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Correlation Between Culture and Music Used in Advertising

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ABSTRACT

Objective: The objective of this study was to find out if there is a correlation between a country's culture and the type of music they use in their TV advertisements.

Methods: We used the Hofstede model profiles for each of the five countries we selected for this study in order to determine if there is a correlation between each country's profile (which represents its culture), and the music that was selected in each country's advertising. Of the six dimensions in the Hofstede model, we chose to focus on three dimensions for the purpose of this study. The three dimensions we used are individualism/collectivism, masculinity, and uncertainty avoidance. We analyzed the music by using Spotify's Web API tool, which gave us three values: energy, danceability, and valence. We chose those values from Spotify since they are well-suited to be linked to the Hofstede dimensions that we are investigating here. Individualism/collectivism (from Hofstede's culture model) is associated with danceability (from Spotify's music tool); masculinity (from Hofstede's culture model) is associated with energy (from Spotify's music tool), and uncertainty avoidance (from Hofstede's culture model) is associated with valence (from Spotify's music tool).

Results:

The USA has a medium-high country/song coherence value (321) and a low-medium commercial/song coherence value (492). India has a high country/song coherence value (251) and a low-medium commercial/song coherence value (446). The Netherlands has a low country/song coherence value (548) and a low commercial/song coherence value (512). Japan has a high country/song coherence value (227) and a medium-high commercial/song coherence value (392). Singapore has a medium-high country/song coherence value (342) and a low commercial/song coherence value (529).

Conclusion:

We have found that there is correlation between a country's culture and the type of music they use in their TV advertisements in countries with Eastern culture such as India and Japan but not in countries with Western culture such as the US, The Netherlands, and Singapore.

Keywords: Cultural influence, Music in advertising, Consumer behavior, Brand identity, Cultural symbolism, Target audience, Emotional appeal, Cross-cultural marketing

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Introduction

This paper investigates the question of a correlation between a country's culture and the type of music they use in their TV advertisements.

Culture has been well established as a vital factor which influences different types of behavior among people living in different regions (Steenkamp, 2001). Culture can be composed of many dimensions such as varying belief systems, preferences, and customs of specific people or groups of people that inform how they live. (Nasse, 2023)

However, measuring the effect of culture in research requires effectively representing the dimensions of culture involved. Since it is not linear but dependent on multiple causes, it would be easy to get it wrong. But in 1980, Geert Hofstede was the first researcher to create a model to successfully represent the profile of a country's culture, and his work has long been considered the most dominant in the field since (Siganos, 2023).

Hofstede built the first four dimensions of his model to measure culture by using data from IBM employees within the timeframe of 1967-1973 (Siganos, 2023). About a decade later he added two more dimensions for a total of six dimensions to measure culture (Hofstede and Bond, 1988). He provided the ratings of 50 countries with more than 100,000 questionnaires (Hofstede, 2011).

Hofstede's model has been successfully employed to study multiple marketing issues across the board. As Jan-Benedict E. M. Steenkamp explains (Steenkamp, International Marketing Review, 2001), Hofstedes' model studied:

> "…humor in ads (Alden et al., 1993), response style tendencies (Baumgartner and Steenkamp, 1999), consumer responses to decisions (Lynn et al., 1993), new product development (Nakata and Sivakumar, 1996), brand market share (Roth, 1995), and consumer innovativeness (Steenkamp et al., 1999)."

Taking culture into account is extremely important for creating effective strategies for marketing (Nasse, AB, 2023). As D.A. Ricks has pointed out, “The failure to take cultural differences between countries into account has been the cause of many business failures.” (Ricks, D.A., Blunders in International Business, 1993). The ads for the same product in two different regions must be tailored to each region to reflect the culture in order for the ads to be most effective. The dimensions of the Hofstede model can be used in many ways to improve a company’s ability to build an effective ad campaign (An, D and Kim, S, 2007). Therefore, we believe the Hofstede model is a good way to measure culture in connection with music, as we will do in this study.

At the beginning of this project, our initial interest was in nostalgia in music with regard to marketing. It turns out though, that the field of nostalgia in music is very controversial and messy, with “no common ground on which nostalgia is the most beneficial in marketing or how to best trigger it and what effects it has on consumers and consumer behavior” (Ajander, Hubertsson, Nilsson, 2023). The results vary quite heavily: some research finds nostalgia quite impactful, while others question those reports’ credibility, as it is not easy to find correlations within groups of people. Whether music is nostalgic or not tends to be based on specific personalities of individuals rather than based on commonalities among groups of people.

The scales measuring the success of nostalgia in music in marketing that have been established thus far find the most success when nostalgia in music is targeted to each listener’s unique personality and specific upbringing (Ajander, Hubertsson, Nilsson, 2023). This fact makes it incredibly hard for advertising agencies to use nostalgia as a factor, since for it to be effective, many more ads would have to be created per company, as well as other factors having to be considered, like how to get very specific ads shown to very specific people. While this strategy might generate more revenue than a different strategy, it would ultimately cost the company far more in their marketing budget than would be reasonable.

Since there is little data so far to answer this question of how an advertising agency can use nostalgic music in advertising more effectively if they cannot customize the ad for everyone, we decided to start at the beginning. We decided to research the connection between the music used in advertising and the familiar cultural dimensions of different countries around the world, using the Hofstede model as a basis of information for each country. Specifically, we investigated the coherence between the culture of each of five countries and the type of music used by advertisers in each of those countries.

The definition of coherence is having the same or similar degree of intensity for the dimensions defining the culture of the country, the values expressed by the commercial and the characteristics of the song.

In the context of this paper, coherence is the measure of the correlation between the culture of the country and the attributes of the music that country has used in their commercials.

Hofstede's Model on Cultural Dimensions

We used Geert Hofstede's model to measure cultural dimensions of countries. The Hofstede model is a tool that looks at six variables from a large list of countries and assigns a number from 1-100 that rates the countries' level of that variable. The six variables are: power distance, individualism/collectivism, masculinity, uncertainty avoidance, long term orientation, and indulgence.

For this study, we will focus on the variables of individualism/collectivism (IDV), masculinity (MAS), and uncertainty avoidance (UAI). We excluded the following three variables, as we thought they would not be useful towards the study of correlation with music in advertising: 1) power distance, 2) long term orientation, and 3) indulgence. We will explain the definitions of these variables and our reasoning for inclusion or exclusion below.

Definitions for the three Hofstede variables that we used include:

Individualism/collectivism (IDV): represents the level to which people of a society feel independent as compared to feel connected to other people. Western countries, namely countries like The Netherlands are very individualistic (100). People tend to be more independent, buy things for themselves, do things themselves, while Asian countries like Indonesia (5) are very collectivistic, having more groups of people doing and sharing things together.

Masculinity (MAS) officially denoted as "Motivation towards Achievement and Success": represents, as the name suggests, motivation towards financial success and assertiveness. It promotes "competitiveness" vs mutual support, a key reason why we linked masculinity (from the Hofstede model) with energy (from the Spotify API tool) in our data. Eastern countries like Hungary tend to have higher motivation towards success (88), while western countries like Denmark tend to have a lower or more neutral level of motivation towards success (16).

Uncertainty avoidance (UAI): represents, as the name again suggests, carefulness and avoiding risks. It is the concept of being stressed by fear vs acceptance of the unknown and incertitude, a key reason why we linked uncertainty avoidance (from the Hofstede model) to valence (from the Spotify API tool). We reason that reassurance causes happiness. Countries like Greece have higher uncertainty avoidance (100), while countries like Singapore have lower uncertainty avoidance (8).

We chose these three variables for the following reasons: individualism/collectivism can be easily linked to danceability, since dancing is known to be a collectivistic activity, not an activity that people usually do completely by themselves. Masculinity can be linked to energy, because it represents assertiveness and competitiveness, characteristics that someone of low energy would lack. Last, we linked uncertainty avoidance to valence since when an individual avoids potential danger, it usually soothes their mind and makes them happier, knowing they are danger free.

Definitions of the other three variables that we excluded follow. **Power distance** is defined by James Madison University as "the way people in a society relate to each other on a hierarchical scale". A low power distance country will typically have more opportunity. People who grow up poor can achieve the same feats as anyone else. A high-power distance country sets you on the same track for life. **Long term orientation** is defined by Hofstede as "the choice of focus for people's efforts: the future or the present and past." (Hofstede, 2011) Countries that are constantly advancing efforts for the future like Russia have a higher long-term orientation, whereas countries that don't work on advancing like Morocco, remain monumentalist. **Indulgence/restraint** is defined by Hofstede as "gratification versus control of basic human desires related to enjoying life." (Hofstede, 2011) Most of the countries in the western hemisphere are high indulgence countries, like the US, Canada, Mexico, and much of South America. Again, Russia is the opposite, with more restraint than most American countries.

We excluded these above three variables as we simply could not find a way to link them to the music dimensions that we were studying.

