



Forest fires from the perspective of environmental psychology

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General Note



Article is recommended to print as color version in recycled paper. *Save Trees, Save Climate.*

ABSTRACT

Forest fires are a global environmental problem influenced by numerous causal factors. They must be conceived as a latent risk in current societies that can compromise the economic and social development of future generations, especially in rural areas. In Spain, thousands of hectares of forest and agricultural land are destroyed annually. The Valencian Community is one of the regions of the country most affected by this type of disturbance, reaching, sometimes, disastrous consequences. One of the reasons why an individual, a community and a society do not act in a preventive manner in the face of the likelihood of a risk is because of the

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perception of the probability of occurrence of that risk and the proximity of its consequences. Although it may happen that you do not have the necessary resources to prevent or minimize it. Add a determining factor, the will. Aware that the same risk can have different interpretations and meanings, a study is proposed, with a general population, that deepens the analysis of the perception of risk on the reality of forest fires, the willingness to act against them and the predictive factors of both variables.

Keywords: Forest fire, prevention, risk perception, environmental, climate change

1. INTRODUCTION TO THE ENVIRONMENTAL ISSUE

"More people are born, but no more territory is created"

The concern for the environment is part of the discourse of Western society. At present, "the environmental" tends to have a range of positive social value. In that sense, the enjoyment of nature has become a consumer product through various leisure activities, sports or leisure time. Not without worry about the deterioration of the planet, all the countries of the world have agreed on the need to take measures so that natural resources are not exhausted, as well as to analyze the global climate change trend. There are few voices that claim more attention, since the planet suffers an ecological crisis, which presents an environmental problem in whose epicenter is the human being. The behavior of this, or his way of being in it, aggravates the deterioration of the environment, an aspect that negatively influences the lives of people. The interpretation of the role that the human being occupies in the causality of disasters requires an honest exercise of analysis, since everything points to the fact that human actions exert an influence in the before and after the catastrophes.

Risk is an uncertainty that has man as protagonist, either by action or by omission. In fact, risk does not seem to be understood without the anthropic component that gives it meaning. In this context, vulnerability to natural hazards has been pointed out as a fundamental criterion for risk analysis.

When talking about risk in this context, we can't avoid mentioning, even if succinctly, three types of risks that are considered in the general study of disasters:

- *Natural Risks:* generally, they are beyond the capacity of man to produce, influence or prevent them, e.g. earthquakes, volcanic eruptions, hurricanes, lightning fires, etc.
- *Anthropogenic Risks:* are those derived from the action of the human being, either by action or by omission, as mentioned above; serve as an example, train and airplane accidents, maritime, mining, fires of all kinds, explosions, radioactive leaks, etc.
- *Hybrid or mixed risks:* they appear as a result of the interaction between the natural and the anthropogenic; that is, the human being, through some of his activities, can cause a natural risk to aggravate or even appear. The risk of forest fires would place it in this type of framework.



Figure 1 Geography of risk. (Senabre, J.)

Excluding the previous classification, it is not uncommon for forest fires to be socially related to natural risks, most likely due to the scenario in which they usually develop. Natural risk refers to the possibility that a phenomenon of nature acquires extraordinary

rank and affects the normal functioning of a society in a specific geographical space. In other words, it is the risk to which the human being and his built environment are subjected, as a consequence of a phenomenon of nature that acquires an extreme character. The territorial component is something intrinsic to the concept. Thus, exposure to risk occurs over a specific geographic space, as indicated in Figure 1.

Environmental deterioration, sustainable development and the environment as a market product have been pointed out as cornerstones of Environmental Psychology. But, as we will see later, this approach is somewhat reductionist. Veitch and Arkkelin (1995, page 7- cited by Aragonés and Amérigo, 1998) have given us a series of interesting reflections:

"...

- The Earth is the only habitat available to humans.
- The resources of the Earth are limited.
- The Earth as a planet has been and continues to be affected by life.
- The effects of the use of the Earth by humans tend to be cumulative.
- The sustained life of the Earth is a characteristic of ecosystems and not of individual organisms or populations

..."

The human being is the living being with the greatest capacity to negatively affect the planet, despite its greater intellectual capacity with respect to other animal species. In fact, the world human population index is a sample of our success as a species, although this data can become an indicator of the potential magnitude of our negative impact on the environment (Jolly, 1994), as previously indicated.

