Feeling Blue—Study on the Attribution of Responsibility for Depression and Its Stigmatization from the Prospective of Chinese and American News Framework

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Abstract. Based on 290 depression-themed reports from Xinhua Net and the United Press International News in the recent two years, a comparative analysis was conducted on the differences and similarities between China and America in terms of the framework construction of the depression-themed reports and the media representation of people suffering from depression. Through this analysis, the impacts of various factors, especially culture, upon the presentation of the topic by the media and the attribution of responsibility were discussed, exploring the relevance between the individual cases and the stereotypes. It was found that, compared with United Press International News, Xinhua Net laid more emphasis on the function of health communication, including the popularization of depression-related knowledge and the guidance on prevention and treatment. When it comes to the general application of the framework, Xinhua Net and United Press International News both exhibited conspicuous inclination towards individualization in terms of reporting concerning the causes of depression and the utilization of framework. As for the application of individual cases, an increase in the stigmatization of the image of "suicide victims" can be witnessed on both the Chinese and American media.

Keywords: Dissemination of health-related information · Depression · Framework analysis · Attribution of responsibility · Stigmatization

1 Introduction

Depression has become one of the most serious threats to public health today, affecting more than 300 million people worldwide. Among them, more than 54 million people suffer from depression in China, taking 4.2% of the total population. In the United States, 5.9% of people are diagnosed with depression, with the number of patients exceeding 17 million (World Health Organization, 2017). As a common mental illness, depression is characterized by persistent sadness and a loss of interest in activities that people normally enjoy according to World Health Organization. Despite the high morbidity and mortality of depression, according to WHO statistics, less than half of patients

worldwide actively seek help or receive medical treatment. Studies have pointed out that the worrying diagnostic and therapeutic rates were due to the lack of knowledge about depression among patients, nursing staff and even medical experts [36].

As the main source of information on mental health problems in people's daily life, media coverage may directly affect public's views and attitudes on related issues, including attribution of responsibility. On the one hand", news media frame an issue, telling the audience "the causes of health problems" and "who should govern them [19]. On the other hand, news framework determines the way in which media images are presented [42]. Some research has suggested that depression was severely stigmatized in Chinese news media [25]. Stereotypical portrayals such as depicting the mentally ill as dangerous and suicidal were also common in American news reports [32]. Such stigmatization can be the main obstacle for psychiatric patients to seek medical treatment in time [5].

Given few existing studies explored news coverage of depression from a cross-cultural perspective, this study compares depression coverage in China and the United States online news media, analyzing the similarities and differences in terms of news framing of depression and media representation of depressed patients. In addition, the deficiencies and practical improvement of media coverage were also examined.

2   Literature Review

2.1   Framing Theory

Frame is a cognitive structure, allowing its users to locate, perceive, identify and label numerous concrete facts [14]. Entman (1993) holds the view that the essence of frame is selection and salience. He describes four basic functions of framing: (1) define problems; (2) diagnose causes; (3) make moral judgments and (4) suggest remedies. Since the 1980s, framing theory had evolved into the term 'news frame' after introducing into the field of news and communication. News frame reflects the process of news selection, processing, news text and meaning construction [8].

DeVreese (2001) argues that there are two broad categories of news frame, which are: issue-specific news frames and generic news frames. Focusing on particular events and problems in great detail, Issue-specific news frames vary with specific news events or topics, whereas generic frames allow for a wide range of different news topics. A generic frame approach to the study of news frames can be used for cross-cultural comparison and theoretic expansion. For example, Semetko and Valkenburg [30] identified five news frames most commonly used by media: conflict frame, human interest frame, economic consequences frame, morality frame and responsibility frame. Responsibility frame can be traced back to the term defined by Iyengar [9, 22] called "attribution of responsibility", exploring the causes and treatments of various social problems. Furthermore, framing on attribution of responsibility could be divided into two types: casual responsibility and solution responsibility, placing the origin of the problem or problem-solving responsibilities respectively [11, 16]. Social psychologists have found that attribution of responsibilities have an important impact on the public's views, attitudes and behaviors, including emotions, self-image, impressions of others, and assignment of blame or credit for events [1].

In the discourse construction of depression, there are there basic topics of media coverage: (1) present situation analysis (e.g., etiology, diagnosis and treatmen); (2) latest research and (3) medical system(e.g., public policies, depression prevention and treatment) according to Dong [10]. For Li [21], topics of media coverage are of six kinds: (1) the social status quo of depression; (2) prevention or treatment of depression; (3) popularization of depression knowledge (e.g., causes, symptoms, diagnosis and types); (4) individual cases; (5) latest research and (6) governmental action.

2.2   Cultural Factors and Framing on Attribution of Responsibility

Scholars have long attempted to figure out macro- and microlevel frame building factors, including social norms and cultural values, organizational pressures and constrains, pressure of interest organizations, news conventions and characteristics of individual journalists [29]. Discussing the cultural factor of news frame contributes to understand why media from different backgrounds define the responsibility of depression in different ways.

In cross-cultural studies, Hofstede [17] popularized "Cultural Dimensions" to measure cultural differences in different countries. Culture refers to a set of common behavioural patterns shared by members of each social group. Hofstede identified cultural dimensions to describe and compare cultural differences: (1) Individualism versus collectivism; (2) Power Distance; (3) Uncertainty Avoidance; (4) Masculinity versus Femininity and (5) Long-term versus Short-term. Among them, individualism-collectivism (I-C) is one of the most widely used assessments to examine cultural factors of attribution of responsibility [27]. Individualism emphasizes personal needs, interests and independent individuals, while collectivism highlights the interdependence between groups and macro-factors such as community, social system, policy and social contexts [35]. In Hofstede's survey, the score of individualism in the United States is as high as 91, while China received lowest scores at 20, showing obvious collectivist cultural characteristics.

