

# PARENTS AND THEIR CHILDREN'S EXPOSURE TO THE SUN: SURVEY OF KNOWLEDGE AND ATTITUDES BEFORE AND AFTER PHOTO-EDUCATION. A COLLABORATIVE STUDY BETWEEN CITIES IN ARGENTINA AND HONDURAS

Cafferri María Isabel<sup>(1)</sup>, Rodríguez Mónica<sup>(2)</sup>, Yáñez Loreto<sup>(3)</sup>  
Serralunga Gabriela<sup>(3)</sup>, Pistonesi Silvina<sup>(3)</sup>, Flores Santos Norma<sup>(4)</sup>

1) Argentinean Society of Dermatology, Bahía Blanca, Province of Buenos Aires, Argentina; 2) Head Office, Educational Region XXII of the Province of Buenos Aires, Bahía Blanca, Argentina; 3) Universidad Nacional del Sur (National University of the South), Bahía Blanca, Argentina; 4) Honduran Society of Dermatology, Tegucigalpa, Honduras.



## AIM OF THE STUDY

To compare knowledge and attitudes about the risks of exposure to the sun on the part of parents in the cities of Bahía Blanca (Argentina) and Tegucigalpa (Honduras) by means of an ad-hoc survey.

## METHODS

A descriptive cross-section study was used. Data was collected by means of a self-administered survey drawn up ad-hoc in Bahía Blanca and answered by the parents of children of pre-school age. The same survey was then carried out online in Tegucigalpa within the framework of a pilot photo-education scheme. The survey was divided into two parts: Part A) related to the photo-protection

attitudes adopted by parents with respect to their children. The time of day of the children's exposure to the sun and the use of natural protection (shade, hats and clothing) and applied protection (sunscreen) were taken into account; and Part B) 10 statements to be classed as true or false to evaluate parents' knowledge about the risks involved in over-exposure to the sun and what they consider to be appropriate behavior in the light of this knowledge.



### PHOTO-PROTECTION 2002-2007 – SURVEY FOR PARENTS

Dear Parents: we would again like to ask for your collaboration in filling out this questionnaire to enable us to evaluate changes after the solar education activities at the Kindergarten. Your time will be most appreciated by all the children.

A. Mark with a cross the times of day at which your children are most frequently in the sun:

- Before 11.00 h  
 Between 11.00 and 16.00 h  
 After 16.00 h

B. Mark with a cross the protective measures your children use

	ALWAYS	SOMETIMES	NEVER
SHADE			
HAT			
LIGHT CLOTHING			
SUNSCREEN CREAM			

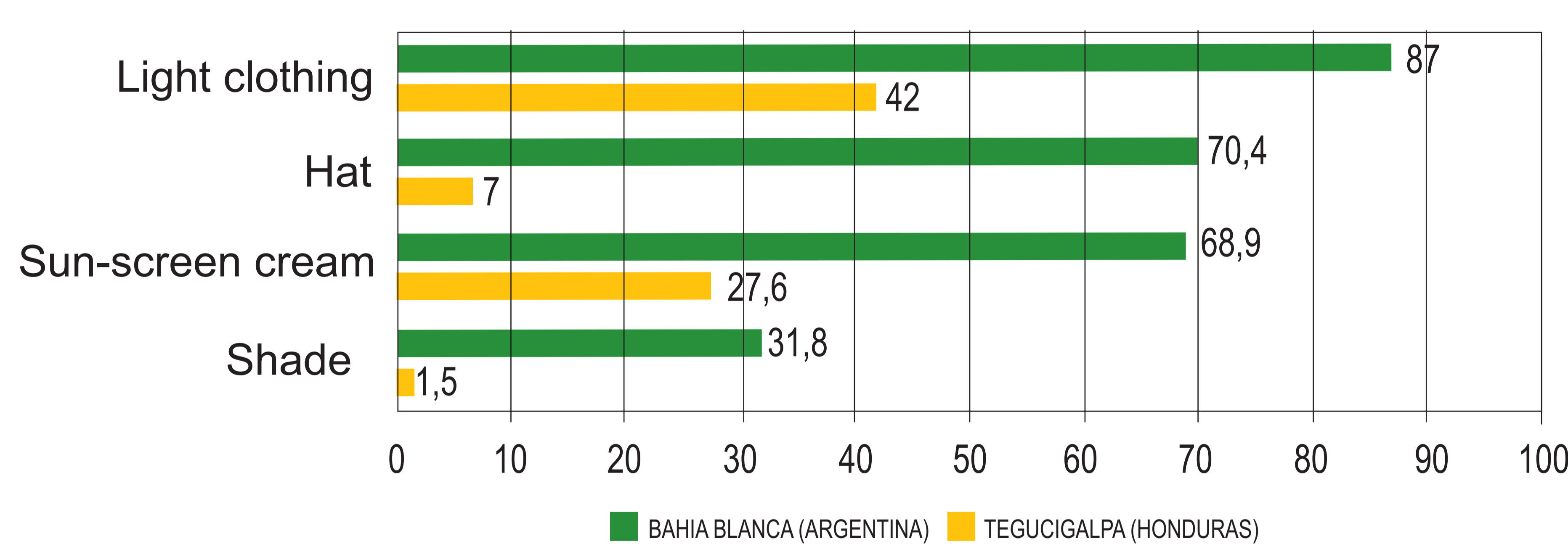
C. Circle T (True), F (False) or Dk (Don't know) for each statement

- T F DK Sunscreen creams provide the same protection as suntan creams.
- T F DK Children do not require solar protection on cloudy days
- T F DK Excess exposure to the sun can cause serious eye damage
- T F DK Dark-skinned children do not need solar protection
- T F DK Solar damage to the skin is cumulative over time
- T F DK Excessive exposure to the sun can cause skin cancer
- T F DK Exposure to the mid-day sun is dangerous
- T F DK Sunscreen creams should be applied every two hours
- T F DK Sunscreen creams can be replaced by cooking oil.
- T F DK Sunscreen creams lose their effect with immersion in water

