



Competences for sustainability and its institutionalization level in a higher education institution

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Abstract

This paper aims to identify the competences for sustainability and its level of institutionalization from the perspective of the professors of the Department of Applied Social Sciences (SESA) of a State University of the Center-South region of Paraná, Brazil. The research can be characterized by the quantitative approach and survey method. For data collection, an already tested and validated instrument proposed by Stefano and Alberton (2015) was used to identify the 5 (five) competencies for sustainability (focus on systemic thinking; preventive; normative; interpersonal strategic), as well as issues related to their level of institutionalization (habitualization, objectification and sedimentation), based on the model of Tolbert and Zucker (1999). Exploratory Factor Analysis (EFA), Cronbach's Alpha test and Cluster Analysis were performed. The results show that approximately 70% of the respondents consider the existence of competencies for sustainability at the university, however, the institutionalization of the sustainability theme is at the habitualization level. It is important to identify the competencies that favor sustainability practices in the organizational environment, as well as the institutionalization of these new values, especially in public universities, which, besides their social duty, are educating future generations to make decisions, thus being able to promote a more sustainable future.

Keywords: Organizational Sustainability, Competencies for Sustainability, Institutional Theory.

Introduction

Nowadays, there are social pressures on current management models so that organizations take on more ethical and responsible behavior in social, environmental and economic issues. Such a movement goes beyond the business environment and reaches the political, public and academic institutions, being considered a trend of the 21st century (GARRIDO; SALTORATO, 2015). Higher education institutions stand out because, according to the Brazilian Constitution of 1988, Chapter VI, Art. 255, paragraph 1, it is their responsibility "[...] to promote environmental education at all levels of education and public awareness for the preservation of the environment". This pressure on Sustainable Development (SD) demands that organizations align their actions to fairer socio-environmental values so that they can satisfy "[...] the needs of the present world without compromising the ability of future generations to have their needs met" (BLOWFIELD, 2013, p.7). Organizational Sustainability (OS), in turn, has the role of encouraging corporations to contribute to the SD, and challenges them to constantly innovate, shifting the emphasis from economic growth to pursue the balance and effectiveness in the three dimensions of sustainability known as Triple Bottom Line (TBL) (ELKINGTON, 2011).

As a result, organizations began to compete for legitimacy regarding the change of posture, making sustainability a new institutional demand (GARRIDO, SALTORATO, 2015). It is believed that with its institutionalization, it is possible to standardize norms and behaviors in order to disseminate the organizational identity among its members, besides creating a stable and favorable social environment for the TBL balance (CARVALHO, VIEIRA, 2003).

As a way to make such a process possible, organizations can develop the necessary skills for this purpose. Directing the competencies for sustainable practices can foster economic, social and environmental harmonization within and outside organizations. Fleury and Fleury (2005, p. 30), states that competencies are "[...] a responsible and recognized acting knowledge, which involves mobilizing, integrating, transferring knowledge, resources, skills, which add economic value to the organization and social value to the individual". Thus, it will depend on the organizations to make efficient use of them to pursue their goals.

Within this context, universities are encouraged to meet these new demands, reevaluating their management strategies (BELTRAME, 2015). Thus, there is a growing search for the institutionalization of sustainability as well as a direction to develop competencies that subsidize its accomplishment.

Therefore, this study has as a research problem: what is the level of institutionalization of sustainability and of sustainability competencies in a public institution of higher education in the countryside of Paraná? Thus, the main objective is to identify the competencies for sustainability and its level of institutionalization from the perspective of the Faculty of the Department of Applied Social Sciences (SESA) of a State University of Paraná.

The research is limited to the perception of SESA professors from the Santa Cruz campus of the Public University of Paraná, located in the Center-South region of Paraná. The organization was chosen for being the most expressive in number of students and professors in the region, as well as for positive evaluations in the Ministry of Edu-

cation and Culture (MEC) rankings, Folha de São Paulo (a Brazilian newspaper), among others.

Theoretical Framework

This study will use the framework knowledge regarding the Institutional Theory and the process of institutionalization, whose main focus is the theoretical construction of Tolbert and Zucker (1999). Next, concepts related to sustainability competencies will be presented, especially the studies of Wiek, Withycombe and Redman (2011), which point out the five main competencies that favor organizational sustainability. Finally, the discussion will focus on the Sustainability and Institutionalization in the Public Universities, as well as the use of the competences to favor such process.