Health condition of a person is affected by many factors, such as psychology, body, personal behavior and the surroundings [4]. Existing studies showed demonstrably different view on cultural factors of attribution of responsibility. Individualists hold the view that most problems may be due to flaws in personal behavior, focusing mostly on modifications of the problematic behaviors. U.S mass media tend to attribute responsibility of public health to the individual level [38, 39]. For example, neurobiological factors are considered to be the main cause of schizophrenia [3]. Media placed more causal and problem-solving responsibilities of depression on individuals than the society [41]. On the contrary, collectivists believe that social problems might be result from macro-social environment, such as uneven distribution of economic resources, unethical business practices and unsafe environments. Changes in government policies and other macro-social means are supposed to be main solutions [28]. Furnham and Chan[13] found that Chinese public were more convinced of sociological interpretation of schizophrenia, and social stress levels were seen as a key factor affecting psychiatric disorders. Chinese newspapers primarily framed solutions of depression on the societal level [43].

Based on I-C of cultural dimensions, attributions of casual responsibility and solution responsibility can be categorized into personal and societal levels, namely personal causes, societal causes, personal solutions and societal solutions [20].

2.3 Stigmatization and Stereotype

Stigma dates back to marks on the skin made by a pointed object, or tattoo, to prevent slaves or criminals from escaping in Greek [18]. In 1963, Goffman popularized "Sigma" to describe an attribute that is deeply discrediting after proposing the concept of "Spoiled Identity". Stigma can be categorised into public stigma and self-stigma. Public stigma refers to the negative stereotype on a particular stigmatized group, accompanied by low self-evaluation and self-inefficiency called self-stigma [5]. Stigma communication includes specific content: marks, labels, responsibility and peril. By labelling and implying a responsibility, distinguished group are classified as a separate social entity and linked to physical and social peril [33].

Corrigan (2005) pointed out the association between stigmatization and stereotype: As a social cognitive process, stigmatization can be divided into three progressive stages including stereotype, prejudice and discrimination. Stereotype is a cognitive structure based on knowledge, ideas and expectations of certain social groups [23]. These fixed views may be either positive or negative. Stereotypes are negative only when they are overgeneralized or inaccurate (Yang et al. 2009). Prejudice is a behavioral bias based on stereotypes. Stereotypes become prejudices when people have negative emotions and evaluations of distinguished individuals [7]. Discrimination is the result of prejudice, in a punitive way, such as stopping stigmatized groups to legitimate opportunities or reacting to them in disgust [6]. Therefore, negative stereotypes may lead to prejudice and discrimination, thus exacerbating stigmatization of mentally ill person by media and public.

At present, existing studies have categorized stereotypes of mental illness patients in the media. According to the traits of depression reported in China, Fan [12] divided the image of depressive patients into six types: (1) Dangerous and injurious; (2) crazy and weird; (3) vulnerable groups; (4) anxious public figure; (5) negative metaphor and (6) normal patients. In American news reports, people with mental illness are often described as: (1) Dangerous and violent; (2) Incompetent; (3) Psychological weak; (4) Suicidal [26].

As discussed above, three questions regarding media coverage, responsibility attribution and media image of depression are proposed.

RQ1: How have Chinese and American media presented specific topics of depression? Are there any differences?
RQ2: How have Chinese and American media presented the causes and solutions for depression? Have certain causes and solutions appeared more often than others?
RQ3: How have Chinese and American media presented depressive patients? Are there any differences?

Individual cases, defined as exemplars, are often used in media coverage [44]. Individual cases present information about an event or issue vividly, helping audiences create mental simulations to improve self-efficacy and information processing [15]. As a common news topic, the use of exemplars sometimes is problematic. In order to get attention, some journalists tend to use dramatic and exaggerated exemplars. This has been seen in the case of reporting on crime [2]. However, few studies have examined the effect of

individual cases on stigmatization in health issues reporting. Depending on Li Xiang's [21] classification of depression reporting, the study will further explore the relationship between individual cases and stereotypes of depressive patients:

RQ4: Is there any relationship between the use of exemplars and the stereotype of depressive patients in China and U.S media coverage on depression?

3   Methodology

3.1   Sample

The study selected XINHUANET.com and UPI.com, because each represents on the most frequently used and trusted news sources in Chines and American media. As a comprehensive news information service portal hosted by official state-run press called Xinhua News Agency, Xinhuanet ranks 1st among central news websites in 2017 and 2018 (List of China's Top 100 Enterprises). Given that the insufficient sample size of the largest news agency website called AP.org, the research selected the website of United Press International (UPI), the second largest news agency in the United States.

Using the keywords "抑郁症" and "抑郁" in Xinhuanet, and "depression" and "depressed" in UPI.com, the search first located 197 and 673 complete articles in each media from January 1, 2017 to December 31, 2018. Those that fell into one of the following categories were excluded: (1) location of keywords did not appear in news headlines; (2) items unrelated to depression (e.g. stories about the Great Depression or tropical depression) or marginally related (mentioned only as non-thematic content) or duplicate items. The search finally yielded a total of 290 news articles, of which 168 were from Xinhuanet and 122 were from UPI.com.

