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Uncertainty Avoidance, News Genres and Framing of Traditional Chinese Medicine: A Content Analysis of News from Seven Countries

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Abstract: This study explores how news media in different countries, varying in Hofstede's cultural dimension of uncertainty avoidance, frame traditional Chinese medicine (TCM). It also examines how news framing of TCM differs between the two main news genres: news reports and editorials. A comparative content analysis of 196 news pieces on TCM from seven countries was conducted. The results indicate that a country's uncertainty avoidance index (UAI) influences the use of factual information and professional qualification frames. Additionally, news reports on TCM use more human interest and leadership frames than editorials, while editorials surprisingly use more factual information and curative effect frames than news reports.

Keywords: cultural distance; framing; news genres; traditional Chinese medicine; uncertainty avoidance

1 Introduction

Cross-culture studies examining interactions between different peoples have explored the concept of cultural distance (CD). Developed by Geert Hofstede, CD measures the extent to which cultural norms, worldviews, attitudes, perceptions, and ideas differ between countries (Raza, Singh & Dutt 2002). For instance, research has confirmed CD's impact on bilateral trade volumes (Tung & Verbeke 2010). Additionally, CD can explain how a cultural product from one country – defined as a

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good or service encompassing heritage conservation, art, festivals, and cultural industries (Aiello & Cacia 2014, pp. 1–3) – is received or framed by another country's populace or media. The assumption is that greater CD leads to more negative evaluations by the people or media of the receiving country. While this assumption may seem intuitive, it overlooks the complexities of CD and the unique nature of specific cultural products.

CD comprises five dimensions: uncertainty avoidance, individualism, masculinity, power distance, and long-term orientation. These dimensions can influence the acceptance of cultural products in varied ways. Furthermore, certain cultural products, such as traditional Chinese medicine (TCM), present even more complex scenarios. TCM, a cultural product from China, has significant and direct effects on physical health, which may cause people from other cultures to be more hesitant in accepting it.

The unique characteristics of TCM – perceived as exotic and potentially risky by non-Chinese individuals – are particularly relevant to the CD dimension of uncertainty avoidance. This dimension measures the extent to which individuals in a society feel threatened by ambiguous or undefined situations originating from different cultures (Usunier et al. 2005). In societies with high uncertainty avoidance, people are more likely to feel threatened by unfamiliar practices like TCM. For example, before the 1970s and the efforts of Chinese immigrants to promote it, TCM acupuncture faced discrimination by local authorities in the United States, which has a different UAI than China (Bu 2023).

Despite the theoretical implications, no studies have yet investigated how a country's UAI relates to the acceptance or framing of cultural products from other cultures, including TCM. This study aims to fill that gap by conducting a quantitative content analysis of mainstream news media reports on TCM in seven countries with varying UAIs. TCM is chosen not only because its acceptance can be linked to a nation's UAI, but also due to the increased attention it has received from academic circles in China following the launch of the Belt and Road Initiative (BRI) in 2013. The promotion of TCM has become a priority in the BRI agenda, receiving significant support from the Chinese government, which emphasizes TCM's role in “constructing a shared community of mankind in public health” (NATCM 2021). However, the global acceptance and development of TCM remain limited, with many countries treating it as a health product or alternative medical treatment (So et al. 2019).

Therefore, examining how TCM is perceived and framed in countries with different levels of UAI is both theoretically and societally significant for understanding its global acceptance. Additionally, since existing studies – e.g., Bray (2018) and Rodrigues, Niemann, and Paradies (2019) – suggest that news genres influence content and framing, this study also explores how TCM is framed in different news genres, namely news report and editorial.

2 Uncertainty Avoidance

As introduced, uncertainty avoidance is a dimension of Hofstede (1984, 2001) concept of CD, developed from a survey of IBM employees in more than 40 countries between 1967 and 1973. Hofstede (1984, p. 14) defined uncertainty avoidance as “ways of dealing with uncertainty, relating to the control of aggression and the expression of emotions.” Uncertainty arises from the unknowability of the future, which is essentially a subjective experience. This feeling is not personal, but shared in the society.