An Institutional Theory

The institutional theory was developed as criticism to structuralism-functionalism and has its origins in the studies of Robert Merton and his disciples, such as Philip Selznick, in the late 1940s (PEREIRA, 2012). This perspective has evolved in the field of organizational studies and among its main contemporary authors are Meyer and Rowan (1977), DiMaggio and Powell (1991) and Machado-Da-Silva et al. (2003).

Among the most renowned concepts about this issue is Selznick's (1971, p.14) that proposes institutionalization as "[...] a process, something that happens to an organization over time. Reflecting on their private history, the people who work there, the groups with several interests and the way they have adapted to the environment." Meyer and Rowan (1977, p. 341) add that institutionalization is "[...] the process by which social processes, obligations or circumstances assume the status of norm in the social thoughts and actions." Berger and Luckmann (2009, p. 77) present that "[...] institutionalization occurs whenever there is a reciprocal typification of habitual actions by types of actors".

It can be understood that the institutional perspective is related to sociocultural elements and is characterized by the need of organizations to standardize their behaviors and disseminate the organizational identity among employees in order to create a stable social environment besides guaranteeing the legitimacy and survival in the environment (CARVALHO; VIEIRA, 2003).

For Tolbert and Zucker (1999) institutionalization is also a procedural change formed by sequential phenomena - habitualization, objectification and sedimentation - with variability at different levels.

The first phase is known as habitualization or pre-institutionalization stage and occurs from environmental stimuli, such as legislation, technological changes, market forces, leading to the development of standardized behavior for the solution of specific problems, thus creating new structural arrangements (TOLBERT; ZUCKER, 1999). Organizations with the same or similar problems may also adopt similar policies and procedures in order to meet context expectations, leading to isomorphism (DIMAGGIO; POWELL, 1991).

The second phase is called objectification or semi-institutionalization and stands out by the social consensus and recognition of the benefits observed by the proposed practices and models. Thus, the broader the agreement regarding the value

of the structure, the lower the resistance among the members, and the greater is its institutionalization. This also recognizes the cognitive and normative legitimacy of the organization (BELTRAME, 2015). Finally, there is the stage of sedimentation or total institutionalization. It is characterized by the perpetuation of the structure over a long period of time throughout the organization, the low resistance of opposition groups and the support of the members for the positive results achieved (MACHADO-SILVA *et al.*, 2003).

According to Tolbert and Zucker (1999), it is observed that as levels progress, organizational actors establish stronger social relations, norms and procedures are better understood and organizational identity is spread among the members with more fluidity. This article seeks to identify at what level the process of institutionalization of sustainability competences in the University because of the relevance of the theme.

This article seeks to identify the level at which the process of institutionalization of sustainability competences in the University is, due to the relevance of the theme.

Competences for Sustainability

The concept of competence was first proposed in 1973 by David McClelland with the article *Testing for competence rather than intelligence*, in which the author defines it as an individual characteristic that can provide superior performance in accomplishing a task or in specific situations (MCCLELLAND, 1973). Since then, there has been an expansion of the research on the subject, proliferating and diversifying its theme with the contributions of Zarifian (1999) and Fleury and Fleury (2005), among others.

Skills can be discussed in different levels of comprehension: the personal (competence of the individual), the organizations (core competences) and the countries (educational systems and developing the competences system) (FLEURY; FLEURY, 2005). In this research the first two stages will be discussed. Individual competences are understood as "[...] a responsible and recognized action knowledge that involves mobilizing, integrating, transferring knowledge, resources and skills, which add economic value to the organization and social value to the individual." Organizational competencies, in turn, are developed through human competences allied to the conditions of the context (resources and business processes). They serve as guidelines for employees to develop the skills needed to perform tasks or functions more efficiently and effectively (ZARIFIAN, 1999).

Recent studies show that the link between competences and sustainability (WIEK; WITHYCOMBE, REDMAN, 2011; MUNCK, BORIM-DE-SOUZA, 2012; STEFANO, ALBERTON, 2015) enables the creation of a more coherent scenario to establish sustainable policies that add value to the organization, the individual, the society and the environment.