3.2   Coding Schemes

Based on DeVreese's (2001) research, the study divided news frame into Issue-specific frames and Generic frames (see "Table 1"), and coded six types of media image of depressive patients (see "Table 2").

Issue-specific frames show traits of media coverage on depression. It can be classified on the basis of Li (2017)'s research into six kinds: (1)the social status quo of depression; (2) prevention or treatment of depression; (3) popularization of depression knowledge; (4) individual cases; (5) latest research and (6)governmental action. Each news topic was measured as a categorical variable (0 = absent, 1 = present).

Generic frames mainly explore whether there are personal or social differences in the attribution of responsibility for depression between Chinese and American media. The study coded generic frames as causal frame and problem-solving frame conceptualized by Zhang and Jin [40]. Causal frame were categorized into personal and societal causes. Problem-solving frame were also grouped into personal solutions and societal solutions. Each cause or solution was coded as a categorical variable (0 = absent, 1 = present). Nevertheless, some stories may not mention any cause or solution while others emphasized the same cause or solution more than once. To avoid unnecessarily inflating

Table 1. News frame code sheet

News frame	Item		Operational definition
Issue-specific frames	Social status quo of depression		Did any social status quo of depression get a mention in this article?
	prevention or treatment of depression		Did any prevention or treatment of depression get a mention in this article?
	Popularization of depression knowledge		Did any causes, symptoms, diagnostic methods or different types of depression get a mention in this article?
	Individual cases		Did any depressive patient stories or their families' stories get a mention in this article?
	Latest research		Did any research progress of depression get a mention in this article?
	Governmental action		Did any suggestions for adjusting policies or improving the health care structure for people with depression get a mention in this article?
Generic frames	Causal frame	personal causes	Did any cause about demographic factors get a mention in this article? Did any cause about genetics, personality or health conditions get a mention in this article? Did any cause about behavior, lifestyle or life events get a mention in this article? Did any personal cause other than those referred above get a mention in this article?
Generic frames	Causal frame	societal causes	Did any cause about micro-level social environment get a mention in this article? Did any cause about macro-level social environment get a mention in this article? Did any cause about public health system and policies get a mention in this article? Did any societal cause other than those referred above get a mention in this article?

(*continued*)

the number of mentions made of a particular cause or solution, the study selected the
coding method of Kim and Wills [20]. No matter how many mentions were made, we

Table 1. (*continued*)

News frame	Item		Operational definition
	Problem-solving frame	personal solutions	Did any solution about demographic changes get a mention in this article? Did any solution about personality and health condition changes get a mention in this article? Did any solution about behavioral and lifestyle changes get a mention in this article? Did any personal solution other than those referred above get a mention in this article?
		societal solutions	Did any societal solution about micro-level social environment get a mention in this article? Did any societal solution about macro-level social environment get a mention in this article? Did any societal solution about public health system and policies get a mention in this article? Did any societal solutions other than those referred above get a mention in this article?

Table 2. Media image code sheet

Media image	Item	Operational definition
Stereotypes	Violence	Did any criminal behavior of depressive patients who hurt or even kill others get a mention in this article?
	Suicide	Did any suicidal behavior of depressive patients get a mention in this article?
	incompetence	Did any individual who were portrayed as unemployed or incapable of working or engaging in socially acceptable activities get a mention in this article?
	Weakness	Did any individual who were described as psychologically weak and therefor caused their own disease get a mention in this article?
Objective image	Normal patient	Did the article mention depression as a disease and view depressive patients as people with mental illness that need treatment?
Not mention		Did any stereotype or objective image not get a mention in this article?

counted them as one mention as far as they came from the same story. As a result, personal causes, societal causes, personal solutions and societal solutions are coded from 0 to 4 respectively.

Media image of depressive patients can be divided into stereotypes and the objective image. Stereotypes include violence stereotype, suicide stereotype, incompetence stereotype and weakness stereotype. There may be multiple stereotypes in a report. Each media image is measured as a categorical variable (0 = absent, 1 = present). Neither the objective image nor the four stereotypes of depressive patients were marked as not mentioned.

3.3 Intercoder Reliability

Four bilingual (English-Chinese) coders were trained and coded 30 news stories out of the sample. Using Cronbach's Alpha, intercoder reliability was calculated above 0.90 in total. The reliability in each category is: 1.000 (Issue-specific frames), 0.927 (Generic frames) and 0.987 (media image of depressive patients) respectively.

4 Findings

A total of 290 valid samples were collected from January 1, 2017 to December 31, 2018.
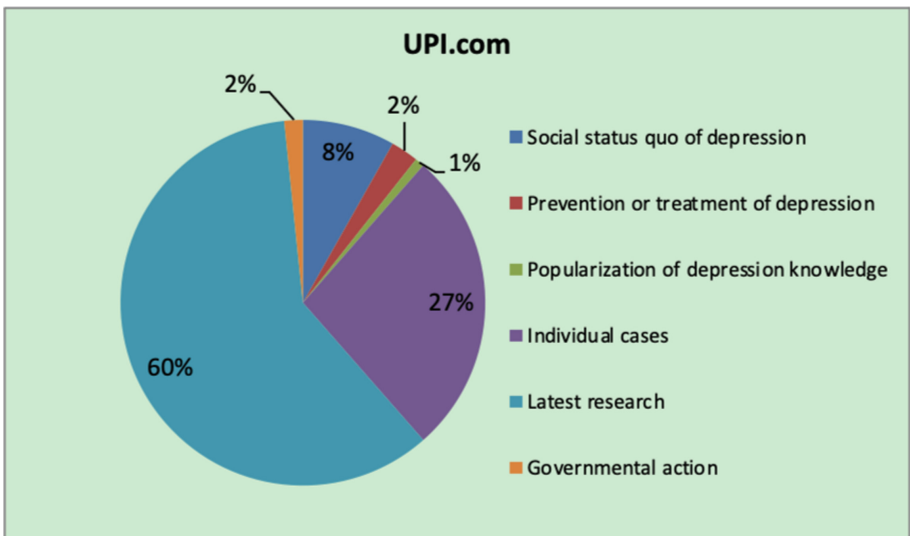
4.1 Issue-Specific Frames

