

Higher Education and Professional Profile: Case Study at Fatec Zona Leste

Ensino Superior e Perfil Profissional: Estudo de Caso na Fatec Zona Leste Educación Superior y Perfil Profesional: Estudio de Caso en Fatec Zona Este

> Lannara Chaves Barbosa¹ lannara.barbosa@fatec.sp.gov.br

Valéria Rufino Maiellaro¹ valeria.maiellaro01@fatec.sp.gov.br

> João Roberto Maiellaro¹ joao.maiellaro@fatec.sp.gov.br

> Lucas Rufino Maiellaro² lucas.maiellaro@fatec.sp.gov.br

1 – Faculdade de Tecnologia da Zona Leste – Fatec Zona Leste 2 – Universidade de São Paulo - USP

Abstract: Human Resources are a relevant impact factor in organizations and evaluations of behavioral profiles can allow analysis and formulation of various strategies. The literature does not have a relevant number of studies that analyze the impact of college degree on the behavioral profiles of different courses in Brazil. This research aims to evaluate the behavioral profiles of students of the Foreign Trade, Logistics and Systems Analysis and Development courses at Fatec Zona Leste at the beginning and during the transition between the initial semesters of the courses. The Animal Test, or Brain Preference Assessment, formulated by the Brazilian Institute of Coaching (IBC), was used. Students of the courses answered a questionnaire consisting of 25 questions, which analyzed traits such as creativity, communication, determination and organization. In the end, the results show different behavioral profiles of students who attend the different courses analyzed. The results also show that there are variations in the behavioral profiles of students during their trajectory between the first and second semesters of the courses.

Keywords: IBC; Animals; Profile; Behavior.

Resumo: Recursos Humanos são um fator de impacto relevante nas organizações e avaliações de perfis comportamentais podem permitir análises e formulação de estratégias diversas. A literatura não traz em número relevante, estudos que analisam o impacto da formação superior nos perfis comportamentais de diferentes cursos no Brasil. Essa pesquisa tem o objetivo de avaliar os perfis comportamentais de alunos dos cursos de Comércio Exterior, Logística e Análise e Desenvolvimento de Sistemas da Fatec Zona Leste no ingresso e durante a transição entre os semestres iniciais dos cursos. Foi utilizado o Teste dos Bichos, ou Avaliação da Preferência Cerebral formulado pelo Instituto Brasileiro de Coaching (IBC). Alunos dos cursos responderam questionário composto por 25 questões, que analisaram traços como criatividade, comunicação, determinação e organização. Ao final, os resultados mostram diferentes perfis comportamentais de alunos que frequentam os diferentes cursos analisados. Os

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resultados mostram ainda que existem variações dos perfis comportamentais dos alunos durante sua trajetória entre os primeiros e segundos semestres dos cursos. **Palavras-chave**: IBC; Bichos; Perfil; Comportamental.

Resumen: Los Recursos Humanos son un factor de impacto relevante en las organizaciones y las evaluaciones de los perfiles de comportamiento pueden permitir el análisis y formulación de diversas estrategias. La literatura no cuenta con un número relevante de estudios que analicen el impacto de la educación superior en los perfiles de comportamiento de diferentes carreras en Brasil. Esta investigación tiene como objetivo evaluar los perfiles conductuales de los estudiantes de las asignaturas de Comercio Exterior, Logística y Análisis y Desarrollo de Sistemas de la Fatec Zona Este en el ingreso y durante la transición entre los semestres iniciales de las asignaturas. Se utilizó el Test Animal o Evaluación de Preferencia Cerebral, formulado por el Instituto Brasileño de Coaching (IBC). Los estudiantes de los cursos respondieron a un cuestionario compuesto por 25 preguntas, que analizaban rasgos como la creatividad, la comunicación, la determinación y la organización. Al final, los resultados muestran diferentes perfiles conductuales de los estudiantes que asisten a los diferentes cursos analizados. Los resultados también muestran que existen variaciones en los perfiles conductuales de los estudiantes durante su trayectoria entre el primer y segundo semestre de los cursos.

Palabras clave: IBC; Bugs; Perfil; Conductual.



