose or need* (i.e., the task at hand).

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## 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.