Book Chapter

Cross-National Study on the Perception of the Korean Wave and Cultural Hybridity in Indonesia and Malaysia Using Discourse on Social Media

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**Abstract**

In the era of globalization, due to the prevalent cultural exchange between countries, inflows of foreign cultural products can enrich local culture by hybridizing local and global culture together. Although there have been numerous studies on cultural hybridity using qualitative interviews with recipients of foreign cultural products in single countries, cross-national studies that examine the national characteristics that facilitate or impede cultural hybridity remain scarce. The purpose of the present study is to identify the factors that promote or hinder cultural hybridity between the Korean Wave and Muslim culture by probing the similarities and differences in social media data on Korean cultural products between Indonesia and Malaysia using a semantic network analysis. The results of the study uncovered the three factors that promote cultural hybridity (‘Asian identity’, policies emphasizing ‘unity in ethnic diversity’, and ‘local consumers xenocentrism’) and the two hindering elements (‘a conservative nature of religion’ and ‘discrimination between ethnic groups’). Theoretical contributions and practical implications are also provided for promoting cultural hybridity.
Keywords

Cultural Hybridity; Korean Wave; Indonesia; Malaysia; Social Media Data

Introduction

Cultural products are visible and invisible commodities, such as cultural content and multimedia content, which reflect cultural elements and identities [1]. Because cultural products act as mediators that deliver one’s culture and value to another, the reception of cultural products involves the acceptance of cultural elements from the origin country [2]. A shift in cultural elements has gained momentum in recent times through globalization, which has been precipitated by the rapid penetration of digital technology [3,4]. Although globalization entails the risk of losing the unique identity and value of the local culture, it produces a hybridized culture by mixing the sociocultural characteristics of the local heritage with those of the imported culture [4]. According to Kraidy [5], cultural hybridity is transnational cultural dynamics where disjuncture and mixture of culture co-exist. The interplay of cultural, economic, and political forces is constitutive of this hybridization in the international context [5]. This process of cultural hybridity, known as glocalization, involves a combination of local and global culture that leads to a rich and diverse culture in the importing countries [6,7]. In other words, cultural hybridity promotes and strengthens cultural diversity as a means of achieving cultural sustainability by receiving global culture while simultaneously maintaining local cultural codes [3]. Therefore, identifying what expedites or hinders cultural hybridity, which ultimately leads to sustainable culture, becomes necessary [3].

One of the most successful examples of cultural hybridity is South Korean (hereafter Korean) cultural products, such as popular music (K-pop), drama, and movies, which combine Korean traditions, Confucian culture, and western popular culture [8]. Recently, the Korean Wave, which describes the international phenomenon of the spread and consumption of
diverse Korean cultural products [9], has rapidly spread through international markets. Thus, it should be noted that Korean cultural products, as a type of hybridized culture, again have the potential to generate a significant hybridized culture within the importing country via the process of cultural trade.

Numerous studies have been conducted on the Korean Wave and its impact on cultural hybridity in importing countries by employing qualitative semi-structured interviews conducted in a single country. The researchers conducting these studies typically asked questions related to Korean cultural products and examined participants’ perceptions and preferences toward Korean cultural products [2,10–12]. Although this qualitative approach is useful for exploring the interpretations and meanings that each individual generates, it has led to the following two knowledge gaps in the literature. First, research comparing consumers’ responses to Korean cultural products across countries is scant. In addition, the literature has mainly focused on the individual recipients’ interpretations of the reception of Korean cultural products. This limitation prevents researchers from identifying these countries’ ethnic, cultural, socio-economic, political, and/or historical characteristics that facilitate or hinder cultural hybridity. In particular, research that compares consumers from neighboring countries with the same religion is helpful because it may enhance the validity of findings on why consumers from countries with similar religious backgrounds react differently or similarly to the same cultural products.

Second, because most studies included the use of semi-structured interviews with a small number of consumers, few studies on cultural hybridity included consumers’ opinions on the Korean Wave on social media, even though the social media are interactive avenues through which consumers freely share their opinions and experiences [13]. The social media have played a critical role in spreading Korean cultural products. With the development of smart technology, global audiences encounter these products through social media such as Facebook, Twitter, and YouTube. These media are not only distribution channels for Korean cultural products but also provide an interactive avenue for the audience [13]. Young fans, in particular, actively
participate in online forums related to Korean artists, create secondary content, and deliver their content to others through social media [2]. Thus, social media offer valuable sources of colorful discourse on the Korean Wave, which may complement the limitations of interview-based studies because of the use of small-sized samples. A few studies based on social media such as Twitter [13] and YouTube [14] have been conducted. Their foci, however, involved deducing the diffusion patterns of the Korean Wave, rather than interpreting the hidden meanings behind the audience’s discourses.

To fill the knowledge gap in the existing literature, the purpose of the present study is to probe the roles of a nation’s ethnic, socio-economic, and historical backgrounds in promoting or impeding cultural hybridity. We employ Kraidy’s [5] conceptualization on cultural hybridity that underlines the formative roles of those backgrounds in cultural hybridization. To this end, we compare social media data on Korean cultural products across countries by using semantic network analysis. This is a useful technique for identifying the hidden themes and framing patterns within text data [15]. We focus on the Muslim consumers in two Southeast Asian countries, Indonesia and Malaysia, because these two countries have historically had few interactions with Korea; thus, consumers in these countries were unfamiliar with Korean culture until Korean cultural products were introduced through the Korean Wave [16]. Malaysia consists of three distinctive ethnic groups: Malay, Chinese, and Indian Malaysian. In this study, we specifically focus on Malay Malaysians who are Muslims and occupy 69% of its population (referred to as Malaysians hereafter).

Islam is the dominant religion in both of these countries, but they have different ethnic, socio-economic, and historical backgrounds. Because an individual uses one’s local culture as the lens through which imported culture is received, Indonesians and Malaysians who encounter Korean cultural products are affected by their own local cultures [17]. In this regard, shared and different responses on Korean cultural products between the two cultures are anticipated, even though the two countries are neighbors in the Southeast Asian region and have the same
religion. These results will further enable us to identify the roles of a nation’s ethnic, socio-economic, and historical backgrounds in cultivating or inhibiting cultural hybridity. Specifically, the present research presents two research questions as follows.

**Research question 1**: What are the similarities and differences in the social media discourse on the Korean Wave between Indonesians and Malaysians?

**Research question 2**: What factors contribute to promoting or impeding cultural hybridity based on the findings of the similarities and differences in the social media discourse on the Korean Wave between Indonesians and Malaysians?

The present study will contribute to the existing literature on cultural hybridity by identifying the national characteristics that promote or inhibit cultural hybridity in the context of the hybridization of the Korean Wave with Muslim culture by comparing of Indonesian and Malaysian social media data on the Korean Wave. This study will also reveal how semantic network analysis using discourse on social media is useful for cross-national studies on cultural hybridity. Furthermore, this study will have practical implications for local consumers, educators, policy makers, and the entertainment industry regarding how to pursue constructive cultural hybridity, which is inevitable in globalization. We expect that the findings of this research will help both cultural-product importing and exporting countries that are impelled to exchange their culture by highlighting the importance of understanding each other’s backgrounds.

The rest of the present study begins with reviewing the literature on cultural hybridity, the Korean Wave, and the general cultural backgrounds of Indonesians and Malaysians. After explaining the research methods, a results section is provided. Then, the first and second research questions are probed in the discussion section. This article concludes with theoretical and practical implications related to promoting cultural hybridity by respecting each contributing culture.
Literature Review

Cultural Hybridity in the Era of Globalization

The concept of culture is complex and can be defined in broad or narrow terms [18]. The UNESCO Universal Declaration of Cultural Diversity provides a broad definition of culture as a “set of distinctive spiritual, material, intellectual and emotional features of society or a social group, and that it encompasses, in addition to art and literature, lifestyles, ways of living together, value systems, traditions and beliefs” [19] (p.12). Because we focus on the Korean Wave, the definition of culture is narrowed to include cultural artifacts, heritage, and the shared knowledge of social groups or countries [20].

Since the twentieth century, cultural hybridity has been noted across various disciplines, such as sociology, anthropology, and history, especially in studies on migration in urban contexts [21]. From a postcolonial critique perspective, hybridity has been investigated as an expression of the power relations between the periphery and the center [5]. According to Kraidy’s [5] conceptualization of cultural hybridity, the continuous dynamics that occur in the cohesion and dispersal of culture are what is captured in communication across countries. His concept of cultural hybridity underlines the cultural, economic, and political forces that drive culture to become hybridized. Therefore, based on Kraidy’s [5] conceptualization, we consider cultural hybridity in the international context as transforming one’s culture into a new culture based on an active exchange between cultures that is influenced by national backgrounds [22].

In the era of globalization, cultural hybridity is considered a by-product of the transcultural dynamics between local and global context [6], which are accelerated in the form of glocalization, in which globalization is combined with localization through the process of constant change, adaptation, and convergence [6,23]. Specifically, accepting heterogeneous culture by globalization is facilitated by the movement of cultural products across regions [4,24]. When consumers consume imported cultural products, such as foreign music and visual content, the foreign culture embedded in these cultural products is introduced to another
culture. In this process, the imported cultural products contribute to producing a hybridized culture by creatively adapting to the local culture [25]. The hybridized culture then develops according to the recipients’ tastes, values, and needs [26]. At the same time, it keeps the local cultural ethos alive [3]. For example, several Korean cultural products have been produced via a hybridization between Korean culture and Western culture. Through diffusion to other Asian countries, such as Japan, China, and Taiwan, this process also facilitates the cross-fertilization of pop culture of these other countries [4]. Therefore, glocalization and the resulting cultural hybridization produce more diverse cultures through the exchange of cultural products [23].

To build a constructive novel hybridized culture by adapting the imported culture to the local culture, the requirements for the recipients do not entail an uncritical reception of imported culture or ethnocentrism but instead involve accepting non-exclusive and non-judgmental notions of culture [27]. To protect a country’s traditional heritage, the inflow of foreign culture provokes reactionary movements to reduce ethnic or religious diversity [28]. Ethnocentrism, which is a lack of acceptance of cultural diversity and an intolerance for outgroups, has a strong tendency to lead to negative stereotypes, negative prejudices, and negative behaviors towards other cultural group members [29,30]. This tendency is based on differences in culture, language, religion, family structure, and the clothes worn or the food eaten [31]. Because ethnocentrism is involved in the xenophobic rejection of external influence, it interrupts intercultural communication. Therefore, it is vital to acknowledge the principle of ‘learning to live together’ by promoting the peaceful co-existence of cultures rather than homogenization or cultural imperialism [11,32].

**Diffusion of the Korean Wave as Cultural Products**

The Korean Wave, or the Hallyu, refers to the popularity of Korean cultural products, such as drama, movies, and popular music (K-pop) and was first used as a term in China during the 1990s [9]. Cultural products are visible and invisible
commodities where cultural elements are accumulated and create economic value [1]. The recent Korean Wave is considered an aspect of cultural globalization because Korean cultural products have successfully entered into various countries and dominated global pop-culture markets [33].

The success of the Korean Wave is attributed to the increasing transnational and hybrid aspects of pop culture [8]. It is acknowledged that the Korean Wave carries the unique cultural products that adapt Western pop culture, mixed with Asian culture but packaged in a modern way [2,33]. For example, K-pop artists are popular in European countries because of their polite attitudes towards their fans, which are based upon Confucian values, making fans feel respected [23]. At the same time, the lyrics of K-pop songs mix both Korean and English, which enables global audiences to easily access the songs [23]. Analyzing the success of K-pop, Seo [34] adopted Griswold’s cultural diamond model, which notes four key points that are helping to globalize K-pop: preparation, content, delivery, and consumers. For the preparation point, Korea’s major management agencies have developed and applied systematic training management systems to take their artists overseas. From a content perspective, K-pop artists have a talent to fascinate their music fans by captivating them with melodies adopted from a western style popular music. In addition, the artists wear unique fashions and styles. For delivery, K-pop management agencies utilize social media for worldwide exposure and promoting their artists. K-pop fans, who are mostly young, enjoy K-pop content delivered through social media using smart devices.

Korean drama has gained popularity in the Asian region since the early 2000s due to its beautiful cinematography, original soundtracks, romantic storylines, and Confucian values [9]. For Confucian values, Korean drama usually presents a traditional patriarchal system with respect for elders, which are cultural foundations in China and Japan [10]. These dramas also attract audiences because of the exoticness preserved in their visual elements, such as costumes [36,37]. The costumes and styles in
Korean movies also depict Western trends but are distinguished from those of Hollywood movies [3].

