



THE BEST ARTICLES OF THE
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MULTIDISCIPLINARY CONGRESS**

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Osmar José Accorsi | Carolina de Lima Accorsi Montefusco | Wilians Montefusco da Cruz
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International Cataloging in Publication Data (CIP)
(Câmara Brasileira do Livro, SP, Brasil)

The best articles of the III Seven International
Congress of Health [livro eletrônico]. --
São José dos Pinhais, PR : Seven Events,
2023.
PDF

Vários autores.
Vários organizadores.
Bibliografia.
ISBN 978-65-84976-67-2

1. Ciências da saúde 2. Ciências médicas -
Pesquisa.

23-171307

CDD-610.3

Indexes for systematic catalog:

1. Ciências da saúde 610.3

Tábata Alves da Silva - Bibliotecária - CRB-8/9253

DOI: 10.56238/thebestiimulti2022-

Seven Publicações Ltda
CNPJ: 43.789.355/0001-14
editora@sevenevents.com.br
São José dos Pinhais/PR

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  <https://doi.org/10.56238/thebestiimulti2022-002>

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Comparison between granulometric analysis of the sand from the Acre river and normal sand from the Tietê river

  10.56238/thebestiimulti2022-001

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Keywords: Sand extraction, Particle size analysis, Normal Sand.

1 INTRODUCTION

The emergence of the main cities of the Amazon, including the State of Acre, occurred on the banks of rivers. In the region, the sand used in the buildings has always been, and continues to be, until today, removed directly from the river beds, from the dredging process, without any control, of both the places of withdrawal and the places of sand deposits, let alone with the quality of the sand.

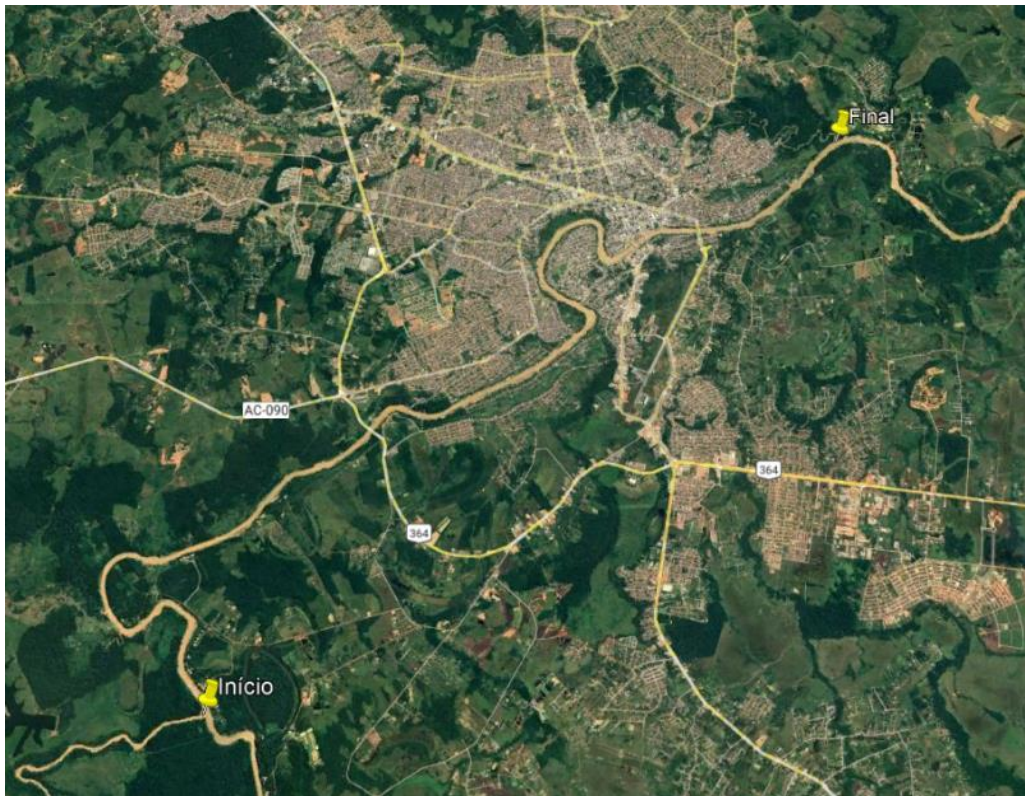
In the municipality of Rio Branco, associated with a growing increase in the urban population, there has also been an increase in the demand for sand, causing the number of dredgers that exploit sand on the Acre River to increase considerably over the last twenty years.

And this research aimed to study a comparison between the granulometry of the sand samples collected in the Acre River with the granulometry of the Normal Sand of the Tietê River. A mixture with other types of aggregates was also proposed to improve the granulometric quality of acre river sands for use in civil construction. For these mixtures, the sand collected in the Madeira River, located in the State of Rondônia, approximately 240 kilometers from Rio Branco, was used.

2 METHODOLOGY

The research area is located, in an extension of approximately 20 km, along the Acre River, in the municipality of Rio Branco, state of Acre. It is located between latitudes 9°57'22" at 10°03'18" S and longitudes 67°46'31" W at 67°52'40" W (Figure 1).

Figure 1: Location map of the search area.



Source: Google Earth (2021) - Adapted by the authors (2022).

The Acre River is a watercourse that has a total length of about 1,190 km, has its source in Peru in the order between 300 and 400 m of altitude and water in Brazil, on the right bank of the Purus River, next to the Amazonian city of Boca do Acre, approximately at the quota of 130 m. It is one of the most famous rivers in the Northern region of Brazil, for it crosses and gave its name to the state of Acre, bathing municipalities such as Assis Brasil, Brasiléia, Epitaciolândia, Xapuri, and Porto Acre (BESER DE DEUS, 2013; ACCORSI, 2014; SILVA, 2015; NETO et al., 2017).

In the city of Rio Branco, the Acre River, within the urban perimeter, has an extension of 15.83 km in length, passing through the central part of the city, dividing it into two districts, referring to the left side, known as the first district, and the right side, as the second district (BONFANTI et al., 2020).

The methodology of the work consisted of fieldwork, from the collection of samples from the places where the pulp (mixture of water, sand, silt, and clay) taken from the river is stored to go through the decanting process and, later, be commercialized. These decanting sites are technically called storage yards, "decanting wells" or "decanting boxes".

All 15 samplings were carried out on the Acre River between July and September,

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at the time of year in which the river has its lowest volumes of water. Samples were collected from both the right bank and the left bank, from the mouth of the Riozinho do Rola to the mouth of the São Francisco Stream, covering the entire research area, totaling approximately 20 km (Table 1).