Thus, the management of the organizations is responsible for maintaining and developing the competences necessary to achieve sustainable assumptions. Because with the support and knowledge of the employees' business vision, a culture focused on sustainability is strengthened and new values and attitudes are internalized, min-

imizing the negative socio-environmental impacts generated by work and life routines (CARVALHO; STEFANO; MUNCK, 2014).

The five main competencies that favor organizational sustainability are: focus on systemic thinking (includes values and social systems), preventive (ability to create scenarios and develop shared visions), normative (ethics and justice as presuppositions of actions), strategic (related to the viability of ideas and the efficiency of their application) and interpersonal (leadership and cooperation in team activities) (WIEK; WITHYCOMBE; REDMAN, 2011). These competences are presented in Table 1.

Table 1 – Competences for Sustainability and their Characteristics

| Competence for Sustainability | Characteristics/Definition |
|--------------------------------|---|
| Focus on the systemic thinking | It is the ability to collectively analyze complex systems in different domains and scales, related to sustainability issues and sustainable problem solving. It is based on the systemic knowledge acquired and includes understanding, empirically verifying, and articulating its structure, the main components and dynamics. They comprise concepts such as structure, function, cause and effect relationships, perceptions, motivations, decisions and regulations. |
| Preventive | It is the ability to collectively analyze and evaluate the future scenarios related to issues of sustainability and problem solving. It includes the ability to understand and articulate its structure, the main components and dynamics; creative, constructive and comparative skills that relate to the 'state of the art'. |
| Normative | It is the ability to specify, apply, reconcile and negotiate sustainability values, principles, objectives and goals. It allows the collective assessment of sustainability of current and/or future states of organizational systems besides collectively building the visions of sustainability for these systems. It is based on normative acquired knowledge including concepts of justice, equity, socio-ecological integrity and ethics. |
| Strategic | The ability to implement interventions, transitions and governance strategies of transformation towards sustainability. It requires a deep understanding of strategic concepts such as intentionality, systemic inertia, path dependencies, barriers, carriers, alliances etc.; knowledge about the feasibility, effectiveness, efficiency of systemic interventions, as well as the potential for unintended consequences, etc. |
| Interpersonal | The ability to motivate, enable and facilitate collaboration for research on participatory sustainability and problem solving. It requires advanced communication skills, decision making and negotiation, collaboration, leadership, pluralism and cultural thinking, and empathy. It also seeks to understand, accept and foster diversity among cultures, social groups, communities and individuals. |

Source: Adapted from Stefano and Alberton (2015, p. 3-4).

It can be observed from Table 2 that interpersonal competence serves as support for the other competences and that through managers prepared with specific deliverables for sustainability it is possible to reach the balance of economic, social and environmental pillars (BRUNSTEIN; RODRIGUES, 2014, STEFANO; ALBERTON, 2015).

In view of the above, it can be concluded that the management by competences is a means of making organizational sustainability feasible and tends to result in

beneficial procedures for society, economy and the environment, and whenever possible, must be linked to the organizational strategy, through its Mission, Vision and Values (MUNCK; BORIM-DE-SOUZA, 2012). Thus, organizations that are able to identify sustainability competences and perform the assessment of these deliverables will be better able to promote sustainability in their internal and external environment, allowing today's actions not to limit the range of economic, social and environmental options for future generations (ELKINGTON, 2011).

Sustainability and Institutionalization of Public Universities

Nowadays there are social pressures on current management models for the organizations to take on a more ethical and responsible behavior on social, environmental and economic issues. In this scenario, Higher Education Institutions (HEI) stand out because, according to Madeira (2008, p. 19), "[...] they are privileged institutions of propagation of knowledge through education and research [...]", and also participate in the training of the main professionals of society.

In this perspective, Kraemer (2000) anticipates this line of reasoning in arguing that it is the responsibility of higher education to prepare the new generations to promote sustainability in society, as well as solve related challenges. Thus, HEIs should adopt a management model aligned with these new assumptions besides reviewing their teaching programs and encouraging projects that embrace the TBL criteria (MADEIRA, 2008).