Structure and Indicators of the Song According to Spotify's Model

We used variables from Spotify's Web API tool to measure dimensions of the specific music that had been chosen by advertisers in the selected commercials. The Spotify tool measures an assortment of variables.

Acousticness: As per Spotify's definition, acousticness is the confidence measure from 0.0 to 1.0 of whether the track is acoustic. 1.0 represents high confidence the track is acoustic.

Analysis URL: As per Spotify's definition, the analysis URL is a URL to access the full audio analysis of this track. An access token is required to access this data.

Danceability: As per Spotify's definition, danceability describes how suitable a track is for dancing based on a combination of musical elements including tempo, rhythm stability, beat strength, and overall regularity. A value of 0.0 is least danceable and 1.0 is most danceable.

Duration MS: As per Spotify's definition, the duration MS is the duration of the track in milliseconds.

Energy: As per Spotify's definition, energy is a measure from 0.0 to 1.0 and represents a perceptual measure of intensity and activity. Typically, energetic tracks feel fast, loud, and noisy. For example, death metal has high energy, while a Bach prelude scores low on the scale. Perceptual features contributing to this attribute include dynamic range, perceived loudness, timbre, onset rate, and general entropy.

ID: As per Spotify's definition, the ID is the Spotify ID for the track.

Instrumentalness: As per Spotify's definition, instrumentalness predicts whether a track contains no vocals. "Ooh" and "aah" sounds are treated as instrumental in this context. Rap or spoken word tracks are clearly "vocal". The closer the instrumentalness value is to 1.0, the greater likelihood the track contains no vocal content. Values above 0.5 are intended to represent instrumental tracks, but confidence is higher as the value approaches 1.0.

Key: As per Spotify's definition, the key variable tells us what key the track is in. Integers map to pitches using standard Pitch Class notation. E.g. 0 = C, 1 = C♯/D♭, 2 = D, and so on. If no key was detected, the value is -1.

Liveness: As per Spotify's definition, liveness detects the presence of an audience in the recording. Higher liveness values represent an increased probability that the track was performed live. A value above 0.8 provides a strong likelihood that the track is live.

Loudness: As per Spotify's definition, loudness represents the overall loudness of a track in decibels (dB). Loudness values are averaged across the entire track and are useful for comparing relative loudness of tracks. Loudness is the quality of a sound that is the primary psychological correlate of physical strength (amplitude). Values typically range between -60 and 0 db.

Mode: As per Spotify's definition, mode indicates the modality (major or minor) of a track, the type of scale from which its melodic content is derived. Major is represented by 1 and minor is 0.

Speechiness: As per Spotify's definition, speechiness detects the presence of spoken words in a track. The more exclusively speech-like the recording (e.g. talk show, audio book, poetry), the closer to 1.0 the attribute value. Values above 0.66 describe tracks that are probably made entirely of spoken words. Values between 0.33 and 0.66 describe tracks that may contain both music and speech, either in sections or layered, including such cases as rap music. Values below 0.33 most likely represent music and other non-speech-like tracks.

Tempo: As per Spotify's definition, tempo represents the overall estimated tempo of a track in beats per minute (BPM). In musical terminology, tempo is the speed or pace of a given piece and derives directly from the average beat duration.

Time Signature: As per Spotify's definition, time signature is a notational convention to specify how many beats are in each bar (or measure). The time signature ranges from 3 to 7 indicating time signatures of "3/4", to "7/4".

Track HREF: As per Spotify's definition, the track HREF is a link to the Web API endpoint providing full details of the track.

Type: As per Spotify's definition, the type is the object type.

URI: As per Spotify's definition, the URI is the Spotify URI for the track.

Valence: As per Spotify's definition, the valence is a measure from 0.0 to 1.0 describing the musical positiveness conveyed by a track. Tracks with high valence sound more positive (e.g. happy, cheerful, euphoric), while tracks with low valence sound more negative (e.g. sad, depressed, angry).

We focus on three particular variables for this study: energy, danceability, and valence (happiness). And as stated earlier, we believe these three variables are the most effective way to research the coherence between country/commercial and song because each of them can easily be linked to one of Hofstede's six dimensions.

To use Spotify's Web API tool, we had to find advertisements that used released, distributed music on Spotify. By using the Spotify URIs of the songs, we were able to gather the data we wanted for each advertisement.

Hypothesis/Choice

We needed to somehow link the cultural dimensions of 1) Individualism (IDV), 2) Masculinity - Motivation Towards Achievement and Success (MAS), and 3) Uncertainty Avoidance Index (UAI) to the dimensions of the music from the Spotify tool of 1) energy 2) danceability and 3) happiness. This way we could draw the conclusion that the higher or lower each dimension of the music is, then the higher or lower the respective cultural dimension is. Specifically, we chose to link IDV (this is an inverse correlation to collectivism, which is what we used) with danceability, as dancing is considered a rather social activity. We associated MAS from Hofstede's model with energy from Spotify's tool because putting more energy into something often signals more motivation towards success, or other motives, which is associated with masculinity in the literature (Hofstede, 2011). And we associated UAI from Hofstede's model with valence from the Spotify tool, as avoiding uncertainty can result in having fewer problems and more reassurance, which often results in more happiness.

Countries Selected

We selected five countries, all with varying values in each of the cultural dimensions, to test our hypothesis on. The five countries are the USA, India, The Netherlands, Japan, and Singapore. We used

the "country comparison tool" on the Hofstede Insights official website. Here is a brief description of each country with its values for each cultural dimension.

1) USA
    a) IDV: 60 / COL: 40
    b) UAI: 46
    c) MAS: 62
    d) PDI: 40
    e) LTO: 50
    f) IDL: 68

The United States remains average across all dimensions of the Hofstede model, but according to the official Hofstede Insights country comparison tool, "The score of the US on Motivation for Achievement and Success is high at 62, and this can be seen in the typical American behavioral patterns". It goes on to say that this value goes hand in hand with the US's Individualism level too, in that "Americans, so to speak, all show their Motivation for Achievement and Success individually." The tool further describes the US as a country where the motivation to win and become higher in status is important.

2) India
    a) IDV: 24 / COL: 76
    b) UAI: 40
    c) MAS: 56
    d) PDI: 77
    e) LTO: 51
    f) IDL: 26

The Hofstede Insights country comparison tool describes India, a country with high PDI, as a country with "appreciation for hierarchy and a top-down structure in society and organizations." As a result, the tool explains India's low Individualism level by saying "The collectivist side means that there is a high preference for belonging to a larger social framework in which individuals are expected to act for the greater good of one's defined in-group(s)." It then describes India as a "spiritual country with millions of deities and various religious philosophies", reasoning that this might contribute to the country's forbearance in flashing one's wealth and success.

3) Netherlands

a) IDV: 100 / COL: 0
b) UAI: 53
c) MAS: 14
d) PDI: 38
e) LTO: 67
f) IDL: 68

The Netherlands is a very different culture compared to most of the other countries in this study. The Hofstede Insight's country comparison tool considers it as "a Consensus society". With its low MAS score of 14, it describes the Netherlands as a culture where "it is important to keep the work-life balance and make sure that all are included." Consequently, the country's Individualism score is the highest of any country in the world, coming in at 100. As the tool explains, people are expected to keep to themselves and solve their own problems.

4) Japan
   a) IDV: 62 / COL: 38
   b) UAI: 92
   c) MAS: 95
   d) PDI: 54
   e) LTO: 100
   f) IDL: 42

The Hofstede country comparison tool characterizes Japan as "one of the most Decisive societies in the world." It further explains that "in combination with their mild collectivism, you do not see assertive and competitive individual behaviors which we often associate with a Decisive culture."

5) Singapore
   a) IDV: 43 / COL: 57
   b) UAI: 8
   c) MAS: 48
   d) PDI: 74
   e) LTO: 67
   f) IDL: 46

The Hofstede country comparison tool reasons that Singapore's high PDI refers to Confucian ideology and Confucius' five basic relationships (ruler-subject; father-son; older brother-younger brother; husband-wife; and senior friend-junior friend). It characterizes Singapore as a country that is "centralized and managers rely on their bosses and on rules. Employees expect to be told what to do." The country has the lowest UAI value of any country in this study, and the country

comparison tool explains that “people abide to many rules not because they have need for structure but because of high PDI. Singaporeans call their society a “Fine country. You’ll get a fine for everything”.”

Methodology

By searching on YouTube, we were able to find four commercials per country that were produced and run in their respective countries. To be able to find information about the music used in the ads, we had to select ads that used music that was publicly distributed on Spotify. This was somewhat difficult to find, as it is common for advertising agencies to create custom music specifically for a commercial, meaning it won’t be distributed to Spotify. However, we were able to find enough commercials that were available on Spotify, allowing us to insert the URI of each song into the Web API tool, giving us the data we were looking for.

You’ll notice that the numbers output from the Web API tool were in ranges from 0.0 to 1.0. We multiplied those numbers by 100 for clearer recognition when analyzing the data and to make them comparable with Hofstede's model dimensions values that range from 0 to 100.

