



**HAL**  
open science

## Social representations of suntanning and conditional beach practices in China

Sandrine Gaymard, Benjamin Taunay, Jean-Noël Amato

► **To cite this version:**

Sandrine Gaymard, Benjamin Taunay, Jean-Noël Amato. Social representations of suntanning and conditional beach practices in China. *Mediterranean Journal of Social Sciences*, 2019, 10 (5), pp.24-36. 10.2478/mjss-2019-0063 . hal-02344038

**HAL Id: hal-02344038**

**<https://univ-angers.hal.science/hal-02344038v1>**

Submitted on 3 Nov 2019

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



## Research Article

© 2019 Gaymard et al.  
This is an open access article licensed under the Creative Commons  
Attribution-NonCommercial-NoDerivs License  
(<http://creativecommons.org/licenses/by-nc-nd/3.0/>).

# Social Representations of Suntanning and Conditional Beach Practices in China

**Sandrine Gaymard**

University of Angers,  
Laboratoire de Psychologie des Pays de la Loire (LPPL, EA 4638),  
SFR Confluences, Univ Angers-Univ Nantes, France  
Corresponding Author

**Benjamin Taunay**

University of Angers, Department of Geography,  
CNRS ESO Angers - UMR 6590

**Jean-Noel Amato**

Private Consultant, Paris

Doi: 10.2478/mjss-2019-0063

### Abstract

*Pale skin in China seems to be a norm and the use of face-kinis on the beaches effectively implies that suntanning frightens. However other practices can be observed which raise questions. The aim of this article is to study the social representation of suntanning and the normative aspects of the representation with the conditionality of practices, among adepts of new beach practices in China. Interviews were carried out among a Chinese population who regularly follow these new beach practices on three Zhujajian island beaches (Zhejiang Province). A free associations test and a conditionality questionnaire were filled out. The results show on one hand that the social representation of suntanning differs between men and women; on the other hand that conditionality differs little between men and women. Regression analysis shows that several sociodemographic variables such as age, can explain the conditions of acceptability of suntanning. Cross-checking the results shows up some contradictory elements which reflect the existence of an ongoing transformation in the identity of Chinese culture.*

**Keywords :** Social representations, Theory of conditionality, Beach practices, Suntanning, China, Cultural values

## 1. Introduction

### 1.1 The theory of social representations and the conditionality theory

The theory of social representations was developed by Moscovici in 1961. Social representations arose from the concept of collective representations put forward by Durkeim (1898). Social representation is « ...a form of knowledge, elaborated and shared socially, with a practical objective going toward building a reality common to a social group.» (Jodelet, 1989) (our translation). According to Moscovici, a social representation has three dimensions: 1. Attitude expresses a stand, a general orientation whether positive or negative in relation to the object of the representation; 2. Information refers to the sum and organization of knowledge about the object of the representation. This can be more or less extensive, varied, precise or stereotyped; 3. The field

of representation refers to the content of a representation made up of both cognitive and affective elements: it is a set of organized and structured data concerning an object. Studying social representations helps to understand individuals and groups better by analysing the way in which they represent an object. It is this particular relation to the object connected to the practices of the group that accounts for what is known as common sense. It is known that social representation is contextualized because linked to the environment and culture; it also helps to face certain threats by playing a protective role (Gaymard, 2012 ; Gaymard, Kay & Etoundi, 2015 ; Gaymard, Tiplica, Koh & Wong, 2015 ; Joffe, 2003). Through social representations it is possible to assimilate the information coming from our environment and to communicate with others knowing that communication is essential in the construction of an object of social representation.

According to the central core theory of social representations (Abric, 1993; Gaymard, 2014), the representation is composed of a core that represents what is shared by the group and of a periphery that is linked more to individual practices. Thus, in order to describe a social representation the elements constituting the central core and those of the periphery are presented via the Vergès technique (2005). Through the study of social representations the evolution of an object or its ongoing transformation can be brought to light. The change in practices is essentially the origin of a transformation of the social representation (Flament, 1987). Resistant transformation has been identified among these transformations. This shows what Flament called "strange schemas" which rest on contradictory elements. Thus in Mamontoff's study (1996) on the social representation of the gypsy identity, there can be seen a transformation of the object that can be explained by the adoption of new practices linked to the sedentary lifestyle of gypsies (and consequently in contradiction with the nomadic lifestyle).

Works on the normative aspects of social representations led to the theory of conditionality (Gaymard, 2014; 2016). This theory defends the importance of normative latitudes and therefore the fact that the norms are subject to condition. According to this approach norms are not considered as rigid, non-negotiable system; they are on the contrary flexible and "ecological" in the sense that they refer to the reality of daily practices. By associating prescriptions with the conditions, more or less legitimate transgressions are brought to light (it is acceptable to...under certain conditions). In the field of traffic psychology a specific tool has been developed: the Conditional Scripts Questionnaire (Gaymard, 2007) which has allowed a parallel to be drawn between two systems of norms: legal and social. Thus concerning young drivers it was noted that the conditionality of the practices was highest with the script "speed limit" and that in this case, what justified the transgression most was the fact of driving on a motorway and the fact of driving on a clear road (Gaymard, 2007). By adapting the CSQ to the problem of interactions between drivers and pedestrians (Gaymard & Tiplica, 2014) it is notably seen that it is legitimate not to allow the pedestrian to cross if he or she is not on a pedestrian crossing thus confirming the place of infrastructures in the representation of the pedestrian (Gaymard et al., 2013). The study of conditionality illustrates what it is acceptable to do and the good reasons to justify this. The more numerous or significant (or frequent) these reasons are, the greater the gap between the legal and social norms or the formal and informal norms (Gaymard, 2014).