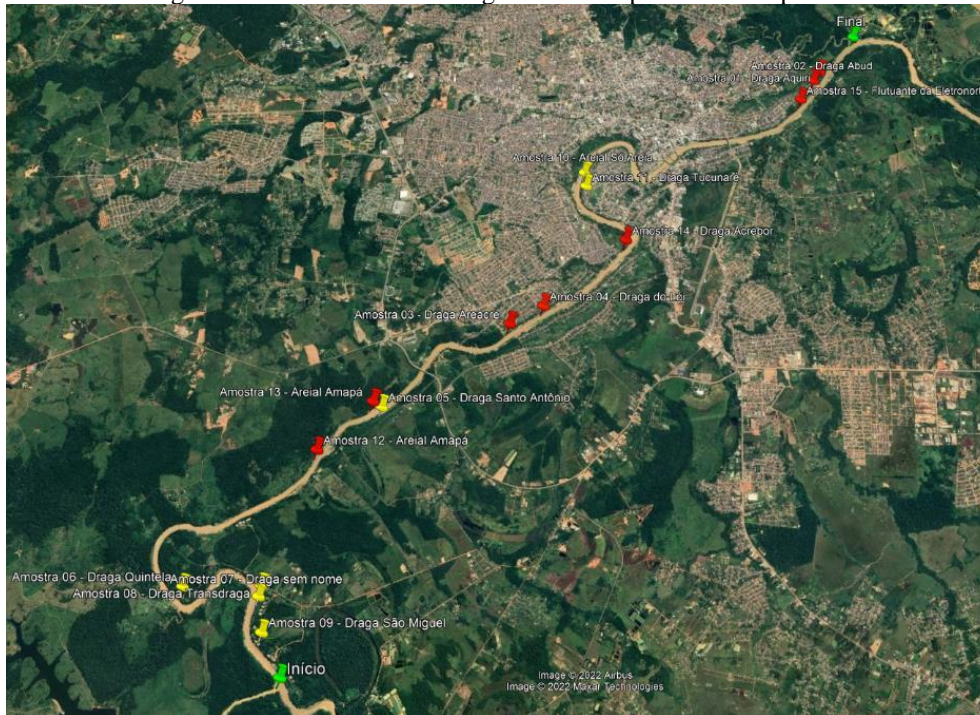
Table 1: Information about the 15 sand samples collected.1

Sample	Collection Site (margin)	Depth (m)	Collection Point	Coordinates	
				Latitude (South)	Longitude (West)
1	left	3,9	Draga Aquiri	9th 57' 50"	67th 47' 02"
2	left	2,7	Draga Abud	9th 57' 56"	67th 47' 06"
3	left	2,4	AREACRE	10th 00'	67th 49' 54"
4	left	3,4	Draga do Lói	10th 00'	67th 49' 22"
5	right	3,9	Draga Santo Antonio	10th 01'	67th 50' 58"
6	right	3,2	Draga Quintela	10th 02'	67th 52' 22"
7	right	3,4	Próximo a Draga	10th 02'	67th 51' 52"
8	right	3,1	TRANSDRAGA	10th 02'	67th 51' 47"
9	right	3,0	Draga São Miguel	10th 02'	67th 51' 49"
10	right	3,8	Areial Só Areia	9th 58' 54"	67th 49' 14"
11	right	3,3	Draga Tucunaré	9th 59' 02"	67th 49' 14"
12	left	3,7	Areial Amapá	10th 01'	67th 51' 30"
13	left	3,5	Areial Amapá	10th 01'	67th 51' 05"
14	left	3,0	ACREBOR	9th 59' 34"	67th 48' 53"
15	left	3,0	Flutuante da Eletronorte	9th 58' 08"	67th 47' 14"

Source: Accorsi (2001).

The location of the collection points was performed from geographic coordinates (latitude and longitude), obtained by GPS (Figure 2).

Figure 2: Identification/Marking of sand sample collection points.



Source: Google Earth (2021) - Adapted by the authors (2022).

15 samples were collected. Being a group of depth samples and another surface group, distributed as well: 12 samples in sand deposit sites (storage yards) that were empty and 3 samples in places that are not associated with sand deposits. Depth samples were collected manually at the depth at which the hydrostatic level was found. Surface samples were collected directly from the surface part of the ravines.

The samples after collection were sent to the Laboratory of Technological Tests (LET) of the Center for Exact and Technological Sciences (CCET) of the Federal University of Acre (UFAC), where in addition to other characterization tests, a complete Granulometric Analysis was performed, both by Sieving and Sedimentation.

The analyses were carried out according to the Brazilian Standards (NBR) of the Brazilian Association of Technical Standards (ABNT), adopted by the National Department of Transport Infrastructure (DNIT), since the preparation of the samples, carried out from the NBR-06457/86, as the determination of the granulometry performed by the sieving and sedimentation process, using the densimeter. These analyses were performed according to NBR-07181/84 and the sedimentation test was based on Stokes' Law.

From the individual particle size analyses, both from the sand of the Acre River and the sand of the Madeira River, dosages of the mixtures of 40%, 35%, 30%, and 25% of the sand of the Acre River, with 60%, 65%, 70% and 75% of the sand of the Madeira



River, were proposed to obtain the mixture that most closely approximated the granulometric characteristics of the Normal Sand of Tietê, accordance with NBR 7214/82.

3 CONCLUSION

The results of the granulometry tests (sieving and sedimentation) took into account the granulometric scale of the ABNT in which the sands (coarse, medium, and thin) presented a granulometry ranging from 5.0 mm to 0.05 mm, the silt from 0.05 mm to 0.005 mm and the clays a granulometry < 0.005 mm (Figure 3).

Considering the percentages of sand, silt, and clay, according to the granulometric classification of soils proposed by FOLQUE (1988), the 15 samples taken in depth were classified as sand (4 samples), silty sand (2 samples), sandy silt (1 sample), clay sand (1 sample), clay silt (3 samples), sandy clay (2 samples) and clay (2 samples) (Figure 4).

All surface samples were classified, based on the same classification proposed by FOLQUE (1988), as sands (Figure 5).

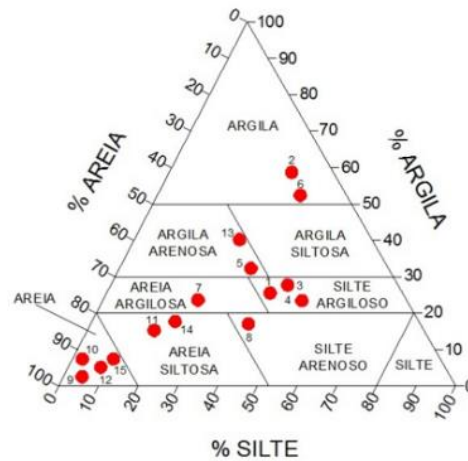
In the sampled places where the sands predominate, the soils have a higher possibility of suffering erosive processes, due to the low cohesion of the sands.

Figure 3: Granulometric scale of ABNT /NBR 6502/1995.

Pedregulho	Areia Grossa	Areia Média	Areia Fina	Silte	Argila
5,0 mm	2,0 mm	0,4 mm	0,05 mm	0,005 mm	

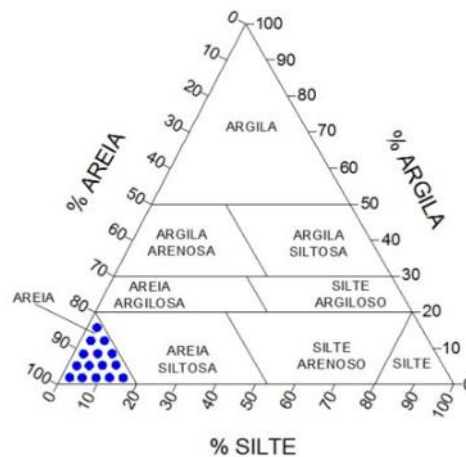
Source: ABNT (1995) - Adapted by the authors (2022).

Figure 4: Depth samples.1



Source: Accorsi (2001).

Figure 5: Surface samples.



Source: Accorsi (2001).