To get the “coherence value” for each commercial, we gave an educated score ranging from 10 (low) to 40 (high) with two intermediate scores of 20 (medium low) and 30 (medium high). These scores indicate the intensity of Hofstede's cultural values expressed by the content of the commercials.

Brand/Commercial Link	Song	Country	MAS	IDV	UAI	Energy	Danceability	Valence
Coca-Cola	Tyler, The Creator - Tell Me How	USA	62	60	46	50	79	8
Heinz	Chris Knox - It’s Love	USA	62	60	46	65	56	58

Beats by Dre	A$AP Rocky, Pharrell Williams - RIOT	USA	62	60	46	88	74	87
Pepsi	ALLISTER X, CKAY - Bassline	USA	62	60	46	87	72	89
Spotify	Badshah - Kar Gayi Chull	India	56	24	40	74	83	87
OLX	Khushboo Raaj - Womaniya	India	56	24	40	85	69	64
Frito Lays	Lashon Byrd - Pumped	India	56	24	40	86	72	91
7up	Anirudh Ravichander - Arabic Kuthu	India	56	24	40	76	61	63
McDonalds	Los Shain's - Shain'S a Go Go	Netherlands	14	100	53	83	37	87
Centraal Beheer	Mutkattomat - Jätkän humppa	Netherlands	14	100	53	63	69	98
Heineken	Walter Murphy - A Fifth Of Beethoven	Netherlands	14	100	53	51	69	78
Coca-Cola	Etta James - I Just Want To Make Love To You	Netherlands	14	100	53	52	64	65
Google	Royal Cinema - Lookee Lookee	Japan	95	62	92	85	90	88
Universal Studios	Nash Music Library - What's The Hits?	Japan	95	62	92	100	73	96

Nissan	YUZU - Chururi	Japan	95	62	92	79	61	60
Ayataka	Hikaru Utada - traveling	Japan	95	62	92	94	68	77
KFC	Sémø - Eyes on the Ball	Singapore	48	43	8	74	80	36
ShengSiong	SaraoMusic - Folky Mood	Singapore	48	43	8	71	67	96
Pink Magic	Roger John Webb - Bossa Mia	Singapore	48	43	8	56	56	91
Bank of Singapore	Kyle Cox - Some Good	Singapore	48	43	8	40	73	36

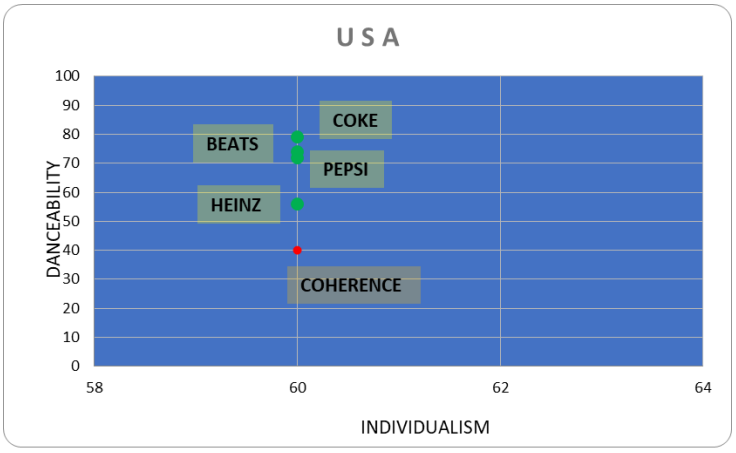
Results

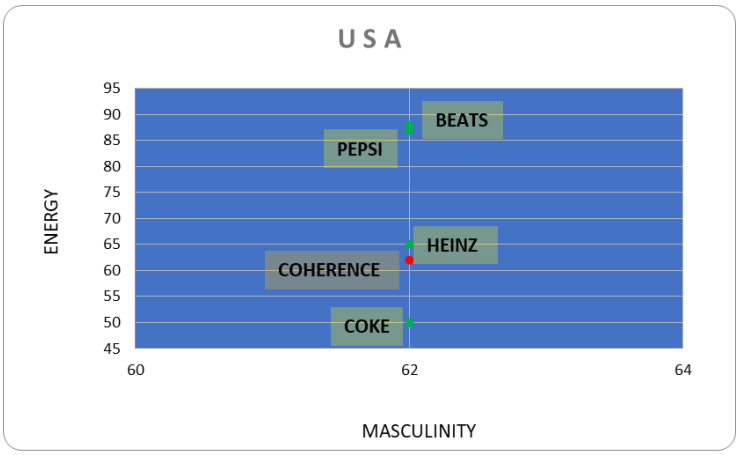
After measuring the difference between the song scores (Energy, Danceability, Valence) and the related country cultural dimensions (MAS, IDV, UAI), we found that the higher the difference between the two variables, the higher the incoherence level. For example, to show the calculation, consider the Coke commercial in the USA: the song's energy = 50; the MAS of the USA = 62. The incoherence index is 12 (the lower the number the better the resulting coherence). For the IDV and the song's danceability, the incoherence index is 39; for the UAI, and the song's valence the incoherence index is 38. So, the total incoherence index for the song used in the commercial for the American cultural values is 89, as reported in the first box of the following matrix. The same approach has been used to evaluate the incoherence index between the song and the values expressed by the content of the commercial. Finally, for each country, we summed the total scores of the 4 commercials to create an incoherence index for the whole country.

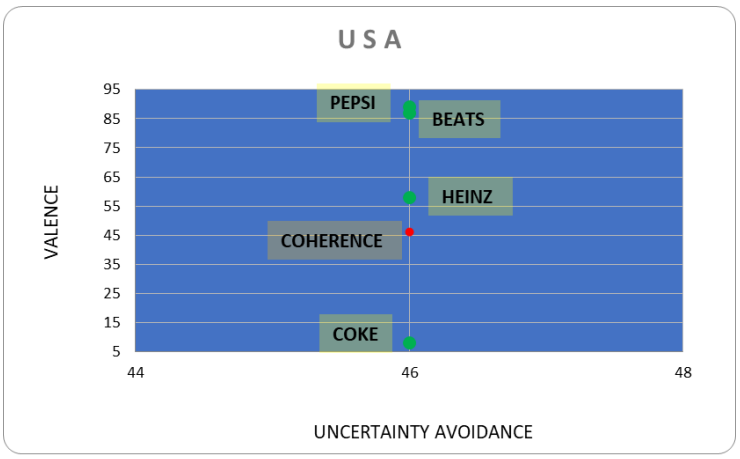
The results showed that India and Japan, two countries with more homogenous cultures, showed the highest level of coherence among the five countries studied. The other three, the USA, the Netherlands, and Singapore showed less coherence with their more diverse ethnic backgrounds.

USA:

Country/Song:







		Country	USA
		DIMENSION	SONG
Nr.	Commercial	IDV	DANCEABILITY
1	Coke	60	79
2	Heinz	60	56
3	Beats	60	74
4	Pepsi	60	72
	COHERENCE	60	40

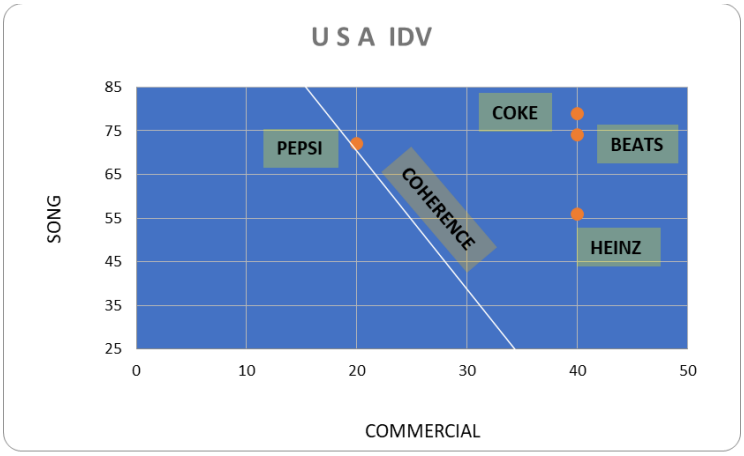
		Country	USA
		DIMENSION	SONG
Nr.	Commercial	MAS	ENERGY
1	Coke	62	50
2	Heinz	62	65
3	Beats	62	88
4	Pepsi	62	87
	COHERENCE	62	62