## 1.2 Beach practices and sunbathing in China

The beach is not a common place in Chinese tourist practice. The oldest coastal spots where promenading and bathing practices are documented in photos were built by European colonialists at the turn of the 20th century, for example the cities of *Beidaihe* (by the British) and *Qingdao* (by the Germans). If the Chinese communist party's propaganda points out that its main apparatchiks took possession of these spots once the People's Republic of China was declared (1949), it was only in the mid 1980s that the central Chinese government decided to make the tropical island of *Hainan*, in the South of the country, a tourist Mecca (Vernay, 2011), as attests the nickname of "Chinese Hawai", or "Hawai of the Orient" that it was rapidly given. Without disregarding the deserving workers sent to the beach of *Beidaihe* from the end of 1970s, linked to a relaxing of the regime following Mao Zedong's death (1976) and to the coming to power of Deng Xiaoping (1978), it will be noted that going to the beach in the 1980s and 1990s often remained a local practice,

relying essentially on excursionists (Boulet, 1988; Xu, 1999). Today however it concerns more and more individuals (Taunay, 2010), as can be seen by the regular increase in tourist attendance at different seaside spots in the country (measured by the national tourist administration of China) and the now classic presence of local beaches in the catalogs of Chinese tour operators alongside the inevitable landscapes of majestic rivers running through mountains and hills (Taunay, 2011).

If beach practices are becoming more and more substantial, their nature, the representations on which they rest remain an object of research that is dealt with very little. A bibliometric analysis of articles published in Mandarin and registered in the data base "Knowledge of China" (*zhongguo zhiwang*) on the most important tourist spots in the country gives 204 articles (from the North to the South of the country, *Beidaihe* : 30 ; *Qingdao* : 49 ; *Zhoushan* : 27 ; *Xiamen* : 36 ; *Beihai* : 8 ; *Sanya* : 54). Within this corpus the recurrent themes are "markets" and their different "sectors" (*shichang fenxi* : 12), "resources" (*ziyuan* : 15), "products" (*chanpin* : 18), development of these areas (*fazhan* : 65), and the associated measures to attain this (*zhengce* : 29). In a country where the level of urbanization has passed from a level around 20% (at the end of 1970s) to more than half the population living in cities (in 2011), this interest for development is not insignificant. Hence it is easy to understand that only an article in the above-mentioned corpus deals with the question of tourist practices. If a generalization is desired, to go beyond a regional entry although very interesting, cross checking between "tourist practices" and "the beach" (by the words: *shatan* ; *binhai* ; *haitan*) leads to no result. Once more this can be understood quite easily. Questioning the preceding database for the single item "tourist practices" (*lüyou zhe xingwei*), without spatial distinction, gives 108 results, while searching for "tourist market demands" (*lüyou shichang xuqiu*), gives 1192 responses. This clear disproportion testifies to a Chinese academic production oriented toward management sciences in the field of tourism with a view to concrete applications. The fact that in nearly half of the cases where articles deal with tourist practices, the specific analysis of purchasing practices (*xiaofei*) is associated with them, testifies to this. Finally in French articles on Chinese beach practices in China are also virtually inexistent, only the hypothesis of a "Chinese beach culture" (Taunay, 2010) being formulated then taken up collectively (Coëffé, Guibert, Taunay, 2014; Guibert & Taunay, 2013) through the beginnings of understanding of what suntanning represents in China. This last question is far from insignificant. "Chinese domestic tourism", tourist mobility and practices within the territory of the Peoples' Republic of China (PRC) (Taunay, 2009), namely on the beaches, is a phenomenon that engenders progressive revealing of the body. A recent phenomenon, only appearing in the last two decades of the XX<sup>th</sup> century, Chinese domestic tourism already represents the movement of around 300 million individuals each year, a growing number of whom go to the beaches (Taunay, 2008, 2011). Places such as the island of Hainan receive nearly 20 million tourists each year, among whom a growing number would seem to expose themselves to the sun on the beach. This thus supposes a possible appropriation of a suntan, while white skin is hailed as a canon of beauty in the country, paleness being acknowledged as a societal quality that could equally concern the skin's colour (Jullien, 1991). However some Chinese people allow themselves to go beyond these aesthetics and are beginning to tan, like Chinese surfers on the island of Hainan (Guibert and Taunay, 2013). This can be explained in part by their social paths: tanning is seen to become an economic, even symbolical resource for certain individuals (Coëffé, Guibert & Taunay, 2014). The Chinese surfers on the island of Hainan are a typical-ideal case of emerging suntanning in China, based on a dual distance. Firstly a spatial distance (the island of Hainan being located 3000 km from the political and administrative center and away from the continent), then a social distance since tanned Chinese surfers do not represent the middle classes (Rocca, 2010), who prefer in majority the white skin. However, tanning in China was not the object of any scientific publications in Chinese language and a simple search on the data base "knowledge of China" (see above) gives evidence of it. On the other hand, signs show that the study of tanning is relevant; an illustration can be given with the existence of the UV lounges in biggest cities of China. While an article of the *China Daily*, the official organ of the Chinese Communist Party (PCC), gives evidence of their presence from 2006 at Shanghai from first, a search on the "Like the tan" website (quasi-official website for this practice in China (<http://www.imeihe.com>)) sort 30 lounges, most of the half (17) located in the three biggest cities of China (Beijing, Shanghai, Guangzhou).

As suntanning in China is a developing practice, this study proposes to verify if suntanning constitutes an object of social representation for this population. From the normative point of view this study also proposes to study the conditionality of suntanning practices i.e. the acceptable suntanning conditions for the Chinese population.

If suntanning is an object of social representation it means that it is part of the shared reality which would reinforce the finding of a reconfiguring of Chinese cultural values (Hsu & Huang, 2016). Indeed, if China has a tradition of collectivist values (Hofstede & Bond, 1984; Kluckhohn & Strodtbeck, 1961; Zeng & Greenfield, 2015), particularly linked with Confucian Thinking (Lau, 1988), economic and tourism development also highlights the existence of modern values (Leung, 2008; Wang & Sheldon 1995).

## 2. Method

### 2.1 Tools

A mixed methodology was adopted on account of its interest demonstrated in the study of social representations (e.g. Gaymard & Joly, 2013; Gaymard & Chauvet, 2016; Gaymard & Lethielleux, 2015). We used a free association test and we created a conditionality questionnaire.