Although analyses were performed in surface and depth samples, which presented differentiated granulometric constitutions, the other results obtained from the physical indicators presented values within the limits of sand, silt, and clay. Thus they did not serve as useful indicators for differentiation and geotechnical characterization and stability according to their indicators.

However, it was possible to make some inferences about the stability of these soils, due to their granulometry, whereas in the surface samples, with a predominance of sands, which present lower stability and are more subject to erosive processes.

In in-depth samples there is a heterogeneity of materials, where the occurrence of clayey materials is observed, which confer greater cohesion and stability of the soils,



waiting for these sites to lower environmental damage.

From the analysis of sand samples extracted by suction from the Acre River, collected in the decanting yards and which are used directly in civil construction in the State of Acre and especially in the municipality of Rio Branco, it was observed that, in granulometric terms, the samples have a granulometry that varies, for the most part, between 0.042 mm in diameter, which characterizes the granulometric upper limit of fine sands, up to granulometry smaller than 0.053 mm corresponding to silts or clays.

The granulometry of the Normal Sand of the Tietê River, produced and supplied by the Institute of Technological Research (IPT) of São Paulo, for technological tests has granulometry that presents the following percentages about the weight of the sample, as observed in Table 2.

Table 2: Granulometry of the normal sand of the Tietê River.2

Nominal opening in mm	Accumulated retained percentage
2,4	0
2,0	5 ± 5 %
1,2	25 ± 5 %
0,6	50 ± 5 %
0,3	75 ± 5 %
0,15	97 ± 5 %

Source: ABNT/NBR7214 (1982) - Adapted by the authors (2022).

When we delimit the granulometry of the normal sand of the Tietê River, they correspond to the following limits: coarse sand (2.4 to 1.2 mm), medium sand (1.2 to 0.6 mm), fine medium sand (0.6 to 0.3 mm), fine sand (0.3 to 0.15 mm) and silts and clays (< 0.15 mm).

When comparing the granulometric curves of the 15 samples analyzed, with the granulometric curve of the normal sand of the Tietê River and considering the lower limit of the normal sand (sieve opening of 0.15 mm) and taking into account the maximum and minimum limits of the accumulated percentage retained in each sieve, it was observed that none of the 15 samples of the Acre River are within the normal sand patterns of the Tietê River, even considering the tolerance limits of the accumulated retained percentages, always presenting very fine granulometry, predominantly silts and clays.

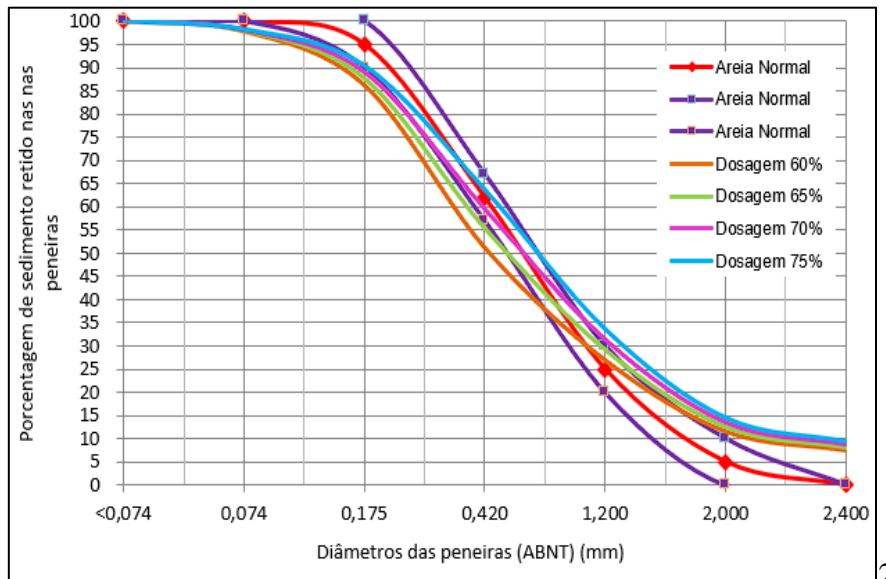


The NBR 7214/82 standard establishes criteria for sand to be considered standard, among these criteria, are granulometry, powder material content, moisture, clay conglomerates, feldspars, micas, and organic matter.

In this work, we took into account only the granulometric analysis and the amount of powder material, where the granulometric curves of the samples taken from the Acre River were compared, with the granulometric curve of the normal sand of the Tietê River. It can be seen that the sands of the Acre River presented much thinner granulometry than the normal sand of the Tietê River. The powder material content in the samples of the Acre River is extremely high, which can be observed by a large amount of silt and clay present in the samples.

Having performed individual granulometric analyses for a sand sample taken from the Acre River, and one from the Madeira River, and aiming at the adequacy of these particle sizes, we tried to perform several percentages of dosages combining the two materials, to obtain the one that best suited the standard (Figure 6).

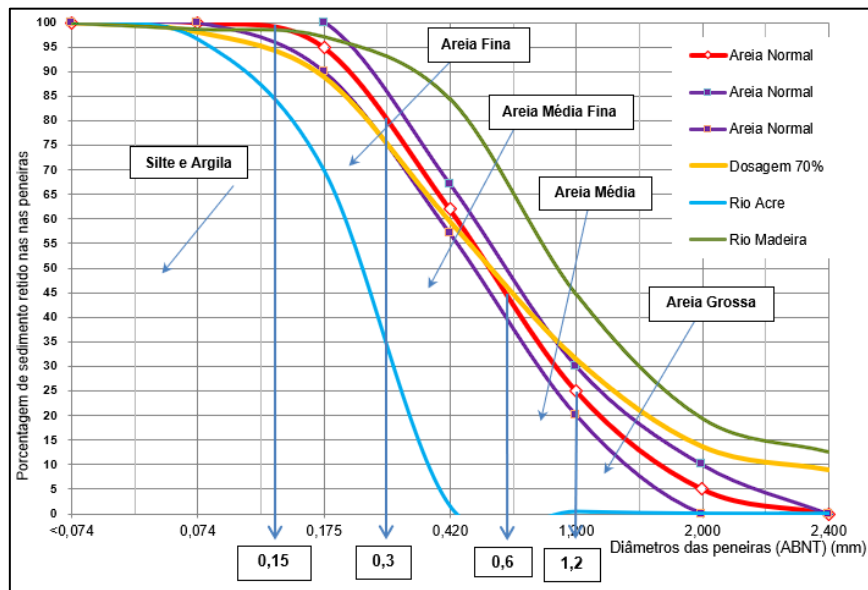
Figure 6: Granulometric curves of the normal sand of the Tietê River and percentages of dosages.



Source: By the authors (2022).

It was observed that the one that came closest was the dosage with 30% of sand from the Acre River and 70% with sand from the Madeira River, obtaining the behavior observed in Figure 7, which can be compared with the granulometric curves of the materials under study individually.