Unlike other living beings, the human being has developed the prefrontal cerebral cortex, which has given him the ability to plan cognitively complex behaviors, the expression of personality, the decision-making processes and the adaptation of social behavior to each circumstance. This brain region is responsible for coordinating thoughts and actions, so it has been attributed the executive function. This evolutionary and competitive advantage, with respect to the rest of the species, has turned the human being into the greatest threat to the rest of beings and to the planet itself, something that we have defined as the paradox of evolution.

The environmental issue is linked to the ways of being in the world and lifestyles; It involves a strong component of solidarity, an aspect that gives the subject a psychosocial dimension. In this dimension is where Environmental Psychology finds its space.

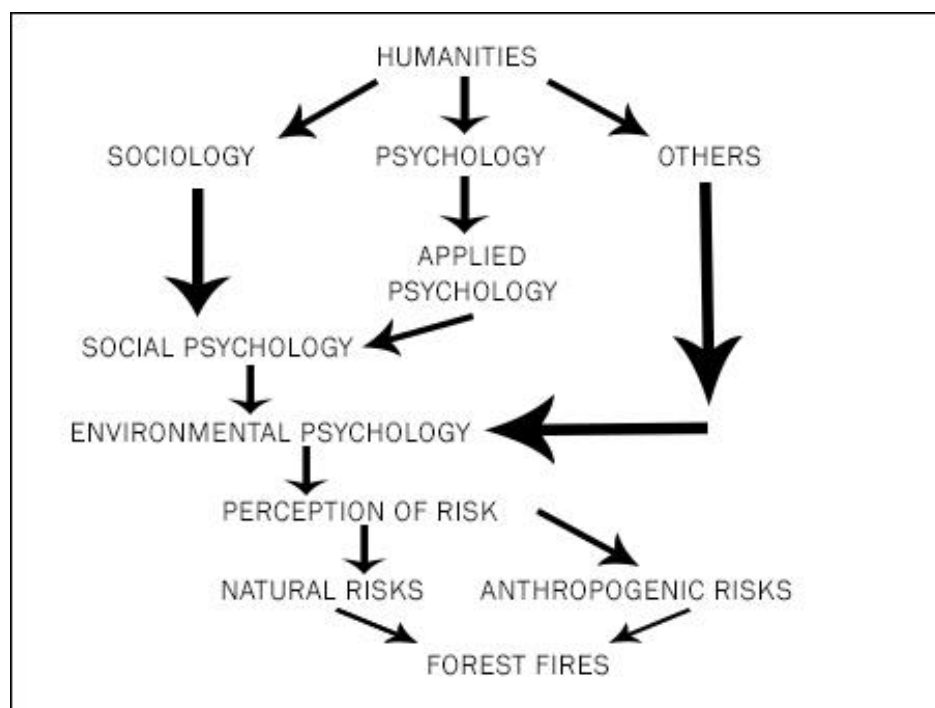


Figure 2 Forest fires from a psychosocial perspective. (Senabre, J.).

2. AN APPROACH TO ENVIRONMENTAL PSYCHOLOGY

The Environmental Psychology (EP) we locate it between the disciplines or fields of study that can be considered as part of the Humanities or Social Sciences, between which the Psychology is located, science to which it belongs. Although its scope of action is greater, Applied Psychology has four more prominent branches: clinical, educational, organizational or work and social psychology. The latter maintains a very close link with Sociology. EP is part of the study areas of Social Psychology. The forest fires, from this psychosocial perspective, we are going to frame it within the studies on the Perception of Natural and Anthropogenic Risks (see figure 2).

The object of study of EP seems obvious that it has not been exclusive of this discipline, but that other disciplines have actively participated in its development, some of them fertile enough as behavioral geography, social biology, human ecology, ecology behavioral, psychological and urban architecture, anthropology and sociology (Roth, E., 2000).

The EP will be located among those that deal with the study of the environment, whether natural or built. In Table 1, we point out some of the main disciplines that address the relationship between ENVIRONMENT and BEHAVIOR (Moore, 1987) - Environmental Psychology - and that we have grouped into three blocks or domains, according to the type of environment or environment in which predominantly develop:

Table 1 Groups of disciplines that study the relationship between Environment and Behavior. (Senabre, J.).