Discussions on sustainability in higher education gained international prominence with the United Nations Conference in Stockholm in 1972. The principle 19 of the Declaration drafted at the conference emphasizes environmental education from primary school to adulthood in order to contribute to the behaviors and competences related to the protection of the environment. Its popularization at the global level happened with the creation of the Talloires Declaration in October 1990 at the University of Tufts (Talloires - France), by the deans of American universities and other continents, as well as presidents of more than 40 countries. This declaration proposed planning the construction of a sustainable university, highlighting items such as: the role of the professor in environmental awareness; the universities' initiatives in research on development and the environment; resource conservation and waste reduction policies and establishment of partnerships with external organizations (KRAEMER, 2000; VIEGAS; CABRAL, 2015).

It is observed that the Brazilian universities are adapting to this new scenario and through institutionalization they seek to connect sustainable development to their context through innovative management practices, conducting training and development of their professors and employees, besides including sustainability in their curriculum components (JACOBI; RAUFFLET; ARRUDA, 2011).

According to Franco, Oliveira and Sokulski (2016) the pressures of the institutional environment encourage organizations to change their behaviors and positions to obtain the support and legitimacy of society. Thus, legitimacy emphasizes the importance of exercising sustainability in organizations, improving their image and relationship with the various actors involved. When acquired, conformity is also able to protect them from questioning their posture and provide security and survival in the environment (MEYER; ROWAN, 1977).

This movement towards the institutionalization of sustainability will only happen if it relies on human competences to promote this new business performance. It depends on the individuals through their knowledge, skills and attitudes, to carry out practices that consider a tripartite balance of social, environmental and economic issues, improving the credibility and symbolic reputation of the organization (MUNCK; BORIM-DE-SOUZA, 2012).

Next, the methodology of the research, the data analysis and the results and final considerations are presented.

Methodology

In this research the professors of the Sector of Applied Social Sciences (SESA) of a State University of the Center-South region of Paraná were investigated. This department is composed of the courses Business Administration, Accounting Sciences, Economic Sciences, Executive Secretariat and Social Service. This university was chosen because it provides easy access and contacts for field research, besides being the most expressive in number of students and professors in the region, as well as for positive evaluations in the MEC (Education Ministry) rankings, Folha de São Paulo, among others.

The population was represented by 112 qualified professors and staff (temporary). The data was collected through field survey with a sample of 65 professors, however, three questionnaires were disregarded due to inconsistency and lack of information, totaling 62 valid respondents. The final sample represented 55.36% of the total population.

This is a quantitative approach study (CRESWELL, 2007). The research strategy used was a cross-sectional survey, according to Babbie (2005, p. 113), "[...] survey methods are used to study a segment or part - a sample - of a population, to estimate about the nature of the total population from which the sample was selected".

In this study, self-filling and structured questionnaires were used, adapted from the Stefano and Alberton (2015) model (already tested and validated), with 33 (thirty-three) questions about the 05 (five) competences for sustainability: Competence with focus on systemic thinking; Preventive competence; Normative Competence; Strategic Competence and Interpersonal Competence. In addition, there were other 10 (ten) questions about the level of institutionalization of sustainability (habitualization, objectification and sedimentation) from the model of Tolbert and Zucker (1999).

The response alternatives presented options based on a Likert scale of 06 points (1- Totally Disagree until 6-Totally Agree), with the field unknown for when the respondents do not have knowledge about the item. The social profile of the sample was also investigated with 06 (six) questions about gender, age, working time in the university, department, education level and marital status.

The data was collected in December 2015 and was characterized as a cross-sectional data collection, in which they are collected at a single point in time (HAIR JR et al., 2005). The questionnaires were printed and delivered at the reception of each department where a person was responsible for their distribution, collection and control of the respondents. For professors who did not participate in the first attempt of research, the research instrument was sent to the other professors by e-mail. The

second step consisted of analyzing the data and information collected using IBM® SPSS® Statistics, as presented in the next section.

Data Analysis and Results

In this topic, the results of the research are exposed and discussed. In the first part, the characterization of the study object and the profile of the responding professors are presented, and then the analysis of the data and information collected, using the IBM® SPSS® Statistics.

Characterization of the object of study and the respondents

The University emerged from the joint of the College of Philosophy, Sciences and Languages of Guarapuava, PR, Brazil with the College of Education, Sciences and Languages of Irati, PR, Brazil in 1968. In 1997 it began its expansion process, implementing new courses in several fields of knowledge. Currently, it has more than 65 courses, with 8,689 students and in 2015 it ranked the 98th university in the ranking prepared by Folha de São Paulo that ranks 192 Brazilian universities based on research, innovation, internationalization, education and market indicators (RUF, 2015; UNICENTRO, 2016).