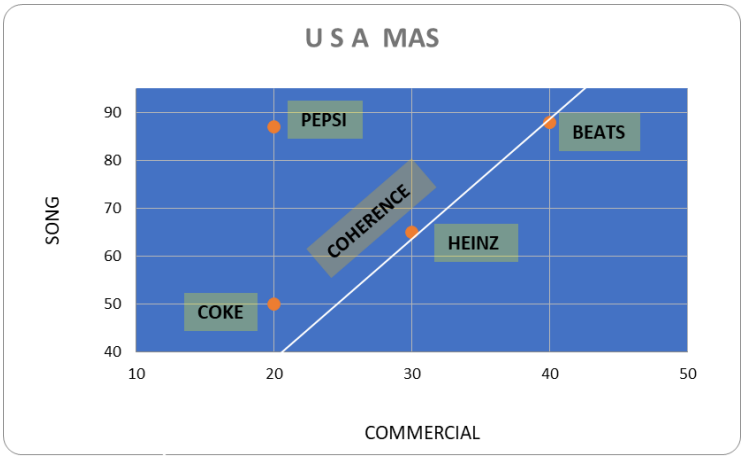
		Country	USA
		DIMENSION	SONG
Nr.	Commercial	UAI	VALENCE

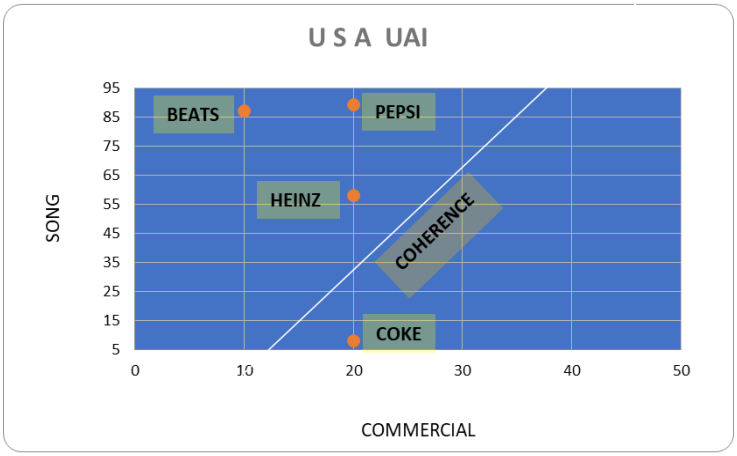
1	Coke	46	8
2	Heinz	46	58
3	Beats	46	87
4	Pepsi	46	89
	COHERENCE	46	46

1	Coke	89
2	Heinz	31
3	Beats	101
4	Pepsi	100
	COHERENCE	**321**

Commercial/Song:


USA IDV
SONG
COMMERCIAL
85
75
65
55
45
35
25
0
10
20
30
40
50
COKE
BEATS
PEPSI
COHERENCE
HEINZ


USA MAS
SONG
COMMERCIAL
90
80
70
60
50
40
10
20
30
40
50
PEPSI
BEATS
COHERENCE
HEINZ
COKE


USA UAI
SONG
COMMERCIAL
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40
50
BEATS
PEPSI
HEINZ
COHERENCE
COKE

		Country	**USA**
		COMMERCIAL	SONG
Nr.	Commercial	IDV	DANCEABILITY
1	Coke	40	79
2	Heinz	40	56
3	Beats	40	74
4	Pepsi	20	72
	COHERENCE	10	100

		Country	**USA**
		COMMERCIAL	SONG
Nr.	Commercial	MAS	ENERGY
1	Coke	20	50
2	Heinz	30	65
3	Beats	40	88
4	Pepsi	20	87
	COHERENCE	20	50

		Country	**USA**
		COMMERCIAL	SONG
Nr.	Commercial	UAI	VALENCE
1	Coke	20	8
2	Heinz	20	58

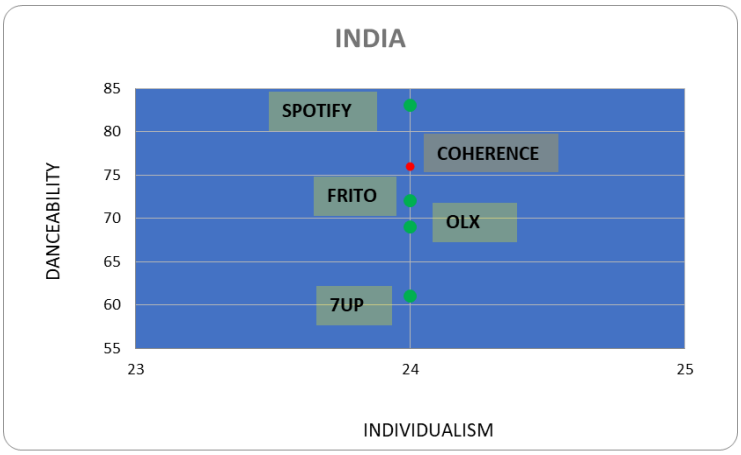
3	Beats	10	87
4	Pepsi	20	89
	COHERENCE	20	50

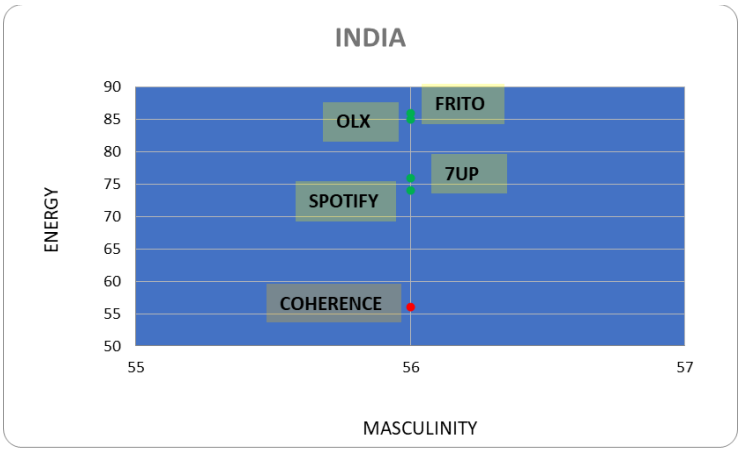
1	Coke	121
2	Heinz	83
3	Beats	173
4	Pepsi	115
	COHERENCE	**492**

Based on our evidence, the most coherent country in the US is Heinz. One explanation is that condiments, Heinz products, appeal to everyone, and are not limited to consumers of a certain age, sex or culture. For this reason, music is not as important to consider the extent as one might with other products. The other three brands try to appeal to a more specific market. Beats appeals to younger consumers.

India:

Country/Song:


INDIA
DANCEABILITY
85
80
75
70
65
60
55
23
24
25
SPOTIFY
COHERENCE
FRITO
OLX
7UP
INDIVIDUALISM


INDIA
ENERGY
90
85
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75
70
65
60
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50
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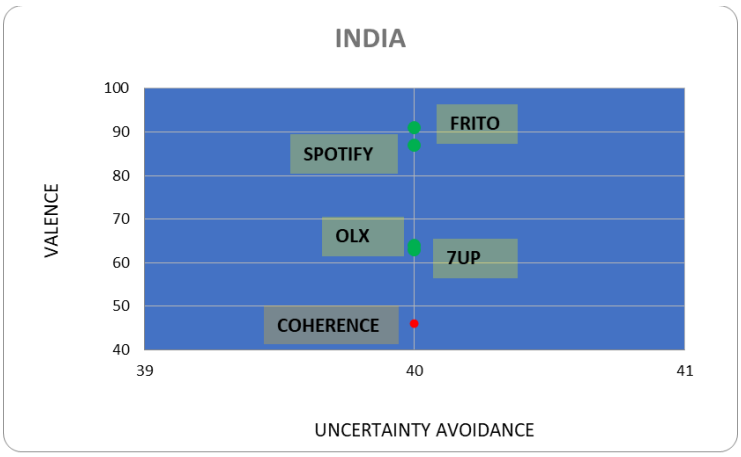
57
FRITO
OLX
7UP
SPOTIFY
COHERENCE
MASCULINITY


INDIA
VALENCE
100
90
80
70
60
50
40
39
40
41
FRITO
SPOTIFY
OLX
7UP
COHERENCE
UNCERTAINTY AVOIDANCE

		Country	India
		DIMENSION	SONG
Nr.	Commercial	IDV	DANCEABILITY
1	Spotify	24	83
2	OLX	24	69
3	Frito Lays	24	72
4	7up	24	61
	COHERENCE	24	76

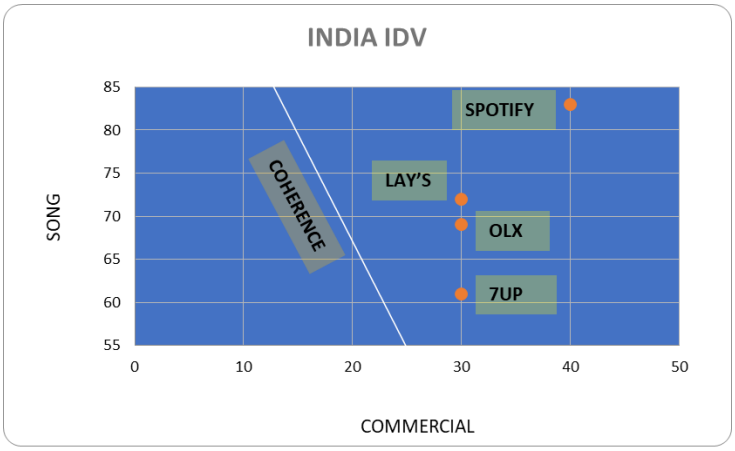
		Country	India
		DIMENSION	SONG
Nr.	Commercial	MAS	ENERGY
1	Spotify	56	74
2	OLX	56	85
3	Frito Lays	56	86
4	7up	56	76
	COHERENCE	56	56