1. INTRODUCTION

Human Resources can play a vital role in organizational performance. Behavioral profile analysis is a major area of interest within Human Resource Management research. In recent years, there has been a growing interest in creating behavioral profiles to obtain more excellent performance from people (D'amorim; D'Amorim, 2020; Gregório; Gregório; Bueno, 2022; Silva; Basso; Bueno, 2022).

Many researchers face the main challenge of finding methods with applicability and reliability. So far, it is still unclear what the impact of higher education is on behavioral profiles. Little attention has been paid to this topic due to the lack of relevant studies in Brazil.

Given this scenario, we can raise the following questions: What is the behavioral profile of students in different higher education courses? How do behavioral profiles change as students' progress through higher education courses?

The objective of this research is to verify the behavioral profiles of students from different courses at Fatec Zona Leste by applying the test known as the Animal Test of the Brazilian Coaching Institute (IBC) and to diagnose variations between the first and second semesters of these courses.

The Animal Test, also known as the Brain Preference Assessment, was applied to students from the Foreign Trade, Logistics, and Systems Analysis and Development courses during the first and second semesters. Ultimately, it was possible to diagnose different profiles between the courses and evaluate the variation in the profiles throughout the semesters studied.

2. THEORETICAL FOUNDATION

More recent attention in the literature has focused on the position that it is recognized that the quality of Human Resources (HR) is decisive for the company's success and that the primary concern of the HR sector in a company should be precisely the employees (Darmawan, 2020). Over the past 20 years, there has been growing interest in the effect that HR systems have on organizational performance and employee indicators, including various aspects of well-being (Peccei; Van DE Voorde, 2019).

Studies have considered behavioral tests. They are a way to predict people's behavior in certain circumstances assertively. They do not measure knowledge, values, or intelligence but people's behavior. These methods show how each person behaves in the work environment, defining trends and skills in developing an organizational climate based on positivism (Cabral; Rosa, 2021).

Behavioral profile tests have been gaining traction in selection processes. It is essential to know the behavioral profile of candidates to identify differences from other candidates. In the Brain Preference Assessment, the candidate completes a self-assessment that reflects his or her current profile. The objective of the test is to understand how the candidate thinks and acts. The answers will indicate a predominance of 4 types of profiles: eagle (idealizing), shark (executor), cat (communicator), and wolf (organizer) (Fostinoni et al., 2022).



The analysis of academic research and online search traffic since 2002 has revealed changes in the relative trajectory of People Analytics in conceptually related terms over the last fifteen years, indicating both the rebranding of similar innovations and differentiation of priorities and communities of practice (Diclaudio, 2019).

Among several studies and theories of brain dominance, in 1980, researcher Ned Herrmann, in his research and theory The Creative Brain from 1989 and The Whole Brain Thinking from 1996, divided the brain into two parts, the right and left sides, and four quadrants, upper and lower. Herrmann's research and studies on brain dominance demonstrate that people have access to creative thinking, but it is necessary to know the individual preference for thinking (Machado, 2012).

Ned Herrmann's profile classifies human thinking styles in relation to the dominant side of the brain. Thus, people dominated by the left side are logical and analytical, and people dominated by the right side are more intuitive (Azevedo; Francisco, 2021).

After conceptualizing the dominant quadrants, Herrmann developed the Herrmann Brain Dominance Instrument (HBDI), a 120-question questionnaire. This instrument plays a crucial role in understanding and assessing behavioral profiles, making it an essential tool in the selection process.

Adapted from the work on Brain Dominance Theory by the American researcher Ned Herrmann, one of the leading exponents of studies on creativity, the Brazilian Coaching Institute developed the behavioral profile test known as the Animal Test (IBC, 2020). The Brazilian Coaching Institute (IBC) adapted Ned Herrmann's questionnaire (HBDI) into 25 multiple-choice questions. Coaching professionals in Brazil widely use this questionnaire to assess the behavioral profile of professionals. The results of the IBC questionnaire should be totaled to determine which style is predominant, allowing an assessment of how comfortable the person will be in each type of situation (Machado, 2012).