Thank you for your collaboration

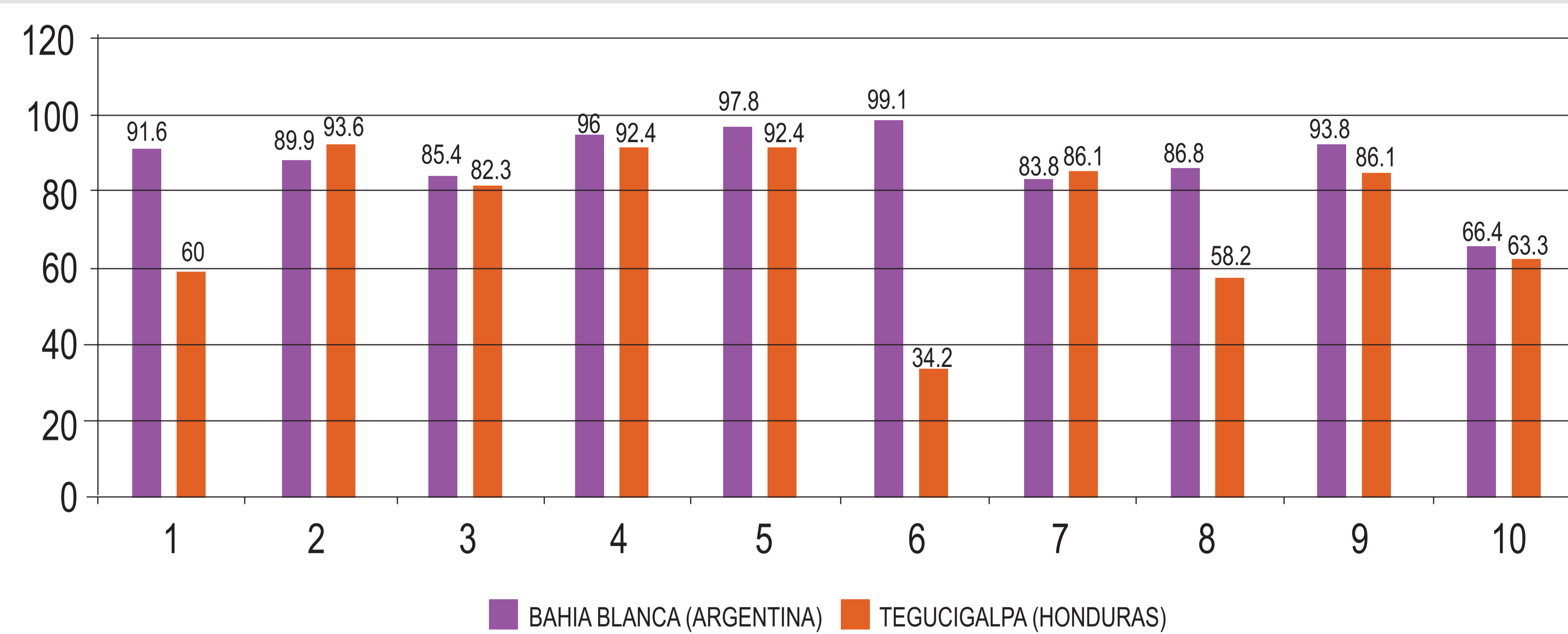
## RESULTS

### PERCENTAGE OF THOSE ALWAYS COMPLYING WITH PROTECTION MEASURES



Protection method	Bahía Blanca (Argentina)	Tegucigalpa (Honduras)
Shade	31,8	1,5
Sun-screen cream	68,9	27,6
Hat	70,4	7,0
Light clothing	87,0	42,2

### PERCENTAGE OF CORRECT ANSWERS



Item	Bahía Blanca (Arg.)	Tegucigalpa (Hond)
1	91,6	60,0
2	89,9	93,6
3	85,4	82,3
4	96,0	92,4
5	97,8	92,4
6	99,1	34,2
7	83,8	86,1
8	86,8	58,2
8	93,8	86,1
10	66,4	63,3

With respect to Part A) it was determined that 43% of the Tegucigalpa group of children are exposed to the sun at inappropriate times of the day as compared with only 9.7% of children in Bahía Blanca. With respect to the protective measures that parents say they take with their children, there was a significant difference between the two groups: for example, 70,4% of the Bahía Blanca group said their children always use a hat when exposed to the sun whereas only 7% of children in Tegucigalpa do so.

With respect to Part B) the parents of children in Bahía Blanca

scored higher in 8 of the 10 statements. In Tegucigalpa, 66% of parents appear unaware of the fact that over-exposure to the sun can cause skin cancer whereas practically all the Bahía Blanca parents expressed knowledge of this fact. In both cities, however, approximately 40% of parents did not know that sunscreens lose their effect after repeated immersions in water. The impact of photo-education in Honduras could not be assessed owing to insufficient responses following on from the activities to raise the level of photo-awareness.

## CONCLUSIONS

The results of the survey show that more children in Tegucigalpa are exposed to the sun at inappropriate times of the day than children in Bahía Blanca and that they use less solar protection. It also emerges that the parents of children in Tegucigalpa are less aware of the linkages between over-exposure to the sun's ultraviolet rays and skin cancer. The more than a decade of photo-education in Bahía Blanca

compared with a much shorter photo-education experience in Tegucigalpa is a possible explanation for the results of the survey.

Networking encourages the interchange of information and experiences, promoting the multidisciplinary work essential to prevention in the health sector