Uncertainty avoidance has been discussed at both national and individual levels. At the national level, uncertainty avoidance refers to the extent to which people feel threatened by ambiguous and uncertain situations, often leading them to create more formal rules, seek career stability, believing in expertise and absolute truths, and rejecting deviant ideas and behaviours (Hofstede 1984). In low UAI cultures, ambiguous situations are less threatening, and novelty is more readily accepted (Erez & Nouri 2010). In high UAI cultures, there is a tendency to perceive ambiguity as “what is different is dangerous” (Hofstede et al. 2010: 203) and therefore prefer predictability and avoid ambiguity.

Individually, those in high UAI cultures feel more threatened by uncertain situations and thus prefer structures that help predict events more easily (Srite & Karahanna 2006). Conversely, individuals in low UAI cultures are more accepting of ambiguity and seek convenience and novelty (Hofstede 2001). Hofstede et al. (2010) also found that uncertainty avoidance correlates with consumers’ anxiety towards an uncertain and unpredictable future.

UAI has often been applied to cross-cultural psychology studies on marketing, management, disease, privacy calculus and other culturally sensitive behaviours. Many believe that culture determines people’s attitudes, beliefs, values and norms towards almost everything surrounding them (Mackenbach 2014). UAI has been found to influence various consumer behaviours from the consumption of a certain type of beverage to the choice of investments (Hofstede 2001). For example, people in high UAI cultures tend to invest more in precious metals and gems but less in stocks (Hofstede 2001). Communication researchers have often taken uncertainty and ambiguity as important factors in explaining people’s choice of media (Draft & Lengel 1984). For example, people from Japan where uncertainty avoidance is high, experienced a higher drop in participation when they had to make decisions with limited information as compared to other nationals such as Germans and Americans, revealing a significant interaction among culture, uncertainty avoidance and information (Vishwanath 2003). However, previous studies on uncertainty avoidance largely focus on its effect on culturally sensitive behaviours and few have tried

to explore the possible causal or correlative relations between cultural dimensions and news framing. This cultural dimension is, therefore, adopted in this study because TCM could be considered an “undefined” object, which might cause people in a non-Chinese society with a higher UAI to feel threatened.

3 News Genres

Existing research on news genres focuses on the functions of different genres and their impact on the presentation of news stories. Primary journalistic genres have varied functions as news reports emphasize the timeliness of news events (Bell 1991; Van Dijk 2013), while feature articles delve deeply into recent or past news stories (Garrison 2010). In contrast, editorial genres, including subgenres of commentaries, opinion pieces or op-eds, primarily use an expert voice or editorial comments to “persuade, recommend, and exhort” (Hohenberg 1960, p. 182). Editorials not only present newspapers’ opinions on issues, but also offer moral judgments and interpretations aligned with what the publications consider as public interest (Fogoaga 1982; Ryan 2004). Journalism education often prioritizes news reports and feature genres, giving less attention to the editorial genre (McKane 2014; Scanlan & Craig 2014). Consequently, studies on news editorials are less extensive than those on news reports (Van Dijk 1998).

Editorials differ from news reports by providing readers with opinions and evaluations of news events instead of just presenting facts (Rupar 2007). This allows editorials to become a platform where media organizations can imbue their own values and interpretations, making the framing of editorials crucial for engaging the public in political deliberations and shaping its views on controversial issues (Dahmen 2010; Firmstone 2008; Richardson and Lancendorfer 2004). Research indicates that editorials can influence public opinion on important issues and potentially affect voting decisions (Dalton, Beck, and Huckfeldt 1998).