Each person has four behavioral styles, with one being predominant. To identify this predominant style, a test is conducted where the individual makes decisions in given situations. The four styles correspond to four types of animals, and the one with the most similar answers is the predominant style. These animals are eagle, wolf, cat, and shark (Azevedo; Francisco, 2021), as shown in Table 1.

Table 1 – Animals and profiles			
Eagle	A creative, intuitive, and idealistic person who likes to do things		
(Águia)	differently, seeks freedom and has a vision of the future and		
	innovation.		
Wolf	An organized, punctual, controlling, and detail-oriented person who		
(Lobo)	.obo) has difficulty adapting to changes but is very responsible with what		
	agreed.		
Cat	A communicative person who likes to work in a team is sensitive to		
(Gato)	(Gato) the feelings of others and needs to be socially accepted.		
Shark	A task executor who seeks results and has a sense of urgency, creating		
(Tubarão)	an impulsive and practical person.		

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Source: Adapted from Azevedo and Francisco (2021).



3. METHOD

This study uses the Brain Preference Assessment test from the Brazilian Coaching Institute (IBC) to analyze the profiles of students at Fatec Zona Leste. This method is beneficial in research that seeks to evaluate group profiles (MOTA; MUNCINELLI, 2014).

The brain preference analysis or behavioral profile is essential for the coaching process, allowing us to identify the profile most evident in the current state. This tool is the famous animal test: wolf, eagle, dolphin, or shark (the cat is used instead of the dolphin, but the characteristics of the profile are the same). This information is essential for defining goals since people are different and react differently to the same situation (CHIARETTO; LIMA, 2020; COSTA, 2023).

In this research, the profiles will be correlated to the respondents' course and training axes. The research was carried out at Fatec Zona Leste, with the questionnaire applied to the institution's students.

The participants were divided into three groups based on their courses at Fatec Zona Leste: CST in Logistics, Foreign Trade, and Systems Analysis and Development. The participants in this study were recruited after an integrative project was announced for the Human Resources Management Course, with a theme based on People Analytics.

To collect the data, the participants received an explanation about the research and how the results would be presented. Then, they answered the 25 questions of the IBC questionnaire directly on the electronic form, and the results were processed in electronic spreadsheets. After the processing, the behavioral profile of each respondent was identified.

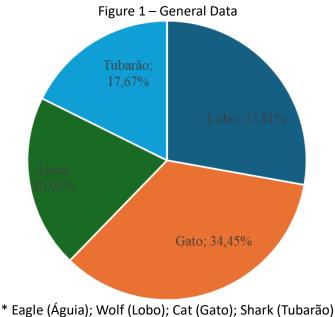
4. RESULTS AND DISCUSSION

This topic will demonstrate and discuss the research results on behavioral profiles. The first set of analyses examined the results of all respondents in general. This data includes female and male respondents and students of the Logistics, Foreign Trade, and Systems Analysis and Development courses. The number of respondents per course and semester is shown in Table 2.

Table 2 – Respondents per course and semester			
	1st Semester	2nd Semester	
Foreign Trade	21	31	
Logistics	18	5	
Systems Analysis and Development	21	30	
Source: Authors (2023)			

Each respondent received an e-book about their behavioral profile. Figure 1 shows the percentages of animals obtained from all respondents.





Eagle (Águia); Wolf (Lobo); Cat (Gato); Shark (Tubarão) Source: Authors (2023)

Figure 1 shows the general percentage of respondents translated into the animal figure related to the profile presented in the questionnaire. The Cat profile predominates with 34.45% of respondents, followed by the Wolf profile with 27.81%, Eagle with 20.06%, and Shark with 17.67%.

The impression is that the Cat profile is predominant because the research participants are students at the beginning of higher education. The following graph (Figure 2) shows comparisons between the female and male genders in general, including all courses and semesters surveyed.