Cultural products deliver a nation’s perception of its own identity [2]. In this regard, the Korean Wave can expand the possibility of distributing Korean culture at a global level by transcending the limits of national borders and reconstructing their country’s image [9]. This phenomenon increases the familiarity and favorability of Korean culture, such as the character of its people, Korean heritage, the Korean language, and the lifestyle of the Korean people [2,38]. Specifically, Korean drama and K-pop highlight Korean fashion, food, language, and games [39,40]. Hsu [39] found that the motivation to purchase clothing among young female Taiwanese individuals is affected by the presentation of fashion in Korean dramas. Jeong [40] showed that a preference for Korean drama and K-pop induced a preference for Korean fashion and food. Moreover, recipients of Korean cultural products consume them as a means to assess and critique their own circumstances [41]. This implies that these cultural products allow their recipients to access foreign culture to compare and criticize their own culture.

Research found that the reception of Korean cultural products extensively influences and enriches the importing countries’ cultures, especially in Asian countries [33,42,43]. Kim [42], who studied the influence of the reception of Korean drama on Southeast Asian countries, revealed that the Korean culture presented in these dramas becomes integrated into the recipient’s personal life. For example, watching a Korean drama visualizes the daily life of a family, and the recipients follow the Koreans’ lifestyle presented in the drama. In addition, the reception of Korean cultural products affects the formation and management of the local cultural products of the host countries. For example, after the introduction of K-pop to Indonesia, the Indonesian music industry has learned from the growth factors of K-pop to help develop its local cultural content [2]. The Indonesian music industry has been increasingly crowded with local boybands and girlbands that emulate K-pop artists, which has resulted in the emergence of I-pop [33]. These Indonesian groups sing and dance in a K-pop style, but their songs are in Indonesian [11]. In
addition, a few Korean dramas (e.g., *Coffee Prince* and *Boys Over Flowers*) and their theme songs were remade in Malaysia, thereby demonstrating the influence of Korean cultural products in the Malaysian entertainment industry.

Fans of Korean culture assume an important role in the process of recreating local culture. Such fans are considered active participants with their own ability to decode Korean culture and build their own cultural content with high levels of attachment [2]. Due to their special interest in Korean culture, these fans participate in online forums and gather information about their favorite artists to share with others. These activities are extended to sociocultural events, such as donating to charity and volunteering in emergencies to enhance their star’s image [2].

Moreover, the Korean Wave rapidly diffuses through online media, such as Facebook and Twitter, which enable recipients of the Korean Wave to participate in creating secondary content, such as fan fiction and dance clip covers [40]. Recently, YouTube has provided a unique ecosystem for cultural diffusion by giving its users a means of collective viewing, commenting, and fostering an online community based on the peer interactions related to video clips [43]. These media facilitate the transnational circulation of Korean cultural products in countries with a lack of cultural affinity or geographical proximity to Korea, such as Latin America [44]. Hybridized cultural content also appears in Europe. European fans show off their own dances combining K-pop’s style with that of their own countries in related competitions [23].

**Indonesian and Malaysian Culture**

Indonesia and Malaysia are two of the closest neighbors in Southeast Asia and share many similarities. These countries use similar languages, and both are Muslim countries [45]. They both employ more-or-less the same language, Bahasa (i.e., Indonesian Bahasa and Malaysian Bahasa), but both countries feature slight differences in their grammar, pronunciation, vocabulary, and spelling. They can understand each other as their languages are mutually intelligible [45]. Moreover, people
aged 15–24 account for 16.76% and 16.74% of the total population in Indonesia and Malaysia [46]. People in these age groups are “digital natives” who are widely exposed to the Internet and social media [33].

The religion Islam acts as the core of both Indonesian and Malaysian identity, forming the normative and cognitive behaviors of the two countries [47]. Although there are diverse religions in these countries, Islam has an extensive influence on Indonesian and Malaysian cultures because people are expected to follow some Islamic rules regardless of their religion. Muslim consumers are known to have a strong connection to each other even though they come from different social statuses and countries [45]. For example, they are not allowed to eat pork or drink alcohol. One of the important concepts that influences Muslims is Halal, which means “something permissible by Islamic law”, [48] and especially concerns food consumption. Muslims are permitted only to consume Halal foods that follow Islamic principles in the process of manufacturing, preparing, packaging, and distribution [49]. Indonesia and Malaysia developed their own Halal certification systems. Furthermore, they follow Islamic values in their advertising: the use of sexual appeal, deceptive promotions, or advertisements that exploit or provoke the basic instincts of consumers is strongly discouraged [50]. Islam also influences consumers to consume and spend moderately and ethically [51,52].

However, the two countries are different in their ethnicities, economic indices, and attitudes towards foreign products. Although the population of Malaysia is a ninth of Indonesia’s population, Malaysia has a 2.5 times larger GDP per capita than that of Indonesia [47]. Both Indonesia and Malaysia are multicultural countries, but they show differences in their ethnic policies. Indonesia pursues ‘unity in diversity,’ but Malaysia is more likely to distinguish and preserve each ethnic group [47]. More than 300 ethnic groups construct the Indonesian population, the largest of which is Javanese, who occupy 40% [53]. The government has tried to overcome the ethnic division since 1945, when Indonesia gained independence from the Dutch [53]. Moreover, Indonesians are united as Muslims, as almost
90% of Indonesians believe in Islam. This united identity has resulted in ethnocentrism, which has led Indonesian consumers to refuse foreign brands to protect the local economy [45,47].

On the other hand, Malaysia consists of three major distinctive ethnic groups: Malay (62%), Chinese (22%), and Indian Malaysian (7%). After independence from the British in 1963, the Malaysian government struggled to overcome the economic inequality between Malay and Chinese Malaysians. The government developed a radical solution of implementing affirmative programs, called the New Economic Policy, in 1969 [54]. This socio-economic policy favored the Malays, referred to as Bumiputra, over non-Malays, especially over the Chinese who occupied the majority of the country’s wealth, to enhance the Bumiputras’ social status over others [47]. Bumiputra includes Malay Malaysians, indigenous people such as the Iban and Kadazan (in Borneo), the descendants of Portuguese Eurasians in Melaka, and a few other minority groups, although Malay Malaysians comprise the majority of the Bumiputra [55]. The government developed this socio-economic policy because the Malays feared that their political power was being threatened by the Chinese [54]. Due to these policies, the distinctiveness between the ethnic groups has been accentuated, leading to coexistence among the groups, rather than a mix [47]. On the other hand, in 2009, the government introduced the concept of ‘1Malaysia’ to accept the differences within the country and develop a more inclusive national image [56]. Although the government has since promoted various national unity programs and moderated the Malay-centric policies of the New Economic Policy, there remains skepticism towards these measures, which have not appeased all ethnic groups. Right-wing Malay Malaysians believe that these revised policies undermine their rights, while some non-Malays have regarded them not as a genuine effort of the government to unite the various groups but as a political ploy to win votes, leaving many challenges for resolving the distinctiveness between the groups [54,56,57].
Reception of Korean Cultural Products in Indonesia and Malaysia

Although Korea, Indonesia, and Malaysia are located in Asia, few cultural interactions have occurred between these countries. Compared to China and Japan, Indonesia and Malaysia are geographically distant from Korea, which has hindered active diffusion of Korean cultural products [16]. The linguistic and religious differences between Korea and Southeast Asian countries have also produced cultural difference among them [16]. The differences in religion can especially intensify cultural differences because a shared religious identity has a formative role in shaping how people think, feel, and behave [58]. Furthermore, the political, economic, and historical exchanges between Southeast Asian countries and Korea have been scarce [42]. Therefore, the Korean culture transmitted by Korean cultural products has been novel to Indonesian and Malaysian consumers.

The popularity of Korean cultural products began to increase in Southeast Asia starting in the 2000s. Korean drama is the driving force of the Korean Wave in this region. More recently, K-pop has experienced an elevated importance in Korean pop-culture. This popularity has facilitated the purchasing desire for, and quality satisfaction of, various Korean products featured in movies or dramas, such as cars, mobile phones, and electrical home appliances [1].

Several studies on the Korean Wave determined how Indonesians and Malaysians accept and respond to Korean cultural products. Using the Q methodology, Suh et al. [12] developed four perspectives on the Korean Wave of its Asian recipients (including Japanese, Chinese, Vietnamese, Thai, and Uzbek): 1) economic perspectives, 2) cultural appropriators, 3) ethnocentric perspectives, and 4) global perspectives. Recipients within the economic perspective focus on the economically and culturally positive impact of the cultural Wave in their own countries. These recipients believe that the Korean Wave enriches their own culture. Cultural recipients are more involved in the Korean Wave and are active recipients of the Wave. Their
interest in the Korean Wave expands to other aspects of Korean culture, such as food, language, and traditions. On the other hand, recipients with an ethnocentric perspective perceive the Korean Wave as a temporary phenomenon with poorer quality than their own culture. Lastly, recipients with a global perspective focus on the success of the Korean Wave. They attribute its success to the systematic support of the Korean government. In addition, they note the economic power of Korea in Asia, who admire Korea’s fast-growing economy but only passively accept the country’s cultural products.

Jeong [40] focused on Indonesian consumers and found that they positively accept Korean dramas, K-pop, Korean fashions, and foods as they acknowledge the similarities between Korean content and Indonesian content. At the same time, a discriminatory perception between these two types of content also exists, which contributes to both the positive and negative attitudes of Indonesians aged 10–39 during the Korean Wave [40]. Anwar and Anwar [33] showed that some young Indonesians negatively perceived other young Indonesians’ admiration of Korean culture because they considered such admiration to have negative impacts on the development of their own cultural products, such as Indonesian music, TV drama, and film [33].

On the other hand, Ruslan and Latif [59] addressed how Malaysian women enjoy Korean drama. Focusing on individuals who read media-based texts according to their sociocultural backgrounds, the authors found that Malaysian women found various meanings in Korean drama, such as a male-centric dynamic, parasocial relationships, and a cosmopolitan lifestyle and family. Khai and Wahab [60] suggested that the beautiful men appearing in Korean drama are one of the reasons that Malaysians sustain a high level of consumption of Korean dramas. Cho and Jang [61] also demonstrated the diverse responses of Malaysian consumers. The authors identified that some Malaysians recognize that well-organized storylines and trendy fashions contribute to the popularity of Korean movies. However, the interviewees older than 40–49 were worried about a crisis in their local culture due to the Korean Wave. These
consumers worried that their local industry would retreat because of Malaysian youths following Korean culture [62].

A review of the literature indicates that although numerous studies have examined how the Korean Wave has been received by Indonesian and Malaysian consumers, the majority of these studies have employed qualitative method interviews conducted in a single country. This calls for cross-national research using social media data to identify the roles of a nation’s ethnic, socio-economic, and historical backgrounds in promoting or prohibiting cultural hybridity.

**Social Media Use**

Social media refers to a collective category of Internet-based applications that enable the creation and exchange of user-generated content; such applications include Facebook, Twitter, blogs, Instagram, and other online communities [63]. These media deliver information online about products or services, spreading the information beyond traditional offline media [13].

The literature on social media use has demonstrated that people use social media to fulfill their various individual needs [64]. People use these media for not only practical motivations (e.g., obtaining useful information [65,66]), but also for their psychosocial wellbeing, such as gaining affection [67,68], emotional intimacy [69], and building strong interpersonal relationships [70,71]. The social media also provide an avenue for establishing online brand communities where consumers interact with each other over a specific brand, satisfying social and hedonic needs for social enhancement and playfulness [64]. In addition, Alhabash and McAlister [72] revealed that the self-expression of one’s identity motivated people to use Twitter.

Large amounts of user-generated data on social media reflect public opinion, thus offering accurate insights into the public mind [73]. Previous research has included the use of these opinions to discover topics in various contexts, such as global warming concerns [74], rumors surrounding public events [73], mental disorder experiences [75], and comments on gender
issues [76]. Because social media users tend to share freely their opinions about their product experiences in the media [77], the user-generated opinions on these media would also be useful for examining the diverse and genuine responses on Korean cultural products. To this end, we have conducted cross-national research to identify how a nation’s background facilitates or inhibits cultural hybridity by using consumers’ opinion on the Korean Wave from Indonesian and Malaysian social media.

**Research Methods**

**Data**

The research process is presented in Figure 1. This study collected consumers’ opinions through cooperation with Zanroo, a local marketing company in Malaysia. Zanroo is the first company in Southeast Asia to provide market insights with comprehensive social media data [77] and is an ISO/IEC 27001:2013 certified company, where ISO/IEC 27001:2013 is an internationally recognized standard for information security [78]. Data obtained from posts on Indonesian and Malaysian social media, specifically Facebook, Twitter, and online communities, in the period between November 2018 and July 2019 were crawled using “Korean Wave”, “K-pop”, “Korean drama”, and “Korean movie” as keywords. As a result, 51,340 postings from Indonesia and 46,513 postings from Malaysia were obtained.