ENVIRONMENT AND BEHAVIOR		
Environmental Psychology		
Environment or Constructed Physical Environment	Environment or Natural Physical Environment	Environment or Societal Environment
Ergonomics	Landscaping	Urban Anthropology
Interior design	Environmental management	Human and Social Geography
Architecture	Engineering and Environmental Ecology	Environmental Sociology
Urbanplanification		Environmental Psychology

Taking into account what is indicated in Table 1 and Figure 3, we will say that in the EP three classic domains have been distinguished, which we point out below:

- *Built Physical Environment*: which includes urban planning, architecture, interior design and aspects related to ergonomics.
- *Natural Physical Environment*: where the human being has not intervened or has barely exerted its impact.
- *Societal Environment*: which uses the physical space to define the situations of interaction.

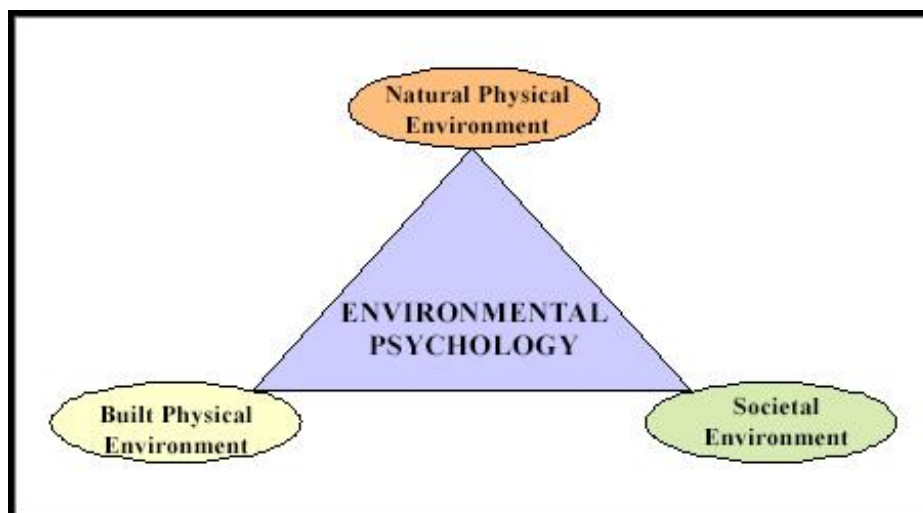


Figure 3 Classic domains of Environmental Psychology. (Senabre, J.).

Seagert and Winkel (1990) have distinguished three different ways of studying behavior-environment relationships:

- Adaptive paradigm*: according to which biological and psychological survival motivates behavior. There are room for stressors, as well as perception, cognition and environmental emotion.
- Opportunistic paradigm*: which considers the environment as a structure-opportunity for directed action. In this case, the relationships between the behavioral requirements of the active person, aimed at an objective and the qualities of the environment are studied.
- Sociocultural paradigms*: address environmental problems considering the person as a member of the social structure, so we can interpret that the person is assigned the role of social agent.

However, other authors (Roth, E., 2000), tell us about the existence of two different approaches in EP. One, which emphasizes the environmental variable as a determinant influence of behavior, that is, behavior as an effect of environmental properties; the other, which analyzes the effects of behavior in the physical and natural environment, or what is the same, behavior as the causal agent of changes in the environment. One can notice in this approach a clear difference in the nature of the data under consideration and in the type of relationship between psychology and the environment.

- ✓ Approach 1 ----- ENVIRONMENT → BEHAVIOR
- ✓ Approach 2 ----- BEHAVIOR → ENVIRONMENT

In this sense, we can speak of "transactions between individuals and the environment" (Gilfford, 1982) and the establishment of "interactive influences" between them (Darley and Gilbert, 1985), which we interpret as a dynamic process in which can talk about determined behavior and determining behavior. In the following table (2) we represent in a schematic way the most outstanding aspects of what we call the dual approach of the EP, consisting of a dynamic process that relates two modes of influences with two types of given behavior.

Table 2 Dual focus of Environmental Psychology: influences and behavior. (Senabre, J.).

ENVIRONMENTAL PSYCHOLOGY	
Environmental influences on behavior	Behavioral influences on the environment
➤ Environmental design and planning	➤ Environmentally responsible behavior
➤ Environmental perception and cognition	➤ Attitudes and values towards the environment
➤ Territoriality	➤ Environmental education and communication
➤ Emotion and the environment	➤ Beliefs about the environment
BEHAVIOR DETERMINED	DETERMINING BEHAVIOR

Although human behavior is normally understood as an attribute of the individual, it can also be interpreted as a property of the system (Willems, 1973), which would place the human being as a simple component of the total environment that is related to other components of the same (Proshansky et al 1978).