Studies have discussed how different news genres vary in content and production. For example, a case study on how online news utilizes findings from climate change research showed that journalists primarily use news reports to cover research within 48 hours of its initial publication, followed by editorials afterwards. Both news genres used abstracts of research papers, while news reports also relied on press releases (Bray 2018). Another study conducted a content analysis of news reports on notable racial and cultural issues in Australia’s mainstream news publications, and a sentiment analysis of Twitter conversations on the same events. It found that editorials continued to advance the hegemonic viewpoints, portraying minorities as disruptions to Australian norms or threats to the white majority (Rodrigues et al. 2019). Additionally, a study comparing The New York Times op-ed pages written by staff writers and guest columnists about the Israeli–Palestinian

conflict found that staff writers were more critical in their analyses (Golan & Wanta 2004). Another study examined the different framing of the controversy over legalizing marijuana for medical use in editorials and news reports, concluding that editorials used a wider range of framing strategies, including legal, political, and social implications (Golan 2010).

Inspired by these findings, this study will explore whether different news genres represent TCM differently. This approach will provide insights into how TCM is framed in various media contexts, contributing to our understanding of its acceptance and portrayal in different cultural settings.

4 News Framing

An important approach to investigating the representation of TCM is to analyze its framing. The concept of framing was developed by Goffman (1974) who defined it as the “schemata of interpretation, a framework that makes a possibly meaningless succession of events into something meaningful” (1974, p. 21). Gitlin (2003) considers that journalists use frames to organize various types of information for their audiences. Entman (1993) discusses the process and function of framing as follows:

To frame is to select some aspects of perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described. (1993, p. 52)

Researchers have provided different typologies of frames. Iyengar (1994) classified frames by “episodicity” and “thematicity”. Episodic frames focus on individuals, single events, and private realms, whereas thematic frames highlight issues, trends over time, and public realms. Vreese (2005) proposes two major types of media frames, i.e. issue-specific frames and generic frames. Issue-specific frames indicate that every issue or event could involve several particular frames (Matthes 2009) while generic frames are not issue-specific but can be used across different issues. Before the summaries of this typology, studies by Neuman et al. (1992), Valkenburg, Semetko, and de Vreese (1999) and Semetko and Valkenburg (2000) identified five generic frames: human interest, conflict, responsibility, economic consequences, and morality. According to Semetko and Valkenburg (2000), a conflict frame uses conflicts between individuals, groups or institutions as a means to capture audiences’ attention. A human interest frame presents an issue, event or problem in a story with an individual perspective or an emotional angle (Valkenburg et al. 1999). An economic consequence frame focuses on the actual or potential economic impact of an action, problem, event, or issue on nations, societies, organizations or individuals

(Neuman et al. 1992; Valkenburg et al. 1999). A morality frame explains a problem, event, or issue by referring to moral prescriptions, presenting moral messages, or providing specific social prescriptions for behaviour (Neuman et al. 1992; Valkenburg et al. 1999). A responsibility frame attributes responsibility for the cause or solution of a problem or issue to a government, organization, or individual (Semetko & Valkenburg 2000). Another frame identified in Chinese news stories is the leadership frame, which focuses on the speeches, actions or activities of a leader, highlighting the discussion and evaluation of their leadership (Luther & Zhou 2005; Kuang & Wang 2020). Additionally, there is a frame that presents factual information in a straightforward way without indicating implications, which is also considered a frame (Zillmann et al. 2004).

Existing studies have discussed in depth the construction and influence of frames. Scheufele (1999) considers that frames are constructed through four key processes: frame building, frame setting, the individual-level process of framing and an audience–journalist feedback loop. Factors influencing frame building operate on several levels: first, individual journalists' ideology, attitudes and professional norms; second, organizational preferences influencing coverage type or media organization's political orientation; third, external factors such as political actors, authorities, interest groups, culture, and social norms (Scheufele 1999). While many studies explore how cultural factors influence framing, few specifically address how the Uncertainty Avoidance dimension of CD may interact with the use of frames when reporting on an issue.