#### 2.1.1 Free associations test

In the study of social representations, the free associations test makes it possible to access spontaneous representations. We used the following instruction: "when you hear suntanning what do you think of?" A cross check was carried out between word frequency (high vs low) and their ranking order (first vs last ranks). According to the prototypical approach, the most frequent elements quoted in the first ranks are identified as being the central elements of the social representation. The frequently quoted elements but in the last ranks or infrequently quoted but in the first ranks are those belonging to the first periphery. The elements of the second periphery do not usually enter into the interpretation of the results since they are not relevant to explain the structure of the representation.

#### 2.1.2 The conditionality questionnaire

Based on Gaymard's works (2007), this questionnaire enables the assessment of the conditionality of norms or in other words, the legitimacy of transgressions. An 11-item questionnaire was drafted with the following formulation:

*"(according to you) suntanning is acceptable if the body is protected" (item 1), with a scale ranging from "absolutely disagree" to "absolutely agree" (5 degrees). The aim of this questionnaire was to verify what was more or less conditional in suntanning practices according to the theory of conditionality (Gaymard, 2014).*

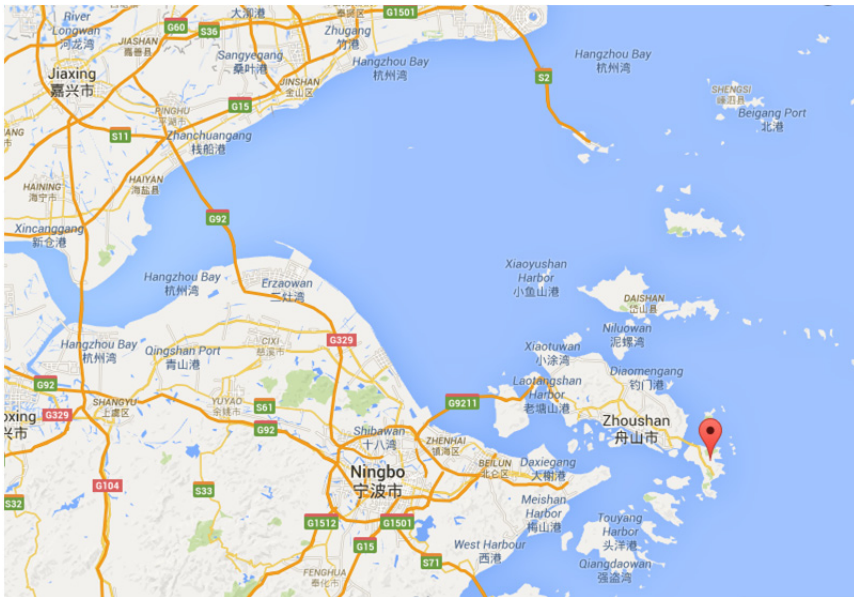
### 2.2 Places of research.

The Chinese population was interviewed on 3 beaches in China (PRC) during the summer of 2015. They took place on the Island of Zhujiajian, in the archipelago of Zhoushan, in Zhejiang province. It is the second largest island in the archipelago linked to the main island by a bridge going from the city of Shenjiamen, the main economic hub (urban, industrial - port) of the archipelago. According to official statistics, tourists come either from Zhejiang province or from neighbouring provinces. The Island of Zhujiajian is where the airport of the archipelago is located and is one of the 12 districts of Zhejiang province.

After the questionnaire was translated into Mandarin Chinese two students in a dual bachelor diploma in tourism were recruited to administer the questionnaire. The volunteers were interviewed on the beaches of : Dongsha, Nansha or Lisha (Figure1) between 9 July and 18 August 2015

(Appendix 1, tables 5 and 6). It should be mentioned that one of the beaches is free of charge and the other two are not.

In order that the beaches were investigated equally, a system of daily rotation was set up, taking into account each student's weekly two days off. Each student interviewer was thus on a different beach every day and there were no two interviewers on the same beach at the same time.



**Figure 1.** Location of archipelago of Zhoushan on the Island of Zhujiajian, in PRC. (Google Maps, Ciepluch, Jacob, Mooney & Winstanley (2010))

### 2.3 Population

In this study we retained Chinese men and women who declared to have regular beaches practices, the question of practices linked to social representations being essential. The sample is composed of 207 Chinese, 104 females, average age 27.04 (SD: 6.15) [median: 26; min: 13; max: 45] and 103 males, average age 31.79 (SD: 9.36) [median: 31; min: 15; max: 69]. Of the overall population, 24.6% were interviewed on a beach free of charge and 75.4% on a beach with an admission charge. Socio-demographic data were collected, such as marital status, social background, education and occupation (see Appendix 1).

## 3. Results

### 3.1 Free associations

In general, the population gave an average of 1.7 words. 69 respondents, that is 33%, replied to the instruction: "I do not understand" and 7 respondents, that is about 3%, replied: "I don't know". When we compare the men's discourse with the women's, it can be noted that the men discourse is richer and contains higher frequencies than the women's, whose most frequent word is "beach" quoted 10 times. For analysis, words with a minimum frequency of 5 were retained. Looking at tables 1 and 2, it can be seen that the central core (box 1) differs for each group. For the men it is composed of the items "beach", "beauty" and "therapeutic sunshine" (Shai in Chinese). For the women it is composed of the items "beach", "dark skin" and "sun". When observing the first periphery (boxes 2

and 3), it can be seen that the men supplied more associations than the women. This first periphery which deals with individual practices is composed of the items “fashion”, “sea”, “health”, “sun” and “burning” among the men and “therapeutic sunshine”, “foreign”, “sunlight” and “sea” among the women.