The data needed to be translated because they were written in the local language of each country. We used Google Translator for our primary translation into English. By adapting the Recurrent Neural Network to improve the translation system, Google Translator has been noted for its low translation errors and high level of accuracy that almost matched that of bilingual human translators [79,80]. Then, an Indonesian translator who is proficient in both Indonesian and Malaysian corrected errors by comparing the original documents with the translated versions and transformed abbreviations and slang into formal words.

To clean the data, we conducted automated text classification with supervised machine learning to exclude documents irrelevant to our topic to minimize the amount of labor needed to
classify the documents [62]. In the supervised machine learning, a small portion of documents is randomly sampled from an entire dataset. Researchers manually annotate these sample documents with numeric values according to a predetermined categorization scheme to represent classes of each document. Subsequently, the sampled documents are divided into training and test datasets. A machine learning algorithm is trained using a training dataset and their correct classes to derive the classification rules [81]. These rules are applied to the test dataset of which classes are also known through the hand coding conducted by the researchers. To evaluate the performance of this computer classifier, its predicted classes and the correct classes of the test dataset are compared. The well-performed rules are used for the automated classification of the remaining dataset, whose classes are unknown. The known category classes of training and test datasets are provided by a human coder with contextual knowledge, and a trained computer classifier is treated like any human coder [82].

According to this procedure, we randomly sampled 1000 documents from each country’s data set. Two researchers labeled the documents under two classes: 0 = documents that do not include the writer’s opinion on Korean cultural products (e.g., “Indomaret is now playing a BTS (a name of Korean idol group) song” and “Because of my exam, I rarely focus on BTS”); and 1 = the others. After hand coding, the labels were cross-checked by the researchers to enhance the reliability of text classification. Mismatched labels between the coders were revised under discussion. In total, 252 Indonesian documents and 162 Malaysian documents (out of the 1000 sampled documents) were labeled as 1, thus representing an imbalanced data set. The performance of machine learning algorithms deteriorates when the classes are not approximately equally represented [83]. In this case, such algorithms tend to classify unlabeled documents as the dominant class, resulting in a low level of classification accuracy. To address this issue, SMOTE (Synthetic Minority Over-Sampling Technique) [83], which creates extra documents in a minority class by over-sampling, was used. Using this approach, we adjusted the imbalanced dataset to have equally
proportional classes; 50% of sampled documents were then labeled under each class.

To construct the training set and test set, we divided the balanced data set 80:20 (training set:test set). Then, the texts of each set were preprocessed through the following steps. First, they were parsed into words. Second, the parsed words were normalized with lemmatization to transform the words into their basic forms. Third, all numbers and punctuations were removed from the data, and capital letters were transformed into lower case. Fourth, stop words that contained general terms, such as “a”, “the”, and “some”, and uninformative terms, such as the adverb “very” and the verb “do”, were removed. After preprocessing, a document-term matrix (DTM) was constructed. Each row of the matrix presents a document whose column indicates a single term, which demonstrates the appearance frequency of the terms within a document.

After preprocessing, we trained a classifier model with the DTM using a support vector machine, which is known to be highly efficient at text categorization [84]. Because the performance of the classifier model could vary across different data contexts, 10-fold cross-validation was conducted to validate each classifier’s accuracy [62]. This process partitioned the data set into ten equal folds, with a fold reserved for testing and the other nine folds for training the classifier model. This process was repeated ten times for every fold that was used as a test datum.

The model automatically classified the test dataset, which included the remaining 20% of the balanced data, and the performance of the model was then evaluated. Accuracy is the performance measure generally associated with machine learning [83]. Accuracy is defined as the number of correctly classified documents out of the entire range of documents. Our models for each country showed classification accuracies of 92.27% (215 documents correctly classified out of the 233 documents in the test set) for the Indonesian data and 88.39% (137 documents correctly classified out of the 155 documents in the test set) for the Malaysian data.
To classify the remaining unlabeled documents, we constructed a DTM of these documents with the same preprocessing procedure. Then, the classifier models were applied to the unlabeled DTM and automatically tagged a binary code (i.e., a 0 or 1) to the remaining documents. As a result, 11,299 and 16,231 documents that were labeled as 1 from the Indonesian and Malaysian data, respectively, were extracted for further analyses. R programming was used for the automated text classification, preprocessing of the texts, and constructing the DTM.

| 1. Data collection |
|--------------------|
| • Collecting posts from Facebook, Twitter, blogs, and online community |
| • Keywords: “Korean Wave”, “K-pop”, “Korean drama”, “Korean movie” |
| • Initial number of documents: 51,340 from Indonesia; 46,513 from Malaysia |

| 2. Translation |
|----------------|
| 1. Google Translator |
| 2. Revision by a bilingual translator |

| 3. Text classification and preprocessing |
|-----------------------------------------|
| 1. Hand coding of randomly sampled 1,000 documents into binary class |
| (0—documents without writer’s opinion; 1—the others) |
| 2. Adjusting the imbalance of the binary class |
| 3. Preprocessing the texts |
| 1) Tokenizing the sentences into the words |
| 2) Normalizing the words |
| 3) Removing all numbers and punctuations, and transforming capital letter into lower case |
| 4) Removing general and uninformative words |
| 5) Constructing DTM |
| 4. Training the computer classifier with supervised machine learning algorithm |
| 5. Validating the classification algorithm with cross-validation |
| 6. Testing and evaluating the performance of the algorithm |
| 7. Adapting the algorithm to remaining documents |
| • Final number of documents: 11,299 from Indonesia; 16,231 from Malaysia |

| 4. Semantic network analyses |
|-------------------------------|
| • Listing the words in order of TF-IDF values |
| • Identifying the themes with CONCOR |
| • Examining shared and unique words with ego-centered network |

**Figure 1**: Overall process of the analysis.

**Semantic Network Analysis**

Semantic network analysis is a technique that treats words as nodes and their semantic relationships as lines (i.e., links) between the nodes to identify key themes and framing patterns in the texts [15]. A link between two nodes can present how frequently a pair of words co-occurs in a document. Semantic network analysis focuses on the relational structures of shared meaning in a text by examining the associations between the prominent words of a message [85]. This analysis started by constructing a co-occurrence matrix of the words based on DTM. DTM is a matrix that contains words listed in columns and documents listed in rows, demonstrating the frequency of each word’s appearance in the documents. A co-occurrence matrix of
the words, comprising words on both row and column, presents the co-occurrence frequency of word pairs and is produced by multiplying the transposed DTM and the original one.

To select the words to be studied, we applied the term frequency–inverse document frequency (TF–IDF) technique. The higher the frequency of a word and the lower the number of documents containing the word are, the higher the TF–IDF value the word has [86]. A word with a low TF-IDF value shows that the word is common across the data but has no distinguishable influence between the documents. We calculated the TF–IDF of each word by multiplying the frequency of each word and inverted document frequency. Then, we listed the words by descending order of absolute frequency and TF–IDF value. We then chose the words that appeared 80 times in each country’s data and eliminated words with TF–IDF values lower than 60. This yielded 116 words in the Indonesian data and 125 words in the Malaysian data.

In the network analysis, the prominence of words was evaluated with the degree centrality of each word. Degree centrality measures how a node is related to other nodes [86] and is effective for identifying the important words in a network [87].

Convergence of iterated correlations (CONCOR) was used to identify semantic clusters and discover hidden themes in each country’s data [15]. This method divides nodes into groups based on structural equivalence, which is determined by the extent to which the words have identical relationships with other words [15]. The themes and subthemes of each group were determined by the words within the group [86], and their meanings were interpreted with reference to the links of the words and the documents that contain the words [88].

In addition, we used an ego-centered network to examine the differences in the discourse surrounding the main keywords in Indonesia and Malaysia. This network allowed us to focus on an individual node (i.e., ego) and to interpret the relationship between the ego and other words [89]. The CONCOR analysis and ego-centered network were conducted using UCINET6 [90],
which is a commonly used software for network analysis [87]. NetDraw with UCINET was utilized to visualize the networks.

Results

TF–IDF and Degree Centrality

We found that the frequently appearing words related to the Korean Wave in Indonesia and Malaysia (see Appendix A: Table A1 and Table A2). In both countries, words related to Korean popular music (K-pop), such as “idol”, “song”, “music”, and “concert”, appeared to be high. Popular K-pop groups (“BTS”, “Blackpink”, and “SuperJunior”) along with the name of the related fandom (“Army”) appeared in both countries with high frequency. Words representing the positive attitudes and feelings towards the Korean Wave, such as “interested” and “good”, were also highly ranked. Relatively fewer words were found for Korean dramas and movies, such as “drama” and “actor”, compared to the words related to K-pop, showing that online discourse about K-pop is more active than discourse about dramas and movies in both Indonesia and Malaysia.

Generally, words with a high TF–IDF showed high centrality values; however, some notable words presented a high TF–IDF with low centrality. This indicates that such terms may be linked to specific words in the network, rather than to diverse terms. For example, Indonesians may be interested in the “hair” of Korean artists and “merchandise”, which are products related to popular artists (see Appendix A: Table A1). Similarly, “Malay culture” and “pig” are notable in terms of their low centrality compared to their high TF–IDF rank (see Appendix A: Table A2). This suggests that Malaysians use these terms to address some issues related to the Korean Wave, which will be further examined.

CONCOR

Figure 2 presents the CONCOR results indicating the themes of discourse for the Korean Wave in Indonesia. Eight themes and embedded subthemes in each theme were determined with
reference to the links between the terms within a group and the documents that contain those terms, as follows:

(1) **Korean entertainment industry**
- Talented K-pop artists from Korean entertainment agencies;
- Distinct characteristics of K-pop artists from different Korean entertainment agencies;
- Interest in the appearance and fashion of K-pop artists;
- Beauty standards reflected in the Korean entertainment industry.

(2) **K-pop songs**
- Learning Korean language from K-pop song lyrics;
- K-pop is a personal musical taste.

(3) **K-pop concerts**
- Expensive ticket prices.

(4) **K-pop merchandise**
- Excessive expenditure on K-pop merchandise.

(5) **Conflicting opinions between fans and anti-fans of K-pop**

**Fans**
- K-pop provides life motivation;
- Pride in the international popularity of one’s favorite K-pop artist(s);
- K-pop is a worldwide trend;
- It makes people happy to listen to K-pop songs.

**Anti-fans**
- K-pop artists are too girlish;
- K-pop artists are ugly;
- K-pop artists have many plastic surgeries;
- Being ashamed of fanatic K-pop fans;
- It is tiresome to listen to K-pop songs.

(6) **Negative opinions involved with religion**
- Korean Wave content is against religion.

(7) **Styles of Koreans**
- Interest in hairstyle and color;
- Positive opinions about pretty and handsome faces.

(8) **Korean dramas, movies, and variety shows**
- Exciting scenes in Korean dramas and movies;
- Interest in Korean food presented in Korean dramas, movies, and variety shows.
Figure 2: Convergence of iterated correlations (CONCOR) results of Indonesian discourse.

Figure 3 demonstrates the themes of discourse on the Korean Wave in Malaysia through CONCOR. There are eight themes and subsequent extracted subthemes, as follows:

(1) **Conflicting opinions between fans and anti-fans of K-pop**

- K-pop is great;
- K-pop artists are talented;
- It makes people happy to listen to K-pop songs.
  - Anti-fans
- Fanatical K-pop fans are stupid;
- K-pop is noisy;
- K-pop artists have many plastic surgeries;
- It is tiresome to listen to K-pop songs.

(2) **Korean dramas and movies**

- Positive opinions about actors’ beautiful and handsome appearances;
- Interest in Korean food presented in Korean dramas and movies.

(3) **K-pop songs**

- Learning Korean language from K-pop song lyrics;
- Watching videos of K-pop artists;
• Comparing K-pop songs with local songs.  
  (4) Styles of Koreans
• Interest in hairstyle;
• Popularity of short length of clothing.
  (5) Negative opinions involved with religion
• Korean Wave content is entertainment and against religion;
• Criticism about Korean Wave fans who consume related content during Ramadan.
  (6) General negative opinions on the Korean Wave
• Inappropriate fashion styles of Korean artists;
• Worried about the potentially negative influence of Korean artists on Malaysians;
• Korean artists are too girlish.
  (7) Economic issues
• Excessive expenditures on K-pop merchandise;
• Criticism about wasting the national budget to bring foreign cultural content to Malaysia.
  (8) Conflicting opinions on the reception of the Korean Wave

• The Korean Wave will undermine the Malaysian culture that has to be inherited by the youth;
• The Korean Wave will bring economic benefits because it will attract tourists from neighboring countries.