As for the relationship of human behavior with EP, inspired by the classification of Gifford (1987), we can differentiate three fields of interest:

- Individual processes: related to perception, cognition and emotion.
- Interpersonal societal processes: related to interpersonal relationships, such as personal space, territoriality, overcrowding, etc.
- General societal processes: such as urban life, everything related to residential centers, resource management, etc.

That said, we do not want to lose sight of the purpose of this work, which is none other than addressing the problem of forest fires from the perspective of EP, also supporting aspects of social psychology. Therefore, we have tried to select those thematic

fields that, from the EP, we understand that can contribute knowledge about the perception of forest fire risk, as well as explain certain cognitions, behaviors and effects of the same on the different types of environments. In this way, we base our classification on different sources of study (Handbook of Environmental Psychology, 1987, Aragonés, 1995, Valera, 1996, Sundstrom et al., 1996).

Handbook of Environmental Psychology (1987)

a) *Person-environment transition processes:*

- Environmental cognition
- personality and physical environment
- emotion and atmosphere
- applied behavioral analysis and environmental psychology

b) *Levels of environmental analysis: situations, scenarios and places:*

- human conduct
- cognition
- Affection for the environment

c) *EP applications to community problems:*

- towards a EP of disorder: crime, crime and fear of crime
- management of natural environments
- management of the scarcity of natural resources
- Active responses to environmental risks: perceptions and decision making

Aragonés (1995).

- *natural resources.*
- *environmental cognition.*

Valera (1996).

d) *The way in which people access environmental knowledge.*

e) *The evaluation of the environment*, taking into account: the personality and the environment, pro environmental attitudes, responsible ecological behavior, etc.

f) *Perception of risk and its evaluation.*

Sundstrom (1996).

g) *Environmental influences in the community.*

- attitudes towards the environment: environmental concern and perceived environmental risk
- conservation of the environment: common dilemmas and conservation behavior
- wayfinding (cognitivemaps)
- environment and crim
- Coping with disasters

h) *Natural environments.*

The points described above, together with the dual approach proposed in Table 2, provide us with sufficient elements to propose a complex study on some of the socio-environmental variables that could explain, in a certain way, the mainly anthropogenic origin of forest fires in Spain.

Before continuing to advance in our line of study, even briefly, it seems relevant to include in this introductory framework of the discipline, the three study methods most used in PA, along with some representative example:

- *Laboratory experimentation:* i.e. personal space and influence of the physical environment on behavior.
- *Field experimentation:* i.e. responsible ecological behavior.
- *Correlation studies:* they are used for descriptive purposes, for example, to relate sociodemographic variables with perception of environmental risks.

Taking into account these approaches, it is proposed to carry out a study on the social perception of the risk of forest fires and behavior in the event of possible disasters, through the research group on Planning of Regional Spaces of the University of Alicante, with the collaboration of the Research and Professional Development of SINIF.

3. ANTECEDENTS PRIOR TO THE STUDY

One of the reasons why an individual, a community and a society do not act in a preventive manner in the face of the likelihood of a risk is because of the perception of the probability of occurrence of that risk and the proximity of its consequences. . Also, it may happen that, even with a full perception and awareness of the likelihood of risk, both the individual and the community and society do not have the necessary resources to prevent or minimize it. To the perception and availability of resources must be added a determining factor, the will (Senabre, J., 2015a).

The same risk can have different interpretations and meanings, as well as affect health, the environment, properties, future generations, etc. From this psychosocial approach to risk, when evaluating, interpreting and judging a risk, we must take into account a series of quantitative factors (eg probability index and number of losses), as well as qualitative factors (eg involuntariness of exposure, lack of personal control, uncertainty about the probabilities or consequences of exposure, lack of credibility and trust towards the institutions that manage it). Likewise, the perception and meaning that people may attribute to risk (attribution of risk) will be influenced by different types of beliefs, values and social contexts. For example, people who go through difficulties due to the effects of natural phenomena are more aware of the actions to take regarding the environment, especially if it is a risk that is usually manifested and repeated in their environment.