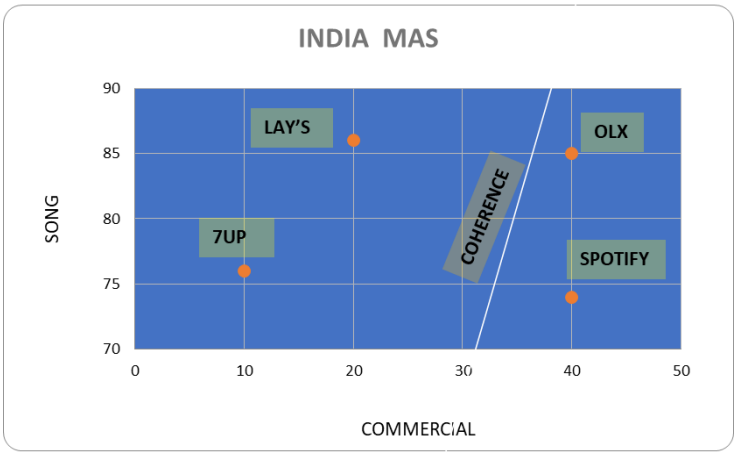
		Country	India
		DIMENSION	SONG
Nr.	Commercial	UAI	VALENCE
1	Spotify	40	87
2	OLX	40	64
3	Frito Lays	40	91

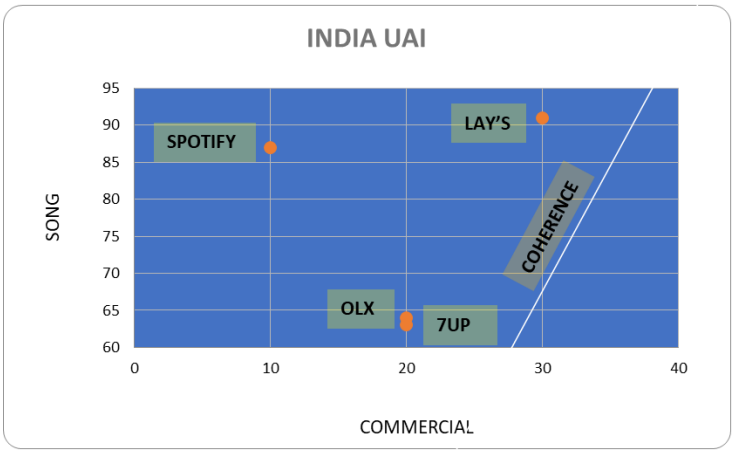
4	7up	40	63
	COHERENCE	40	46

1	Spotify	66
2	OLX	54
3	Frito Lays	79
4	7up	52
	COHERENCE	**251**

Commercial/Song:







		Country	India
		COMMERCIAL	SONG
Nr.	Commercial	IDV	DANCEABILITY
1	Spotify	40	83
2	OLX	30	69

3	Frito Lays	30	72
4	7up	30	61
	COHERENCE	10	100

		Country	**India**
		COMMERCIAL	SONG
Nr.	Commercial	MAS	ENERGY
1	Spotify	40	74
2	OLX	40	85
3	Frito Lays	20	86
4	7up	10	76
	COHERENCE	20	50

		Country	**India**
		COMMERCIAL	SONG
Nr.	Commercial	UAI	VALENCE
1	Spotify	10	87
2	OLX	20	64
3	Frito Lays	30	91
4	7up	20	63
	COHERENCE	20	50

1	Spotify	130
2	OLX	77
3	Frito Lays	105
4	7up	134
	COHERENCE	**446**

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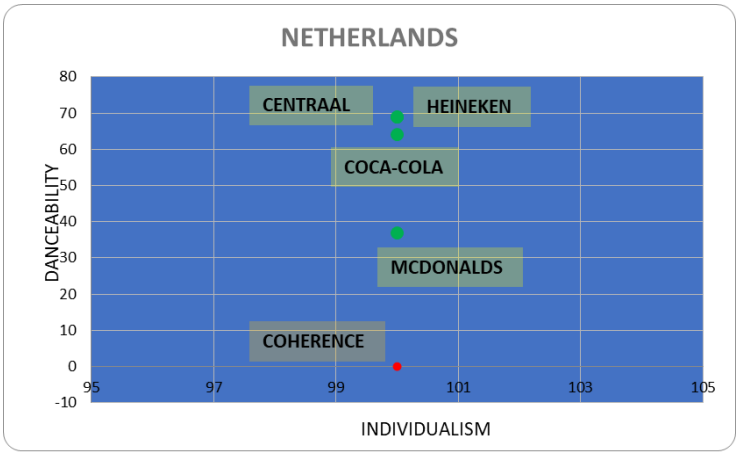
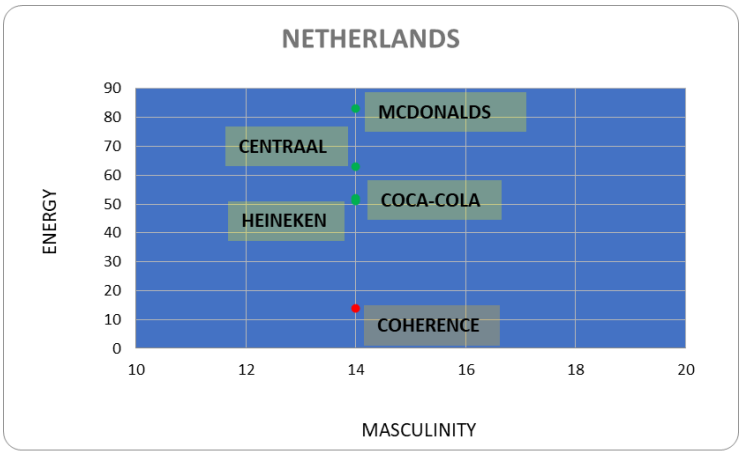
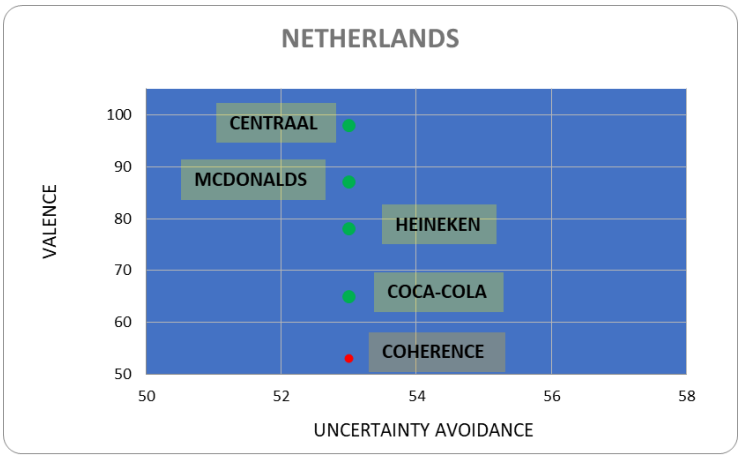
OLX, the Dutch company that is the most coherent of the four brands studied in Indian commercials, tries to cater towards the local culture in every country that they advertise in. They use commercials - and songs - with high coherence values between culture and music. The other three brands try to tap into western culture, thus disregarding the coherence between songs and cultural values.