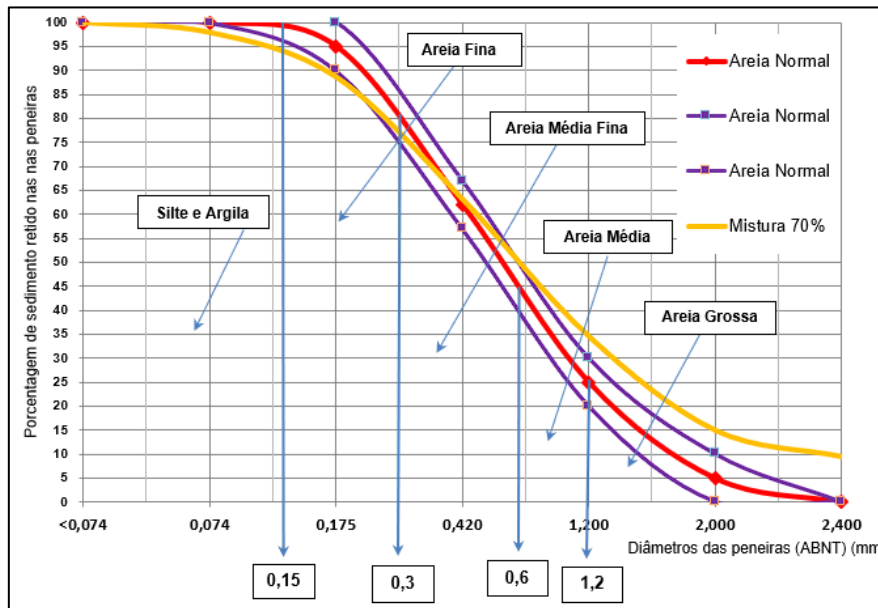
Figure 7: Comparison between the granulometric curves of the normal sand of the Tietê River, acre river sand, Madeira river sand, and 70% dosage.



Source: By the authors (2022).

Thus, in the laboratory, the effective mixture of the materials was performed at the proposed dosage of 30% sand from the Acre River and 70% sand from the Madeira River, and after the sieving and granulometric assay was performed, the curve was obtained as observed in Figure 8.

Figure 8: Comparison between the granulometric curves of the normal sand of the Tietê River and the mixture in a laboratory of 70%.



Source: By the authors (2022).

A slight difference is observed between the granulometric curves of the dosage and the mixture, but both present the same behavior. This difference is expected since the dosage was elaborated after calculations and the mixture was obtained after laboratory tests were performed with the proposed materials.

The sands of the Acre River have much finer particles than the normal sand of the Tietê River, which are adopted for technological tests. Thus, the civil construction procedures, when using the sands of the Acre River should be adapted, and it is not possible to use procedures defined by national technical standards.

From the various dosages of mixtures made, with different materials, the one that most appropriated the norm was the mixture of 30% of sand of the Acre River, with 70% of sand of the Madeira River, being the fine sand, fine and medium, practically within the limits of the normal sand of the Tietê River, and only in the strip of coarse sand is outside the granulometric limits of the norm.

In the case of the Acre River, as dredging sand extraction is not carried out intensively and uninterruptedly, carried out only for six months of the year and the natural deposition process occurs throughout the year, a balance is observed between the accumulation and extraction of sand since the dredges are installed in activity in the same places over many years. Therefore, if the management of sand mining activities



meets the appropriate practices and procedures, it is perfectly possible to coexist this essential economic activity, with the preservation of the environment, a relationship currently disseminated as Sustainable Development.



REFERENCES

- 1) ACCORSI, O. J. Mineração de areia no Rio Acre e os problemas ambientais associados: Trecho da área urbana de Rio Branco – Ac. Dissertação (Mestrado em Geociências e Meio Ambiente). Instituto de Geociências e Ciências Exatas, Universidade Estadual Paulista. 2001.137p.
- 2) ACCORSI, O. J. Exploração de areia para uso na construção civil: Caracterização da atividade de dragagem e sustentabilidade na bacia hidrográfica do rio Acre. Tese (Doutorado em Engenharia Civil). Escola de Engenharia. Universidade Federal Fluminense, 2014.
- 3) ASSOCIAÇÃO BRASILEIRA DE NORMAS TÉCNICAS. NBR 6457. Amostras de solo-preparação para ensaios de compactação e ensaios de caracterização. Rio de Janeiro, 1986. 9 p.
- 4) ASSOCIAÇÃO BRASILEIRA DE NORMAS TÉCNICAS. NBR 7181. Solo-análise granulométrica. Rio de Janeiro, 1984. 13 p.
- 5) ASSOCIAÇÃO BRASILEIRA DE NORMAS TÉCNICAS. NBR 7214. Areia normal para ensaios de cimento. Rio de Janeiro, 1982. 7 p.
- 6) ASSOCIAÇÃO BRASILEIRA DE NORMAS TÉCNICAS. NBR 7211. Agregado para concreto. Rio de Janeiro, 2009. 9 p.
- 7) BESER DE DEUS, L. A.. Espaço e tempo como subsídios à construção de cenários de uso e cobertura da terra para o planejamento ambiental na Amazônia: O caso da bacia do rio Acre. Tese (Doutorado em Planejamento Energético). Instituto Alberto Luiz Coimbra de Pós-Graduação e Pesquisa de Engenharia. Universidade Federal do Rio de Janeiro. 2013.
- 8) BONFANTI, D. C.; LIMA, F. T. B.; FERREIRA, L. C. A.; SANTOS, W. L. A dinâmica fluvial do rio acre: Uma análise ambiental do trecho urbano da cidade de Rio Branco-AC. Revista Geonorte, v. 11, n. 37, p. 154-174, 2020.

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Comparison between granulometric analysis of the sand from the Acre river and normal sand from the Tietê river



- 9) FOLQUE, J. B. *Investigação em Mecânica dos solos*, 1988.
- 10) CHIOSSI, N.J. *Geologia aplicada à engenharia*. São Paulo: Grêmio Politécnico, 1979. 427 p.
- 11) GUERRA, Antônio Teixeira; GUERRA, Antônio José Teixeira. *Novo dicionário geológico-geomorfológico*. 5. ed. Rio de Janeiro: Bertrand Brasil, 2006, 648 p.
- 12) IAEG. *Classification of rocks and soils for engineering geology mapping*. Part 1: rock and soil materials. Commission "Engineering Geological Mapping". *Bulletin of the International Association of Engineering Geology*, v.19, p. 364-371.1979.
- 13) NETO, L. A. D.; SILVA, MANIESI, W.; SILVA, M. J. G.; SILVA, D. C.; QUERINO, C. A. S.; REIS, V. *Análise da precipitação mensal e pentadal durante a cheia de 2015 no rio Acre usando o produto 3B43 do TRMM*. VII Simpósio Internacional de Climatologia. *Clima, Variabilidade e Perspectivas Futuras*. Anais. Petrópolis. 2017.
- 14) SENÇO, W. de. *Pavimentação*. Grêmio Politécnico, 1980. 452 p.
- 15) SILVA, P. J. *Rio Acre, o rio das ferraduras, um rio que serpenteia no limite entre duas nações*. XV Safety, Health and Environment World Congress. Anais. Porto, Portugal. 2015.



Evaluation of the association between drug use and sleep quality in shift workers vs daytime workers

  10.56238/thebestiimulti2022-002

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1 INTRODUCTION

Sleep is a physiological process and a fundamental biological function for human survival¹. Disturbances in its quality can trigger significant changes in the quality of life of the individual². The quality of sleep can be influenced by several factors, such as: previous medical conditions, the consumption of medications and/or stimulant substances, working hours, among others³. The use of medication to alleviate sleep disorders caused by working hours is common; however, if abused and unsupervised, it can trigger new pathological conditions⁴. On the other hand, when prescribing medications for several pathologies, it is common to neglect their adverse effects on sleep⁴.