Little research has been conducted on the news framing of TCM. Some researchers reveal ideological incongruences between biomedicine and TCM through interviews with 22 TCM physicians in Singapore, suggesting that more open discussions on dichotomous framings are key to reducing power and ideological reinforcement and increasing mutual understanding (Chang & Lim 2017). However, how TCM is framed in different cultures and whether the level of uncertainty avoidance affects this framing remains underexplored. Given the assumption that uncertainty avoidance influences people's feelings, views, and behaviours toward undefined situations or objects such as TCM for non-Chinese people, we formulate the first research question (RQ1) as follows:

Do news organizations in countries with varying uncertainty avoidance indices (UAI) frame TCM differently?

Additionally, no other studies on health issue framing have analysed both issue-specific and generic frames. This research, which analyses both generic frames and issue-specific frames for TCM, aims to fill this gap. Therefore, in addition to factual information and the six generic frames (human interest, conflict, responsibility, morality, economic consequence, and leadership), we explore three issue-specific frames: the environment/animal protection (EAP) frame, addressing media critique

on the impact of TCM due to its use of herbs and animal parts, the curative effect frame on TCM's efficacy, and the professional qualification frame emphasizing TCM practitioners' qualifications. The study also examines the tones of TCM framing, including positive, neutral, and negative tones. We thus raise several sub-research questions under RQ1:

Do news organizations in countries with different UAI show variations in the use of human interest (RQ1a), responsibility (RQ1b), morality (RQ1c), economic consequence (RQ1d), conflict (RQ1e), leadership frames (RQ1f), factual information (RQ1g), environment/animal protection (RQ1h), curative effect (RQ1i), professional qualification frames (RQ1j), and positive (RQ1k), neutral (RQ1l) and negative tones (RQ1m)?

As it is also evident that news genres, i.e. news reports and editorials, would influence on the presentation of an issue/object, the second research question (RQ2) of this study is:

Do news reports and editorials in news organizations of different countries frame TCM differently?

Similarly, another batch of sub-research questions under RQ2 on the adaptation of the particular frames and tones are formulated as follows:

Do news reports and editorials in news organizations of different countries show variations in the use of human interest (RQ2a), responsibility (RQ2b), morality (RQ2c), economic consequence (RQ2d), conflict (RQ2e), leadership frames (RQ2f), factual information (RQ2g), environment/animal protection (RQ2h), curative effect (RQ2i), professional qualification frames (RQ2j), and positive (RQ2k), neutral (RQ2l) and negative tones (RQ2m)?

5 Methods

We sampled all English news stories on TCM from seven countries which vary in terms of UAI and have the largest number of news stories on TCM. Using the keywords “traditional Chinese medicine,” “Chinese Medicine,” “Chinese herbs,” “acupuncture,” and “cupping” via the Nexis Lexis news database, we collected all relevant news stories from these countries between 1980 and 2019. The countries include Singapore (SG) with a low UAI of 8, the UK, Malaysia (MY) and India (IN) with a UAI of 35, 36 and 40 respectively, and the US, Canada (CA) and Australia (AU) with higher UAI scores of 46, 48 and 51, respectively (The Culture Factor Group 2022). These seven countries were selected because they exhibit a range of UAI values and their news organizations have a considerable number of articles on TCM. In total, we collected 196 stories: 72 from Singapore, 28 from the UK, 4 from Malaysia, 8 from India, 17 from the USA, 37 from Canada, and 30 from Australia (see Table 1).

Table 1: Number of news stories by countries varied in terms of Uncertainty Avoidance Index (UAI).

Countries	UAI	News (N)	Editorial (N)	Total no. of stories
SG	8	53	19	72
UK	35	20	8	28
MY	36	3	1	4
IN	40	7	1	8
US	46	15	2	17
CA	48	32	5	37
AU	51	23	7	30
Total no. of stories		153	43	196

One coder coded all the 196 news articles, while another coded 20 % of the sample following the coding guidelines. Most of the definitions and guidelines in the codebook were developed based on existing literature on news framing, such as Neuman et al. (1992); Semetko and Valkenburg (2000). In addition to coding for three tones and seven generic frames, the coders also coded three issue-specific frames: the environment/animal protection, curative effect and, professional qualification frames.