Of the 62 professors surveyed, it is observed that the majority of respondents are male (59.68%). The average age is 42 years old, with an average working time of 10 years; predominant education level is Master's degree (53.23%) followed by Doctorate degree (20.97%); married or in a common-law marriage (74.20%) for the most part. Regarding the department, they work for, the highest concentration of respondents is from Business Administration (46.78%), followed by Accounting Sciences (24.19%), Executive Secretariat (12.9%), Economic Sciences (6.8%) and Social Work (6.45%).

Data analysis and information collected

Data analysis was begun by assessing the reliability, or internal consistency of the instrument, of the scale that measures each of the three TBL dimensions of the highlighted competencies, as well as the level of institutionalization of sustainability. Field (2009, p.594) states that Cronbach's Alpha is "[...] the most common measure of reliability [...]", also that "[...] a value of 0,7- 0,8 is acceptable for Cronbach's α and substantially lower values indicate an unreliable scale." For the composition of sustainability dimensions, from the respective competencies, the same groupings of variables proposed by Stefano and Alberton (2015) were used, already tested and validated. Regarding the 10 (ten) questions about the institutionalization level of sustainability (habitualization, objectification and sedimentation), based on the model of Tolbert and Zucker (1999), these were the subjects of the Exploratory Factor Analysis (EFA), aiming to identify if the variables are grouped into factors as indicated in the levels of institutionalization (habitualization, objectification and sedimentation).

As for Cronbach's alpha values which indicate internal consistency or reliability of the scale, for Malhotra (2006) the expected reliability value is at least 0.6, and lower values may indicate an unsatisfactory internal consistency. However, Hair Jr. et al. (2005, p.200) indicate that Cronbach's alpha can be assessed from this rule, how-

ever, depending on the purpose of the study values below this reference may be acceptable, and the association of intensity 0.3 to 0.6 can be considered depending on the purpose of the study.

Table 2 presents the results of Cronbach's Alpha which identify the reliability, or internal consistency, of the scale as well as the values of the average and the standard deviation for each of the constructs.

Table 2 – Average, standard deviation and result of the reliability test of the scale

| Competence | Dimension | | Average | Standard Deviation | Cronbach's alpha |
|----------------------------|---------------|-------|---------|--------------------|------------------|
| Focus on systemic thinking | Environmental | CFEST | 4,15 | 1,491 | 0,867 |
| | Social | CFSST | 4,16 | 1,393 | 0,565 |
| | Economic | CFEST | 3,94 | 1,567 | 0,434 |
| Preventive | Environmental | CPA | 3,87 | 1,361 | 0,738 |
| | Social | EPC | 4,16 | 1,130 | 0,651 |
| | Economic | EPC | 3,81 | 1,239 | 0,803 |
| Normative | Environmental | ENC | 4,18 | 1,612 | 0,801 |
| | Social | SNC | 4,07 | 1,586 | 0,752 |
| | Economic | ENS | 4,10 | 1,622 | 0,797 |
| Strategic | Environmental | ESC | 4,10 | 1,340 | - |
| | Social | SSC | 4,18 | 1,218 | - |
| | Economic | ESC | 4,18 | 1,400 | - |
| Interpersonal | Environmental | EIC | 4,55 | 1,676 | 0,820 |
| | Social | SIC | 4,47 | 1,479 | 0,816 |
| | Economic | EIC | 4,31 | 1,704 | 0,708 |
| Habitualization | | | 3,65 | 1,508 | 0,904 |
| Objectification | | | 3,78 | 1,679 | 0,947 |
| Sedimentation | | | 3,77 | 1,595 | 0,914 |

Source: created by the authors.