Figure 3: CONCOR results of Malaysian discourse.
The themes derived from CONCOR indicate that Indonesia and Malaysia share several similar issues regarding the Korean Wave. Various topics related to K-pop appear in both countries, indicating that the most commonly consumed Korean Wave content in these countries is related to K-pop. Indonesians and Malaysians learn some Korean language when they enjoy the lyrics of K-pop songs, as shown by the theme of K-pop songs in both countries. These terms also relate to excessive expenditures on K-pop concert, such as “concert”, “ticket”, and “merchandise” via the theme of K-pop concerts in Indonesia and the subtheme of Economic issues in Malaysia. Further, in both countries, one theme that appears to include Conflicting opinions between fans and anti-fans of K-pop was extracted, containing words such as “fan” and “anti”—words not only illustrating devotion to K-pop stars, such as “happiness”, but also expressing negative attitudes toward these stars, such as “plastic surgery” or “tired”. Fans feel happiness when listening to K-pop songs, while anti-fans feel tired by the songs. Anti-fans of K-pop also point out that K-pop artists often have many plastic surgeries (e.g., “Plastic surgery is a common word now to describe Korean idols.”). Thus, we called this theme Conflicting opinions between fans and anti-fans of K-pop. On the other hand, both Indonesians and Malaysians experience Korean food through visual content, such as dramas and movies, as found in the theme of Korean dramas, movies, and variety shows in Indonesia and the theme of Korean dramas and movies in Malaysia. In addition, as shown in the Style of Koreans themes in both countries, not only females but also males mention the Koreans’ beautiful appearance and hairstyle (e.g., “The girl (Korean artist) was really beautiful, and her hair was soft” and “He wants to look like a Korean idol, so he should try the natural hairstyle that is popular in Korea”).

However, some differences in discourse on the Korean Wave were discovered between Indonesia and Malaysia. Only the Malaysian network includes a theme that indicates opinions about reception of the Korean Wave (Conflicting opinions on reception of the Korean Wave), suggesting that Malaysians tend to be more sensitive to accepting foreign cultural content. In addition, several shared words are found between these two countries but belong to different themes. For example, “fashion”
belongs to the **Korean entertainment industry** in Indonesia, while it is included in **Negative opinion involved with religion** in Malaysia. Some Malaysians perceive the Korean Wave as forbidden and criticize the inappropriate costumes of the Korean artists. “Korean culture” is found in the **Korean entertainment industry** theme in Indonesia, but the same word was classified under the theme of **Conflicting opinions on reception of the Korean Wave** in Malaysia. This shows that Indonesians consider the Korean entertainment industry to represent Korean culture. On the other hand, there is debate surrounding the reception of Korean culture among Malaysians. For example, Malaysians mention that accepting Korean culture would bring economic “benefits” and “profit” to their own country, showing a supportive opinion of the Korean Wave. “Tradition” simultaneously appears in the same theme, which suggests a view that Korean culture deteriorates Malaysian tradition.

### Shared and Unique Words Between Indonesia and Malaysia

Figure 4 compares the two countries on a lexical level. The words that connect to both “Indonesia” and “Malaysia” placed in the center of the figure indicate shared words. The other words are unique terms that appear only in the linked country.

![Figure 4: Shared and unique words appearing in Indonesian and Malaysian discourse.](image-url)
Among the shared words, “trend” indicates that both Malaysians and Indonesians perceive the Korean Wave to be a worldwide trend (e.g., “K-pop songs are a trend all over the world”). Some consumers from the two countries consider the Korean Wave to be against “Islam.” They use the word “demon” to condemn the content of the Korean Wave, reflecting religion as the cultural background that shapes consumer thought. Malaysians especially perceive the Wave as “entertainment” and a “sin” that should be avoided. Terms such as “Quran”, “nonMuslim”, and “ustaz” (a religious preacher in Islam) show that Malaysians consider the appropriateness of Korean Wave content consumption from a Muslim perspective (e.g., “An ustaz can help (Malaysian) youth (who are) active in Korean music and dance in the K-pop style”). Both Indonesians and Malaysians perceive Korean male artists to be too girlish, though their expressed words are different (“sissy” in Indonesia and “gay” in Malaysia).

The unique words from each country portray differences in the discourse on the Korean Wave in detail. For Indonesia, “YG entertainment” and “SM entertainment” demonstrate that Indonesians are interested not only in K-pop artists but also their agencies, such as the characteristics and training processes of each agency. “Booth” (which means supporting a certain artist), “bias” (which refers to a favorite performer), and “fangirling” clearly show that Indonesian fans enthusiastically support specific singers. They especially use the word “oppa”, which is a phonetic spelling of ‘older brother’ in Korean. “Jpop” (Japanese pop music) and “Western song” show that Indonesians also consume popular songs from other countries and compare them with K-pop (e.g., “For me as a K-pop song fan, I don’t condemn Western songs. Do not judge our music. It is just different in genre and style” and “(I think) Kpop songs have become a rival of J-pop.”). Some Indonesian fans have been motivated to live passionate lives by K-pop artists (e.g., “Knowing BTS has motivated me and my zest for life”), which is not prominent among Malaysians. This shows that Indonesians are more emotionally involved with K-pop artists and that their affection for K-pop extends beyond listening to songs. Indonesians also watch Korean “variety shows”, which shows that the Korean
Wave is diffusing through not only songs and dramas but also through more diverse entertainment programs.

On the other hand, “pig” shows how Malaysians explicitly express negative opinions toward fanatic Korean Wave fans and their favorite artists (e.g., “People who worship K-pop are pigs. (It is) annoying me” and “I pray 5 times (a day). I do not want to be unclean like the idol and its fanatics. It is a pig”). Unlike in Indonesia, words representing local cultural products appear in Malaysian discourse. “Malay song”, “Malay culture”, and “tradition” demonstrate that Malaysians recognize the necessity of protecting their own cultural identity (e.g., “There are so many ways we can introduce Malaysia to the world. We should expand the program to introduce Malaysian culture and Malaysian tradition. Why should we be obsessed with foreign culture?” and “Where is the identity of a Malaysian citizen? Korean artists are against Malaysia values”). Moreover, “foreign artist” and “foreign country” in Malaysian discourse underline the people’s perceptions of the boundaries between their own country and others.

Ego-Centered Network

Ego-centered networks depict the differences in issues raised in relation to keywords between Indonesian and Malaysian consumers. We selected “Korean culture”, “Kpop song”, and “drama” as the centered egos because they are the focal contents of the Korean Wave. These networks enable us to examine in what contexts the unique words of each country appear.

Figure 5 and Table 1 present the words linked to “Korean culture” in ego-centered networks. Words that link to “Korean culture” in Indonesia networks tend to focus on words related to K-pop, showing that Indonesians are likely to consider K-pop as the medium of Korean culture. Meanwhile, in the Malaysian network, words such as “tradition”, “Malay culture”, and “Malay artist” indicate that Malaysians compare their own cultural content with Koreans’ and perceive the need to protect their own culture.
Figure 5: Ego-centered networks of “Korean culture”.

Table 1: Words linked with “Korean culture” in ego-centered networks.

| Words                  |
|------------------------|
| **Indonesia**          |
| good, idol, BTS, Korean.language, drama, dance, Army, Korean.Wave, **Korean.food, song**, Korean.people, music, picture, universal, interested, Kpop.song, **group**, cool, fan |
| **Malaysia**           |
| Malay.culture, good, Malay.artist, song, Islam, dance, **group, interested**, great, **Korean.food, BTS**, concert, Korean.artist, money, proud, tradition, stupid, tourist, youth |

Note: Bolded words are shared terms between Indonesia and Malaysia.

Regarding “Kpop song”, Indonesians mentioned the various attributes of K-pop songs, such as “taste,” “style,” “title,” “singer”, and “lyrics” (see Figure 6 and Table 2). Also, “Western
“K-pop song” and “Jpop” show that Indonesians perceive K-pop as one of mainstream music genres that is internationally popular. In the Malaysian network, however, words such as “wrong”, “shocked”, “noisy”, and “curse” indicate some of Malaysians’ negative opinions of K-pop songs.

![Diagram of ego-centered networks of “Kpop song”]

**Figure 6:** Ego-centered networks of “Kpop song”.
Table 2: Words linked with “Kpop song” in ego-centered networks.

| Words                      |
|---------------------------|
| **Indonesia**             |
| song, English, BTS, face, beautiful, EXO, favorite, handsome, **good**, music, interested, fan, Jpop, lyric, SNSD, crazy, taste, style, title, trend, wrong, western.song, video, SuperJunior, **bad**, color, happy, singer, popular, sad, cool, idol, Korean.language, market, genre, group, dance, appearance, fanatic, concert, era, drama |
| **Malaysia**              |
| dance, genre, cute, BTS, concert, great, fanatic, busy, bad, crazy, Blackpink, **fan**, good, Korean.artist, money, rock, lyric, group, music, Army, Malay.song, song, popular, stupid, video, youth, wrong, shocked, trend, Korean.language, era, member, idol, drama, interested, noisy, curse |

Note: Bolded words are shared terms between Indonesia and Malaysia.

Figure 7 and Table 3 show the words that co-occur with “drama”. Words about the features of drama appear in Indonesia, such as “scene”, “series”, “genre”, and “character”. Some words related to songs are notable because they illustrate the importance of the original soundtracks of Korean dramas. This demonstrates that Indonesians enjoy not only the storylines of Korean dramas but also the theme songs. However, in the Malaysian network, words related to religion, such as “god”, “religious”, and “Islam”, appear with “drama.” Malaysians consider Korean drama to go against their religion (e.g., “There should be a great deal of worship (to God) in this month of Ramadan and not enjoyment of (Korean) drama” and “Many dramas have a screen (i.e., a scene) that is not religious. (Drama is) for entertainment once in a while but not always”). At the same time, these individuals are interested in the actors’ makeup and beauty (e.g., “(I) Like her because of her beauty. This drama is highly rated.”), which indicates the conflicting viewpoints on Korean drama among Malaysians.
Figure 7: Ego-centered networks of “drama”.

Table 3: Words linked with “drama” in ego-centered networks.

| Words                                                                 |
|----------------------------------------------------------------------|
| **Indonesia**                                                       |
| actor, idol, beautiful, happy, Korean.culture, Korean.language, news, |
| picture, Korean.story, favorite, star, scene, popular, successful, taste, |
| good, variety.show, wrong, title, sad, series, bad, style, group,  |
| Kpop.song, song, politic, music, fan, genre, oppa, Korean.artist,    |
| handsome, cool, excited, character, crazy, airing                   |
| **Malaysia**                                                       |
| good, news, makeup, pretty, music, great, money, concert, shocked,  |
| government, politic, sad, star, song, style, youth, video, singer, busy, |
| idol, religious, market, popular, plastic.surgery, Korean.people, movie, |
| crazy, Korean.artist, interested, handsome, Islam, fan, issue, bad, |
| entertainment, beautiful, fun, actor, Blackpink, god, fanatic, BTS   |

Note: Bolded words are shared terms between Indonesia and Malaysia.
In this section, we discuss the first research question concerning the similarities and differences in social media data on the Korean Wave between Indonesians and Malaysians by comparing the results of a semantic network analysis. Subsequently, we respond to the second research question related to the factors contributing to the promotion or impediment of cultural hybridity between the Korean Wave and Muslim culture by probing ethnic, socio-economic, political, and historical backgrounds that may have caused the results we obtained to answer the first research question.

Regarding the first research question, several topics were shared between Indonesia and Malaysia. Both countries consume various Korean cultural products, such as music, dramas, and movies, and perceive the Korean Wave as a worldwide trend. K-pop is the most representative type of content and the vehicle that carries Korean culture. The next similarity between the two countries is related to their interest in the appearance and hairstyle of Korean artists. Indonesians and Malaysians mentioned that Korean appearances are “beautiful”, “pretty”, and “handsome” and also noted their hairstyles. Furthermore, as found in previous studies [2,12,39,40], Korean cultural products, such as dramas, movies, and pop songs, play a significant role in expanding Southeast consumers’ interests towards other types of Korean cultural products. Specifically, interest in Korean dramas and movies expanded to Korean food by visual representation, and the lyrics of K-pop songs encouraged people to learn the Korean language. Finally, there are similarities that suggests negative responses to the Korean Wave. Both Indonesians and Malaysians mention “plastic surgery”, which shows that they perceive the faces of Korean artists to be unnatural. They also regard Korean male artists as too girlish, using different terms such as “sissy” in Indonesia and “gay” in Malaysia.

There are several differences in the social media data on the Korean Wave between Indonesians and Malaysians. Unlike Malaysians, Indonesians are interested in the Korean entertainment industry, often stating specific names of Korean
entertainment agencies. Some Indonesians show enthusiasm for their favorite Korean artists, which is not found among Malaysians. Moreover, Indonesians are motivated to live more passionate lives by K-pop artists. This shows that cultural products are able to go beyond consumed products and influence personal lifestyles [33]. Although both Indonesians and Malaysians recognize K-pop as a worldwide trend, Indonesians particularly perceive it as a mainstream music genre equal to Western pop or J-pop.