**Table 1:** The social representation of suntanning among Chinese men (N=103)

		Average Rank					
		frequencies	First rank	frequencies	Last rank		
Frequency	High	Beach	20	1.35	Sea	13	2.31
		Therapeutic sunshine	15	1.53	Fashion	9	1.78
		Beauty	11	1.55	Health	9	1.67
		<b>Central words – Box 1</b>			<b>First periphery – Box 2</b>	9	2.56
Low		Burning	5	1.20	Dark skin	8	1.63
		<b>First periphery – Box 3</b>			<b>Second periphery – Box 4</b>		

**Table 2:** The social representation of suntanning among Chinese women (N=104)

		Average Rank					
		frequencies	First rank	frequencies	Last rank		
Frequency	High	Beach	10	1.60			
		Dark skin	9	1.44			
		Sun	9	1.44			
		<b>Central words – Box 1</b>			<b>First periphery – Box 2</b>		
Low		Therapeutic sunshine	8	1.62	Beauty	5	1.80
		Foreign	5	1.20			
		Sunlight	5	1.20			
		Sea	6	1.33			
		<b>First periphery – Box 3</b>			<b>Second periphery – Box 4</b>		

### 3.2 The conditionality questionnaire about suntanning

The analysis of the answers to the conditionality questionnaire (see descriptive analyses in Appendix 2) based on a scale between 1 (the least conditional) and 5 (the most conditional) shows a good reliability of the questionnaire (Cronbach’s alpha on the totality= .88) and that the male/female distributions are homogeneous (Kolmogorov-Smirnov test not significant). The use of Mann-Whitney’s test shows that at the threshold of .05 there is only one condition that appears significantly different; this is the condition : “if those around me are favorable to this practice”. It is to be noted that there is also a large-size effect (Cliff’s delta=0.9174). There is one condition that tends toward significance; it is the condition “ if it is for men” (see Tables 3 and 4).

**Table 3:** Mann-Whitney ‘s test / bilateral test (those around me are favorable to this practice):

U	4470.500
Expectation	5356.000
Variance (U)	163170.348
p-value (bilateral)	.028
alpha	.05

**Table 4 :** Mann-Whitney ‘s test /bilateral test (if it is for men):

U	4573.000
Expectation	5356.000
Variance (U)	164110.493
p-value (bilateral)	.053
alpha	.05



The conditionality for each group shows up some subtleties. We have classed the conditionality in decreasing order for men (Figure 2). For both groups suntanning is seen to be legitimate first of all if it is so that mentalities evolve (the highest conditionality for both groups). Other characteristics for which men and women agree: suntanning is less legitimate if it is for groups for women or if it is for well-being (the lowest conditionality for these two items for both groups).

Two conditions appear more legitimate for men : “if those around me are favorable to this practice” and “if it is for men”. Two conditions appear more legitimate for women : “if the body is protected” and “if it is for esthetic reasons”.

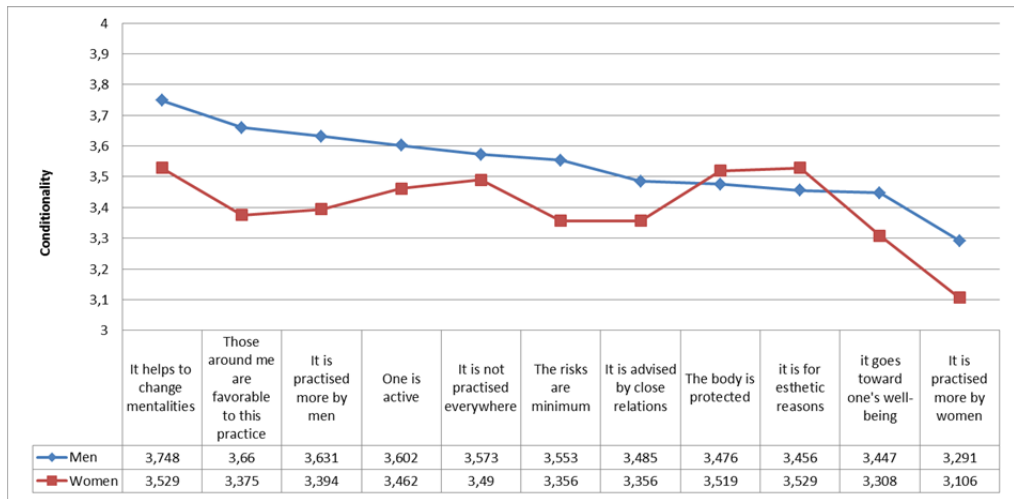


Figure 2: Conditionality for men and women (classed in decreasing order for men)

A regression analysis was performed to identify the predictors that are the most determinant in the conditionality among the sociodemographic variables. This is in order to recognize the minimum number of independent variables (IV) to predict best the variations in dependent variables (DV) (Cosnefroy & Sabatier, 2011). It arises from the analysis that the explained variables are: “Those around me are favorable to this practice”; “the risks are minimal” and “it is practiced more by men”. The explaining variables are: the respondent’s gender, their age, their main occupation (students, working....) and their status (married, cohabitation or single). The type of beach, the level of education and the social origin do not contribute to the model (Table 5).

Table 5: Table recap of regression analyses in relation to sociodemographic variables (R<sup>2</sup> Adjusted : takes into account the impact of a variable on the observed values ; the significant p values indicate that the independent variable must be maintained in the model)

Suntanning is acceptable if...	According to beaches (Nansha, Lisha and Dongsha)		Gender		Age		Status (married, cohabitation, single)		Occupation (students, employees, managers ...)		Degree		Social origin	
	R <sup>2</sup> Ajusted	p value	R <sup>2</sup> Ajusted	p value	R <sup>2</sup> Ajusted	p value	R <sup>2</sup> Ajusted	p value	R <sup>2</sup> Ajusted	p value	R <sup>2</sup> Ajusted	p value	R <sup>2</sup> Ajusted	p value
1. The body is protected	-0,0048	0,8781	-0,0043	0,7178	-0,0046	0,7867	-0,0036	0,6111	0,0092	0,091	-0,0045	0,7735	-0,0009	0,3667
2. Those around me are favorable to this practice	0,0005	0,2936	<b>0,0219</b>	<b>0,0197</b>	-0,0027	0,5058	-0,0047	0,8161	<b>0,022</b>	<b>0,0193</b>	-0,0001	0,3246	-0,0023	0,4683
3. It is for esthetic reasons	-0,0006	0,352	-0,0035	0,5874	-0,0043	0,7214	-0,0039	0,6501	-0,0005	0,3454	-0,0042	0,7004	-0,0049	0,9032
4. The risks are minimal	-0,0049	0,9163	0,0081	0,105	<b>0,0187</b>	<b>0,0289</b>	<b>0,0319</b>	<b>0,0061</b>	0,0027	0,2131	-0,0001	0,3259	-0,0035	0,5995