However, on a few occasions, low priority is given to some of the environmental hazards, which leads many societies to live together in a life scenario of "latent silent emergencies" (Senabre, J., 2016b), on occasion, they manifest themselves in different degrees of threat, occurrence and intensity, until they reach, in some cases, the category of disaster, catastrophe or calamity (Senabre, J., 2015a). Human behavior in disasters, in the diachronic sense of the incident, goes through three phases: before, during and after. In this way, the perception of risks should be placed in the "before" time, although this is not always the case.

The factor of social perception results from the personal evaluation that arises from the sum of individual thoughts of the members of a given community, where intuition and social customs play an important role. In fact, one could consider the social perception of risk as the risk seen from the perspective of the human being. Thus, the social perception of natural risks can be considered as a multifactorial product, result of the social universe, the degree of knowledge of similar situations and daily experiences, and the climatic factors of each place.

4. AN APPROACH TO THE PHENOMENON OF FOREST FIRES

Forest fires can be considered as a global environmental problem influenced by numerous causal factors. In Europe there have been, in the last 25 years, 2.5 million fires, which have devastated more than 20 million hectares. Forest fires in Europe produce large socioeconomic losses and significant environmental degradation, that is: burnt forests, loss of fauna, vegetation cover and organic matter, with the consequent deterioration of soil quality, erosion increase and alteration of atmospheric and climatic processes, among others.

In recent years, and as of 2001, in most countries in Europe, there has been a slight decrease in the number of fires. However, an annual average of 100,000 fires has been reported in the last 25 years, with more than 70% of them occurring in southern European countries (Portugal, Spain, France, Italy, Greece, Balkan countries and Turkey), being Portugal , with 29% of fires, the country that leads this "macabre" leadership, followed by Spain with 22%. Thus, 51% of forest fires have been recorded in the Iberian Peninsula, in a study carried out with 22 countries (Legido et al., 2016). Note that Estonia, Switzerland, Slovenia and Romania are the countries with the lowest percentage of fires, between 0.1 and 0.3%.

Putting the focus on Spain, thousands of hectares of forest and agricultural land are destroyed each year. The Valencian Community, for example, is one of the regions of the country most affected by this type of environmental disturbance, sometimes resulting in disastrous consequences.

The environmental problems that most concern a surveyed population in southeastern Spain (Olcina, J. et al., 2014), are: desertification (60%), forest fires (59%), droughts (55%), floods (55 %), extreme temperatures (40%), earthquakes (38%), erosion (30%), strong winds (21%), hurricanes (9%), tsunamis (7%), others (2%). On the other hand, the perception of the threat by these natural phenomena is headed by: floods (64%), droughts (61%), forest fires (43%) and desertification (43%). 58% perceive that the evolution of the impact caused by these natural phenomena will worsen. These data will serve as a point of reference and comparison for the results obtained with our sample.

Forest fires must be conceived as an imminent risk in current societies and a problem that can compromise the economic and social development of future generations, especially in some areas of the territory, such as the rural environment. However, we must not fall into the temptation to criminalize the use of fire, nor deny the close evolutionary link with the development of some species, including humans.

From the conclusions of the First International Workshop on Forest Fires and Climate Change, held in the city of Alicante last June 2015, it could be extracted that: "given that 95% of forest fires are caused by humans, The scientific community postulates that this problem, to a greater extent, should not only be solvable, but it is solvable"(Senabre, J., 2015c).

It is not possible to question influential aspects in the course of forest fires, such as the socioeconomic changes of the last decades, the rural exodus, the increase of biomass and, therefore, the increase of combustible material, the lack of a strict ordering of the territory, the excessive protective zeal of the mountains, the so-called "paradox of extinction" and even the effects of climate change, among others ... In fact, the effects produced by climate change and its relationship with fires Forests have gained an important role in recent years. Nor can it be doubted that certain meteorological situations can have an important influence on the propagation and evolution of a conatus or a forest fire already declared, being able to condition its intensity and severity in a drastic manner, and finally, its hazard index and consequences.

However, we can't fall into generalizations about the consequences of global change. Climate change does not generate or generate a greater number of forest fires on this planet, as we know it, although the trend of change can facilitate conditions and favor scenarios of more virulent and large fires. Thus, it is time to realize that climate change, by itself, can only favor and generate certain enabling conditions, so it should be considered as a facilitating agent and another element in the universe of the problem.