2 OBJECTIVE

Determinar a associação entre o consumo de medicamentos e a qualidade do sono em trabalhadores por turnos vs trabalhadores diurnos.

3 METHODOLOGY

A cross-sectional study of quantitative nature was conducted. The target population was shift and daytime workers, including individuals aged ≥ 18 years and with professional activity ≥ 6 months. The sample was by convenience. Three questionnaires were applied: Epworth Sleepiness Scale, Pittsburgh Sleep Quality Index, and a sociodemographic and medication consumption questionnaire. They were made available online, through a link that was disseminated by the "snowball" method, after agreement with a document informing of participation in the study. Statistical treatment was performed with SPSS software in addition to Microsoft Excel. This study was approved by the Ethics Committee of the Escola Superior de Tecnologia da Saúde de



Lisboa (number 41-2021).

4 DEVELOPMENT

The sample consisted of 296 participants, of which 124 (41.89%) had daytime working hours and 172 (58.11%) had shift work. Of the participants, 130 (43.92%) belonged to the health care sector, 116 (39.19%) to industry, and 50 (16.89%) to other sectors. After a bivariate analysis, poor sleep quality was associated with the presence of sleep disorders ($p < 0.001$), the type of work shift ($p < 0.001$), and the use of sleep medication ($p < 0.001$), among other variables. Although shift workers had worse sleep quality they did not have a higher consumption of medication with direct action on the central nervous system or with proven effects on sleep. There was no association between medication consumption and sleep quality. When adjusting the different variables that individually were associated with poor sleep quality, through a logistic regression model, none showed an increased risk of poor sleep quality.

5 CONCLUDING REMARKS

Sleep quality is such a complex issue that its analysis should be multifactorial and not restricted to a simple association between a single variable and sleep quality. Although there are several factors that influence it negatively, when adjusted, they did not reveal statistical significance of an increased risk of this.



REFERENCES

1. Mukherjee S, Patel SR, Kales SN, Ayas NT, Strohl KP, Gozal D, et al. An Official American Thoracic Society Statement: The Importance of Healthy Sleep. Recommendations and Future Priorities. *Am J Respir Crit Care Med.* 15 de Junho de 2015;191(12):1450–8.
2. Müller MR, Guimarães SS. Impacto dos transtornos do sono sobre o funcionamento diário e a qualidade de vida. *Estud Psicol Camp.* Dezembro de 2007;24(4):519–28.
3. Rocha MCP da, Martino MMFD. Stress and sleep quality of nurses working different hospital shifts. *Rev Esc Enferm USP.* Junho de 2010;44(2):280.

Chang W-P, Peng Y-X. Meta-analysis of differences in sleep quality based on actigraphs between day and night shift workers and the moderating effect of age. *J Occup Health.* 2021;63(1):e12262.



Women's health in prison situations in Brazil

  10.56238/thebestimulti2022-003

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Keywords: Women's health, SUS, Presidio.

1 INTRODUCTION

Health System (SUS) obtains from some policies that aim to ensure the best health condition for the population. In this perspective, when analyzing women in penitentiary situations, they tend to suffer from more injuries and in a certain way a vulnerability in their health due to the proportions to which they are submitted.

2 OBJECTIVE

To identify the health problems presented among women in prison situations in Brazil and how health team care involving physicians and nurses is performed.

3 METHODOLOGICAL

This is demonstrative/explanatory research with an integrative review of data made available in the integration free of charge and online in google academic, data from the national penitentiary department (DEPEN). Scientific Library Online (SciELO). Analyzed more than 8 articles focusing on the main information on women's health and their conditions in prisons.

RESULTS

After analyzing the research we understand that with the increase in the rates of women in jails, overcrowding generates a concern that should be assisted although most cases women's health is treated with little attention by public agencies and many of the time care occurs in inadequate ways, most women who contract some disease in the



presidio do not have a treatment appropriate, moreover it is notorious that for some government systems it is more in the best interest to identify data related to the number of seizures of "Delinquent citizens" for a newscast and simply ignore the health factors of these women, since the SUS, defines health for all as a duty of the state.

4 CONCLUSION

The lack of information on the subject was what led to the construction of this abstract to alert and bring knowledge on the subject and care that can be offered to the inmates despite the situation in which they are, to identify the most prevalent diseases in female prisons and possible interventions that can be performed. And also know the actions that can be implemented according to public policies focusing on a possible improvement in the quality of life of women in a penitentiary situation in Brazil.



Influence of physiotherapy in the treatment of children with autism spectrum disorder

  10.56238/thebestiimulti2022-004

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ABSTRACT

Introduction: The etiology of the disorder is not yet well defined, what is known is that several factors can predispose the child to have autism, which may be genetic and environmental factors, according to scientific evidence. The TEA has three measurement degrees, classified as mild, moderate and severe. It is important that the autistic child and his family have the support of a multidisciplinary team that instructs them to overcome the diagnosis and the current situation in which they find themselves. Based on the characteristics presented by the autistic individual, there is a need to develop activities that encourage movement patterns, posture, communication, socialization and psychic, for this reason the physical therapy intervention must occur early, promoting improvements in psychomotor development and daily needs. **Objective:** Highlight the benefits of physical therapy as a treatment for children with autism spectrum disorder, present with autism spectrum disorder and talk about the family attitude in view of the autism diagnosis. **Methods:** This study qualifies for its basic nature, being a bibliographical research with a qualitative approach, through scientific journals of the last 10 years. **Conclusion:** When talking about physiotherapy in ASD, it is possible to understand that as the autistic person undergoes these treatments, their difficulties become smaller. Physiotherapy allows the child to have physical, motor and emotional well-being.

Keywords: multidisciplinary team, development, rehabilitation, autism.

1 INTRODUCTION

Autism spectrum disorder (ASD) affects neurodevelopment, however, there is still no proven cause, its origin is unknown. Autism is a behavioral syndrome, with direct action on psychomotor development, characterized by social isolation, communication deficit and behavior patterns (SAFE; BIRTH; KLEIN, 2011).

Autism has levels that are determined according to the severity of the commitment that the individual presents to perform their activities of daily living (ADL's), the levels can be classified as mild, moderate and severe (MORAL *et al.*, 2017).

Physical therapy treatment should occur early, benefiting from improvements in motor development and daily need. The treatment of autism has a multidisciplinary team composed of professionals from various areas, such as: physiotherapists, occupational



therapist, speech therapists, psychoecologists, physicians and others (SEGURA; BIRTH; KLEIN, 2011).

Hippotherapy for a child with autism has several benefits, such as muscle strength development, stimulation of motor coordination, postural correction and balance gain, promoting the physical and emotional well-being of the child (RIBEIRO *et al.*, 2019).

According to Dutra (2018), ludotherapy is a therapeutic practice that works artistically, more naturalistically, where it will apply in a playful way with the child to be able to develop communication, interest, motor coordination, capacidintellectual and cognitive ades. Ludotherapy is a set of playful and therapeutic activities, what matters is not only the product of the activity, but the action itself and the movement experienced, allowing the child to live in an allegorical and real world expressing their feelings and anxieties (RIBEIRO, 2013).