RQ1 questioned how Chinese and American media have presented specific topics of depression. Frequency analysis shows that news topics on depression covered by Xinhuanet were relatively balanced. The most frequently used topics were the latest research and individual cases, accounting for 31% (53) and 29% (48) respectively. The numbers of issue-specific frames on knowledge popularization (15%), prevention and treatment (10%) and social status quo (10%) of depression were similar (see "Fig. 1"), and government action (5%) was the least emphasized. On the other hand, the latest research had also become the most common used news topics, taking the most important position (60%) in relevant reports of UPI News Network. It was followed by individual cases (27%) while government action (2%), prevention and treatment of depression (2%) and Popularization of depression knowledge (2%) were neglected in American news stories (see "Fig. 2").

Chi-square analyses shows significant differences between Xinhuanet and UPI.com for the usage of issue-specific frame on latest research ($\chi^2 = 23.018$, $p < 0.001$), popularization of depression knowledge ($\chi^2 = 17.121$, $p < 0.001$) and prevention and treatment of depression ($\chi^2 = 6.459$, $p < 0.05$). Results indicate that UPI.com pays more attention to new scientific findings of mental illnesses, such as the link between depression and other diseases or the future development of therapeutic pathways. While Xinhuanet was more likely to provide public with relevant health information, including causes, symptoms, prevention and treatment of depression than American news media (see "Table 3").
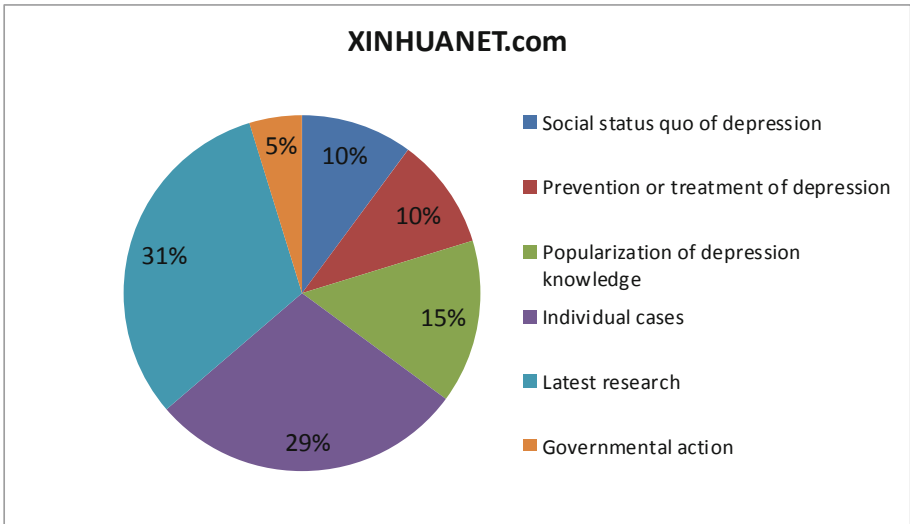
Fig. 1. Proportion of issue-specific frames used in Xinhuanet.

Fig. 2. Proportion of issue-specific frames used in UPI.com.

Table 3. Comparisons of the use of Issue-specific frames between Chinese and U.S website

Issue-specific frames	XINHUANET.com (Total N = 168)		UPI.com (Total N = 122)		χ^2 (df = 1)
	N	%	N	%	
Social status quo of depression	17	10%	10	8%	0.309
Prevention or treatment of depression	17	10%	3	2%	6.459*
Popularization of depression knowledge	25	15%	1	1%	17.121***
Individual cases	48	29%	33	27%	0.081
Latest research	53	31%	73	60%	23.018***
Governmental action	8	5%	2	2%	2.070

[a] χ^2 refers to the difference between the coverage of Xinhuanet and UPI.com for the use of issue-specific frames;
[b] *p<0.05 **p<0.01 ***p<0.001

4.2 Generic Frames

RQ2 questioned how Chinese and American media presented the causes and solutions for depression.

Accoding to paired sample t-test, Xinhuanet assigned more causal responsibilities to individual (t = 3.360, p < 0.01). As shown in "Fig. 3", "genetics, personality or health conditions" (27%) and "behavior, lifestyle and life events" (20%) are the two most frequently cited individual causes. With regard to social causes, "micro-social environment" (18%) and "macro-social environment" (14%) were mostly concerned in Chinese media coverage. UPI News Network also attributed more responsibility to the individual (t = 7.326, P < 0.001). As shown in "Fig. 4", individual causes account for 79% of all mentioned causes. Among them, "genetics, personality or health conditions are the most frequently mentioned individual causes of depression, accounting for 30% of the total use of the causal frame, while "public health system and policies" was mentioned less often, appearing 2 (2%) times.