Legend:

| | |
|-------|---|
| CFEST | Competence Focus on Environmental Systemic Thinking |
| CFSST | Competence Focus on Social Systemic Thinking |
| CFEST | Competence Focus on Economic Systemic Thinking |
| EPC | Environmental Preventive Competence |
| SPC | Social Preventive Competence |
| EPC | Economic Preventive Competence |
| ENC | Environmental Normative Competence |
| SNC | Social Normative Competence |
| ENC | Economic Normative Competence |
| ESC | Environmental Strategic Competence |
| SSC | Social Strategic Competence |

| | |
|-----|--|
| ESC | Economic Strategic Competence |
| EIC | Environmental Interpersonal Competence |
| SIC | Social Interpersonal Competence |
| EIC | Economic Interpersonal Competence |

Thus, regarding the Cronbach's alpha values in Table 1, it is important to highlight that in the case of the social and economic dimensions, of the competence focused on systemic thinking with values below 0.6, these are maintained in the analysis because of the proposed objective and also because they are formed by only two variables each, which significantly impacts on the result of the text. In addition, Cronbach's alpha values have not been presented in the three dimensions of strategy competence since each of these dimensions is composed of only one variable.

Wiek, Withycombe and Redman (2011) state that sustainability-related competence must add value to the organization, the individual, the society and the environment. In this sense, Stefano and Alberton (2015) agree that the necessary competences for the effective implementation of sustainability aim to help in the development of organizational sustainability, and are essential for the achievement of actions that promote the development of each of the three dimensions of TBL of the competences highlighted in Table 1.

Another relevant aspect indicated in Table 1 is the composition of the three factors of institutionalization. These factors were reached from the EFA, but the composition differs a little from that initially proposed. Habitualization consisted initially of questions Q31 to Q36, but EFA included only Q31, Q32, Q34 and Q46 in this factor. Objectification is present in questions Q31 through Q40, but EFA also includes Q35 in this factor besides these variables. The sedimentation is initially constituted by questions Q41 to Q43, but the EFA also included the variable Q33.

These findings demonstrate in practice the institutionalization as a process because its theme should not be treated as binary, that is, it is institutionalized or not. So much so that Zucker (1977) argues that institutionalization is not simply present or absent, and Owen-Smith (2011, p. 5) adds that "[...] practices, structures, rules and conventions can be institutionalized in greater or lower degree". It can be observed that the path to sustainability is long and its institutionalization requires that organizations make a daily commitment to social, environmental and economic issues until they are finally consolidated and legitimized.

For the continuity of the analysis, it was verified how the respondents behave in relation to the competencies for sustainability. For this, Cluster Analysis was carried out, which "[...] is an exploratory multivariate analysis technique that allows the link of subjects or variables into homogeneous or compact groups in relation to one or more common characteristics" (MAROCO, 2003, p. 295). Hair Jr. et al. (2005, p.401) point out that "[...] cluster analysis attempts to identify natural groups using several variables." Thus Cluster Analysis using the Ward method for clustering and the use of the square Euclidean distance to measure the interval indicated the existence of two clusters, as shown in Chart 1.