On the other hand, Malaysians express negative opinions about the Korean Wave on religious grounds. Although words related to Islam also appear in Indonesia, Malaysians use more diverse words that portray a stricter view of Muslims, suggesting that the Korean Wave deviates from their religious standard. They even use “pig” to explicitly express their negative feeling towards fanatic fans and K-pop artists. This shows how the aggressive collective activities of fans can be a negative consequence of K-pop fandom, which is an obvious concern for the Korean entertainment industry as the popularity of the Korean Wave increases [2]. Further, Malaysians are concerned with damage to their own local culture due to the inflow of the Korean Wave. They are worried about the negative influence of the Wave on their traditional culture and on Malaysian youth.

Regarding the second research question, we identified the following factors that contribute to the promotion or impediment of cultural hybridity between the Korean Wave and Muslim culture. The first factor contributing to promoting cultural hybridity is ‘Asian identity’, which is reflected by Indonesian and Malaysian consumers’ aspirations toward Korean artists’ appearances, such as their hairstyles, as evidenced by the extracted words of “beautiful”, “pretty”, “handsome”, and “hair” in this study. These words show not only their interest in the appearance of Korean artists and actors in the sheer pursuit of beauty but also a desire to mimic the appearance of Koreans, who they feel more communally connected to through an Asian identity compared to Western artists. Although Indonesia and Malaysia are distant from Korea, all these countries are located in Asia, which binds them in a sense of Asian identity. While
American culture has entered these Asian countries with little resistance, there is an “emptiness” that this culture cannot fill due to its lack of cultural proximity [10,91]. Korean cultural products, especially drama, are known as to fill this “emptiness”. For example, Asian values, such as harmony, family morals, and sacrifice, presented in Korean dramas generate sympathy among Indonesians and Malaysians [10,26]. These features may help Indonesians and Malaysians easily familiarize themselves with Korean culture, thereby facilitating acceptance of the Korean Wave and even desire for some elements of the Korean Wave, such as appearance.

The second factor that promotes cultural hybridity is policy that emphasizes ‘unity in ethnic diversity’. The Indonesian government pursues a policy that reinforces the unity of over 300 ethnic groups under one religion. This may develop cultures that are more receptive to external cultures, affecting Indonesians to embrace outgroup cultures and incorporate them into their ingroups [92]. In other words, the policy of unity in ethnic diversity cultivates cultural hybridization more easily among Indonesians. In the present study, the enthusiastic supporting terms for K-pop artists, such as “booth”, “bias”, “fangirling”, and “oppa”, which appear only in Indonesian social media discourse, reflect the Indonesians’ tendency to engage in cultural hybridization. Further, some Indonesians are motivated to live passionate lives by Korean artists. This indicates that the subjects are deeply involved with Korean cultural products and perceive them as something beyond consumed products by relating them to their personal lifestyles [33].

The third factor that facilitates cultural hybridity is ‘local consumer xenocentrism’, which is the tendency that consumers evaluate foreign products more favorably and accept them more easily than domestic ones [93]. The popularity of global pop trends in Indonesia has been attributed to their xenocentrism [94,95]. This tendency has been observed since the 1960s when Indonesia embraced various styles of western music and incorporated them into their local pop music [94]. Wallach [95] notes the Indonesians’ xenocentric view of Western music as modern and elite and local pop music as inferior. More recently,
cultural inflows from Japan, so-called J-pop, have hybridized with local cultural content in Indonesia [95,96]. This factor is manifested in the Indonesians’ development of their own branded music groups called I-pop by emulating the Korean management system, which is attributed to the success of K-pop in international markets [11,33]. In the present study, unlike in the Malaysian case, it is portrayed as the extracted names of specific Korean entertainment management agencies from Indonesian social media discourse. Our data show that Indonesians are able to distinguish the different characteristics of major agencies to which popular K-pop artists belong. Therefore, it appears that Indonesian xenocentrism combined with the lucrative market potential of the area’s large population has driven Indonesians and their entertainment industry to hybridize Western songs, J-pop, and now K-pop with their local pop music.

A xenocentric view, however, should be carefully taken into consideration for cultural hybridity because it entails the tendency to reject their own products, which deteriorates local cultural values [97], as illustrated in Tambunan [98]. Tambunan [98] observed that some Indonesian boy/girl groups are just copycat versions of K-pop groups, sometimes taking their mimicry to a different level by producing “made-in-Korea I-pop products”, whose process includes sending out the winner of a reality “talent” show to undergo an eight-month training camp managed by one of the K-pop training agencies in Seoul, Korea (p.294). The goal of this process is to enhance the “Korean-ness” of the musical products (p. 294) rather than hybridizing K-pop with local music. We consider such copycat activities as the beginning of cultural hybridity, as we predict that Indonesians’ xenocentric views on K-pop will ultimately involve concurrently valuing their own culture as evidenced by their hybridization with Western songs and J-pop.

Forth, the factor that impedes cultural hybridity is ‘the conservative nature of religion’. The current study confirms that religion is an influential cultural background for individuals in this era of globalization, just as it has been in the past [45]. Although personal preferences, such as perceptions of the
usefulness and enjoyability of cultural products, exert an influence on the process of decision-making [99], Islam provides normative standards for evaluating and accepting foreign culture among both Indonesian and Malaysian consumers. *Negative opinions involved with religion*, a theme derived from CONCOR in both countries, demonstrates that Islam is related to negative opinions about the Korean Wave in these countries.

In addition, we extracted words such as “sissy” and “gay” from both Indonesian and Malaysian social media data, suggesting that male K-pop artists are perceived as too girlish. Korean masculinity is known as “soft masculinity”, which involves an alternative construction of male characteristics affected by global metrosexual masculinity and Japanese ‘pretty boy’ masculinity [60]. Thus, this is another outcome of the ‘transcultural hybridization process’, possessing a feminine visual appearance and lacking aggressiveness and sexual dominance over women [100]. Korean pop-culture has created the novel characteristics of male artists with soft masculinity, which has contributed to the success of K-pop [100]. However, the present study reveals the cultural dissonance between Korean soft masculinity and traditional masculinity in Indonesia and Malaysia, where the dominant form of masculinity is closely connected to physical masculinity and a male’s position as the head of the family [100]; moreover, sexual relations between males are prohibited following Islamic laws [101]. Those with religious devotion thus view Korean masculinity negatively.

On the other hand, this study found that Malay Malaysians who are Muslims show a higher level of commitment to Islamic doctrines than Indonesians, as more Islamic concepts, such as “ustaz”, “Quran”, and “Ramadan”, were extracted from the Malaysian social data. For example, Malaysians perceive that watching Korean drama should be avoided during Ramadan when people have to fast. Their commitment is also underlined by referring to a religious preacher (“ustaz”). Recently, an Islam preacher claimed that K-pop artists are dangerous because they promote anti-Islamic behaviors; the preacher encouraged Muslims to repent [102]. As a result, more negative perceptions on the Korean Wave were uncovered from Malaysian discourse.
than from Indonesian discourse, featuring terms such as “illegal” and reflecting the religious grounds of the boycott. Another example is the use of “pig”, illustrating the Malay Muslims’ severe critique of fanatic fans and Korean artists on religious grounds, as a pig is a strongly stigmatized animal in Islam. Religiously conservative Malaysians perceive the consumption of Korean cultural products as inappropriate behavior because these products violate religious rules.

Lastly, ‘discrimination between ethnic groups’ can hinder cultural hybridity, particularly when it is combined with the conservative nature of religion by provoking tensions between the ingroup and outgroup [103]. Generally, Malaysian social media discourse shows more negative opinions on the Korean Wave than Indonesian discourse. Malaysians showed various negative opinions (e.g., “noisy”, “stupid”, and “shocked” in the ego-centered network of K-pop song) in addition to positive ones. The Malaysian government implemented discriminatory policies between ethnic groups, such as the New Economic Policy in 1969, to enhance the socio-economic status of Malay Malaysians due to their economic deprivation compared to Chinese Malaysians. Although the government has subsequently promoted various national unity programs, introducing the motto of ‘1Malaysia’ in 2009, the entrenched separation between ethnic groups has not been thoroughly resolved, leaving structural and informal inequity in Malaysian society [54,56,57].

Further, all Malaysians have to print their ethnicity (Malay, Chinese, Indian, or other minority groups) on their National Identity Cards, as well as on official forms, such as school forms and exams. Malaysian ethnicity is also closely related to religion: Islam for Malay Malaysians, Buddhism for Chinese Malaysians, and Hinduism for Indian Malaysians. Thus, each ethnic group with its own mode of religious devotion may have subtle tensions with the outgroups [103]. As a result, the distinctiveness between the ethnic groups is accentuated, and these groups coexist rather than mixing [47].

These historical, religious, and political circumstances can create an atmosphere that distinguishes the ingroups and outgroups between different ethnic groups [47]. Because government
policy influences the risk perception of individuals [104], this atmosphere may lead Malaysians with religious devotion to perceive an importance of protecting the religion and culture of their ingroup, as reflected by the Malaysians’ greater involvement in Islamic doctrine compared to Indonesians. Further, this tendency may be extended to having more reserved attitudes toward accepting cultures from outside national boundaries, as illustrated by the words “foreign artist” and “foreign culture” extracted from the only-Malaysian data. Malaysians, especially those with religious devotion, clearly perceive the Korean Wave as imported culture, i.e., an outgroup culture. In addition, we found a subtheme of negative opinions on the Korean Wave based on the young generation’s deeper admiration of Korean culture than the local culture, represented in the theme of Conlicting opinions on reception of the Korean Wave in Malaysian discourse. Because the young generation tends to be the most active recipient of foreign cultural content and consumes cultural products mainly according to their tastes irrespective of the product’s origin, cultural globalization is most visible among the youth [4]. Malaysians with religious devotion are concerned about the negative influence of the Korean Wave on Malaysian youths from the perspective of preserving their own culture. Historically and religiously provoked tensions between these Malaysians and outgroups [105] may condition them to perceive the Korean Wave as an invasion of Korean culture and claim that they should protect and promote their own religion and culture [61].

Conclusions and Implications

The present study attempted to gain insight into cultural hybridity by identifying the characteristics of Muslim countries that lead their people to receive or refuse foreign cultural products of the Korean Wave, based on comparisons of Indonesian and Malaysian social media data using a semantic network analysis. To this end, we identified the themes of discourse on the Korean Wave in Indonesia and Malaysia using CONCOR. Through ego-centered networks, we further investigated topics related to shared and unique words between the two countries and found some interesting discourses that
commonly appeared in both countries and unique discourses that appeared only in each country. Finally, by probing these results, we determined the three factors that promote cultural hybridity (‘Asian identity’, policies emphasizing ‘unity in ethnic diversity’, and ‘local consumer xenocentrism’) and the two hindering elements (‘the conservative nature of religion’ and ‘discrimination between ethnic groups’). These findings provide theoretical and practical implications for the cultural sector and researchers who are seeking for ways to develop cultural hybridity as a means of achieving cultural sustainability in the era of globalization.

Theoretical Implications

Specifically, this study contributes to the literature on cultural hybridity by analyzing discourse on Korean cultural products in the context of a cross-national comparison, which has been overlooked despite abundant research on the issue. Although Indonesia and Malaysia have similar geographical locations, religions, and languages, they cannot be considered as having homogenous cultures [47]. The shared words between these two countries and the unique words of each country related to the same cultural products highlight the importance of understanding the differences in each nation’s ethnic, socio-economic, and historical backgrounds when researching cultural hybridity between the Korean Wave and Muslim culture.

In addition, the present study provides evidence on the usefulness of using semantic network analysis based on social media data for cross-national research of cultural hybridity. Because we used text-based data from social media, where people freely share their thoughts on the Korean Wave, we were able to examine the opinions of consumers who are not limited to active recipients of the Korean Wave but also those who feel repulsed by the Wave. This approach overcomes the shortcomings of previous studies that typically employed a limited number of individual recipients of cultural products using a qualitative method of interview. Further, using a semantic network analysis, we combined the quantitative indices for finding significant words and qualitative interpretations of links.
between the words, which enabled us not only to objectively identify the central words but also to extract the hidden meanings of the words’ communities. Through this analysis, we empirically determined that the globalization of cultural products provokes diverse reactions across different countries, which proves the value of using semantic network analysis for large textual data in cross-national studies.

**Practical Implications**

The findings of the current study suggest practical implications for consumers, educators, policy makers, and the entertainment industry. In the present era of globalization where the exchange of cultural products is prevalent, it is important for the recipients of imported culture to develop intercultural communication sensitivity, a prerequisite for intercultural communication competence [30,105]. To enhance this competence, recipients need to be sensitive to and appreciative of foreign cultures, thereby reducing their level of ethnocentrism and helping them develop ethno-relative mindsets [30]. Educational policy should help individuals promote this competency by providing practical solutions for dealing with intercultural training. Considering the expanding role of the individual as not only a recipient of cultural products but also as a producer of hybridized culture, the enhancement of this competency is critical for creating peaceful and constructive intercultural relations, which are a pre-condition for cultural sustainability [27].