Suntanning is acceptable if...	According to beaches (Nansha, Lisha and Dongsha)		Gender		Age		Status (married, cohabitation, single)		Occupation (students, employees, managers ...)		Degree		Social origin	
5. It helps to change mentalities	-0,0042	0,7035	0,011	0,0723	-0,0047	0,8191	-0,0002	0,3301	-0,0041	0,6786	-0,0047	0,8168	-0,0029	0,528
6. One is active	0,0047	0,1625	0,0041	0,1756	0,0024	0,222	-0,003	0,5342	0,0043	0,1713	-0,0023	0,472	0,0064	0,13
7. It is not practised everywhere	-0,0039	0,6507	-0,0036	0,605	-0,0044	0,7376	-0,0017	0,4239	-0,0002	0,3319	-0,0047	0,8149	-0,0048	0,8596
8. It is advised by close relations	-0,0048	0,8748	0,0009	0,2746	-0,0008	0,3627	-0,0039	0,6563	0,0025	0,2181	-0,0047	0,8245	-0,0045	0,7746
9. It is practised more by men	-0,0043	0,7257	<b>0,0145</b>	<b>0,0474</b>	-0,003	0,5379	0,0027	0,2146	-0,0045	0,7777	-0,0047	0,8256	-0,0048	0,8869
10. It is practised more by women	-0,0033	0,573	0,0099	0,0837	-0,0043	0,7202	-0,0021	0,4505	0,0078	0,1083	-0,0039	0,6504	-0,0014	0,4004
11. It goes toward one's well-being	-0,0040	0,6640	0,0016	0,2485	-0,0028	0,5149	-0,0049	0,9209	-0,0023	0,4726	-0,0042	0,7113	-0,0032	0,5569

R<sup>2</sup> Adjusted present the percentages of variance explained for each question. The significant p values indicate that the sociodemographic variables must be preserved in the model. The significant regression coefficients (R<sup>2</sup> Adjusted) are all positive; this can be interpreted as follows:

- An increase in the male-to-female ratio will be associated with an increase of the responses in direction to greater acceptance if "The entourage is in favor of this practice" and if "it is more practiced by men".
- A variation of the occupations of the participants towards a professional activity (employee or manager) will be associated with an increase of the acceptance of suntanning if "The entourage is in favor of this practice".
- An increase in the average age of participants will be associated with an increase in responses towards a greater acceptance "if the risks are minimal".
- If the "single" ratio increases, this variation will be associated with an increase in responses towards greater acceptance "if the risks are minimal".

From the regressions carried out and the model that can be deduced from them, the variables explained by the "global acceptance of the suntanning" are: "The entourage is in favor of this practice"; "the risks are minimal"; "It is rather practised by men". The explanatory variables are: the gender; the age; the main occupation (student or active); the status (married, cohabiting or single) (Figure 3).

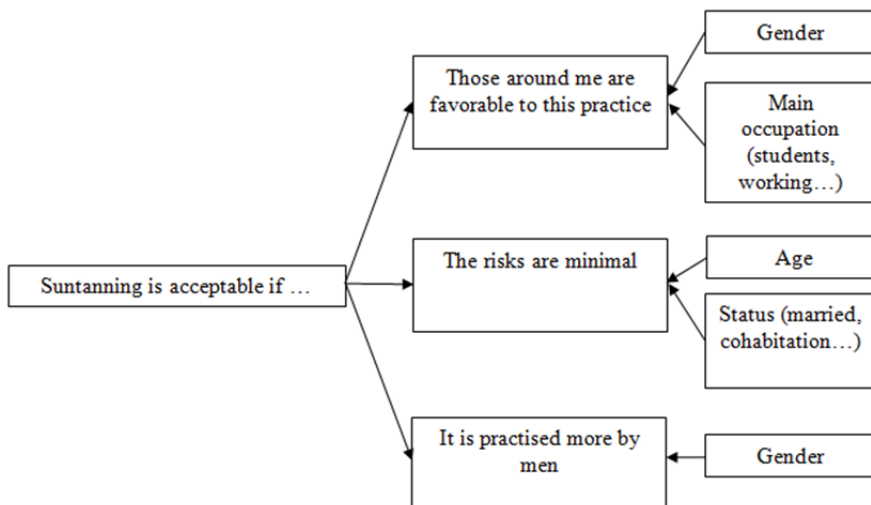


Figure 3 : Regression model

#### 4. Discussion

This study was based on the structural approach of social representations (Abric, 1993; Flament, 1987) in order to describe the structure of the representation of sunbathing among Chinese male and female followers, and on the conditionality theory (Gaymard, 2014) in order to study the normative aspects in more depth. The first aim was to verify whether sunbathing could be considered as an object of social representation for the Chinese. With this practice effectively evolving versus the “norm of pale skin”, it became relevant to check if the Chinese population was appropriating this object. Another goal was to study the conditionality of sunbathing. The existence of a social representation confirms the reconfiguring of Chinese cultural values (Hsu & Huang, 2016).

The links of the object (sunbathing) with the sphere of leisure and the sphere of tourism allow to associate the development of this activity and the evolution or the transformation of the cultural values. Concerning the free associations, even if a part of the population did not answer the instruction, the associations gathered bring out the structure of the representation, which proves different for women and men. The difference observed at the level of the central core is symptomatic of the stigma of dark skin for women and the difficulty there is to transgress this esthetic convention (even norm). If men do not indicate dark in the central core, they are the ones however (and only they) who allow themselves to be exposed to the sun for any length of time without protection (sunbathing cream or exfoliation with sand). Guibert and Taunay (2013) highlighted this phenomenon among Chinese surfers. “Dark” for women would thus seem to be the fear of possible dark skin coloring, which is socially unacceptable. For the men’s periphery, “fashion” could be linked to the novelty of the beach as a place for tourism (Taunay, 2008). For men and women, “sea” is important since the beach is first of all a bathing space before being a space to lie on the sand. Moreover they quoted “relaxing” (but with a frequency below 5), which means to let oneself go for a short moment (they spend little time on the beach) and in certain postures (many people standing in the water rather than swimming) (Taunay and Vacher, 2017).