Is there any significant difference in the use of casual frame on depression between Chinese and American online news websites? Independent sample t-test shows that there was no significant difference between Chinese and American online news websites (t = 0.066, P = ns) at the individual attribution level. Compared with UPI.com, Xinhuanet attributed more responsibility to the social level (t = 4.592, p < 0.001). As can be seen in "Table 4", social causes were mentioned 90 times in 168 reports of Xinhuanet and there have been an average of .55 social causes in each news report. In terms of UPI.com, social causes were mentioned less often with an average of .21 appearances (a total of 25 mentions in 122 news reports). Additionally, "Micro-social environment" was mostly considered as a social reason on depression in Chinese and American media, such as risk factors in family, school, workplace, and community.
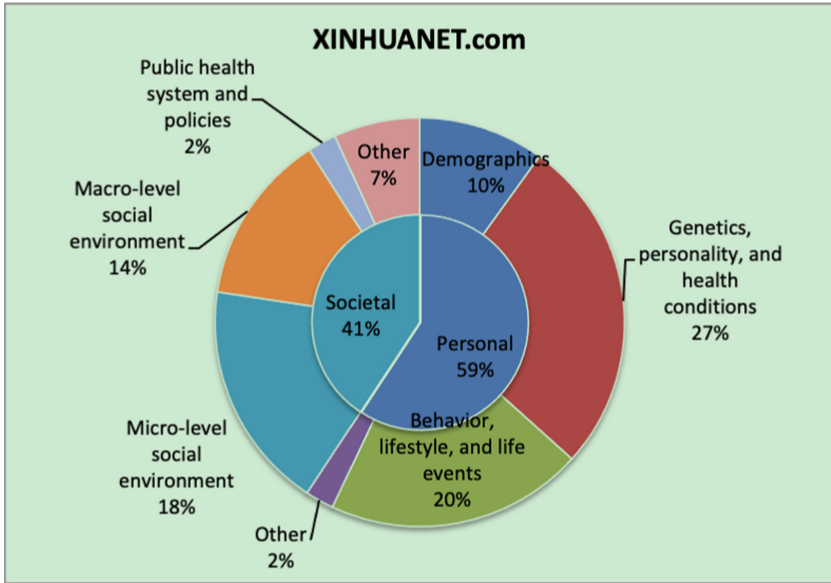
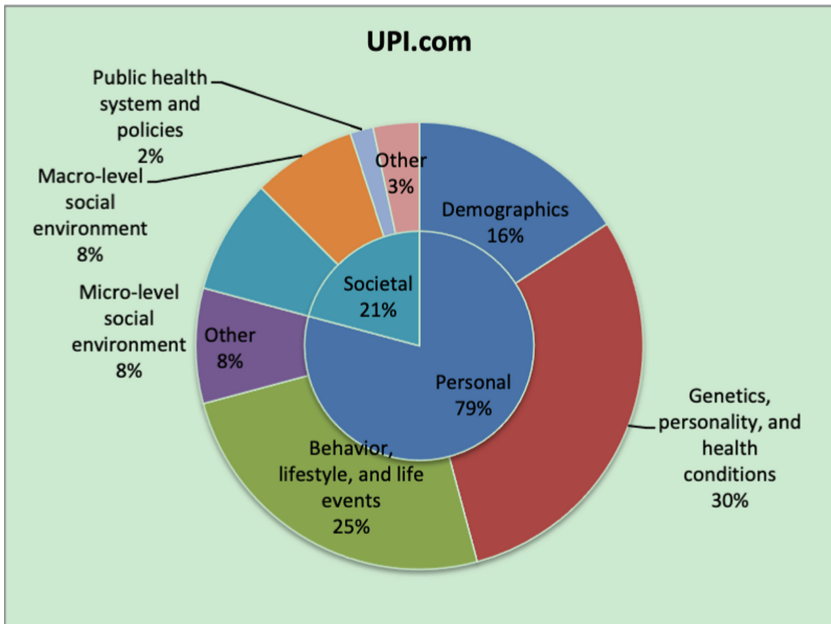**Fig. 3.** Proportion of casual frames used in Xinhuanet.

Fig. 4. Proportion of casual frames used in UPI.com.

Table 4. Comparisons of the use of causal frames between Chinese and U.S website

Causal frames		XINHUANET.com	UPI.com	Total
Personal causes	Demographics	22	19	41
	Genetics, personality, and health conditions	59	36	95
	Behavior, lifestyle, and life events	45	30	75
	Other	5	10	15
Total		131(79%)	95(78%)	226
Societal Causes	Micro-level social environment	40	10	50
	Macro-level social environment	30	9	39
	Public health system and policies	5	2	7
	Other	15	4	19
Total		90(55%)	25(21%)	115

[a]Note. Entries are numbers and percentages of news items mentioning each depression cause or solution.

When it comes to how to solve the problem, Xinhuanet assigned more responsibilities to individual ($t = 2.076$, $p < 0.05$). As shown in "Fig. 5", two personal-level soultions, "personality and health condition changes" and "behavior, lifestyle or life events", were mentioned very often, appearing 60 (27%) and 51 (23%) times. "Micro- social environment" was the most frequently emphasized social strategy for depression on Xinhuanet, accounting for 21% of the total number of strategies mentioned. Although individual-level solutions were more often mentioned in UPI's depression coverage, there is no significant difference between personal and social solutions ($t = 1.896$, $p = ns$). Among them, "personality and health condition changes" and "public health system and policies" were the most frequently appeared strategies at the individual and social levels respectively (see "Fig. 6").

