Conclusion

This book studied and examined inter-sectoral interaction with a focus on Chinese-speaking societies. The study of inter-sectoral interaction around health communication was based on the construction and exploration of large-scale Chinese digital news corpora which contained large amounts of published and licensed industrial information and resources from global Chinese communities and especially the People's Republic of China over the past twenty years. In order to analyse the distinctive patterns between the global Chinese dataset and the PRC Chinese digital dataset, the researcher analysed the key public nutritional health policy documents and annual reports published by the World Health Organization between the 1990s and 2015 and extracted the Mandarin Chinese translations of the original English health terms.

It was found in the development of the bilingual health term index that lexical variation, instead of lexical consistency, widely exists in current bilingual Chinese–English health translation. A dozen types of lexical variation were identified in the comparison of the original English documents and their Chinese translations, including variations in the translation of nutrition balance, the bioavailability of nutrients, density of physical activities, sedentary lifestyle, culturally based dietary pattern research, food grouping schema, sugar research terms, use of adjectives in medical terms, health research methodology and nutrition recommendations. The existence of lexical variation or inconsistency points to the lack of systematic research in the development of cross-lingual terminology for nutritional health. This also posed challenges for the compilation of the search term index for the study of the communication, commercialisation and promotion of health research findings in the Chinese digital industry news corpora.

To solve this problem, the researcher drew upon the classification of nutritional deficiency risks provided by the Global Burden of Disease (GBD) and identified the high-frequency Chinese translations of six classes of nutritional deficiency risks that are particularly relevant for the targeted populations. These are: 1 terms related to general nutritional deficiency risks and the maintenance of overall nutrition health ; 2 protein-energy malnutrition and the balance of energy and metabolic balance ; 3 iodine deficiency ; 4 vitamin deficiency and the bioavailability and absorption of vitamins ; 5 iron deficiency or anaemia and the bioavailability of iron ; 6 other nutritional deficiencies such as calcium deficiency and balance, dietary mineral balance and the bioavailability of micronutrients. In some of the nutrition health lexical categories listed above, valid variant health translations were included in the translated health term index to ensure the systematicity and inclusiveness of the large-scale digital corpus search in Chinese.

The search for translated health terms in the two comparable corpora, i.e. the global Chinese digital dataset and the PRC Chinese digital dataset led to the extraction of a large number of industry reports and digital news related to nutritional health and the prevention of specific health risks. In order to streamline the analysis of the large amount of industrial information retrieved from the datasets, exploratory statistical analyses, including exploratory factor

analysis (EFA), were used to identify the association among different industrial sectors in the communication of nutritional health in Chinese at the international and national levels. This has led to the construction of a four-dimension EFA model which contains four analytical scales or factors. The first latent factor contains five large industrial categories: Food, Drink/ Beverage, Restaurant/Cafés/Fast Food Outlets, Agriculture and Food Processing and Retail. The second latent factor includes another four general industrial categories: Drugs and Pharmaceuticals, Health Products and Services, Research and Economics. The third latent factor comprises three large industrial categories: Transport, Sports and E-commerce. The last latent factor extracted by the EFA contains another three large industrial sectors: Digital Devices, Traditional Chinese Medicine and Media and Entertainment.

This four-dimensional model was then tested with the data collected from the PRC Chinese digital industry news corpus. It was found that while the first two factors of the factor analysis model remained valid for the PRC Chinese digital dataset, the third and fourth factors of the model required further testing and verification with more corpus data to be collected. This finding pointed out that important similarities and differences exist at national and international levels in terms of the inter-sectoral communication of nutritional health. Specifically, the similarities between the global Chinese and the PRC Chinese datasets are reflected in the strength and validity of the first and second factors or dimensions of the model. It suggests that with traditional primary, secondary and research-intensive industries, such as agricultural processing, food, drink, retail, drug research and pharmaceuticals, the modes and patterns of the communication of nutritional health in the global Chinese dataset and the PRC Chinese dataset have important overlaps. However, in new digital-based industries such as Digital Devices and Technologies and E-commerce, and cultural health industries such as Traditional Chinese Medicine and medical and health tourism (coded as part of the Transport industry), important differences need further exploration and analysis.

To understand the differences thus identified between the global Chinese and the PRC Chinese industry news data, Chapter 3 conducted a systematic comparison between the correlation scores and significance levels attributed to different industry pairs in the two comparable Chinese digital corpora. This led to the identification of important and growing trends of inter-sectoral communication of nutritional health in China, as in a number of cases, the strength of correlation between industries in the PRC Chinese dataset was identified as significant, in contrast with the lack of significance between these industrial pairs in the global Chinese industry news corpus. Chapter 3 analysed the inter-sectoral interaction between nine pairs of industries in the PRC Chinese dataset: Transport and Food; Transport and Drink; Transport and Health Products and Services; Transport and Retail; Digital Devices and Health Products and Services; Media and Entertainment and Traditional Medicine; Media and Entertainment and Restaurants and Fast Food; Research and Retail; and Sports and Food.

To illustrate these emerging patterns identified in the corpus analysis, relevant and typical industry news and media reports were retrieved from the digital corpora, which contain a wealth of real-life examples and social phenomena that exemplify these growing industrial

trends and innovation patterns. It was found that despite limited research in this area, inter-sectoral interaction has driven and continues to underscore the development of innovative social programmes and projects and business initiatives that are transforming traditional and emerging digital-based industrial sectors. In this process, traditional industrial sectors such as transport (by air, road and rail), food and drink are benefitting from innovative tourism forms such as health, medical, cultural and retirement tourism; new digital health industries, especially mobile and wearable digital devices; and cultural health industries, for instance traditional medicine and therapeutic treatment. This study integrated methodologies from corpus linguistics, translation studies and digital media to analyse inter-sectoral interaction as an intervention tool. It highlighted benefits of developing and leveraging inter-sectoral interaction to provide effective, innovative and cost-effective approaches to the communication of nutrition health among the public.