There is a major noteworthy difference in the positioning of certain items between the two groups since “beauty” belongs to the representation’s central core for the men and to the representation’s second periphery for the women while “dark skin” belongs to the representation’s central core for the women and to the representation’s second periphery for the men. As the items of the second periphery are not generally part of the interpretation of the results since they do not bear enough weight, there exist items which are in opposite positions for the 2 groups.

The results of the conditionality questionnaire are on the whole homogeneous between men and women. Working from individual practices, measurement of conditionality describes what is more or less acceptable in transgressions (Gaymard, 2009). Thus it can be said that for the Chinese male and female populations going regularly to the beach, sunbathing is on the whole accepted and legitimate for the same reasons. The fact that men find sunbathing more acceptable “if those around are favorable” can be explained by the fact that Chinese society is very male and that the paternal family prevails over the maternal one (Thornton & Lin, 1994). Men are also led to give more importance to those around them and thanks to their acceptance the practice of sunbathing can be justified. This is confirmed furthermore by the place of the item “if it is for men” which is more conditional among men and the place of the item “if it is for women” which is the least conditional for men and for women. In other words the practice of sunbathing is less acceptable for women.

The fact that both groups find sunbathing more legitimate if it is so that mentalities evolve testifies to the fact that sunbathing is an imported practice that enables a social group to assert an evolution. It is therefore a practice that differentiates between those who adopt it and those who do not. This illustrates the importance of the identity function of social representations. Mugny and Carugati (1985) studied the social representations of intelligence among certain social groups. The representations produced have a double vocation: “...the construction of an intelligible and coherent mental universe and the elaboration of a gratifying social and personal identity” (Our translation, p. 183). Regression analyses show that acceptance of sunbathing is conditioned by

modalities concerning agreement of those around, a lesser perception of risks and a rather male practice. These variables are explained in the model by the gender and main occupation ("those around me are favorable), the gender only ("it is more practiced by male"), the status and age ("the risks are minimal"). These results confirm both the supremacy of pale skin while revealing the existence of an evolution or a "reconfiguring Chinese cultural values" (Hsu & Huang, 2016). In China, the representations of imperial families attest to this idealizing of pale skin as in the portraits of Wu Zetian (武则天), the one and only Chinese empress who reigned over the empire from 690 to 705. The non-pale skin is considered to be inferior and concerns those who have to work outside. Our results show that women above all must keep their skin pale and if the status explains the conditionality, this is not the case of the social origin, testifying of the democratization of the object. Some contradictory answers demonstrate an ongoing transformation. In the free associations test, beauty appears as a central element for men whereas for women it is an element that appears in the second periphery. In the conditionality questionnaire the position of the condition "if it is for esthetic reasons" appears inverted since it belongs to the most conditional for women, which is not the case for men. Women say more therefore that suntanning is acceptable for esthetic reasons while they do not associate beauty with suntanning unlike men. Through these results it appears that the usual link "pale skin/beauty" which belongs to the norms is evolving. Studies in the field of transformation of social representations (Flament, 1989 ; Mamontoff, 1996) refer to contradictory elements notably in the case of resistant transformation such as the transformation of the gypsy identity : "The representation of identity effectively undergoes a transformation at the level of the peripheral system without the central system apparently being, put into question" (our translation, Mamontoff, 1996, p. 77). From the position of another element, questions may be asked concerning the evolution of practices. This is the case of the item "well-being" which is one of the least conditional for women and for men. These results show that therapeutic sunshine which is central for men and peripheral for women nevertheless does not belong to the traditional philosophy of well-being which covers activities like Tai Chi Chuan or dancing in the evening in public places (Chiayi & Haoping, 2016; Horwood, 2008; Liu, 1975). Hsu and Huang (2012) studied travel motivations for a sample of Chinese. They identified three motivations of travel: relaxation, knowledge and novelty, in correlation with the need for recreation, education and broadening of the horizon. They showed the attraction for soothing landscapes such as beaches and coasts.

This first study on the social representation of suntanning in China shows a transformation in progress in Chinese cultural identity confirming the link between the evolution of cultural values and tourism or leisure practices (Mok & Defranco, 2000). The differences between women and men reflect a faster and more acceptable evolution for the latter. Even if pale skin is synonymous with beauty for Asian women (Ashikari, 2003; Xie & Zang, 2013), suntanning which is an imported practice becomes acceptable if it is for mentalities to evolve. Therefore behind this practice a change in mentality could be in operation.

## 5. Conclusion

This work will help to better understand the evolution to new practices and serve both the academic community and practitioners such as tourism or marketing professionals. For example, professionals can highlight the impact of these practices on well-being (therapeutic sunshine) or encourage family activities given the importance of the opinion of relatives; the importance of protecting the skin from the sun for health reasons must be recalled.

According to the theory of conditionality, norms and deviations from norms are part of the same system (Gaynard, 2014). Because "transgressions" are legitimate in social representations and linked to practices, this latter ultimately, translate that suntanning can not be considered as abnormal situation today but adaptation of the normative system.

## 6. Acknowledgements

This study was funded within the frame of a call of research by the scientific board of the University.