In addition, the recipients of imported culture should not undervalue their own culture. Although this study shows that xenocentrism can lead people to readily accept cultural products from developed countries, xenocentrism may lead such recipients to have inflated views of other cultures and feelings of national inferiority [106]. To build a constructive hybridized culture, the uncritical adoption of foreign culture should be avoided, as it can result in plagiarism or cultural imperialism. Instead, the recipients should have open-minded attitudes towards foreign cultures and import advanced elements from other cultures to develop their own culture.
Further, the results of the present study demonstrate that government policy on ethnicity is critical for fostering the cultural hybridity of countries with multiple ethnicities. The pursuit of unity among diverse ethnicities has contributed to Indonesians’ more amenable attitudes toward the Korean Wave. Because government policy can influence its people’s perception of risk [104], government policy makers should be cautious when developing ethnic policies to enhance cultural hybridity.

For the Korean entertainment industry, an understanding of the cultural difference between Korean and Southeast Asia is required. Although various entertainment corporations in Korea, such as management agencies and media content corporations, have made efforts to invest, produce, distribute, and promote Korean cultural products in this market [33], the consideration of different cultural backgrounds may yield more successful business ventures. Therefore, cooperation with the local entertainment industry could help Korean corporations by providing specific guidelines related to cultural norms. For example, both Indonesians and Malaysians follow Islamic law, which is not fully accounted for by Korean corporations. Through a strategic alliance with the local entertainment industry, these corporations can be provided with the religious criteria that are important for local consumers. Notably, Korean corporations who plan to enter the Malaysian market, where consumers use diverse religious words to express their negative opinions toward the Korean Wave, should exclude messages from their content that could violate religious law. Likewise, the Indonesian and Malaysian entertainment industry could take advantage of their alliances with Korean entertainment corporations. The Indonesian and Malaysian entertainment industry may thus be able to adopt the production system of K-pop and drama and to develop their own pop-culture products. This adoption may not only lead to a wide range of cultural products that local consumers choose to consume but also attract domestic and international tourists, thereby promoting the tourism sectors of Indonesia and Malaysia. The adoption would also provide a more objective perspective on local production systems, assisting the internalization of their own cultural products [40].
Limitations and Future Research

Finally, this study includes some limitations. First, the generalization of the results of the present study should be limited because social media users from only two Muslim countries, Indonesia and Malaysia, were the focus of this research. Second, we collected recent social media data, even though the Korean Wave has been gaining popularity for the last decade in Indonesia and Malaysia.

Therefore, we suggest the following two research directions for further studies on cultural hybridity. First, analyses of social media data from other Muslim countries introduced to the Korean Wave are required to validate the findings of the present study. In addition, comparative studies that include countries with different cultures and religions, such as European countries, are necessary because they will enrich the findings of this study by confirming the influence countries with various background have on cultural hybridity. Second, future studies should investigate a broader sample of social media data. This is particularly important for cultural research because the culture of a country can change dynamically over time. For instance, the leading cultural product of the Korean Wave shifted from Korean drama to K-pop in the late 2010s. This shift has subsequently driven the difference in the recipients’ responses to the cultural product. Thus, analyzing social media data at different points in time could illustrate the progress of hybridization between local and imported culture.

References

1. Jeong Y, Oh B. Strategy for Islamic market entry of Korean cultural contents industry: Focusing on Indonesia and Malaysia. J. Korean Assoc. Islam. Stud. 2009; 19: 89–112.
2. Jang W, Song JE. The influences of K-pop fandom on increasing cultural contact: With the case of Philippine Kpop Convention, Inc. Korean Reg. Sociol. 2017; 18: 29–56.
3. Kaisii A. Globalization, hybridization and cultural invasion: Korean wave in India’s North East. Asian Commun. Res. 2017; 14: 10–35.
4. Yang J. Globalization, nationalism, and regionalization: The case of Korean popular culture. Dev. Soc. 2007; 36: 177–199.
5. Kraidy MM. Hybridity in cultural globalization. Commun. Theory. 2002; 12: 316–339.
6. Cohen R, Kennedy P. Global Sociology, 3rd ed. London: Springer Nature Limited. 2012; 31–48.
7. Oh DC. K-pop fans react: Hybridity and the white celebrity-fan on YouTube. Int. J. Commun. 2017; 11: 2270–2287.
8. Jung E. Transnational Korea: A critical assessment of the Korean wave in Asia and the United States. Southeast Rev. Asian Stud. 2009; 31: 69–80.
9. Ju H. The Korean wave and Korean dramas. Oxford Research Encyclopedia of Communication. 2018.
10. Ariffin JT, Bakar HA, Yusof NH. Culture in Korean drama towards influencing Malaysian audiences. Int. J. Innov. Res. Eng. Manag. 2018; 5: 10–14.
11. Pramadya TP, Oktaviani J. “Hallyu” (Korean wave) as part of South Korea’s cultural diplomacy and its impact on cultural hybridity in Indonesia. Dinamika Glob. 2016; 1: 87–116.
12. Suh Y, Hur J, Davies G. Cultural appropriation and the country of origin effect. J. Bus. Res. 2016; 69: 2721–2730.
13. Choi SC, Meza XV, Park HW. South Korean culture goes Latin America: Social network analysis of Kpop Tweets in Mexico. Int. J. Contents. 2014; 10: 36–42.
14. Xu WW, Park J, Park HW. Longitudinal dynamics of the cultural diffusion of Kpop on YouTube. Qual. Quant. 2017; 51: 1859–1875.
15. Park S, Hoffner CA. Tweeting about mental health to honor Carrie Fisher: How #InHonorOfCarrie reinforced the social influence of celebrity advocacy. Comput. Hum. Behav. 2020; 110, In press.
16. Kim S, Hwang S. A study on the Hallyu network in Asia through Google Trends-Focusing on the EXO case. Rev. Cult. Econ. 2019; 22: 29–56.
17. Iwabuchi K. Discrepant intimacy: Popular culture flows in East Asia. In: Erni JN, Chua SK, editors. Asian Media Studies: Politics of Subjectivities. Malden: Blackwell. 2005; 19–36.
18. Hawkes J. The meaning of culture. In: Spokes J, editor. The Fourth Pillar of Sustainability: Culture’s Essential Role in Public Planning. Champaign: Common Ground. 2001; 3–10.
19. United Nations Educational, Scientific and Cultural Organizations. Available online at: http://unesdoc.unesco.org/images/0012/001271/127160m.pdf
20. Stylianou-Lambert T, Boukas N, Christodoulou-Yerali M. Museums and cultural sustainability: Stakeholders, forces, and cultural policies. Int. J. Cult. Policy. 2014; 20: 566–587.
21. Ackermann A. Cultural hybridity: Between metaphor and empiricism. In: Stockhammer PW, editor. Conceptualizing Cultural Hybridization. Berlin/Heidelberg: Springer. 2012; 5–25.
22. Fithratullah M. Globalization and cultural hybridity: The commodification on Korean music and its successful world expansion. Proceeding of The American Studies International Conference (ASIC) 2018, Yogyakarta, Indonesia. 2018; 2: 83–89.
23. Lee S. Hallyu in Europe as a phenomenon of cultural hybridization—with the analysis on K-pop craze. Z. Koreanisch-Dtsch. Ges. Soz. 2012; 22: 117–146.
24. Crane D. Culture and globalization: Theoretical models and emerging trends. In: Global Culture: Media, Arts, Policy, and Globalization. New York: Routledge. 2002; 1–25.
25. Kim S. Re-evaluation of the Korean Wave: A glocal perspective. Media Soc. 2010; 18: 313–335.
26. Jang W, Song JE. The glocal culture and the Korean wave. J. Cult. Contents. 2016; 8: 7–34.
27. Busch D. What is intercultural sustainability? A first exploration of linkages between culture and sustainability in intercultural research. J. Sustain. Dev. 2016; 9: 63–76.
28. Appadurai A. Disjunction and difference in the global cultural economy. Theory, Cult. Soc. 1990; 7: 295–310.
29. Berry JW, Kalin R. Multicultural and ethnic attitudes in Canada: An overview of the 1991 national survey. Can. J. Behav. Sci. 1995; 27: 301–320.
30. Dong Q, Day KD, Collaço CM. Overcoming ethnocentrism through developing intercultural communication sensitivity and multiculturalism. Hum. Commun. 2008; 11: 27–38.
31. Smolicz J, Secombe M. Globalisation cultural diversity and multiculturalism: Australia. In International Handbook on Globalisation, Education and Policy Research. Dordrecht: Springer. 2005; 207–220.

32. Tilbury D, Mulá I. A Review of Education for Sustainable Development Policies from a Cultural Diversity and Intercultural Dialogue: Gaps and Opportunities for Future Action. Paris: UNESCO. 2009.

33. Anwar RP, Anwar WW. The effect of Korean Wave on young generation and creative industry in Indonesia. Contemp. Soc. Multicult. 2014; 4: 65–89.

34. Seo M. K-Pop’s Global Success and Implications. Seoul: Samsung Economic Research Institute. 2012.

35. Griswold W. Cultures and Society in a Changing World. Thousand Oaks: Pine Forge Press. 1994.

36. Huat CB. Korean pop culture. Malays. J. Media Stud. 2010; 12: 15–24.

37. Iwabuchi K. Globalization, East Asian media cultures and their publics. Asian J. Commun. 2010; 20: 197–212.

38. Briandana R, Ibrahim IS. Audience interpretation on Korean TV drama series in Jakarta. J. Komun. Borneo. 2015; 4: 45–55.

39. Hsu H. Korean TV soap operas in Taiwan: An investigation of consumers’ clothing purchase behavior. Int. J. Mark. Stud. 2012; 4: 16–30.

40. Jeong J. A study on factors affecting the reception of Korean Wave: The moderating effects of communicative action and contents preference. Korean J. J. Commun. Stud. 2014; 58: 402–427.

41. Ainslie MJ. K-dramas across Thailand: Constructions of Koreanness and Thainess by contemporary Thai consumers. Asia-Pac. J. 2016; 14: 1–13.

42. Kim S. The characteristics of the Korean wave in Southeast Asia and the transnational flow of cultural taste. Broadcast. Commun. 2012; 13: 5–54.