Hydrotherapy through the physical principles of water contributes to motor stimulation, social behavior, sensory development, confidence, self-control and muscle strengthening (BORGES *et al.*, 2016). According to Santos (2014), hydrotherapy ensures improvement in mood, motivation, calms psychic tensions and meets the autistic movements needs.

However, this research aims to understand how physiotherapy will influence the treatment of children with autism spectrum disorder (ASD).

This study conducted through a literature review is relevant because it shows that physical therapy contributes significantly to the advancement of the functions of activities of daily living, and aims to highlight the benefits of physiotherapy as a treatment in children with autism spectrum disorder.

2 METHODOLOGY

The present study was conducted through a literature review. The bibliographic research is part of the bibliography already made public in relation to the theme of study, its purpose is to put the researcher in direct contact with everything that was written, said or filmed on a given subject (LAKATOS; MARCONI, 2017).

The documents were analyzed in the Scientific Hectronic Library Online (SciELO) database. This study is classified as qualitative. The research was conducted through scientific journals of the Portuguese language of the last 10 years, related to the areas that presented interventions and results in the application of physiotherapy in children with autism. All documents were evaluated and reviewed by both researchers.



The following descriptors, autism, multidisciplinary team, neurodevelopment and rehabilitation were used. The inclusion criteria used were articles of free access and that dealt clearly on the subject, 30 articles were mentioned in the text, and in total 48 were found, while the exclusion criteria used were researches that contain little content, with many third-party citations and studies that were based on the general objective of this study, 18 articles were discarded.

3 THEORETICAL REFERENCE

Autism spectrum disorder (ASD) qualifies as an invasive neurodevelopmental disorder (MARTINS; GÓES, 2013). It was first told in 1911 by psychiatrist Eugen Bleuler. However, he stood out years later, with a study published by physician Leo Kanner in 1943 (CUNHA, 2015).

There is still no proven cause, its origin is unknown. ASD is a behavioral syndrome, with direct action on psychomotor development, characterized by social isolation, communication deficit and behavior patterns (SEGURA; BIRTH; KLEIN, 2011).

According to the World Health Organization (2017), a study conducted about 50 years ago shows that cases of autism have been advancing around the world. What is known about its etiology is that several factors can make the child available to have, which may be genetic or environmental, according to scientific evidence.

However, according to Toledo (2010) neurosciences have associated this condition with a specific neuron, being, mirror neurons, they are connected with the context of imitation, social interaction and language.

Although several genes associated with ASD have been detected on several chromosomes, there is still no study that firmly indicates a gene that is involved with the autism condition (FARIAS, 2018).

However, scholars believe that autism may be a genetic condition related to the x chromosome, which makes male children more prone to this condition, since they have only one x chromosome, unlike the female chromosome that has two x chromosomes (ROCHA *et al.*, 2019).

Environmental factors may be related to the etiology of autism, exceptionally in relation to maternal health care in prenatal care, such as some types of infections, drug use, alcoholism, tobacco, use of abortion drugs, pollution of the environment, the age group of parents, among others (PORTO; BRUNONI, 2015). However, according to



Farias (2018), even with the great commitment and attention dedicated by neuroscientists, a definitive cause on autism has not yet been reached.

ASD is a complex syndrome that affects three considerable areas of human development: behavior, communication and socialization (FERNANDES, 2014).

It is possible to identify the disorder before three years of age, through the characteristics presented, such as delay in language development whether verbal or not, repetitive behaviors, difficulty in social interaction, stereotyping, limitations of activities and communication deficit (MARTINS; GÓES, 2013).

The autistic person does not easily share his emotions, tastes, does not maintain eye contact spontaneously, presents low muscle tone, his interests are restricted, rarely share attention with events or objects and has difficulty in relating to other people (SEGURA; BIRTH; KLEIN, 2011).

According to Moral *et al.*, (2017), children with autism spectrum disorder do not have a physical aspect different from the other, however, it is possible to notice the changes through their behavior.

According to Lopes *et al.*, (2019) autism is not easily diagnosed, usually family members seek help from various professionals, such as physiotherapists, speech therapists, neuropediatricians, psychiatrists and psychologists.

According to Locatelli and Santos (2016), according to the degree of impairment, it is possible to make an early diagnosis, around one and a half years of age. However, the earlier the signs manifest, the easier the recognition and the more serious the picture of this child will be (FERREIRA, 2016).

The degree of autism is measured according to the severity of the impairment, and may be mild, moderate and severe, according to the difficulty that the individual presents to perform his activities of daily living (MORAL *et al.*, 2017).

According to Braga (2019), in the mild degree the diagnosis is later, being between 7 - 8 years, may manifest difficulties to socialize, as well as low interest in communicating with other people, repetitive and restricted behaviors, usually presents blockage in the midst of routine changes.

And according to the DScientific Department of Pediatrics of Development and Co-mporization (2019), the moderate degree has been the most common, and its diagnosis occurs between 18 - 34 months, presents signs of intermediate intensity, requires help to perform daily activities, may have difficulty in communicating by speech or not communicating air verbally, social interactions, discomfort in the face of changes,



lack of eye contact and intermediate food selectivity are observed.

However, no severe regression is recognized between 12 - 24 months, presents the signs intensely, requires help to perform most daily activities, repetitive habits, restricted, have severe communication problems, presents high food selectivity, are extremely limited to interact with other people, have low muscle tone and have difficulty in dealing with changes (SCIENTIFIC DEPARTMENT OF PEDIATRICS OF DEVELOPMENT AND BEHAVIOR, 2019).

According to Pinto (2016), when ASD emerges, several changes are caused in the life of the family and the child, since these changes cause a shock in the family environment, they are related as difficult to deal with. The consequences involve changes in family bonding, marital conflicts, burden of care, relationship with friends and social distancing (MAPELLI, 2018).

It is noted that the autistic child and his/her family need the support of a multidisciplinary team that instructs them to overcome the diagnosis and the current situation in which they are (LOPES *et al.*, 2019). According to Brandalise (2013), the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) has been the most used method currently to diagnose the disorder.

According to Netto (2015) upon receiving the diagnosis of autism, family members suffer from the loss of a healthy child who were waiting, from this, arise the five phases of mourning, which were described by psychiatrist Elisabeth Kubler-Ross, the first phase is denial, the person remains on the psychic defensive, denying the certain situation in which she finds himself and somehow she wants to try to escape the reality of your loss. After that, he comes to the phase of anger, where the person begins to restrain himself with everything around him, questioning the reason for being going through it, feeling diminished without being able to conform to the situation.

The third phase is the third phase, here the individual begins negotiation, the individual even makes promises to God that he will be a better person, to emerge from that situation. In the penultimate phase, depression enters, the individual disconnects from the world, feeling incapable through the problem. Fifth and last phase is acceptance, at this stage has passed the shock of loss the person is no longer so upset and in this way can see beyond the difficulty, being ready to weaken the situation (NETTO, 2015).

"[...] the good family relationship shows that the members have properly overcome the difficulties of their children, even if they are many and have no cure, they understood that they can be overcome" (MARQUES; DIXIE, 2011).



Because it is a neurological condition, there is no cure for autism spectrum disorder, but with an early diagnosis and appropriate treatments, the child with autism will develop fundamental skills for his routine (MORAL *et al.*, 2017).

Physical therapy intervention should also occur early, with improvements in psychomotor development and daily need as a benefit. The treatment of autism has a multidisciplinary team composed of professionals from various areas, such as: physiotherapists, occupational therapist, speech therapists, psychologists, physicians and others (SEGURA; BIRTH; KLEIN, 2011).