However, from a causal view of forest fires, the omission of anthropogenic variables would be like being discriminating in a positive way to some of these aspects. Therefore, we can't ignore the role of "the human" in the likelihood of occurrence of forest fires, since, otherwise, it would be exaggerating the prominence given to other types of factors more difficult to control. Therefore, the human being should be included as a central piece in the analysis and evaluation of the causes and triggers of forest fires, if we do not want to have a partial vision of the problem. The true "change" is not to look for it in the climate or in other external aspects, but in the possibility of change of thought and attitude of the human being with respect to the latent risk of forest fire.

Therefore, given that, directly or indirectly and to a greater or lesser extent, the hand of the human being is present in almost all the forest fires that occur in Spain, it is proposed, by way of general hypothesis, that:

- a) We may be faced with an apparent dissociation, between the social perception of risks and human behavior, before the manifestation of disasters. (Senabre, J., 2016c). That is, the phenomenon of forest fires may be seen as mere spectators, from an imaginary stalls or from the screen of a television set.
- b) Perhaps, in many of the cases, there is a dissonance, between what is thought and what is actually done, in view of the probability of occurrence of disasters, and in our case, with respect to forest fires. (Senabre, J., 2016c). That is, you may think in one way and act in another.

The approach proposed in our study is multidisciplinary, that is, on the one hand from Social Psychology (and more specifically, from Environmental Psychology); and on the other, from other branches of science, such as Geography, Ecology, etc.

5. OBJECTIVES OF THE INVESTIGATION

Given this background, it is proposed to conduct a study that analyzes the perception of risk on the reality of forest fires, the willingness to act against them and the predictive factors of both variables. That is, to evaluate those variables that may be influencing the social perception before the probability of occurrence of said risk and the behavior (what is done?) Before it, in a sample of the Spanish population. Also, in the hope that the participation would be significant enough, it was considered to be able to provide particular data in relation to different regions of the country.

Likewise, we want to analyze the influence of some variables in our central theme (forest fires) and that have been shown as determinants in the perception of risk in other problems related to the environment.

6. METHODOLOGY, HYPOTHESIS AND TEMPORAL PLANNING

The study procedure is based on the realization of a fieldwork in which a series of previously determined variables will be evaluated. In that sense, as it has been raised in the previous section, we will analyze the influence of some variables in our subject central (forest fires) and that have been shown as determinants in the perception of risk in other problems related to the environment, such as climate change (Hidalgo and Pisano, 2010), natural risks and floods (Rodrigo, R. et al., 2014) or perceived risk (Puy, A., 1995).

Basing, mainly, on the methodology carried out in these three cases, a measurement instrument has been developed that provides us with objective data on predictive variables of the perception of forest fire risk, such as: the general attitude towards the environment and forest fires, knowledge of the population about forest fires and perceived self-efficacy. On the other hand, the scale that has been developed has the analysis of criteria variables such as: the willingness of the population to act against forest fires (or to prevent them) and the perception of forest fire risk.

The elaborated scale is inspired by items used in previous works of different authors previously mentioned, but that did not address the problem of forest fires. This instrument has been called the Forest Fire Risk Perception Survey - FFRPS (Senabre, J., 2016a) and consists of 82 items with a variable response option, although predominantly, with Likert type responses, also with variability of response options, as agreed in each case. In its initial version, it has been structured in six well-differentiated blocks or study areas, which are shown in Table 3:

Table 3 Structure of the FFRPS

FOREST FIRE RISK PERCEPTION SURVEY - FFRPS			
SECTION	BLOCK	STUDY AREA	ÍTEMS
1	A	Sociodemographic data	8
2	B	Qualitative attributes of risk due to natural phenomena	10
	C	Perception of the landscape	10
3	D	Psychosocial perception of forest fires	11
	E	Qualitative attributes of forest fire risk	23
	F	Determinants of perception and behavior in the face of fire risk	20

Also, as can also be seen in table 3, we could make another more generic division, grouping the set of blocks into three sections:

- 1) A first section, with Block A (BA), which addresses sociodemographic aspects such as age, sex, level of studies, professional activity, place of habitual residence, as well as residence time in the reference city, among others.
- 2) A second section, which would include Blocks B and C, with issues related to the perception of the risk of natural phenomena (BB) and its effects on the landscape (BC), including forest fires.
- 3) And finally, a third section, which would focus more specifically on the problem of forest fires, Blocks D, E and F, through which it is sought to obtain information from the population on the perception that has of this particular risk (BD), as well as a series of qualitative attributes of forest fire risk (BE). In the last Block (BF), a series of determinants of perception and behavior in the face of forest fire risk are analyzed, as subscales, differentiating three predictor variables: knowledge, attitude and self-efficacy; in addition to two variables criterion, perception of risk and, willingness to act or intention of behavior.