43. Xu WW, Park JY, Park HW. The networked cultural diffusion of Korean wave. Online Inf. Rev. 2015; 39: 43–60.

44. Min W, Jin DY, Han B. Transcultural fandom of the Korean wave in Latin America: Through the lens of cultural
intimacy and affinity space. Media, Cult. Soc. 2019; 41: 604–619.
45. Sari DK, Mizerski D, Liu F. Boycotting foreign products: A study on Indonesian Muslim consumers. J. Islam. Mark. 2017; 8: 16–34.
46. Age Structure- 15–24 Years 2020 Country Ranks, by Rank. Available online at: https://photius.com/rankings/2020/population/age_structure_1524_years_2020_0.html
47. Jin B, Kim G. Assessing Malaysia and Indonesia as emerging retail markets: An institution-based view. Manuscript in Preparation.
48. Rezai G, Mohamed Z, Shamsudain MN. Non-Muslim consumers’ understanding of Halal principles in Malaysia. J. Islam. Mark. 2012; 3: 35–46.
49. Ab Talib MS, Hamid ABA. Halal logistics in Malaysia: A SWOT analysis. J. Islam. Mark. 2014; 5: 322–343.
50. Shafiq A, Haque A, Abdullah K, Jan MT. Beliefs about Islamic advertising: An exploratory study in Malaysia. J. Islam. Mark. 2017; 2: 83–96.
51. Arli D, Tjiptono F. The end of religion? Examining the role of religiousness, materialism, and long-term orientation on consumer ethics in Indonesia. J. Bus. Ethics 2014; 123: 385–400.
52. Shah Alam S, Mohd R, Hisham B. Is religiosity an important determinant on Muslim consumer behavior in Malaysia? J. Islam. Mark. 2011; 2: 83–96.
53. Hugo G. Demography of race and ethnicity in Indonesia. In: Sáenz R, Embrick D, Rodríguez N, editors. The International Handbook of the Demography of Race and Ethnicity. Dordrecht: Springer. 2015; 4: 259–280.
54. Noor NM, Leong C. Multiculturalism in Malaysia and Singapore: Contesting models. Int. J. Intercult. Relat. 2013; 37: 714–726.
55. Ahmad ZH, Kadir S. Ethnic conflict, prevention and management: The Malaysian case. Ethn. Confl. Southeast Asia. 2005; 42-64.
56. Harris A, Han A. 1Malaysia? Young people and everyday multiculturalism in multiracialized Malaysia. Ethn. Racial Stud. 2020; 43: 816–834.
57. Chin J. Malaysia: The rise of Najib and 1Malaysia. Southeast Asian Aff. 2020; 2010: 164–179.
58. Cohen AB, Hill PC. Religion as culture: Religious individualism and collectivism among American Catholics, Jews, and Protestants. J. Personal. 2007; 75: 709–742.
59. Ruslan N, Latif SSA. Malay women readings of Korean drama. J. Educ. and Soc. Sci. 2016; 4: 343–365.
60. Khai SW, Wahab JA. Prettiness as a shield: The romantic perpetuation of patriarchy through the representation of pretty boy in popular Korean dramas in Malaysia. Media Watch. 2017; 8: 298–310.
61. Cho K, Jang W. Comparing Malaysian youths and adult toward Hallyu consciousness. J. Korean Contents Assoc. 2013; 13: 92–101.
62. Grimmer J, Stewart BM. Text as data: The promise and pitfalls of automatic content analysis methods for political texts. Political Anal. 2013; 21: 267–297.
63. Kaplan AM, Haenlein M. Consumer of the world, unite! The challenges and opportunities of social media. Bus. Horiz. 2010; 53: 59–68.
64. Kaur P, Dhir A, Rajala R, Dwivedi Y. Why people use online social media brand communities: A consumption value theory perspective. Online Inf. Rev. 2018; 42: 205–221.
65. Dhir A, Khalil A, Lonka K, Tsai C. Do educational affordances and gratifications drive intensive Facebook use among adolescents? Comput. Hum. Behav. 2017; 68: 40–50.
66. Dhir A, Tsai C. Understanding the relationship between intensity and gratifications of Facebook use among adolescents and young adults. Tele. Inf. 2017; 34: 350–364.
67. Malik A, Dhir A, Nieminen M. Uses and gratifications of digital photo sharing on Facebook. Tele. Inf. 2016; 33: 129–138.
68. Dhir A, Chen GM, Chen S. Why do we tag photographs on Facebook? Proposing a new gratifications scale. New Media Soc. 2017; 19: 502–521.
69. Dhir A, Pallesen S, Torsheim To, Andreassen CS. Do age and gender differences exist in selfie-related behaviors? Comput. Hum. Behav. 2016; 63: 549–555.
70. Dhir A, Kaur P, Rajala R. Continued use of mobile instant messaging apps: A new perspective on theories of consumption, flow, and planned behavior. Soc. Sci. Comput. Rev. 2020; 38: 147–169.
71. Dhir A, Kaur P, Lonka K, Tsai C. Do psychosocial attributes of well-being drive intensive Facebook use? Comput. Hum. Behav. 2017; 68: 520–527.
72. Alhabash S, McAlister AR. Redefining virality in less broad strokes: Predicting viral behavioral intentions from motivations and uses of Facebook and Twitter. New Media Soc. 2015; 17: 1317–1339.
73. Kwon KH, Bang CC, Egnoto M, Rao HR. Social media rumors as improvised public opinion: Semantic network analyses of Twitter discourses during Korean saber rattling 2013. Asian J. Commun. 2016; 26: 201–222.
74. Shi W, Fu H, Wang P, Chen C, Xiong J. #Climatechange vs. #Globalwarming: Characterizing two competing climate discourses on Twitter with semantic network and temporal analyses. Int. J. Environ. Res. Public Health. 2020; 17: 1062–1083.
75. Yoo M, Lee S, Ha T. Semantic network analysis for understanding user experiences of bipolar and depressive disorders on Reddit. Inf. Process. Manag. 2019; 56: 1565–1575.
76. Lee Y, Park J. Emerging gender issues in Korean online media: A temporal semantic network analysis approach. J. Contemp. East. Asia. 2019; 18: 118–141.
77. “Linked in”. Available online at: https://www.linkedin.com/company/zanroo
78. Tariq MI, Santarcangelo V. Analysis of ISO 27001:2013 controls effectiveness for cloud computing. Proceeding of the 2nd International Conference on Information Systems Security and Privacy (ICISSP 2017). Rome: SciTePress. 2017; 2: 201–208.
79. Wu Y, Schuster M, Chen Z, Le QV, Norouzi M. Google’s neural machine translation system: Bridging the gap between human and machine translation. arXiv preprint. 2016; arXiv: 1609.08144.
80. Aiken M. An updated evaluation of Google Translate accuracy. Stud. Linguis. Lit. 2019; 3: 253–260.
81. Pennings P, Keman H. Towards a new methodology of estimating party policy positions. Qual. Quant. 2002; 36: 55–79.
82. Scharkow M. Thematic content analysis using supervised machine learning: An empirical evaluation using German online news. Qual. Quant. 2013; 47: 761–773.
83. Chawla NV, Bowyer KW, Hall LO, Kegelmeyer WP. SMOTE: Synthetic minority over-sampling technique. J. Artif. Intell. Res. 2002; 16: 321–357.
84. Anjaria M, Guddeti RMR. A novel sentiment analysis of social networks using supervised learning. Soc. Netw. Anal. Min. 2014; 4: 181–195.
85. Jun CN, Chung CJ. Big data analysis of local government 3.0: Focusing on Gyeongsangbuk-do in Korea. Tech. Forecast. Soc. Chang. 2016; 110: 3–12.
86. Park SD, Lee JY, Wang B. The main factors affecting cultural exchange between Korea and China: A semantic network analysis based on the cultural governance perspective. Int. J. Intercult. Rel. 2019; 71: 72–83.
87. Cha H, Rhee Y, Chung CJ. Comparative nation-branding analysis of big data: Focusing on Korea and Japan. J. Glob. Inf. Tech. Manag. 2017; 20: 276–295.
88. Drieger P. Semantic network analysis as a method for visual text analytics. Procedia-Soc. Behav. Sci. 2013; 79: 4–17.
89. Barash V, Golder S. Twitter: Conversation, entertainment, and information, all in one network. In: Hansen DH, Shneiderman B, Smith MA, editors. Analyzing Social Media Networks with NodeXL: Insights from a Connected World Burlington. Morgan Kaufmann: Burlington, MA, USA, 2011, pp. 143-164.
90. Borgatti SP, Everett MG, Freeman LC. UCINET for Windows: Software for social net4work a4nalysis. Harvard: Analytics Technologies. 2002.
91. Shim D. Hybridity and the rise of Korean popular culture in Asia. Media, Cult. Soc. 2006; 28: 25–44.
92. Bazzi S, Gaduh A, Rothenberg AD, Wong M. Unity in Diversity? Ethnicity, Migration, and National Building in Indonesia, (No.12377) CEPR Discussion Papers from C.E.P.R, Discussion Papers. London: Centre for Economic Policy Research. 2017.
93. Lawrence SJ. Consumer Xenocentrism and Consumer Cosmopolitanism: The Development and Validation of Scales of Constructs Influencing Attitudes towards Foreign Product Consumption. Ph.D. Thesis. Wayne State University, Detroit, MI, USA. 2012.

94. Wallach J. Exploring class, nation, and xenocentrism in Indonesian cassette retail outlets. Indones. 2002; 74: 79–102.

95. Muljosumarto C. Local content in 48 group branding strategy: Focused on JKT48 as a case study. Ph.D. Thesis, Petra Christian University, Surabaya, Indonesia. 2018.

96. Jung S, Shim D. Social distribution: K-pop fan practices in Indonesia and the ‘Gangnam Style’ phenomenon. Int. J. Cult. Stud. 2014; 17: 485–501.

97. Camacho LJ, Salazar-Concha C, Ramírez-Correa P. The influence of xenocentrism on purchase intentions of the consumer: The mediating role of product attitudes. Sustainability. 2020; 12: 1647–1658.

98. Tambunan SMG. Appropriating South Korean popular culture: I-pop and K-drama remakes in Indonesia. Cult. Dyn. Glob. World. 2018; 291-296.

99. Straubhaar J. Rethinking Cultural Proximity: Multiple Television Flows for Multi-Layered Identities, Paper presented at the Annual Meeting of the International Communications Association. Montreal: TBA. 2008.

100. Ainslie MJ. Korean soft masculinity vs. Malay hegemony: Malaysian masculinity and Hallyu fandom. Korea Obs. 2017; 48: 609–638.

101. Goh JN. Fracturing interwoven heternormativities in Malaysian Malay-Muslim masculinity: A research note. Sexualities. 2014; 17: 600–617.

102. “Malaysian Preacher PU Syed Calls K-pop band BTS ‘Demonic,’ Urges Cancellation of Planned Concert”. Available online at: https://www.malaymail.com/news/showbiz/2019/04/30/malaysian-preacher-pu-syed-calls-k-pop-band-bts-demonic-urges-cancellation/1748367

103. Koon HP. The new economic policy and the Chinese community in Peninsular Malaysia. Dev. Econ. 1997; 35: 262–292.
104. Lim S, Berry FS, Lee K. Stakeholders in the same bed with different drams: Semantic Network Analysis of issue interpretation in risk policy related to mad cow disease. J. Public Adm. Theory. 2016; 26: 79–93.

105. Chen GM, Starosta WJ. The development and validation of the intercultural sensitivity scale. Hum. Commun. 2000; 3: 1–15.

106. Balabanis G, Diamantopoulos A. Consumer xenocentrism as determinant of foreign product preference: A system justification perspective. J. Int. Mark. 2016; 24: 58–77.
Appendix A

Table A1: TF–IDF and degree centrality of words in Indonesian data.