The inter-coder reliability (Scott’s Pi) for key dependent variables, e.g. frames and tones, is as follows: 0.90 for human interest, 1.0 for responsibility, 1.0 for morality, 1.0 for economic consequence, 1.0 for conflict, 1.0 for leadership, 0.87 for factual information, 1.0 for environment/animal protection, 0.68 for curative effect, 0.89 for professional qualification frame, and 1.0 for positive, 1.0 for neutral and 1.0 for negative tone. For the independent variable of news type, the inter-coder reliability is 0.90.

We performed a series of chi-square tests in SPSS to answer the research questions. Our reports of the chi-square results include both the statistical significance level, i.e. the *p* value, and a measure of effect size, i.e. Cramer’s *V*. Similarly to many existing studies, the present study sets the statistical significance level at alpha 0.05. For the interpretation of effect size, we use Cohen’s (1988 as cited in Ellis 2010) system, which sets the cutting points of 0.5, 0.3 and 0.1 for strong, medium and weak associations, respectively.

6 Results

Our RQ1 aims to explore the association between the Uncertainty Avoidance Index (UAI) and frame/tone use in the news media reports on TCM. The chi-square analyses

Table 2: Frame/tone use by UAI of countries.

Country UAI (N)	SG 8	UK 35	MY 36	IN 40	US 46	CA 48	AU 51	Chi-square tests (df = 6)	
Frame/tone	(72)	(28)	(4)	(8)	(17)	(37)	(30)	p	v
Human interest	35 %	64 %	50 %	88 %	52 %	67 %	60 %	0.07	0.244
Responsibility	8 %	11 %	0 %	0 %	0 %	0 %	0 %	0.157	0.218
Morality	1 %	0 %	0 %	0 %	0 %	3 %	3 %	0.930	0.098
Eco consequence	3 %	11 %	0 %	0 %	6 %	8 %	3 %	0.653	0.146
Conflict	6 %	11 %	0 %	0 %	12 %	3 %	3 %	0.651	0.146
Leadership	14 %	4 %	0 %	0 %	6 %	24 %	6 %	0.099	0.234
Factual	39 %	7 %	50 %	88 %	47 %	24 %	27 %	0.000 ^a	0.352
Env/ani protection	0 %	4 %	0 %	0 %	0 %	3 %	3 %	0.767	0.130
Curative effect	74 %	82 %	75 %	100 %	71 %	57 %	80 %	0.124	0.226
Prof qualification	44 %	18 %	50 %	0 %	30 %	43 %	30 %	0.047 ^a	0.255
Positive	68 %	64 %	75 %	88 %	65 %	68 %	87 %	0.411	0.177
Neutral	14 %	18 %	25 %	0 %	24 %	0 %	7 %	0.077	0.241
Negative	18 %	18 %	0 %	13 %	12 %	30 %	7 %	0.260	0.198

One news article could use more than one frame. The percentage of all frames can therefore add up to more than 100.

^aThe p value is smaller than 0.05.

show that the use of two frames – factual information and professional qualification – varies significantly across the seven countries, with p values of 0.000 and 0.047, respectively (see Table 2). The Cramer's V for the association between UAI and the use of factual information is 0.352, indicating a medium association. Conversely, the association between UAI and the use of the professional qualification frame is weak, with a Cramer's V of 0.255. Since UAI is an interval variable, these results suggest that higher UAI countries are more likely to use factual information and the professional qualification frame in their news reports.

The differences in the use of other frames and tones – including responsibility, morality, economic consequence, conflict, leadership, environment/animal protection, curative effect frames, and positive, neutral, and negative tones – across the seven countries are not significant, with p values greater than 0.05 (see Table 2). The Cramer's V values for these frames and tones are all below 0.25, indicating that UAI does not significantly affect their use.

