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## ***PROENVIRONMENTAL BEHAVIOR: THE ROLE OF UES AND CONSTRAINTS.***

### **KEY WORDS.**

Environmental Psychology, values, constraints.  
Psychologie Environnementale, valeurs, restrictions.

### **Introduction.**

The aim of this work, which is part of a wider research<sup>1</sup>, is to clarify the role that values and constraints play in the performance of proenvironmental behavior.

More concretely, we analyze the extend to which environmental behavior is influenced by values following a theoretical model anchored in Schwartz's studies (Schwartz, 1977, 1992). In short, his *norm activation theory* posits that value orientations explain the performance or inhibition of altruistic behaviors *through* personal norms (feelings of personal moral obligation). Moreover, values have a universal structure and content. They can be classified in 10 motivational types that are derived from universal human needs.

Stern and collaborators (see e.g. Stern, Dietz & Kalof, 1993; Stern, Dietz & Guagnano, 1995, 1998) expand Schwartz's model. They conceptualize proenvironmental behavior as altruistic behavior. They also state that only a few motivational types of values would activate, or inhibit activation of, environmental personal norms.

We also analyze the role that constraints hold in the performance of behaviors. We consider that limits or barriers to action can be objective as well as subjective (Tanner, 1999).

Our hypothesis are: a) altruistic values will predict proenvironmental behaviors positively; inversely, egoistic values will predict behaviors negatively; b) constraints will explain to some degree the presence/absence of proenvironmental behaviors.

### **Method.**

Data are from a sample of 520 undergraduates at Universities of A Coruña and Santiago de Compostela in October 1999.

Respondents rated 52 value items on a 7-point scale from a judgment that the value is important as a guiding principle in the respondent's life. Responses were factor analyzed using principal components extraction and Varimax rotation. We used the standard conventions of a minimum eigenvalue of 1,0 and a minimum factor loading of 0,4. Factors were then used in a multiple

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<sup>1</sup> *Agenda 21: Multiple identities and environmental action*, funded by European Commission and CICYT (1FD97-0623) and The Galicia Government (XUGA 10606A98). This research is directed by Prof. Dr. Ricardo García Mira. The research group is formed by Dr. José Romay, Dr. J. Eulogio Real, Carlos M. Abella, María del Mar Durán.

regression analysis to predict behaviors. Table 1 shows the resulting factors.

Three items were used to create a scale indicating frequency of behaviors (shopping ecological products, throwing to dust bin paper and glass, recycling or re-using paper and glass). They were measured using a 7 points Likert-type scale (1 = never).

Four items were used to measure constraints. Two of them (existence of recycling bins near home, difficult to find ecological products in supermarkets) were rated in a 7 points Likert-type scale (1 = totally disagree) and were supposed to measure subjective constraints. The remaining 2 items asked for the distance (in metres) from respondent's home to the nearest paper and glass recycling bins (objective constraints). These items were used as predictors in the multiple regression analysis.

## Results.

Behaviors scale reliability was modest (Cronbach's alpha was  $\alpha = ,502$ ).

Factor analysis results are showed in table 1.

[INSERT TABLE 1]

We term factors as follows: 1) Security-Conformity; 2) Self-transcendence; 3) Power; 4) Stimulation; 5) Tradition-Security-Conformity; 6) Self-direction-Universalism; 7) Environmentalism; 8) Self-confidence; 9) Hedonism; 10) Tradition-Spirituality.

We expect Self-transcendence and Environmentalism to predict positively behaviors, and Power to predict them negatively.

Table 2 shows results of multiple regression analysis of values and constraints on behaviors.

[INSERT TABLE 2]

As expected, factors that reflect altruistic values (Environmentalism and Benevolence-Universalism) predict positively behaviors scale, and Power (that reflect egoistic values) is negatively related with it. Subjective constraints play a significant role, while objective ones do not enter into the regression equation. Results show that when people *perceive* bins to be near their homes, they are more likely to recycle. Unexpected findings were the positive relation of Tradition and the negative of Hedonism.

## Discussion.

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## RESUME.

Cette investigation analyse l'influence qui jouent les valeurs du sujet sur les comportements proécologiques d'après le modèle théorique de l'activation de la norme de Schwartz. Le rôle des restrictions objectives et subjectives dans la configuration de ces conduites est aussi étudié.

**Table 11: Factor analysis of values.**

	Component									
	1	2	3	4	5	6	7	8	9	10
Social order	,616									
Politeness	,601									
Responsible	,582									
Honoring of parents and elders	,540									
Successful	,533									
Ambitious	,494									
Clean	,481									
Loyal		,683								
Social justice		,636								
Equality		,595								
True friendship		,567								
Broad-minded		,562								
Helpful	,400	,506								
Honest		,475								
Forgiving		,434								
Authority			,805							
Social power			,785							
Influential			,714							
Wealth			,542							
Social recognition			,526							
Preserving my public image			,456							
Daring				,806						
A varied life				,762						
An exciting life				,724						
Wisdom					,640					
Creativity					,619					
Curiosity					,591					
Intelligent	,439				,506					
Mature love					,460			,432		
Unity with nature						,756				
Protecting the environment						,709				
A world at peace		,422				,506				
A worl of beauty					,500	,502				
Moderation							,696			
Accepting my portion in life							,623			
Obedient	,462						,537			
Reciprocation of favors							,508			
Independent								,691		
Self-respect								,649		
Choosing own goals	,447							,600		
Pleasure									,749	
Enjoying life									,607	
Respect for tradition										,661
Devout										,557
Self-discipline										,442
	1	2	3	4	5	6	7	8	9	10

**Table 22: Multiple Regression Analysis of Values and Constraints on Behaviors.**

Step	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	S.E. of Estimate	Change in R <sup>2</sup>	Change In F	Sig. of change	Variable	Beta
1	,235	,055	,053	4,07	,055	25,785	,000	<b>Environmentalism</b>	,237
2	,292	,085	,081	4,01	,030	14,618	,000	<b>Bins near home</b>	,169
3	,333	,111	,105	3,96	,025	12,465	,000	<b>Benevol.-Universal.</b>	,154
4	,366	,134	,126	3,91	,023	11,827	,001	<b>Power</b>	-,159
5	,389	,151	,142	3,87	,018	9,036	,003	<b>Tradition</b>	,134
6	,403	,163	,151	3,85	,011	5,779	,017	<b>Hedonism</b>	-,105