Physiotherapy performs activities with playful and pedagogical toys, working on concentration skills, increased reasoning and great retention of work of details, generating inhibition of abnormal movements, and improvement of self-control (FERREIRA *et al.*, 2016).

Physiotherapy works to develop or improve basic functions such as rolling, sitting, walking, running and jumping, exercises are performed for strengthening, motor planning, postural adequacy, balance, coordination, activities added to psychomotricity. The behavioral part is fundamental in the care of children with autism, since many of them cannot develop common activities (MOURA, 2018).

Based on the characteristics presented by the autistic individual, it is observed the need to develop activities that stimulate the communication, socialization and psychic of the same (PEREIRA; ALMEIDA, 2017).

Hypotherapy or hippotherapy advances new forms of communication and through the connection with horses decreases anxiety. For autistic children, this treatment alternative has several benefits, such as muscle strength development, stimulation of motor coordination, postural correction and balance gain through the link between "person-animal" (RIBEIRO *et al.*, 2019).

According to Barbosa (2013), in the riding period the brain of the person who practices is constantly functioning, so that motor, respiratory, postural adjustments, among others, occur. When performing gait, experiences capable of stimulating the plastic potential of the central nervous system (CNS) are generated through sensory and motor stimuli, enabling the child the same perceptual, cognitive and motor mechanism that an individual with normal development presents, establishing the formation of new movement patterns in the correct way.

According to Seixas (2011), hypotherapy develops the ability to perceive sense-tactile, increases circulatory and respiratory capacity, develops the ability to move joints,



increases the reflex and promotes psychomotor coordination.

Ludotherapy is another therapeutic method widely used by physiotherapy, the playful comes from the origin of the Latin word ludos que means game. It is a set of playful and therapeutic activities, what matters is not only the product of the activity, but the action itself and the movement experienced, allowing the child to live in an allegorical and real world expressing their feelings and anxieties (RIBEIRO, 2013).

Because it is a therapeutic modality, playful activity with children is used, applying the act of playing as a tool for favoring and simplifying verbal and nonverbal expression. These games should be planned by assisting therapeutic techniques related to larger objectives indicated by the physiotherapist, in which intellectual and cognitive skills are developed, which allow assimilation and behavioral development. The environment is all planned for expressive facilitation, with the strategic placement of objectives, such as toys and games exposed to the free, to facilitate the handling by autistic children (SILVA, 2017).

According to Ribeiro (2013), ludotherapy is the psychotherapy adapted from a child's approach, which are based on helping the child through play, and to express their conflicts and difficulties more easily, helping to carry out their integration and social adaptation, in order to promote or reestablish the psychological well-being of the child through playful activity.

Hydrokinesiotherapy through its physical principles of water contributes to motor stimulation, social behavior, sensory development, confidence, self-control and muscle strengthening. Hydrotherapy will also influence stereotyped behavior and body control (BORGES; MARTINS; TAVARES, 2016).

Aquatic physiotherapy has proved to be a growing area with great possibilities, is effective in the achievement of skills, in the improvement of social behavior and motor development (BORGES *et al.*, 2016).

According to Santos (2014), hydrotherapy ensures improvement in mood, motivation, calms psychic tensions and meets the autistic movements needs. Through the movements performed during aquatic physiotherapy, it is possible to favor the advancement of the individual, exceptionally the autistic, because it stimulates the learning of laterality, muscle strengthening, develops balance, motor coordination, assists in the gain of range of motion (ROM), increased cardiovascular capacity, promotes knowledge of the space around him and his own body (PEREIRA; ALMEIDA, 2017).

According to Pereira and Almeida (2017), from the moment the ASD carrier



adapts to the liquid medium, he is urged to demonstrate the changes resulting from therapy, being social interaction, balance, confidence, cooperativeness, coordination, postural correction and others.

Physiotherapy is part of a multidisciplinary team, to offer better care to children diagnosed with autism, because their intervention is fundamental in the treatment of these children, regardless of the level of seriousness presented. Since fisiotherapy is capable of promoting human development (DUTRA, 2018).

4 FINAL CONSIDERATIONS

In the course of this study it was possible to understand that the physiotherapeutic intervention is an experiential process of extreme relevance, where the autistic being is seen as a whole, being worked by touch, listening, speaking or even through a simple look. To be autistic is to be a person like any other, just, with different limitations.

Physiotherapy has several effective therapeutic modalities in the treatment of children with autism spectrum disorder. When talking about physiotherapy in ASD, it is possible to understand that to the extent that the autistic person is submitted to these treatments, their difficulties become minor.

The physical therapy interventions presented considerable influences, since each treatment alternative was able to reduce the condition of the disorder, allowing the child to have physical, motor and emotional well-being, among others.

Therefore, the research was successful in the objective, because it highlighted the benefits of physiotherapy as a form of treatment for children with ASD, proving to be beneficial in the difficulties presented by an autistic person.

The diagnosis of autism triggers feelings of the most diverse in the family environment, feelings that are common in the period of discovery of the disorder, because characteristics and situations difficult to deal with begin to emerge. However, physical therapy approaches in the treatment of ASD in children clearly express their efficacies, especially in early interventions, whether through hypotherapy, ludotherapy or hydrokinesiotherapy.

This study sought to perform a previous approach on the importance of the physiotherapeutic intervention in the three-way treatment of children with autism spectrum disorder. It is suggested that further studies may be interested in this theme, regarding physiotherapy and its challenges as a tool to treat this neurological condition, ASD.



REFERENCES

- Barbosa G. Efeito de um programa de equoterapia nos aspectos psicomotores de crianças com indicativos do TDAH. Dissertação (Mestrado em Educação Especial), p. 1-193, 2013.
- Borges AP, Martins VNS, Tavares VB. A hidroterapia nas alterações físicas e cognitivas de crianças autistas: uma revisão sistemática. Revista Caderno Pedagógico, Pará, v.13,n.3p.30-36,2016.
- Braga PG, Santos SQM, Buytendorp AABM, Cartilha transtorno do espectro autista - recurso eletrônico. Campo Grande, MS: Secretaria de Estado de Educação do Mato Grosso do Sul – SED/MS, p.1-32, 2019.
- Brandalise, A. Musicoterapia aplicada à pessoa com transtorno do espectro do autismo (TEA): Uma revisão sistemática. Rev Bras Musicoterapia, v.15, n.15, p.28-42, 2013.
- Cunha E. Autismo e inclusão: psicopedagogia práticas educativas na escola e na família. 6 ed. Rio de Janeiro: Wak Ed. 2015. p.140.
- Departamento Científico de Pediatria do Desenvolvimento e Comportamento (ORG.). Transtorno do Espectro do Autismo. 2019. Disponível em: [_Transtorno_do_Espectro_do_Autismo_2_.pdf](#). Acesso em: 05 maio 2021.
- Dutra SDS. Tratamentos terapêuticos em crianças com o Transtorno do Espectro Autista (TEA): Revisão literária. Universidade Federal de Uberlândia, Uberlândia, p.1-40, 2018.
- Farias MAS. Síndromes genéticas associados ao Transtorno do Espectro Autista. p. 1-20. 2018.
- Fernandes RM. Narrativas docentes sobre o método TEACCH: O autismo na gestão do conhecimento. Dissertação de Mestrado Universidade Federal da Paraíba, 2014.
- Ferreira JTC, Mira NF, Carbonero FC, Campos, D. Efeitos da fisioterapia em crianças autistas: estudo de séries de casos. Cadernos de Pós-Graduação em Distúrbios do Desenvolvimento, São Paulo, v.16, n. 2, p. 24-32, 2016.
- Lakatos EM, Marconi MA. Metodologia do trabalho científico: projetos de pesquisa, pesquisa bibliográfica, teses de doutorado, dissertações de mestrado, trabalhos de conclusão de curso. 8. ed. – São Paulo: Atlas, 2017.
- Locatelli PB, Santos M FR. Autismo: propostas de intervenção. Revista Transformar, v.8,n.8,p. 203-220,2016.
- Lopes HB, Menezes IC, Klinger EF, Suzuki JS. Transtorno do Espectro Autista: ressonâncias emocionais e resignificação da relação mãe-filho. Revista Cereus, v. 11, n. 2, p. 48-61, 2019.
- Mapelli LD, Barbieri MC, Castro GVDZB, Bonelli MA, Wernet M, Dupas G. Criança com transtorno do espectro autista: cuidado na perspectiva familiar. Esc Anna Nery, v. 22,