Netherlands:

Country/Song:







		Country	Netherlands
		DIMENSION	SONG
Nr.	Commercial	IDV	DANCEABILITY
1	McDonalds	100	37
2	Centraal Beheer	100	69
3	Heineken	100	69

4	Coca-Cola	100	64
	COHERENCE	100	0

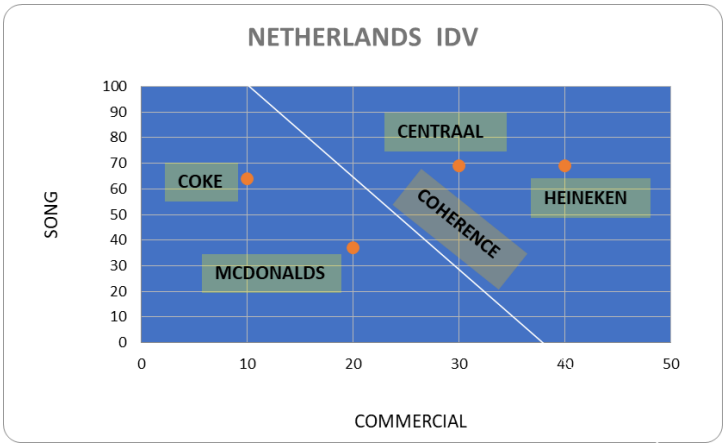
		Country	**Netherlands**
		DIMENSION	SONG
Nr.	Commercial	MAS	ENERGY
1	McDonalds	14	83
2	Centraal Beheer	14	63
3	Heineken	14	51
4	Coca-Cola	14	52
	COHERENCE	14	14

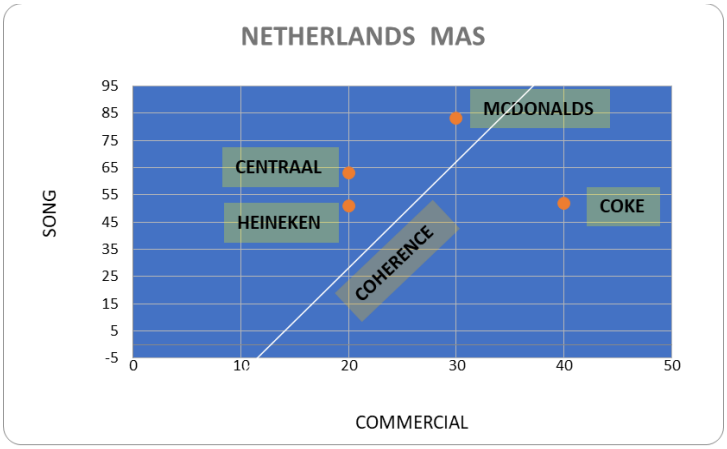
		Country	**Netherlands**
		DIMENSION	SONG
Nr.	Commercial	UAI	VALENCE
1	McDonalds	53	87
2	Centraal Beheer	53	98
3	Heineken	53	78
4	Coca-Cola	53	65
	COHERENCE	53	53

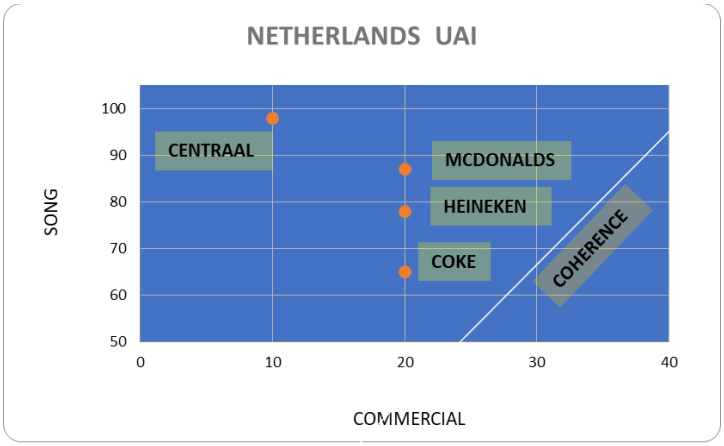
1	McDonalds	140
2	Centraal Beheer	163
3	Heineken	**131**
4	Coca-Cola	114

	COHERENCE	**548**

Commercial/Song:







		Country	Netherlands
		COMMERCIAL	SONG
Nr.	Commercial	IDV	DANCEABILITY
1	McDonalds	20	37
2	Centraal Beheer	30	69
3	Heineken	40	69
4	Coca-Cola	10	64
	COHERENCE	10	100

		Country	Netherlands

		COMMERCIAL	SONG
Nr.	Commercial	MAS	ENERGY
1	McDonalds	30	83
2	Centraal Beheer	20	63
3	Heineken	20	51
4	Coca-Cola	40	52
	COHERENCE	20	50

		Country	**Netherlands**
		COMMERCIAL	SONG
Nr.	Commercial	UAI	VALENCE
1	McDonalds	20	87
2	Centraal Beheer	10	98
3	Heineken	20	78
4	Coca-Cola	20	65
	COHERENCE	20	50

1	McDonalds	100
2	Centraal Beheer	164
3	Heineken	132
4	Coca-Cola	116
	COHERENCE	**512**

Inverse to our hypothesis, the least coherent commercials come from two local companies, Centraal Beheer and Heinekin. Our only explanation is that the Netherlands is simply the least coherent of the five countries studied. The lack of specific cultural values, and perhaps certain actual values in the cultural dimensions of the country, reflects the choice of advertising music. The two international brands, like with OLX in India, try to incorporate more of the target country's culture in their ads, raising their coherence values.

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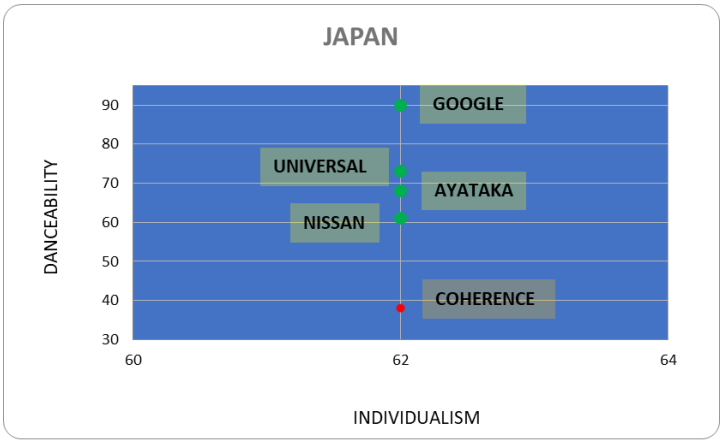
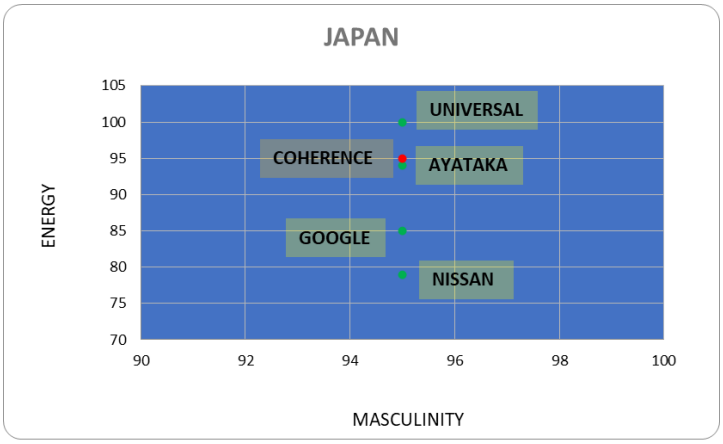
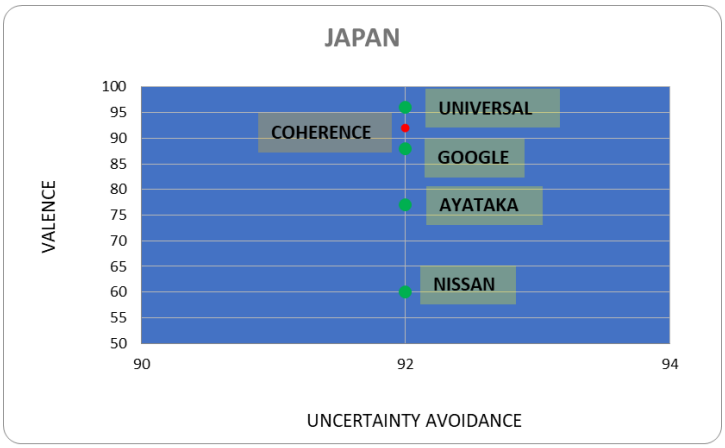
Japan:

Country/Song:







		Country	Japan
		DIMENSION	SONG
Nr.	Commercial	IDV	DANCEABILITY
1	Google	62	90
2	Universal	62	73
3	Nissan	62	61
4	Ayataka	62	68
	COHERENCE	62	38

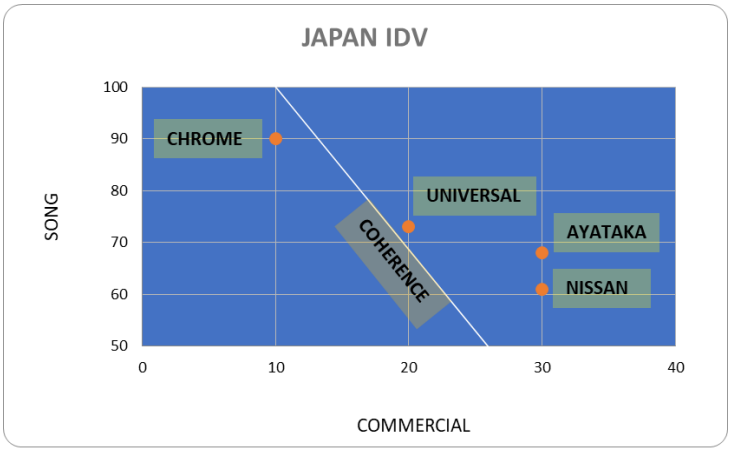
		Country	Japan
		DIMENSION	SONG
Nr.	Commercial	MAS	ENERGY
1	Google	95	85