## References

- Ashikari, M. (2003). The memory of the women's white faces: Japanese and the ideal image of women. *Japan Forum*, 15(1), 55-79.
- Abric, J.C. (1993). Central system, peripheral system : Their functions and roles on the dynamics of Social Representations. *Papers on Social Representations*, 2(2), 75-78.
- Boulet, M. (1988). *Dans la peau d'un Chinois*. Paris: Bernard Barrault.
- Chiayi, S., & Haoping, Z. (2016). China's Guangchang Wu: The Emergence, Choreography, and Management of Dancing in Public Squares. *TDR/The Drama Review*, 60(4), 22-49. doi: 10.1162/DRAM\_a\_00594
- Coëffé, V., Guibert, C., & Taunay, B. (2014). L'aire du bronze: jalons pour une analyse de la circulation et de l'appropriation du hâle (de Hawaï à Hainan). *L'information géographique*, 78(1), 73-91. doi: 10.3917/lig.781.0073
- Cosnefroy, O., & Sabatier, C. (2011). Estimation de l'importance relative des prédicteurs dans un modèle de régression multiple. Intérêt et limites des méthodes récentes. *L'Année psychologique*, 111(2), 253-289.
- Durkheim, E. (1898). *Représentations individuelles et représentations collectives*. Paris: Presses Universitaires de France.
- Flament, C. (1987). Pratiques et représentations sociales. In J.L. Beauvois, R.V. Joule & J.M. Monteil (Eds.), *Perspectives cognitives et conduites sociales, Tome 1, Théories implicites et conflits cognitifs* (pp. 143-150). Cousse: DelVal.
- Flament, C. (1989). Structure et dynamique des représentations sociales. In D. Jodelet (Ed.), *Les représentations sociales* (pp. 204-219). Paris: Presses Universitaires de France.
- Gaynard, S. (2007). La représentation de la conduite chez des jeunes conducteurs: Une étude de la conditionnalité routière. *Recherche Transports Sécurité*, 97, 339-359. doi:10.3166/rts.97.339-359
- Gaynard, S. (2009). Norms in social representations: two studies with french young drivers. *The European Journal of Psychology Applied to Legal Context*, 1(2), 165-181
- Gaynard, S. (2012). Pedestrian representation through the analysis of little stories. *Psychology of Language and Communication*, 16(3), 185-200. doi: 10.2478/v10057-012-0013-9
- Gaynard, S. (2014). The Theory of Conditionality: An Illustration of the Place of Norms in the Field of Social Thinking. *Journal for the Theory of Social Behaviour*, 44(2), 229-247. doi: 10.1111/jtsb.12039
- Gaynard, S. (2016). Conditionality and normative models in the field of social thinking. In F. Kathryn J. (Ed.), *Social Roles and Social Norms* (pp. 1-13). New-York: Nova Science Publishers Inc.
- Gaynard, S., Boucher, V., Nzobounsana, V., Greffier, F., & Fournela, F. (2013). La perception des piétons par les conducteurs : corrélations entre les données d'un œil électronique et le *verbatim* des conducteurs/ Drivers' perception of pedestrians : correlations between the data of an electronic eye and drivers' *verbatim*. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement*, 45(2), 124-137. doi : 10.1037/a0025789
- Gaynard, S., & Chauvet, A. (2016). Volunteer work and disability: Impact on social representations and health. *International Journal of Psychological Studies*, 8(3), 72-83. doi: 10.5539/ijps.v8n3p72
- Gaynard, S., & Engelmann, W. (2016). Nanotechnologies, risks and societal concerns. *Modern Applied Science*, 10(10), 241-251. doi: 10.5539/mas.v10n10p241
- Gaynard, S., & Joly, P. (2013). La représentation sociale du football chez les jeunes adultes issus d'un milieu social défavorisé: une étude exploratoire. *Loisir et Société / Society and Leisure*, 35(2), 263-292. doi: 10.1080/07053436.2012.10707844
- Gaynard, S., Kay, N., & Etoundi, J.-C. (2015). Climate change and beliefs in Cameroon: A qualitative study among farmers in the Equatorial and Sudano-Saharan zones. *Canadian Social Science*, 11(7), 53-64. doi: 10.3968/7273
- Gaynard, S., & Lethielleux, C. (2015). La représentation sociale de la vie de quartier chez des femmes retraitées. *Revue Québécoise de Psychologie*, 36(3), 121-149.
- Gaynard, S., & Tiplica, T. (2014). Conditional respect towards the pedestrian: Differences between men and women and risk modeling by the Bayesian approach. *Quality & Quantity*, 48(1), 91-110. doi : 10.1007/s11135-012-9751-y
- Gaynard, S., Tiplica, T., Koh, P.P. & Wong, Y.D. (2016). Social thinking and risk between road users: The case of the pedestrian in two cultural contexts. *Cross-Cultural Communication*, 10(12), 1-10.
- Guibert, C., & Taunay, B. (2013). From Political Pressure to Cultural Constraints: The Prime Dissemination of Surfing in Hainan. 从政治驱动到文化制约 – 探讨冲浪运动在海南的主要传播. *Journal of China Tourism Research*, 9(3), 365-380. doi: 10.1080/19388160.2013.812903
- Hofstede, G., & Bond, M. (1984). Hofstede's culture dimensions: An independent validation using Rokeach's Value Survey. *Journal of Cross-Cultural Psychology*, 15(4), 417-433.
- Horwood, G. (2008). *Tai Chi Chuan and the Code of Life: Revealing the Deeper Mysteries of China's Ancient Art for Health and Harmony*. London and Philadelphia: Singing Dragon.
- Hsu, C., & Huang, S. (2012). An extension of the theory of planned behavior model for tourists. *Journal of Hospitality & Tourism Research*, 36(3), 390-417.
- Hsu, C., & Huang, S., (2016). Reconfiguring Chinese cultural values and their tourism implications. *Tourism Management: research, policies, practice*, 54(1), 230-242. doi: 10.1016/j.tourman.2015.11.011