Apart from the structure proposed, the FFRPS does not exhaust its possibilities for the study, at least initially, enclosing among its large number of items, other subscales, such as: the locus of control (internal and external), cognitive dissonance, dissociation cognitive and some psychosocial risks.

Regarding the target population (n), the only requirement for participation in the study was the condition of resident in Spain and be over 18 years of age, regardless of the country of origin and any other type of sociodemographic characteristic. The scale itself discriminates between the general population and people belonging to an emergency service related to the prevention, investigation and extinction of forest fires.

For the collection of data, different agreements were reached with municipal institutions to encourage the participation of the population, not giving, in any case, the expected results. Likewise, the collaboration of regional institutions for the same purpose was considered, again without obtaining any response. Given these initial difficulties, the use of new on-line technologies was proposed as an option for data collection, in order to facilitate the completion of the questionnaire via the Internet. This last option would facilitate the process and the work flow. The hiring of a specialized company in the matter was determined, which offered the possibility of inserting the elaborated questionnaire and allowing us to export the registered data. As a means of dissemination of the study announcement and motivation for citizen participation, various social networks were used, as well as mailing campaigns.

The participation rate has been acceptable, given the extension of the tool, with almost 900 questionnaires completed nationwide, a sufficient number for our purpose. At this time we are performing the analysis of the data. A complex task given the number of items and variables to be taken into account.

7. DISCUSSION AND FINAL RECAPITULATION

The social point of view offered by Environmental Psychology, and which we have now addressed, we can't say that it is new. Let us think that the German Hellpach (1911 and 1924) already introduced us in the early twentieth century in a psychology focused on the effects of the geographical environment, weather conditions and living conditions in the city. Since then, this discipline has been lurching, with periods more focused on behavioral scenarios and the so-called Ecological Psychology; periods oriented towards the Psychology of Architecture; and, periods focused on space and individual behavior, that is, in the Psychology of the Place (what in France came to be called, Space Psychology).

EP is therefore the application of Social Psychology to the study of the interaction of people with their sociophysical environment, including territorial behavior, perception and environmental cognition (and / or cognitive maps), environmental attitudes (Pol et al., 1999), as well as everything related to the human and social dimension of environmental management and sustainability. Its object of study must necessarily place it within a specific social context.

A characteristic that defines this discipline is, as it has been pointed out, the diversity of theoretical and methodological orientations used, that is, the EP is multiparadigmatic.

The human being, from its origins, has questioned its relationship with the physical environment; well, with its struggle to dominate a hostile natural environment, adapting and adapting it, or to dominate an urban environment created by it as the optimal environment, or at least more favorable, which has also become hostile (Pol, E., 1988, page 36).

Throughout history, humanity has been threatened by various natural phenomena, such as floods, earthquakes, volcanoes, forest fires, etc. The dangers of the environment are interpreted as stressful experiences that the individual or the community must face, looking for the most appropriate strategies for each situation. According to Hallman and Wandersman (1992), perhaps the least effective way to cope with these risk scenarios is through the so-called "illusory thinking", which is nothing other than doing nothing, trusting that the problem will disappear on its own. Is not this type of attitude familiar? Maybe yes.

The results obtained after conducting this study, we hope they serve to deepen into a topic that we believe is not sufficiently explored with objective data in our territory, that is, from the perspective of the perception of forest fire risk, through of environmental psychology, an extension of social psychology. In the same way, we think that the knowledge of the environmental perception can contribute in the same way in the improvement and effectiveness of environmental policies.

Likewise, we believe that the data obtained can make possible improvements of a legislative nature and in the preparation of plans for the prevention of forest fires. Also, they can be taken into account when planning and organizing the territory, especially in areas of forest urban interface, in population centers scattered in the forest or in its bordering areas. On the other hand, we hope to contribute to the improvement in the planning and management of emergencies of this type. According to Badia and Mira (2007), we think that the lack of perception of risk on the part of the people who inhabit the most vulnerable areas, suggests that the measures of self-protection that can be established will be completely inadequate, hence the need to investigate in this regard.

Finally, this connection with the reality of population thinking can help to improve the design of education and social awareness campaigns, because perhaps there is no better instrument for controlling the flames than the attitude and behavior of the human being, oriented towards the acquisition of competences for the action.

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