Is there any significant difference in the use of problem-solving frame on depression between Chinese and American online news websites? According to Independent sample t-test, Xinhuanet was more likely to attribute solutions responsibilities to the individual than UPI.com ($t = 2.704$, $p < 0.01$). As shown in "Table 5", in the relevant reports of Xinhua, individual solutions were mentioned 125 times, with an average of 0.74 times in each report; while the individual solutions of UPI News Network were mentioned 63 times, with an average of 0.52 times in each report. What's more, Societal solution responsibility was addressed to a greater extent in Xinhuanet news coverage of depression than in UPI.com ($t = 2.514$, $P < 0.05$). There have been an average of 0.57 societal solutions in each news report (96 times in 168 articles) of Xinhuanet and 0.37 societal solutions in each news report (45 times in 122 articles) of UPI.com.
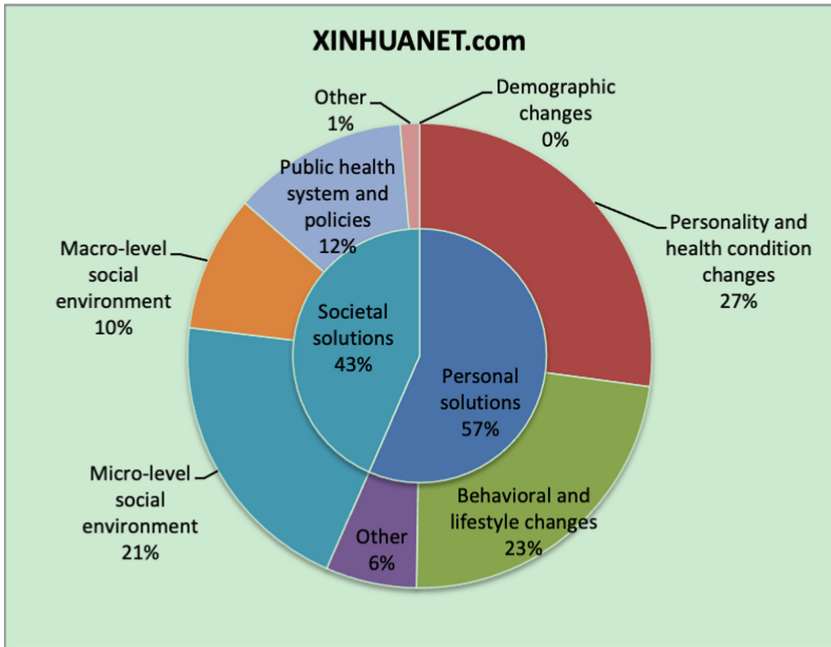
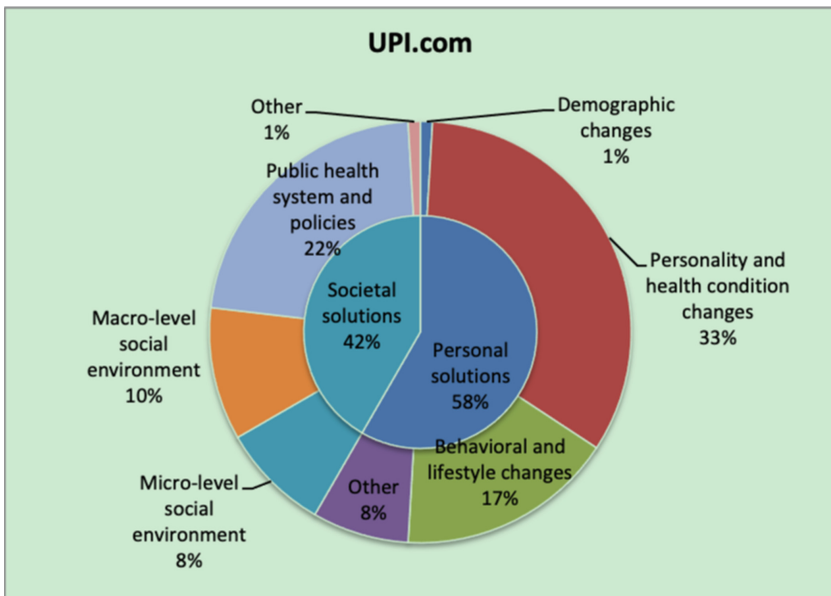**Fig. 5.** Proportion of problem-solving frames used in Xinhuanet.

Fig. 6. Proportion of problem-solving frames used in UPI.com.

**Table 5.** Comparisons of the use of problem-solving frames between Chinese and U.S website

Problem-solving frames		XINHUANET.com	UPI.com	Total
Personal solutions	Demographic changes	0	1	1
	Personality and health condition changes	60	36	96
	Behavioral and lifestyle changes	51	18	69
	Other	14	8	22
Total		125(74%)	63(52%)	188
Societal solutions	Micro-level social environment	45	9	54
	Macro-level social environment	21	11	32
	Public health system and policies	27	24	51
	Other	3	1	4
Total		96(57%)	45(37%)	141