- Jodelet, D. (1989). *Les représentations sociales*. Paris: Presses Universitaires de France.
- Joffe, H. (2003). Risk: From perception to social representation. *British Journal of Psychology*, 42, 55-73. doi: 10.1348/014466603763276126
- Jullien, F. (1991). *Éloge de la fadeur*. Arles: Philippe Picquier.
- Kluckhohn, F. & Strodtbeck, F. (1961). Variations in Value Orientations. Evanston, IL: Row. Peterson
- Lau, S. (1988). The value orientations of Chinese university students in Hong Kong. *International Journal of Psychology*, 23(5), 583-596. <http://dx.doi.org/10.1080/00207598808247787>
- Leung, K. (2008). Chinese culture, modernization, and international business. *International Business Review*, 17(2), 184-187.
- Liu, J. (1975). The effect of Tai Chi Chuan on body-mind. *Ta m k a n g*, 13, 217-223
- Mamontoff, A.M. (1996). Transformation de la représentation sociale de l'identité et schèmes étranges: le cas des gitans. *Les Cahiers Internationaux de Psychologie Sociale*, 29, 64-77.
- Mok, C. & Defranco, A.L. (2000). Chinese Cultural Values: Their Implications for Travel and Tourism Marketing. *Journal of Travel & Tourism Marketing*, 8(2), 99-114. doi: 10.1300/J073v08n02\_07
- Moscovici, S. (1961/76). La psychanalyse, son image et son public. 2nd Ed. Paris: Presses Universitaires de France.
- Mugny, G., & Carugati, F. (1985). *L'intelligence au pluriel: les représentations sociales de l'intelligence et de son développement*. Cousset: Delval.
- Rocca, J.L. (2010). *Sociologie de la Chine*. Paris: La découverte
- Taunay, B. (2008). Le développement du tourisme national chinois. L'exemple de la région autonome du Guangxi [M@ppemonde N°89 (1-2008)]. Retrieved 26/03/2017, 2017, from <http://mappemonde-archivage.mgm.fr/num17/lieux/lieux08103.html>
- Taunay, B. (2009). *Le tourisme intérieur chinois: approche géographique à partir de provinces du sud-ouest de la Chine*. (PhD), Université de La Rochelle.
- Taunay, B. (2010). *L'émergence d'une culture chinoise de la plage*. Retrieved 26/03/2017, 2017, from <http://www.espacestemp.net/articles/emergence-culture-chinoise-plage/>
- Taunay, B. (2011). *Le tourisme intérieur chinois*. Rennes: Presses universitaires de Rennes.
- Thornton, A., & Lin, H.S.(1994). *Social Change and the Family in Taiwan*. Chicago, IL:University of Chicago Press.
- Vergès, P. (2005). Programme d'analyse des évocations « Evoc ».Version non commercialisée. LAMES-CNRS.
- Vernay, E. (2011). La stratégie de l'île de Hainan (Chine) pour devenir une destination touristique internationale. In D. Philippe & K. Boualem (Eds.), *Tourisme et mondialisation* (pp. 208-218). Paris: Espaces tourisme & loisirs.
- Wang, Y., & Sheldon, P. J. (1995). The sleeping dragon awakes: The outbound Chinese travel market. *Journal of Travel and Tourism Marketing*, 4(4), 41-54.
- Xie, Q., & Zhang, M. (2013). White or tan? A cross-cultural analysis of skin beauty advertisements between China and the United States. *Asian Journal of Communication*, 23(5), 538-554. doi: 10.1080/01292986.2012.756046
- Xu, G. (1999). *Tourism and Local Economic Development in China. Case Studies of Guilin, Suzhou and Beidaihe*. Surrey: Curzon Press
- Zeng, R. & Greenfield, P. M. (2015). Cultural evolution over the last 40 years: Using the Google Ngram Viewer to study implications of social and political change for cultural values. *International Journal of Psychology*, 50(1), 47-55. doi: 10.1002/ijop.12125

## Appendix 1 : Sociodemographical variables

**Table 1:** Status of the participants

	Women	Men
Married	51	65
Cohabitation	3	4
Single	50	34
<b>Total</b>	<b>104</b>	<b>103</b>

**Table 2:** Participants' occupation

	Women	Men
In school	5	7
Students	39	13
Farmer		2
Company director	1	12
Worker	2	18
Office worker	34	27
Middle management	11	9
Executive or University scholar	7	4
Unemployed	1	
Other	6	11
<b>Total</b>	<b>104</b>	<b>103</b>

**Table 3:** Participants' level of qualification

	Women	Men
Primary	2	4
Secondary	2	9
High school diploma	11	16
Higher National certificate	13	13
Bachelor's degree	55	46
Master	17	6
Doctorate		3
Other	4	6
<b>Total</b>	<b>104</b>	<b>103</b>

**Table 4:** Participants' social origins

	Women	Men
Working-class (parents small holders, workers, etc.)	20	33
Lower middle (parents office workers, minor public official, etc.)	36	32
Higher middle (parents teachers, middle management, etc.)	30	32
Higher (parents senior executives, doctors, University lecturer or Professor, high-ranking civil servant, etc.)	18	6
<b>Total</b>	<b>104</b>	<b>103</b>

**Table 5:** Number of participants per beach

	Women	Men
Dongsha	29	22
Lisha	31	33
Nansha	44	48
<b>Total</b>	<b>104</b>	<b>103</b>

Nansha and Lisha were beaches with an admission charge ; Dongsha was free of charge.

**Appendix 2 :** Descriptive analyses of the conditionality questionnaire

Condition	Observations	Minimum	Maximum	Mean	Standard deviation
The body is protected  2 <sup>1</sup>	104	2.000	5.000	3.519	0.985
The body is protected  1	103	2.000	5.000	3.476	0.752
<b>Those around me are favorable to this practice  2<sup>2</sup></b>	<b>104</b>	<b>2.000</b>	<b>5.000</b>	<b>3.375</b>	<b>0.926</b>
<b>Those around me are favorable to this practice  1</b>	<b>103</b>	<b>2.000</b>	<b>5.000</b>	<b>3.660</b>	<b>0.847</b>
It is for esthetic reasons   2	104	2.000	5.000	3.529	0.995
It is for esthetic reasons   1	103	1.000	5.000	3.456	0.947
The risks are minimum  2	104	2.000	5.000	3.356	0.847
The risks are minimum  1	103	2.000	5.000	3.553	0.926
It helps to change mentalities   2	104	2.000	5.000	3.529	0.881
It helps to change mentalities   1	103	2.000	5.000	3.748	0.894
One is active  2	104	2.000	5.000	3.462	0.749
One is active  1	103	2.000	5.000	3.602	0.771
It is not practised everywhere  2	104	2.000	5.000	3.490	0.824
It is not practised everywhere  1	103	1.000	5.000	3.573	0.859
It is advised by close relations  2	104	2.000	5.000	3.356	0.902
It is advised by close relations  1	103	2.000	5.000	3.485	0.827
It is practised more by men  2	104	2.000	5.000	3.394	0.864
It is practised more by men  1	103	2.000	5.000	3.631	0.874
It is practised more by women  2	104	1.000	5.000	3.106	0.762
It is practised more by women  1	103	2.000	5.000	3.291	0.800
It goes toward one's well-being  2	104	2.000	5.000	3.308	0.882
It goes toward one's well-being  1	103	1.000	5.000	3.447	0.871

Caption : <sup>1</sup> 2=women ; 1=men

<sup>2</sup> significant at the threshold .05