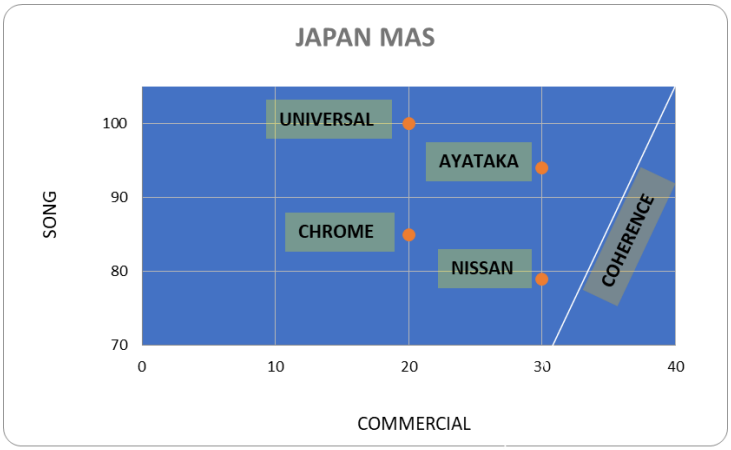
2	Universal	95	100
3	Nissan	95	79
4	Ayataka	95	94
	COHERENCE	95	95

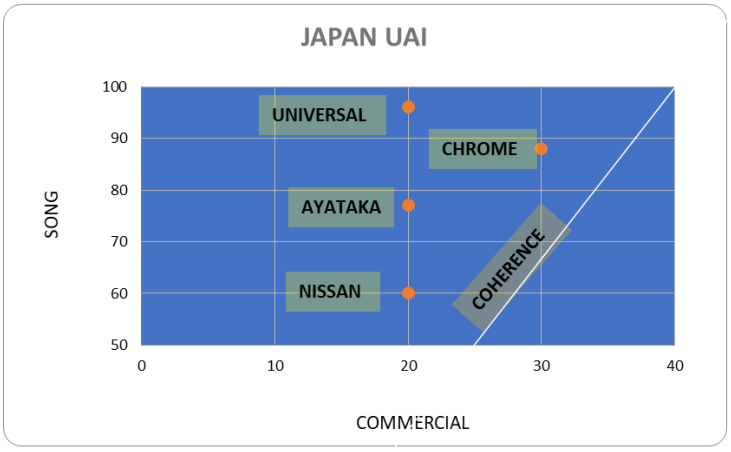
		Country	**Japan**
		DIMENSION	SONG
Nr.	Commercial	UAI	VALENCE
1	Google	92	88
2	Universal	92	96
3	Nissan	92	60
4	Ayataka	92	77
	COHERENCE	92	92

1	Google	66
2	Universal	44
3	Nissan	71
4	Ayataka	46
	COHERENCE	**227**

Commercial/Song:







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		Country	Japan
		COMMERCIAL	SONG
Nr.	Commercial	IDV	DANCEABILITY
1	Google	10	90
2	Universal	20	73
3	Nissan	30	61
4	Ayataka	30	68
	COHERENCE	10	100

		Country	Japan
		COMMERCIAL	SONG
Nr.	Commercial	MAS	ENERGY
1	Google	20	85
2	Universal	20	100
3	Nissan	30	79
4	Ayataka	30	94
	COHERENCE	20	50

		Country	Japan
		commercial	SONG
Nr.	Commercial	UAI	VALENCE

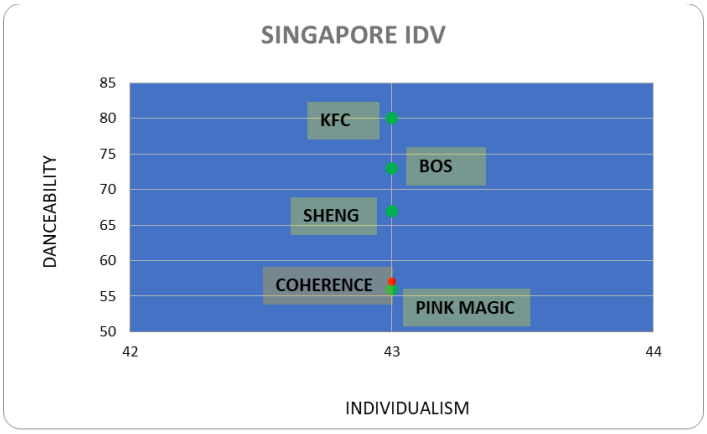
1	Google	30	88
2	Universal	20	96
3	Nissan	20	60
4	Ayataka	20	77
	COHERENCE	20	50

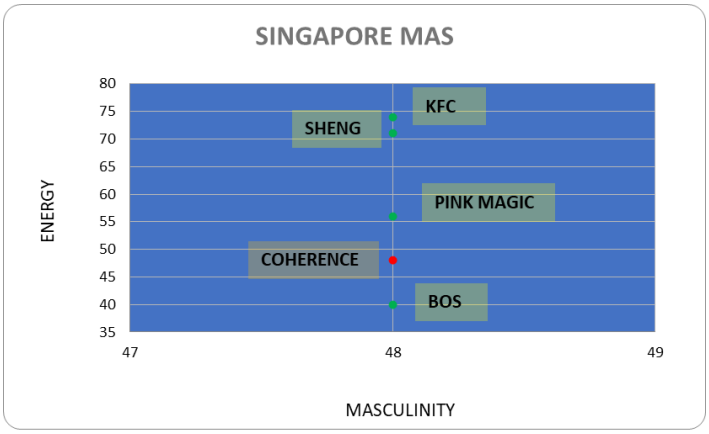
1	Google	83
2	Universal	136
3	Nissan	67
4	Ayataka	106
	COHERENCE	**392**

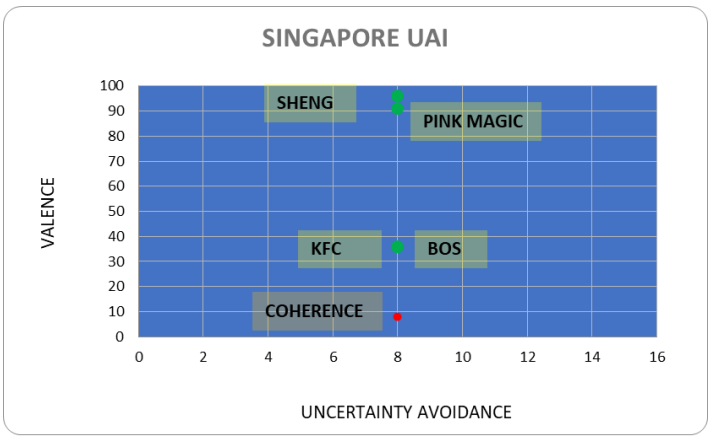
Japan, while in total is a coherent country, feeds us an odd mix of results. Two songs appear to be coherent with their respective commercials (Google Chrome, American, and Nissan, Japanese), but not to the country, where the other two commercials appear much more coherent. Keep in mind the Japanese commercials when compared to other countries, still have a high level of coherence. The differences are still low, hence why Japan is the most coherent of the five countries.

Singapore:

Country/Song:


SINGAPORE IDV
DANCEABILITY
85
80
75
70
65
60
55
50
KFC
BOS
SHENG
COHERENCE
PINK MAGIC
42
43
44
INDIVIDUALISM


SINGAPORE MAS
ENERGY
80
75
70
65
60
55
50
45
40
35
KFC
SHENG
PINK MAGIC
COHERENCE
BOS
47
48
49
MASCULINITY


SINGAPORE UAI
VALENCE
100
90
80
70
60
50
40
30
20
10
0
SHENG
PINK MAGIC
KFC
BOS
COHERENCE
0
2
4
6
8
10
12
14
16
UNCERTAINTY AVOIDANCE

		Country	Singapore
		DIMENSION	SONG
Nr.	Commercial	IDV	DANCEABILITY
1	KFC	43	80
2	ShengSiong	43	67
3	Pink Magic	43	56
4	Bank of Singapore	43	73
	COHERENCE	43	57

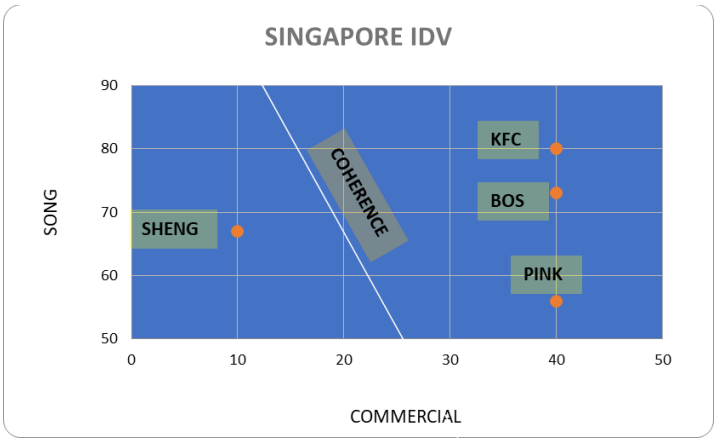
		Country	Singapore
		DIMENSION	SONG
Nr.	Commercial	MAS	ENERGY
1	KFC	48	74
2	ShengSiong	48	71
3	Pink Magic	48	56
4	Bank of Singapore	48	40
	COHERENCE	48	48