Given that Singapore's UAI is dramatically lower than the other six countries, we also compared the frames used by Singaporean news media with those by the other countries combined. The results are very similar to those from the initial comparison. The only exception is that the use of factual information across the two groups (Singapore with low UAI vs other countries with high UAI) shows no significant difference. However, the use of the professional qualification frame remains significantly different, with a p value of 0.039 and a Cramers' V of 0.147 (see Table 3).

Table 3: Frame/tone use by news organizations of Singapore and other countries.

Country UAI (N) Frame/tone	SG Low (72)	Others High (124)	Chi-square tests (df = 1)	
			p	v
Human interest	35 %	43 %	0.269	0.079
Responsibility	8 %	2 %	0.057	0.136
Morality	1 %	2 %	0.902	0.009
Eco consequence	3 %	7 %	0.260	0.080
Conflict	6 %	6 %	0.979	0.002
Leadership	14 %	11 %	0.475	0.051
Factual	39 %	29 %	0.156	0.101
Env/ani protection	0 %	2 %	0.184	0.095
Curative effect	74 %	73 %	0.973	0.002
Prof qualification	44 %	30 %	0.039 ^a	0.147
Positive	68 %	72 %	0.501	0.048
Neutral	14 %	10 %	0.368	0.064
Negative	18 %	17 %	0.842	0.014

One news article could use more than one frame. The percentage of all frames can therefore add up to more than 100.

^aThe p value is smaller than 0.05.

RQ2 investigates the relationship between news type and the use of frames and tones in international reporting on TCM. Our chi-square analyses indicate significant differences in the use of four out of the ten frames/tones: human interest, leadership, factual information, and curative effect. According to Table 4, 44 % of news reports use a human interest frame compared to 23 % of editorials, with a significant difference (p value 0.012) and a V of 0.179, indicating a weak association. Similarly, news reports use the leadership frame more frequently (15 % vs. 0 %) than editorials, with a p value of 0.007 and a V of 0.193, also indicating a weak association.

Conversely, editorials use more factual information (56 % vs. 26 %) and curative effect frames (93 % vs. 68 %) than news reports. The small p values (both 0.000) indicate significant differences, and the effect size values (0.262 and 0.235) suggest that the relationships between news type and the use of these frames are beyond weak and approaching medium. The finding that editorials use more factual information than news reports is surprising. A closer examination reveals that most of these editorials are from Singapore, where TCM is more widely used than in the other six countries.

The differences in the use of other frames/tones – including responsibility, morality, economic consequence, conflict, environment/animal protection, professional qualification frames, and positive, neutral, and negative tones – across news types are not significant, with very large p values ranging between 0.122 and 0.984 and V values ranging from 0.002 to 0.110 (see Table 4).

Table 4: Frame/tone use by type of news.

Frame/tone	News report (N = 153)	Editorial (N = 43)	Chi-square tests (df = 1)	
			p	v
Human interest	44 %	23 %	0.012 ^a	0.179
Responsibility	5 %	5 %	0.983	0.002
Morality	1 %	2 %	0.631	0.034
Eco consequence	6 %	2 %	0.349	0.067
Conflict	6 %	5 %	0.757	0.022
Leadership	15 %	0 %	0.007 ^a	0.193
Factual	26 %	56 %	0.000 ^a	0.262
Env/ani protection	1 %	2 %	0.631	0.034
Curative effect	68 %	93 %	0.000 ^a	0.235
Prof qualification	37 %	30 %	0.440	0.055
Positive	71 %	72 %	0.848	0.014
Neutral	13 %	5 %	0.122	0.110
Negative	16 %	23 %	0.247	0.083

One news article could use more than one frame. The percentage of all frames can therefore add up to more than 100.
^aThe p value is smaller than 0.05.