| Word         | TF–IDF  | Rank | Degree centrality | Rank |
|--------------|---------|------|-------------------|------|
| good         | 752.72  | 1    | 1                 | 1    |
| idol         | 702.50  | 2    | 1                 | 1    |
| song         | 553.16  | 3    | 0.982608695652174 | 8    |
| fan          | 538.14  | 4    | 1                 | 1    |
| BTS          | 532.43  | 5    | 0.991304347826087 | 4    |
| Army         | 430.96  | 6    | 0.956521739130435 | 14   |
| drama        | 425.77  | 7    | 0.965217391304348 | 10   |
| Kpop.song    | 424.33  | 8    | 0.991304347826087 | 4    |
| music        | 408.38  | 9    | 0.991304347826087 | 4    |
| bad          | 353.29  | 10   | 0.991304347826087 | 4    |
| concert      | 344.73  | 11   | 0.921739130434783 | 24   |
| happy        | 303.75  | 12   | 0.965217391304348 | 10   |
| hair         | 299.57  | 13   | 0.773913043478261 | 61   |
| Korean.artist| 291.90  | 14   | 0.965217391304348 | 10   |
| Korean.language| 288.67 | 15   | 0.843478260869565 | 45   |
| plastic.surgery| 277.68 | 16   | 0.895621739130434 | 33   |
| merchandise  | 267.80  | 17   | 0.80869562173913  | 55   |
| group        | 264.02  | 18   | 0.973913043478261 | 9    |
| taste        | 255.24  | 19   | 0.947826086956522 | 17   |
| beautiful    | 238.86  | 20   | 0.921739130434783 | 24   |
| actor        | 234.48  | 21   | 0.930434782608696 | 21   |
| money        | 233.97  | 22   | 0.895621739130434 | 33   |
| interested   | 230.97  | 23   | 0.947826086956522 | 17   |
| handsome     | 220.00  | 24   | 0.91304347826087  | 28   |
| star         | 213.76  | 25   | 0.939130434782609 | 20   |
| Kpop.world   | 212.43  | 26   | 0.834782608695652 | 47   |
| fandom       | 210.17  | 27   | 0.86069562173913  | 41   |
| style        | 203.81  | 28   | 0.921739130434783 | 24   |
| Blackpink    | 193.38  | 29   | 0.895621739130434 | 33   |
| religious    | 192.02  | 30   | 0.834782608695652 | 47   |
| Korean.people| 191.15  | 31   | 0.930434782608696 | 21   |
| wrong        | 186.82  | 32   | 0.930434782608696 | 21   |
| sad          | 183.31  | 33   | 0.834782608695652 | 47   |
| genre        | 180.70  | 34   | 0.843478260869565 | 45   |
| war          | 177.89  | 35   | 0.852173913043478 | 42   |
| video        | 176.95  | 36   | 0.947826086956522 | 17   |
| oppa         | 176.78  | 37   | 0.8869562173913   | 36   |
| cool         | 176.74  | 38   | 0.956521739130435 | 14   |
| dance        | 175.59  | 39   | 0.956521739130435 | 14   |
| trend        | 174.36  | 40   | 0.80869562173913  | 55   |
| crazy        | 172.55  | 41   | 0.965217391304348 | 10   |
| word         | score      | freq | tf     | idf    | df    | word2vec  |
|--------------|------------|------|--------|--------|-------|-----------|
| picture      | 171.5922269| 42   | 0.913| 0.043| 0.478| 0.026     |
| price        | 165.0386182| 43   | 0.817| 0.043| 0.478| 0.026     |
| agency       | 163.8771676| 44   | 0.852| 0.043| 0.478| 0.026     |
| movie        | 162.5967583| 45   | 0.904| 0.043| 0.478| 0.026     |
| excited      | 160.5100858| 46   | 0.886| 0.043| 0.478| 0.026     |
| EXO          | 155.9948392| 47   | 0.886| 0.043| 0.478| 0.026     |
| Korean.culture | 154.9254946| 48   | 0.747| 0.043| 0.478| 0.026     |
| fanatic      | 153.6720319| 49   | 0.852| 0.043| 0.478| 0.026     |
| ticket       | 144.8638908| 50   | 0.695| 0.043| 0.478| 0.026     |
| tired        | 140.7611317| 51   | 0.773| 0.043| 0.478| 0.026     |
| English      | 136.4042339| 52   | 0.826| 0.043| 0.478| 0.026     |
| SM.entertainment | 135.7029436| 53   | 0.782| 0.043| 0.478| 0.026     |
| bias         | 135.0047341| 54   | 0.904| 0.043| 0.478| 0.026     |
| title        | 125.7089479| 55   | 0.773| 0.043| 0.478| 0.026     |
| talent       | 124.7401717| 56   | 0.8   | 0.043| 0.478| 0.026     |
| appearance   | 120.8900438| 57   | 0.834| 0.043| 0.478| 0.026     |
| god          | 118.1539002| 58   | 0.756| 0.043| 0.478| 0.026     |
| member       | 117.6946347| 59   | 0.878| 0.043| 0.478| 0.026     |
| scene        | 116.3130540| 60   | 0.686| 0.043| 0.478| 0.026     |
| sissy        | 114.6974220| 61   | 0.6   | 0.043| 0.478| 0.026     |
| expensive    | 114.6653557| 62   | 0.686| 0.043| 0.478| 0.026     |
| color        | 114.0461693| 63   | 0.756| 0.043| 0.478| 0.026     |
| famous       | 111.8237197| 64   | 0.921| 0.043| 0.478| 0.026     |
| politic      | 110.1930734| 65   | 0.660| 0.043| 0.478| 0.026     |
| booth        | 108.7225886| 66   | 0.8   | 0.043| 0.478| 0.026     |
| news         | 106.8243642| 67   | 0.913| 0.043| 0.478| 0.026     |
| character    | 105.2267660| 68   | 0.721| 0.043| 0.478| 0.026     |
| album        | 104.6664964| 69   | 0.834| 0.043| 0.478| 0.026     |
| pretty       | 103.0183008| 70   | 0.739| 0.043| 0.478| 0.026     |
| Korean.story | 101.5186356| 71   | 0.443| 0.043| 0.478| 0.026     |
| western.song | 101.2541029| 72   | 0.652| 0.043| 0.478| 0.026     |
| lyric        | 100.6598436| 73   | 0.704| 0.043| 0.478| 0.026     |
| singer       | 100.1167256| 74   | 0.808| 0.043| 0.478| 0.026     |
| promotion    | 99.0762442| 75   | 0.686| 0.043| 0.478| 0.026     |
| stupid       | 98.8831390| 76   | 0.739| 0.043| 0.478| 0.026     |
| SNSD         | 97.3460264| 77   | 0.721| 0.043| 0.478| 0.026     |
| sin          | 96.7524467| 78   | 0.617| 0.043| 0.478| 0.026     |
| favorite     | 96.0148797| 79   | 0.878| 0.043| 0.478| 0.026     |
| motivation   | 95.8862662| 80   | 0.660| 0.043| 0.478| 0.026     |
| Jpop         | 92.7944657| 81   | 0.556| 0.043| 0.478| 0.026     |
| era          | 91.4501803| 82   | 0.765| 0.043| 0.478| 0.026     |
| SuperJunior  | 90.7527775| 83   | 0.721| 0.043| 0.478| 0.026     |
| shamed       | 89.9216995| 84   | 0.678| 0.043| 0.478| 0.026     |
| voice        | 89.4579724| 85   | 0.6   | 0.043| 0.478| 0.026     |
| toxic        | 89.2551758| 86   | 0.739| 0.043| 0.478| 0.026     |
| fashion      | 89.1955377| 87   | 0.739| 0.043| 0.478| 0.026     |
| entertain.industry | 89.1670087| 88   | 0.773| 0.043| 0.478| 0.026     |
| Word          | TF–IDF     | Rank | Degree centrality | Rank |
|--------------|-----------|------|-------------------|------|
| fan          | 1501.0364612 | 1    | 1                 | 1    |
| interested   | 1412.0925885 | 2    | 1                 | 1    |
| BTS          | 966.94940158  | 3    | 1                 | 1    |
| good         | 910.77160069  | 4    | 1                 | 1    |
| song         | 859.18850828  | 5    | 1                 | 1    |
| Korean.artist | 856.89838375  | 6    | 1                 | 1    |
| money        | 789.24241161  | 7    | 1                 | 1    |
| Malay.artist | 738.58273585  | 8    | 0.97580645161     | 15   |
| stupid       | 683.27799395  | 9    | 0.99193548387     | 10   |
| concert      | 660.41759865  | 10   | 1                 | 1    |
| fanatic      | 650.32375061  | 11   | 0.99193548387     | 10   |
| Kpop.song    | 646.36150439  | 12   | 0.9354837097      | 30   |
| dance        | 553.17426996  | 13   | 0.96774193548     | 20   |
| bad          | 527.51708491  | 14   | 0.99193548387     | 10   |

Table A2: TF–IDF and degree centrality of words in Malaysian data.
| Term              | TF-IDF Score | Document Frequency | Position |
|-------------------|--------------|--------------------|----------|
| crazy             | 480.86126388 | 15                 | 0.96774193548 20 |
| drama             | 478.46388226 | 16                 | 0.97580645161 15 |
| movie             | 443.51909093 | 17                 | 0.95161290323 27 |
| youth             | 432.8436683  | 18                 | 0.96774193548 20 |
| plastic.surgery   | 415.06873199 | 19                 | 0.91935483871 37 |
| busy              | 410.39817577 | 20                 | 0.96774193548 20 |
| religious         | 405.00316099 | 21                 | 0.97580645161 15 |
| music             | 396.82482846 | 22                 | 0.97580645161 15 |
| Blackpink         | 379.51531768 | 23                 | 0.92741935484 32 |
| idol              | 376.19567626 | 24                 | 0.98387096774 13 |
| demon             | 371.70533706 | 25                 | 0.92741935484 32 |
| Malay.culture     | 369.87118411 | 26                 | 0.84677419355 61 |
| group             | 353.33271711 | 27                 | 1          |
| issue             | 331.65617538 | 28                 | 0.91935483871 37 |
| sad               | 328.22982426 | 29                 | 0.88709677419 46 |
| tourist           | 327.94541674 | 30                 | 0.92741935484 32 |
| wrong             | 323.29443637 | 31                 | 0.98387096774 13 |
| Islam             | 314.98807571 | 32                 | 0.96774193548 20 |
| god               | 306.64504196 | 33                 | 0.95161290323 27 |
| great             | 280.5655868  | 34                 | 0.97580645161 15 |
| curse             | 270.92212387 | 35                 | 0.90322580645 43 |
| Muslim            | 256.43310673 | 36                 | 0.96774193548 20 |
| angry             | 256.3616086  | 37                 | 0.91935483871 37 |
| anti              | 254.62079575 | 38                 | 0.85483780968 57 |
| fun               | 251.79190022 | 39                 | 0.92741935484 32 |
| Army              | 245.83970851 | 40                 | 0.90322580645 43 |
| pig               | 233.36887045 | 41                 | 0.70161290323 104 |
| video             | 228.10097266 | 42                 | 0.91129032258 42 |
| cute              | 224.72288663 | 43                 | 0.73387096774 98 |
| government        | 224.24809017 | 44                 | 0.92741935484 32 |
| fashion           | 221.49375454 | 45                 | 0.92741935484 32 |
| tired             | 220.51585805 | 46                 | 0.79032258065 81 |
| ustaz             | 219.46473519 | 47                 | 0.83064516129 63 |
| Korean.people     | 216.99983032 | 48                 | 0.91935483871 37 |
| handsome          | 209.72096966 | 49                 | 0.75806451613 89 |
| merchandise       | 190.31013977 | 50                 | 0.71774193548 101 |
| member            | 185.70398706 | 51                 | 0.86290322581 54 |
| forbidden         | 180.65283483 | 52                 | 0.78225806452 82 |
| Korean.story      | 178.63811478 | 53                 | 0.59677419355 124 |
| foreign.artist    | 175.27670926 | 54                 | 0.81451612903 66 |
| style             | 169.68243588 | 55                 | 0.88709677419 46 |
| trash             | 169.66822212 | 56                 | 0.79838709677 79 |
| gay               | 169.10764411 | 57                 | 0.6935483871 106 |
| beautiful         | 169.05090795 | 58                 | 0.87903225806 49 |
| ticket            | 169.03220468 | 59                 | 0.90322580645 43 |
| hair              | 167.02849237 | 60                 | 0.75806451613 89 |
| shocked           | 165.82043124 | 61                 | 0.75806451613 89 |
| Word              | Vector 1 | Vector 2 | Vector 3 |
|------------------|----------|----------|----------|
| weird            | 162.809  | 0.846774| 61       |
| shamed           | 160.631  | 0.854838| 57       |
| illegal          | 157.966  | 0.741935| 96       |
| pretty           | 157.577  | 0.685438| 97       |
| job              | 156.953  | 0.814516| 110      |
| prayer           | 156.379  | 0.685438| 97       |
| hot              | 156.139  | 0.725806| 116      |
| SuperJunior      | 155.267  | 0.677419| 114      |
| famous           | 155.201  | 0.935483| 30       |
| budget           | 154.382  | 0.75     | 95       |
| fandom           | 148.776  | 0.685438| 97       |
| benefit          | 147.583  | 0.701613| 104      |
| news             | 147.247  | 0.862903| 54       |
| debt             | 147.081  | 0.653225| 120      |
| stage            | 146.431  | 0.887097| 46       |
| noisy            | 145.215  | 0.629032| 121      |
| chitchat         | 144.381  | 0.717742| 101      |
| sexy             | 144.223  | 0.774193| 86       |
| foreign.country  | 143.962  | 0.806451| 74       |
| trend            | 143.413  | 0.758064| 89       |
| Korean.food      | 142.773  | 0.532258| 125      |
| rock             | 142.724  | 0.822580| 64       |
| happy            | 142.329  | 0.879032| 49       |
| proud            | 137.660  | 0.870967| 53       |
| picture          | 137.476  | 0.919354| 37       |
| album            | 136.479  | 0.661290| 118      |
| Korean.language  | 134.924  | 0.693548| 106      |
| politic          | 134.073  | 0.806451| 74       |
| singer           | 133.997  | 0.951612| 27       |
| entertainment    | 132.654  | 0.879032| 49       |
| worry            | 132.519  | 0.814516| 66       |
| star             | 129.997  | 0.814516| 66       |
| era              | 126.989  | 0.693548| 106      |
| popular          | 126.337  | 0.854838| 57       |
| English          | 126.301  | 0.774193| 86       |
| Malay.song       | 122.497  | 0.774193| 86       |
| lyric            | 121.894  | 0.661290| 118      |
| makeup           | 121.359  | 0.782258| 82       |
| prophet          | 120.397  | 0.709677| 103      |
| entertain.industry| 119.924 | 0.814516| 66       |
| EXO              | 119.301  | 0.620967| 123      |
| genre            | 118.652  | 0.782258| 82       |
| cost             | 114.815  | 0.693548| 106      |
| tradition        | 113.750  | 0.741935| 96       |
| Ramadan          | 112.968  | 0.677419| 114      |
| profit           | 111.573  | 0.806451| 74       |
| poor             | 109.815  | 0.862903| 54       |
| Word          | Score     | Length | Similarity | Type  |
|--------------|-----------|--------|------------|-------|
| talent       | 107.082   | 110    | 0.806      | 74    |
| Korean.culture | 103.317   | 111    | 0.629      | 121   |
| negative     | 101.335   | 111    | 0.782      | 82    |
| actor        | 101.178   | 112    | 0.798      | 79    |
| nonMuslim    | 01.118    | 113    | 0.815      | 66    |
| favorite     | 97.645    | 114    | 0.734      | 98    |
| hijab        | 96.766    | 115    | 0.758      | 89    |
| Siti.Nurhaliza | 95.978    | 116    | 0.669      | 117   |
| Quran        | 95.592    | 117    | 0.685      | 110   |
| foreigner    | 95.161    | 118    | 0.814      | 66    |
| expensive    | 94.106    | 119    | 0.677      | 114   |
| performance  | 90.894    | 120    | 0.806      | 74    |
| market       | 90.633    | 121    | 0.815      | 66    |
| short        | 88.488    | 122    | 0.854      | 57    |
| sin          | 85.908    | 123    | 0.758      | 89    |
| netizen      | 69.948    | 124    | 0.879      | 49    |
| agency       | 77.475    | 125    | 0.823      | 64    |