[a]Note. Entries are numbers and percentages of news items mentioning each depression cause or solution.
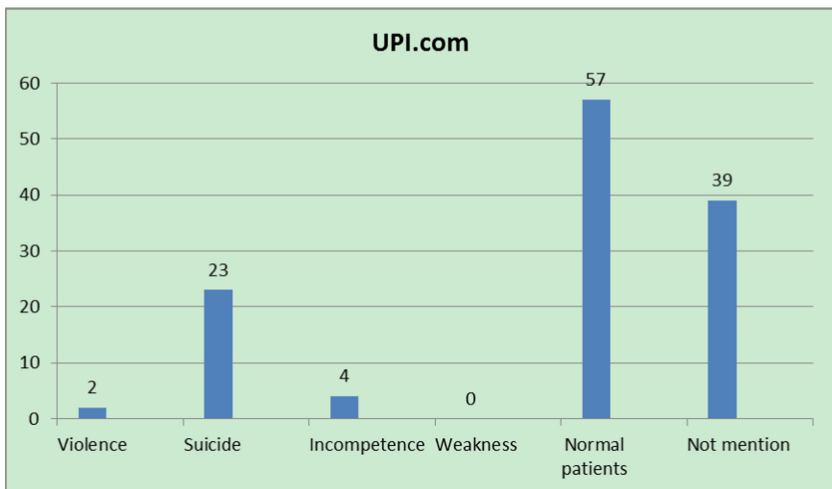
4.3   Media Image of Depressive Patients

RQ3 explored how Chinese and American news media presented depressive patients. Frequency analysis shows that "normal patients" were the most frequently displayed image of depressive patients in Xinhuanet (36.3%). In representation of stereotypes, "suicide" ranked first in related reports, followed by stereotypes of "incompetence" (8.3%), "violence" (4.2%) and "weakness" (3.6%). In addition, 55 (33.9%) reports did not present any media image of depression patients (see "Fig. 7"). For UPI News, the image of "normal patients" is still the most frequently mentioned (46.7%) in all stories. As the most common stereotype, "suicide" took up 18.9%, while the stereotypes of "incompetence" and "violence" accounted for only 3.3% and 1.6% of the reports, and there was no "weakness" image. What's more, 32.0% of the reports did not mention the objective image or any stereotype of depressive patients (see "Fig. 8").

The result of chi-square analyses as shown in "Table 6" suggest that there was a significant difference between Chinese and American media in the presence of weakness stereotype ($\chi^2 = 4.449$, $p < 0.05$). Xinhuanet was more likely to describe depressive patients as weak and attribute the outbreak of depression to the poor psychological endurance of individuals than UPI News Network.
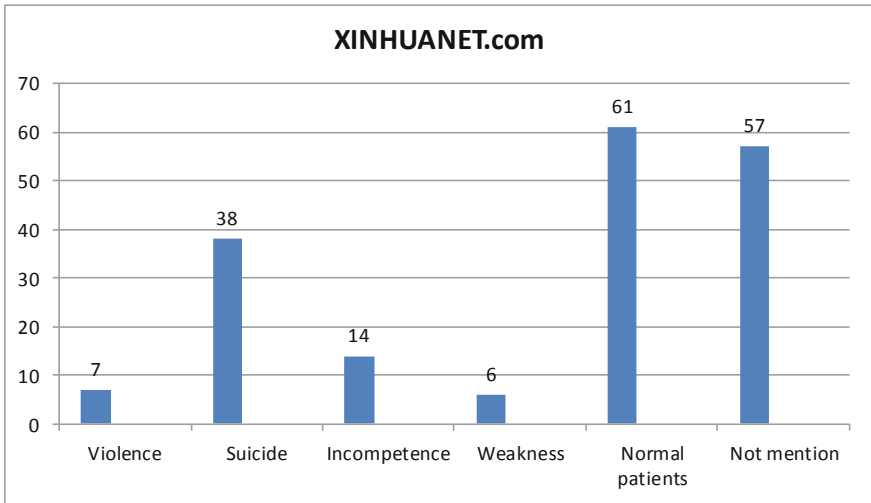
Fig. 7. Frequency of media image of depressive patients in coverage of Xinhuanet.

Fig. 8. Frequency of media image of depressive patients in coverage of UPI.com.

4.4 Individual Cases and Stereotypes

RQ4 explored the association between the usage of individual cases and representation of depressive patients' stereotypes in Chinese and American online coverage. Chi-square analyses indicates that the use of the suicide stereotype ($\chi^2 = 28.784$, p < 0.001), violence stereotype ($\chi^2 = 6.574$, p < 0.05) and weakness stereotype ($\chi^2 = 6.109$, p < 0.05) were all associated with an increased use of the exemplars (see "Table 7") in the coverage of Xinhuanet, which means news reports using individual case were more likely to portray depressive patients as suicidal, socially inaccessible or harmful

Table 6. Comparisons of media image of depressive patients between Chinese and U.S website

Media image		XINHUANET.com (Total N = 168)	UPI.com (Total N = 122)	χ^2 (df = 1)
Stereotypes	Violence	4.2%	1.6%	1.501
	Suicide	22.6%	18.9%	0.604
	Incompetence	8.3%	3.3%	3.102
	Weakness	3.6%	0.0%	4.449*
Normal patient		36.3%	46.7%	3.175
Not mention		33.9%	32.0%	0.123

[a] χ^2 refers to the difference between the coverage of Xinhuanet and UPI.com for media representation of depressive patients; * p < 0.05

Table 7. Association between the use of exemplars and stereotypes presentation in Sino-US websites