7 Conclusion and Discussion

Uncertainty avoidance, defined as the extent to which people in one culture feel threatened by undefined situations and objects and seek to avoid these uncertain and ambiguous contexts (Hofstede 1984), has been assumed to influence the news framing of TCM. Our findings in response to RQ1 show that the use of two news frames – factual information and professional qualification – varies across the seven countries, which differ in terms of UAI. However, the use of other frames and tones, including responsibility, morality, economic consequence, conflict, environment/ animal protection, and curative effect frames, as well as positive, neutral and negative tones, is similar across the seven countries.

Our analyses indicate that the higher the UAI of a country, the more likely its news organizations are to use factual information and professional qualification frames. Existing studies suggest that people from cultures with high UAI prefer predictability and avoid ambiguity, viewing unfamiliar things as potentially dangerous (Hofstede et al. 2010). This could explain why news media in high UAI countries tend to use more factual information and professional qualification frames. Journalists in non-Chinese cultures with high UAI may be wary of the safety of TCM operations in their countries, prompting them to scrutinize the professional qualifications of TCM practitioners and clinics and to report using factual

information, minimizing contention from practitioners and their employers but potentially increasing public anxiety. Consequently, it is not surprising that news organizations in high UAI countries do not report more on issues of responsibility, morality, economic consequences, conflict, environment/animal protection, and curative effect issues related to TCM. Surprisingly, the use of the three tones – positive, neutral, and negative – remains consistent, suggesting balanced reporting on TCM outside China.

Our findings corresponding to RQ2 show significant differences in the use of four out of ten frames/tones – human interest, leadership, factual information, and curative effect – across the seven countries. However, the use of other frames/tones, including responsibility, morality, economic consequence, conflict, environment/animal protection, professional qualification frames, and positive, neutral, and negative tones, is similar across news types.

Our analyses further suggest that news reports on TCM in these countries use more human interest and leadership frames than editorials, while editorials use more factual information and curative effect frames. Some of these findings are surprising, while others are not. It is commonly assumed that news reports contain more factual information than editorials, which are mainly opinion pieces. However, it is surprising that editorials on TCM present more factual information than news reports. Bray (2018) finds that news reports on some issues tend to rely more on press releases, while editorials may only use article abstracts, eliminating many frames in the press releases. This context makes our findings less surprising. Additionally, as most news reports could come from press releases of TCM-related companies and organizations, it is not unexpected that fewer facts are presented in news reports. A closer look at the data reveals that most editorials using factual information are from Singapore, indicating that Singaporean news organizations are less likely to express opinions about TCM and more likely to present factual information. The reason for this pattern is beyond the scope of this research but would be a good question for future studies.

Assuming the wide use of press releases in TCM coverage, it is also evident that news reports use more human interest and leadership frames but fewer responsibility, morality, economic consequence, conflict, environment/animal protection, and professional qualification frames. It is not surprising that editorials use more curative effect frames, as they tend to convey a message of otherness (Rodrigues, Niemann, and Paradies 2019), discussing the curative effect of TCM, seen as an alternative medical treatment. Again, no significant difference exists in the use of the three tones: positive, neutral and negative.

The findings of this study have significant implications for the global acceptance of TCM and the effectiveness of its promotion. The results suggest that the framing of TCM by news organizations in different countries is associated with their UAI,

potentially explaining the low acceptance of TCM and other Chinese cultural products and practices despite China's efforts to promote them. Future research could further investigate how the framing of these cultural products/practices relates to their acceptance in foreign countries.

This study initiates the exploration of the relationships between a country's UAI and the framing of TCM in its news media. It is also the first of its kind to explore how the framing of TCM could vary between two news genres: news reports and editorials. While the study illuminates how UAI and news genre interact with the framing of TCM, it has several limitations. First, not all countries with a reasonable spread of UAI have English news outlets or a sufficient number of news reports on TCM, limiting our sample. We have, however, selected as many countries meeting our criteria as possible. Second, the total number of news reports on TCM (196) is comparatively low, which could make the results less representative. Future research could include more countries and news in other languages by hiring coders proficient in those languages. Additionally, investigating the framing of other cultural products in countries with different UAI would be worthwhile.

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