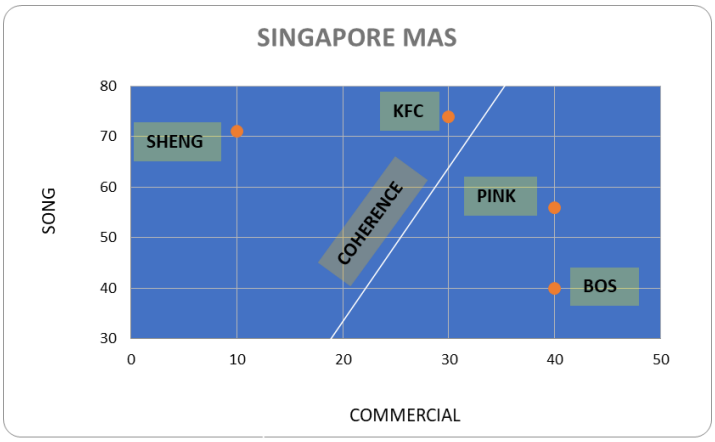
		Country	Singapore
		DIMENSION	SONG
Nr.	Commercial	UAI	VALENCE
1	KFC	8	36
2	ShengSiong	8	96
3	Pink Magic	8	91
4	Bank of Singapore	8	36

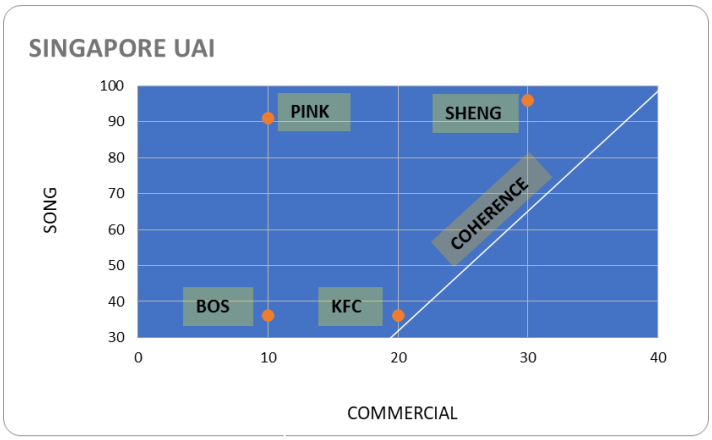
	COHERENCE	8	8

1	KFC	77
2	ShengSiong	121
3	Pink Magic	92
4	Bank of Singapore	52
	COHERENCE	**342**

Commercial/Song:







		Country	Singapore
		COMMERCIAL	SONG
Nr.	Commercial	IDV	DANCEABILITY
1	KFC	40	80
2	ShengSiong	10	67
3	Pink Magic	40	56
4	Bank of Singapore	40	73

	COHERENCE	10	100

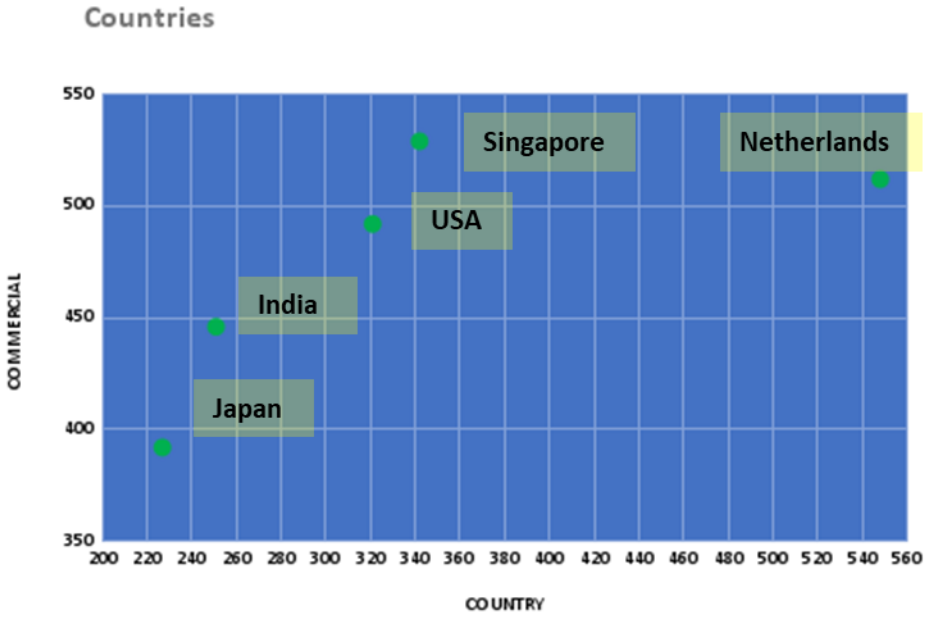
		Country	**Singapore**
		COMMERCIAL	SONG
Nr.	Commercial	MAS	ENERGY
1	KFC	30	74
2	ShengSiong	10	71
3	Pink Magic	40	56
4	Bank of Singapore	40	40
	COHERENCE	20	50

		Country	**Singapore**
		COMMERCIAL	SONG
Nr.	Commercial	UAI	VALENCE
1	KFC	20	36
2	ShengSiong	30	96
3	Pink Magic	10	91
4	Bank of Singapore	10	36
	COHERENCE	20	50

1	KFC	90
2	ShengSiong	133
3	Pink Magic	191
4	Bank of S.	115
	COHERENCE	**529**

Singapore does not show much coherence across the board, but the most coherent song with respect to the brand's country is from a local company: Bank of Singapore. Still, one of the other local companies, ShengSiong, has a low level of coherence. A possible explanation could be that ShengSiong is in the supermarket/retail industry, meaning its target is very different from the other three brands and their choice of song with regard to the commercial could be less important. KFC has the highest coherence value with respect to the song for the commercial, while PinkMagic, offering western style cosmetics, is promoting non-local culture, while rightfully using a song that does not reflect the local cultural values.

	Country	Commercial
USA	321	492
India	251	446
Netherlands	548	512
Japan	227	392
Singapore	342	529



It is clear from our data that the countries that tend to be the most coherent are countries made up of purely native peoples with a well-defined culture. Multicultural countries like the USA, the Netherlands, and Singapore struggle with their coherence value, while India and Japan have a well-defined culture

that likely corresponds with the commercial values and the choice of the songs, making the linkage between the commercial/country and the song stronger. The USA is very clearly a multicultural land with large populations of people who participate in a variety of cultures. Singapore is a country with many people of Chinese, Malay, Indian, and various other ethnicities. A congregation of different cultures coexisting in one congenial space. (Tan J Ken, National Geographic) “The Netherlands has a diverse cultural composition because of immigration and its colonial history. Dutch society is multicultural and encompasses a variety of ethnic, religious, and cultural groups.” (Careforce) The USA by its melting pot is very composite. What is very clear is that the songs used in each country for the commercials have a sort of linear correlation between the cultural values of the country and Hofstede's dimension promoted by the commercial: The distance from the two is progressively increasing at an equal rate. Showing a sort of interdependence between the two axes.

Conclusion

We find it exciting to discover that there is more coherence between the culture of a country and the music selected for commercials in that country in countries with Eastern culture, like India and Japan. Now that we have established the correlation between the country’s culture and the choice of ad music in Eastern cultures, as this paper has done, future research could investigate whether countries who use music in ads that correlates with their cultures are experiencing more success in their ads compared to countries who are not achieving correlation with culture and the selected music in their ads.

We would speculate that correctly matching the music in ads with the culture of the country in which it is targeted will lead to greater success of those ads. On the flip side, failing to consider the culture of the country when choosing the music for that ad will lead to reduced levels of success. Of course, ads are often created by global agencies, so it would be especially important for ad agencies to have this information available to them so they may consider the culture of each country targeted when choosing the music for the ad for each country. We believe there is much important and exciting work ahead in this area of marketing research with respect to music and culture.

Limitations to this research paper are as follows. We were only able to investigate five countries, and four commercials ran in each country. Larger data sets would be helpful in making more accurate determinations regarding the efficacy of using songs that are coherent with the country’s culture in advertisements. We also connected the three select Hofstede dimensions to three select music dimensions with general reasoning, because there is no pre-existing, validated measure available.

Therefore, there is no statistical evidence that these connections are true. More data collection and research are recommended for further exploration of this emerging field.

In conclusion, while it is well known that advertisers consider variables such as impact and rhythm in music they select for commercials, it is our recommendation that global advertising agencies also consider the coherence value of a commercial with respect to the connection between the country's culture and the music selected for that commercial.

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