Stereotypes	XINHUANET.com (Total N = 168)			UPI.com (Total N = 122)		
	No exemplars	Exemplars	χ^2 (df = 1)	No exemplars	Exemplars	χ^2 (df = 1)
Violence	1.7%	10.4%	6.574*	1.1%	3.0%	0.543
Suicide	11.7%	50%	28.784***	9.0%	45.5%	20.925***
Incompetence	5%	16.7%	6.109*	2.2%	6.1%	1.104
Weakness	4.2%	2.1%	0.432			

[a] χ^2 refers to the difference between the coverage of Xinhuanet and UPI.com for stereotypes of depressive patients in the use of exemplars; * p < 0.05 ** p < 0.01 *** p < 0.001

to others. With regard to the reports of UPI.com, the use of violence stereotypes ($\chi^2 = 20.925$, p < 0.001) was associated with an increased use of the exemplars, indicating that depressive patients who commit suicide were more likely to present in stories of individual cases.

5   Conclusion

By comparing and analysing the similarities and differences between Xinhuanet and United Press International news website in terms of the framework construction of depression and media representation of depressive patients, the study has got the following major findings:

First, in terms of the usage of issue-specific frames, the latest research and individual cases are the most frequently used news topics in Xinhuanet and UPI.com. Regarding the differences, UPI News Network paid more attention to new scientific progress than Xinhuanet but lack of reporting prevention or treatment of depression and popularization

of depression knowledge. Shoemaker and Reese [31] pointed out that the differences in choosing specific topics among journalists may be very with the internal structure of organizations and demands of interests. For example, commercial organizations regard profit as their ultimate objective, while other types of organizations focus on obtaining professional recognition or serving the public. As a commercial news agency for the profit of issuing press releases to other media organizations, government departments and enterprises, UPI network laid stress on the latest research with strong timeliness and importance, such as clinical trials of drugs, development of new projects and publication of medical papers. In addition, individual cases especially stories of political celebrities or TV stars were often used to cater to audience's novelty-seeking psychology. On the contrary, Xinhuanet plays an important role in public opinion guidance and knowledge popularization of mental illness. Compared with UPI.com, Xinhuanet attaches importance to health communication function of media, providing sufficient background information to public, including causes of depression, disease symptoms, diagnostic methods, type determination and preventive measures.

Second, from the perspective of generic frames, both Xinhuanet and UPI.com have obvious personalized tendency in the use of their respective reports on depression, which is their common feature. Xinhuanet attributed the causes and solutions of depression to the social level more than UPI News Network. Although there is no significant difference in the use of casual frame at the personal level between the two media, Xinhuanet was more likely to mention personal strategies for depression, emphasizing the individual's responsibility in "personality and health condition changes" and "behavioural and lifestyle changes". To some extent, the inconsistency in attribution of responsibility between Chinese and American media may be due to discrepancy in cultural values of individualism and collectivism. Triandis [37] hold the view that collectivists tend to view persons as being dependent of contextual constraints and thus attribute responsibilities to external causes and social factors. In contrast, individuals believe that people are not bound by social norms and they make a point of human rationality and self-power. For instance, UPI News Network often lay upon personal causes of depression, including individual brain neurological changes, health conditions, overuse of social media and traumatic events, while Chinese media view the causes of depression from the perspective of micro and macro social environment, such as lack of family concern and social support. At the same time, social problem-solving responsibilities are often considered.

However, there is a dialectical relation of unity of opposites between individualism and collectivism. They are both contradictory and interdependent, and may be transformed under certain conditions. As Steele and Lynch [34] said, with the deepening of economic system reform, the contemporary Chinese society has gradually transformed from collectivism to individualism. This coexistence of collectivistic and individualist values has made Chinese journalists not only focus on social impact but also consider responsibilities of personal causes in the issue of depression, especially in the aspects of "personality and health condition changes" and "behavioural and lifestyle changes". That means to encourage the public to maintain a healthy lifestyle, increase social interactions and seek medical help. By contrast, UPI's focus on "public health systems and policies" largely confirmed the shift of American media from personal to social responses

in health policy discussions and practices. This has been seen in the case of the emphasis on public health campaigns on tobacco use and obesity [20].

Third, as far as media image of depressive patients is concerned, although Xinhuanet was more likely to describe depressive patients as the vulnerable with poor psychological endurance than UPI News Network, "suicide" stereotype has become the most commonly used stereotype in the two media. From the perspective of biocultural framework, stigma attributes have intercultural commonalities. People will stigmatize those individuals whose characteristics and actions are seen as threatening or hindering the effective functioning of their groups [24]. In the coverage of Chinese and American media, patients suffering from depression were often portrayed as people who commit suicide, unable to participate in social activities or cause harm to others. Simultaneously, medical image of depression has been basically presented in the two websites while one third of reports do not mention any positive or negative image. The blind area shows that some journalists may not form a correct understanding of depression or do a bad job in popularizing depression.

Finally, regarding the associations between individual cases and stereotypes, the use of exemplars reinforces the stereotype of suicide, violence and weakness in the coverage of Xinhuanet. What's more, the usage of exemplars especially referring to famous stars or political celebrities was coincided with a significant increase in suicide images in UPI News Network. Journalists tend to use individual cases which focus on specific events of an individual or a group, thus arousing audience's emotions, establishing contacts and helping people form cognition. Stereotyped personal cases could lead to cognitive bias, labelling depressive patients with "suicidal", "violent" and "incompetent". Therefore, journalists should report individual cases with caution and depict mentally ill person objectively in order to construct a rational media environment.

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