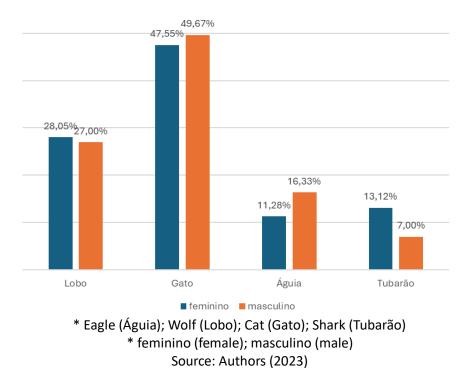


Figure 2 – Gender Comparison



It is noted that both genders have a higher percentage of the Cat profile. The female gender, after the predominant Cat, has a behavioral profile focused on the Wolf, Eagle, and, finally, Shark. The male gender, after Cat, has a behavioral profile of Wolf, Eagle, and Eagle. The small difference between the female and male genders is highlighted in the research results, which may show that both genders are forming a professional profile with little external ideological interference outside the professional context.

Figure 3 presents a comparison of the behavioral profile between courses and the predominant profile in each of the courses. Notably, both courses feature a predominant Cat profile. This profile, characterized by easy communication, team focus, authority delegation, harmony maintenance, comprehensive awareness, group work, recognition, and security, is surprising in its relevance to the soft skills required of professionals in the job market. These findings underscore the practical value of our research in preparing professionals for the demands of the job market.

Systems Analysis and Development professionals are expected to be able to manage development teams, diagnose problems, propose improvements in computer systems, and speak other languages. Logistics professionals must negotiate with suppliers and customers in other languages. Foreign Trade professionals monitor import and export activities, analyze business trends, and identify opportunities for new markets (CATHO, 2023; MEC, 2023).

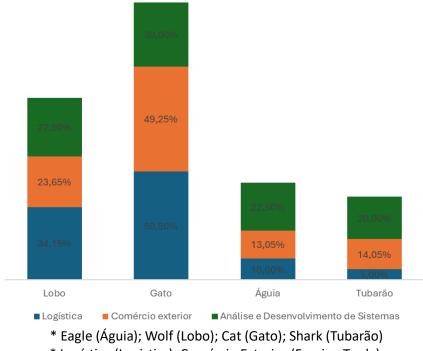


Figure 3 – Comparison Between Courses

* Eagle (Águia); Wolf (Lobo); Cat (Gato); Shark (Tubarão)
* Logística (Logistics); Comércio Exterior (Foreign Trade);
Análise e Desenvolvimento de Sistemas (Systems Analysis and Development)
Source: Authors (2023)

Figure 4 shows a comparison of the behavioral profile of students between the first and second semesters.



35.00%

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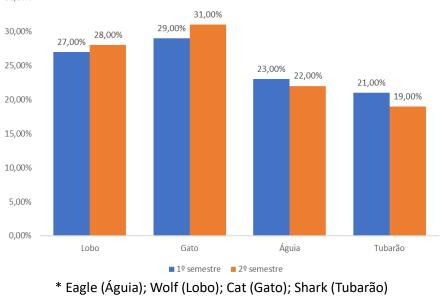
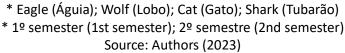


Figure 4 – Systems Analysis and Development



In the comparison, the profile is mostly the same from the first to the second semester of the Systems Analysis and Development Course. It seems that the Cat profile should be less predominant for this group of respondents since, in this activity area, the professional must demonstrate logical reasoning, organization, attention to detail, always search for knowledge, and be a strategist.

This result, in which respondents are in the second semester of the course, shows a small positive variation in the Eagle and Shark profiles and a small negative variation in the Cat profile.

By the end of the course, respondents need to develop skills through the curriculum that coincide with the Wolf and Eagle profiles, which represent the needs of the job market and characteristics of the profile of graduates listed in the Course's Pedagogical Project.

Figure 5 provides a visual comparison of the behavioral profile changes among students between the 1st and 2nd semesters of the Higher Education Course in Foreign Trade.

Figure 5 shows a significant positive variation in the Cat profile and a marked negative variation in the Eagle profile. The desirable characteristics of professionals in the foreign trade area include developing good communication, good relationships, and teamwork, and therefore, the predominance of the Cat profile presented for this group of respondents meets these characteristics of professionals for the job market.

The rise in the Wolf profile is a positive development for the group. This increase is particularly beneficial as it enhances the professional qualities required in the Foreign Trade field. These qualities include organization, process control, and strategic thinking, all of which are crucial for a Foreign Trade professional.



