ABSTRACT

This paper presents an application of the Analytic Hierarchy Process (AHP) to determine the human value structure in institutions of higher education. The study is part of a research project which seeks to incorporate human values in higher education. The evidence indicates that nowadays the inclusion of these values are becoming a main concern, consequently we need to determine those that mainly have to be incorporated regarding the institution. Given that the involved stakeholders have their own values, aspirations to fulfill and perceptions, many conflicting objectives emerge. A multicriteria model has been developed to identify a value assessment structure bearing in mind their judgments. The AHP methodology reflected to be a useful tool to structure and manage the decision problem taking into consideration the dimensions that affect directly the configuration of values. A case study has been explored in the Chilean higher education, as a first approximation in private and public universities.

Keywords: Human Values Assessment, AHP, Higher Education
1. Introduction

Presently, there is a concern about the relevance of incorporating a value structure in higher education. This constitutes a major challenge for educational establishment, thus, it is difficult and complex to ensure that the individual positions will come into communion. It requires a formal and active commitment for the constituents, as managers, administrative staff, academics and student families involved in each institution to legitimize the establishment values which go beyond the classroom. Each of them has different responsibilities within the organization and should be in concordance with the institution values. On previous work, the actors’ activities in primary education were investigated detecting an effect on the teaching and learning process (Oddershede & Jarufe, 2013). Within the search for the conceptualization of the values to be integrated in an academic program, we have developed a multicriterial model based on stakeholder judgments to identify priority dimensions containing the set of values through AHP methodology. This process will contribute to accomplish a declaration of institutional values for achieving an integrated comprehensive academic program. As a starting point, a pilot study is carried out considering two types of higher education institutions (public and private).

2. Literature Review

The study is based on the research conducted by Hall & Tonna (1997) where they define an inventory of 125 values, making them available for the human resources departments of social organizations. Schwartz & Bilsky (1990) and Schwartz (1992) reduced the set into 10 main values. Through his research he has characterized a circular dimension, forming four clusters of respective values. This description gives a framework to decide on the appropriate set for a particular establishment; hence a methodology to identify the dimensional degree of importance of dimensions from the perspective of the participants becomes essential. Consequently the AHP, Saaty (2008), provides a proper approach to deal with the emerging conflicting objectives, stating criteria and ranking.

3. System Description and Methodology

The purpose of this research is to develop a decision model to determine the priority values that an institution of higher education should include in the institutional declaration aimed to the achievement of an integrated education. Initially, the research is oriented to recognize the agents/actors related to the organization, then the efforts are concentrated in constituting a group of experts, who issued judgments based on their knowledge and experience regarding to the dimensions values involved: Openness to change that includes the aspects of self-direction and stimulation; Conservation involving conformity, tradition and security; the Auto-transcendence includes the values of achievement and social power and Self-aggrandizing that includes universalism and benevolence (Schwartz, 1990). A hierarchy structure is then built involving the main actors, their roles and/or activities they perform, the dimensions and correspondingly

values. Applying the AHP, data were obtained from two types of higher education institutions, public and private, who agreed on the same value structure even though private managers declare to have different aspirations in comparison to public service.

4. Model Analysis

A three level hierarchy structure model has been designed. Each level has a number of nodes against where the nodes on the next level are compared. The first level takes into consideration the involved actors’ perspective (Managers, administrative staff, academic & students). The second level comprise the role performed by the actors and would have an effect on each of them. The third level consists of the value dimensions that each role depend on. Figure 1, depicts a basic simplified hierarchy structure proposed.

![Hierarchy Structure Diagram](image)

The next stage is to prioritize the different criteria. A pairwise comparison process is carried out based on decisive factors and expert panel judgments. The expert panel went through the hierarchy structure and derived a priority matrix for each level. The judgments are entered in the matrix in response to the question: How much more important is one criterion compared with another? This is done to justify a fair decision.
selection. In addition; it was possible to detect inconsistencies when experts emitted judgments. Under such situations, it was necessary to review them until obtaining an acceptable index. The result highlights the important function of academics and managers in incorporating human values. Nevertheless, the proposed model can be refined to obtain a more detailed analysis modifying criteria, influenced by the institution.

5. Conclusions

Through AHP it was possible to determine the important values to be incorporated in the institutional values declaration. We could verify the relative importance of educators in transmitting the agreed values by the higher education institution and the collaboration of stakeholders, demonstrating the need for the creation of a Value Community to carry out this integration.

This study provides a basis for defining the institutional declaration that could be incorporated in the educational project of values and thus to define the educational strategy.

6. Key References


Hall, B. (2000) El desarrollo de los valores y la organizaciones que aprenden. En A. Villa (coord.) Liderazgo y organizaciones que aprenden, ICE-Universidad de Deusto, Bilbao