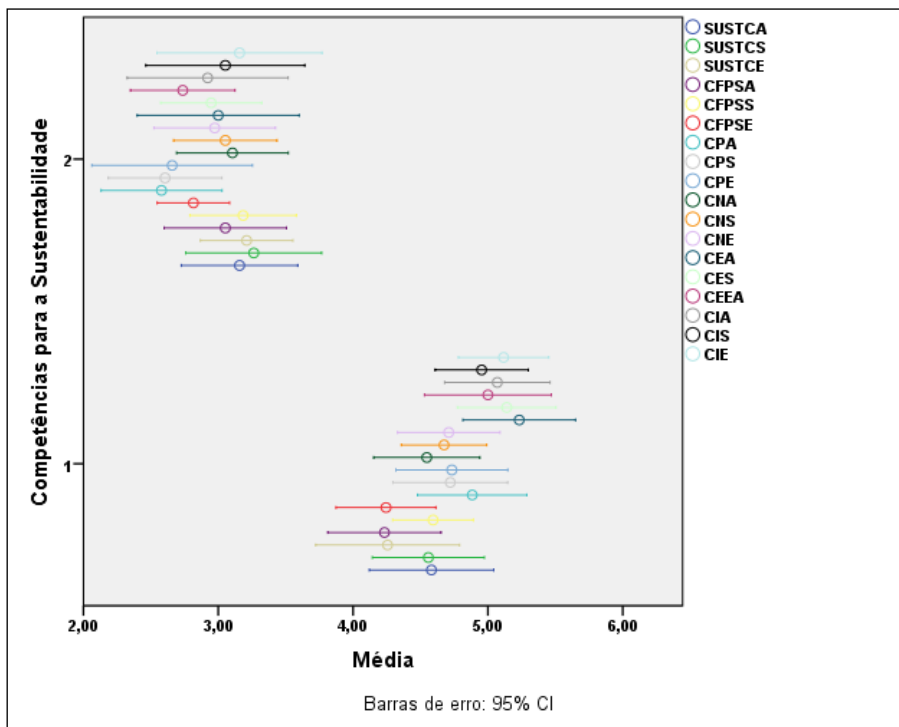


Chart 1 – Characterization of respondents regarding the competences.

Source: created by the authors.

Legend: Competences for Sustainability. Average (média). Error Bars.

The first group consists of 43 individuals who indicated a higher average in all competences, with a tendency to the agreement part of the scale. The second group is composed of 19 individuals and these indicated a lower average than the other group, with a tendency to the disagreement part of the scale.

It can be observed that approximately 70% of professors have the five competences for sustainability well developed while other professionals still need to improve them. This result shows that most professors are aware of new institutional demands, taking a more ethical and responsible position in their actions, aiming at the development that meets the needs of the present world without compromising the ability of future generations to have their needs met.

According to Munck and Borim-de-Souza (2012) professionals engaged on sustainable premises will be aware and better prepared to play their role in society. As observed in Graph 1, the researched professors already think of sustainability as a balance between the environmental, social and economic pillars, which is a positive result since Brunstein and Rodrigues (2014) argue that competences must be defined and developed by organizations for the purpose of business sustainability.

The next step is to identify the level of institutionalization of sustainability in the University. For that, Cluster Analysis was used for the factors related to institutionalization (habitualization, objectification and sedimentation). The result is shown in Chart 2.

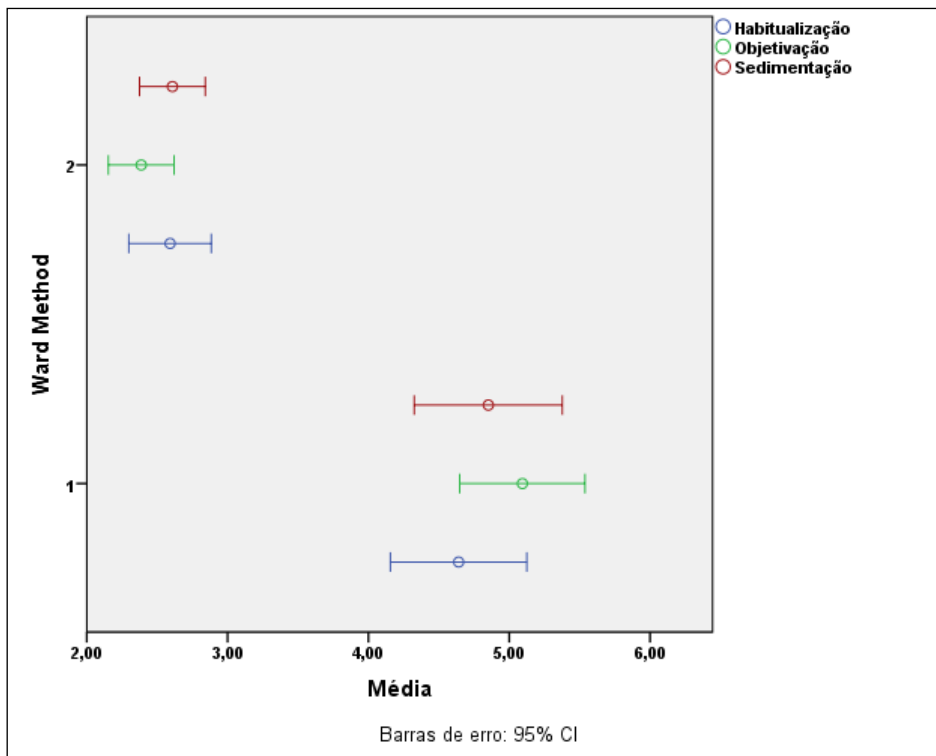


Chart 2 – Characterization of respondents regarding institutionalization.

Source: Created by the authors.