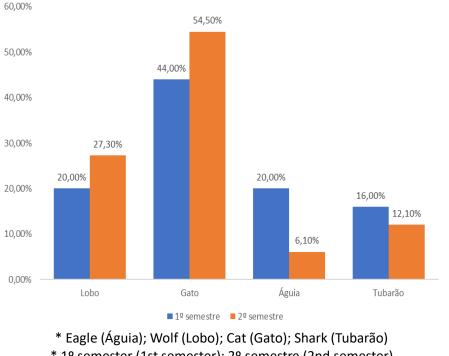


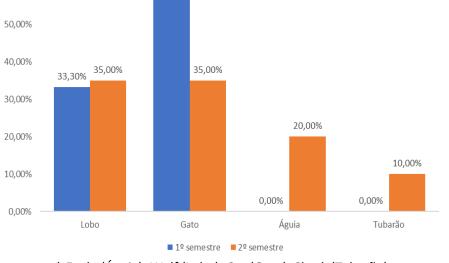
Figure 5 – Foreign Trade

* Eagle (Águia); Wolf (Lobo); Cat (Gato); Shark (Tubarão)
* 1º semester (1st semester); 2º semestre (2nd semester)
Source: Authors (2023)

This is an exciting result, verified after the respondents had attended a semester of the course since the combination of the Cat and Wolf profiles is suitable for professionals in this area.



Figure 6 compares the behavioral profiles of students in the first and second semesters of the Higher Education Course in Logistics Technology.



* Eagle (Águia); Wolf (Lobo); Cat (Gato); Shark (Tubarão)
* 1º semester (1st semester); 2º semestre (2nd semester)
Source: Authors (2023)

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There was a significant variation in the behavioral profile of participants from one semester to the next. From the 2nd semester of the course onwards, the survey respondents began to present the Eagle and Shark Profiles. Moreover, the Wolf profile showed a slight positive percentage variation. On the other hand, there was a significant negative variation in the Cat profile. Figure 6 shows the evolution in the development of logical reasoning, organization, and innovation, characteristics that predominate in the Wolf, Shark, and Eagle profiles, showing an evolution from one semester to the next. The characteristics of the Cat profile are presented in a more balanced way, and the profiles of the respondents are based on the behaviors and skills required of professionals in the area.

Professionals in the logistics field have one of the most complex profiles since they must present logical reasoning, good communication, work as a team, be organized, and be strategists. The balanced combination of the Cat, Eagle, and Wolf profiles may be ideal for professionals in this area.

In this way, it is possible to verify the respondents' good evolution within what is expected for the job market and to positively evaluate the sequence of disciplines applied to the course students, which meets the development of skills and behaviors.

Harmonious results of the profiles, as some verified throughout this research, such as Cat-Wolf and Cat-Eagle, is a positive factor for the individual because, in light of the theory, two profiles predominating in the same individual, this will present more skills compared to someone who has only one profile predominating (MACHADO, 2012).

5. CONCLUSION

The objective of this research was to verify the behavioral profiles of students of different courses at Fatec Zona Leste by applying the test known as the Animal Test of the Brazilian Coaching Institute (IBC) and to diagnose variations between the first and second semesters of these courses.

This study identified variations in profiles between different courses. It sought to draw comparisons and prepare analyses with profiles expected by each course's training axis and analyze the profiles found with those desired by organizations.

The research also showed that students at Fatec Zona Leste are communicative, have a sense of organization, are generally idealistic, and have initiative, to varying degrees of predominance.

Overall, this study reinforces the idea that behavioral profile analysis is vital for better understanding and managing human resources in different professional sectors. The data obtained highlight the importance of outlining desired profiles with diagnosed profiles, and the study also establishes a method for monitoring changes in behavioral profiles caused by the trajectory throughout higher education courses. It is possible to generate insights for adapting curricula in the search for specific profiles and specific soft skills. The analysis of students at Fatec



Zona Leste undertaken here expanded the knowledge of analysis and management of human resources at the institution.

A limitation of this study was the impossibility of obtaining a more significant number of respondents and including other courses offered.

Future studies should be considered. To confirm the results, new research on logistics students should be applied. The methods of this research should also be applied broadly at Fatec Zona Leste to students of all courses, teachers, and staff.

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