Legend: Competences for Sustainability. Average (média). Error Bars.

The first group consists of 32 individuals who presented a higher average in the three factors of institutionalization, with a tendency to the agreement part of the scale. The second group consists of 30 individuals who presented a lower average than the other group, with a tendency to the disagreement part of the scale.

Regarding the level of institutionalization, considering the researched sample and sector, Chart 2 indicates that sustainability is considered and institutionalized by just over half of the respondents. This shows that the level of institutionalization is still low considering the studied environment.

This result shows that a greater number of respondents consider the existence of competences for sustainability in the University, but a smaller number considers the institutionalization of sustainability, which puts it in a stage of habitualization. This shows that sustainability needs to be better developed at the University so that the total institutionalization can be achieved. Tolbert and Zucker (1999) argue that as organizational actors build stronger social relationships, norms and procedures are better understood, organizational identity is spread among members with fluidity and the tendency is for levels that advance to institutionalization levels.

It can then be inferred that the competences for sustainability indicated in Chart 1 should be better explored so that they can contribute effectively to the institutionalization of sustainability in the University, demonstrating the importance of aligning the organization's strategic objectives aiming at minimizing the social and environmental negative impact generated by routine work and life.

Final considerations

Based on the Institutional Theory, the Sustainability and the Competences for Sustainability, this study aimed to identify the competences for sustainability and their level of institutionalization in the perspective of the SESA faculty of the University studied. Therefore, a survey was carried out in this educational institution, which is the most significant in number of students and professors in the region, as well as positive evaluations in the MEC (Ministry of Education) rankings, Folha de São Paulo (a Brazilian newspaper), among others.

In the analyzes it was possible to observe that approximately 70% of the professors agree that they have the five competences for sustainability proposed by Wiek, Withycombe and Redman (2011) well-developed: Competence with a focus on systemic thinking; Preventive competence; Normative Competence; Strategic Competence and Interpersonal Competence. Other professionals, however, agree that they need to improve these competences so that they can contribute more effectively to sustainable assumptions.

This is justified by the fact that most professors are aware of the new institutional and social demands, taking a more ethical and responsible attitude in their actions. Elkington (2011) points out that organizations that develop sustainability-aimed competences will be better able to promote sustainability in their internal and external environment, allowing today's actions not to be limited to the range of economic, social and environmental options for future generations.

The study also evaluated the level of institutionalization of sustainability in the University, which is formed by the sequential phenomena of habitualization, objectification and sedimentation proposed by Tolbert and Zucker (1999). Of the teachers surveyed, 52% had higher agreement average in the three institutionalization factors, and the remaining 48% indicated an average of disagreement with the same factors. Considering the researched sample and the sector surveyed, this result shows that institutionalization is still low, presenting a level of habitualization. It is possible to highlight that although a greater number of respondents consider the existence of competences for sustainability in the University, the university is still at a pre-institutionalization level. These results contradict the contributions of Munck and Borim-de-Souza (2012), who assert that the management by competences is a means of making organizational sustainability feasible, tending to lead to its institutionalization. However, the same authors add that competency management must be consistent with the organization's objectives in order to promote organizational sustainability.

It is believed that the institutionalization of sustainability practices is essential for organizations that aim to remain aligned with their institutional field. Therefore, the social recognition of organizations requires their adaptation to environmental, social and economic standards accepted as legitimate, being able to benefit their relationship throughout history, reduce risks in hard times, favoring their survival (MEYER, ROWAN 1977, MACHADO- SILVA and FONSECA, 1993).

Thus, this research can contribute to the understanding of the competences for sustainability, as well as the institutionalization of sustainability, advancing in the studies of the existing theory, that still has gaps in the literature. It is also important

to highlight their limitations, which relate to the difficulty of generalizing their results, because it is a quantitative, occasional and unique research.

Finally, this study is expected to stimulate further research on the issues raised, allowing society to rethink its actions and seek attitudes that preserve the planet and provide improvements in quality of life standards. A qualitative analysis is suggested to be carried out by means of interviews with professors and staff of the Institution to verify if the results are similar, besides the application in a longitudinal research to verify if this situation changes over time. It is also recommended to expand it in other departments of the University, of other public and private universities, as in other fields or work, observing the similarities and differences among economic activity sectors.

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