n.4, p.1-9. 2018.

Marques, MH, Dixe MDAR. Crianças e jovens autistas: impacto na dinâmica familiar e pessoal de seus pais. *Archives of Clinical Psychiatry São Paulo*, v.38, n. 2, p. 66-70, 2011.

Martins ADF, Góes MRD. Um estudo sobre o brincar de crianças autistas na perspectiva histórico-cultural. *Psicologia Escolar e Educacional*, v.17, n.1, p. 25-34, 2013.

Moral A, Shimabukuro EH, Zink AG, Molina EC. Entendendo o autismo. 3º Edital Santander/USP/FUSP de Direitos Fundamentais e Políticas Públicas, p. 1- 32, 2017.

Moura ADD. A atuação da fisioterapia em crianças com autismo. *Revista nova fisio*. 2018.

Netto JVG. As fases do luto de acordo com Elisabeth Kubler-Ross. IX EPCC – Encontro Internacional de Produção Científica UniCesumar, Paraná, n.9, p. 4-8, 2015.

Organização Mundial da Saúde (ORG.). Folha informativa - Transtorno do espectro autista. 2017. Disponível em: <https://www.paho.org/bra/index.php?Itemid=1098>. Acesso em: 28 abril 2021. 1 Organização Mundial da Saúde. (2017). Folha informativa: transtorno do espectro autista.

Pereira DAA, Almeida AL. Processos de Adaptação de Crianças com Transtorno do Espectro Autista à Natação: um Estudo Comparativo, *Revista Educação Especial em Debate*, v. 2, n. 04, p. 79-91, Jul./Dez.2017.

Pinto RNM, Torquato IMB, Collet N, Reichert APS; Neto VLS e Saraiva AM. Autismo infantil: impacto do diagnóstico e repercussões nas relações familiares. *Revista Gaúcha de Enfermagem*, v. 37 n.3, p.1-9, 2016.

Porto RF, Brunoni D. Transtornos do Espectro do Autismo: intercorrências perinatais. In: Famá ME, Dantino, DB.; Schwartzman S. (Orgs.). *Contribuições para a inclusão escolar de alunos com necessidades especiais: estudos interdisciplinares em educação e saúde em alunos com Transtornos do Espectro do Autismo no município de Barueri*. São Paulo: Memnon Edições Científicas, p.32-41. 2015.

Ribeiro CMS. O mutismo seletivo e a ludoterapia/atividade lúdica. ESEJD - Educação especial – domínio cognitivo – motor (dissertação), PhD Thesis.p. 1-99, 2013.

Ribeiro FO, Pimentel GC, Moraes NOP, Blois LVS. Os efeitos da equoterapia em crianças com autismo. *Fisioterapia Brasil*, v.20, p.5, p. 684-691, 2019.

Rocha CC, Sousa SMV, Costa AF, Portes JRM. O perfil da população infantil com suspeita de diagnóstico de transtorno do espectro autista atendida por um Centro Especializado em Reabilitação de uma cidade do Sul do Brasil. *Physis: Revista de Saúde Coletiva*, Rio de Janeiro, v.29, n.4, p.1-20, 2019.

Santos CCB; Relevância da Natação para Autistas na Melhoria da Qualidade de Vida, FIEP BULLETIN, Volume 84, Special Edition, ARTICLE I, 2014.



Segura DDC A, Nascimento FC, Klein D. Estudo do conhecimento clínico dos profissionais da fisioterapia no tratamento de crianças autistas. Arquivos de Ciências da Saúde da UNIPAR, v.15, n.2, p.159-165,2011.

Seixas LN. O efeito da hipoterapia e da atrelagem adaptada na auto-eficácia e nas funções psicomotoras de crianças com necessidades educativas especiais. Tese de Doutorado. Faculdade de Ciências Sociais e Humanas, Universidade Nova de Lisboa. 2011.

Silva UKF, Barroso CA. Contribuição da ludoterapia no autismo infantil. Saber Humano, ISSN 2446-6298, V. 7, n. 11, p. 210-224, jan./jun. 2017.

Toledo GL. Neurônios-espelho e o representacionalismo. Rev. Filos., Aurora Curitiba, v. 22, n. 30, p 179-194, 2010.



Menstrual dignity project: Guaranteeing access to menstrual health to the community of the São Carlos do Jamari district, Rondônia

  10.56238/thebestiimulti2022-005

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1 INTRODUCTION

Menstruation is a physiological and cyclical process that occurs during the woman's reproductive period and results in endometrial shedding and bleeding. It is a natural process of the female organism and can represent a social and public health problem when a portion of women do not have access to hygiene products necessary to control menstrual flow, such as a simple intimate absorbent. Menstrual poverty reflects, among other reasons, the lack of financial resources that make it difficult to acquire these products as well as the lack of information about the menstrual cycle. The negligence of the State, in providing resources or the free distribution of these items, encourages voluntary social projects, such as the one carried out by students from the Pharmacy course at the São Lucas University Center. On the occasion, intimate pads were distributed to women from the riverine community located in the São Carlos do Jamari district.

2 OBJECTIVE

Collect and distribute intimate absorbents to the women of the riverine community located in the district of São Carlos do Jamari, Rondônia, through the "Health and Citizenship Boat" expedition, ensuring, in a safe and hygienic way, the basic need of girls and women of that region.

3 METHODOLOGY

This work was divided into two stages. The first stage was the dissemination of the campaign to collect absorbents through social networks Instagram® and WhatsApp®,

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Menstrual dignity project: Guaranteeing access to menstrual health to the community of the São Carlos do Jamari district, Rondônia



in stories mode, in the profile of the students themselves. The dissemination period was from October 19 to November 1, 2022. Absorbent collection points were created in boxes scattered around Campuses I and II of the São Lucas University Center (UNISL), located in the city of Porto Velho/RO. In the second stage of the work, the pads collected during the campaign were taken to the UNISL Health and Citizenship Boat, which went to the district of São

Carlos do Jamari, where free medical care was provided in several areas by academics, under the supervision of their professors. As a criterion for the distribution of pads, a pharmaceutical anamnesis was performed, taking as a criterion women from 10 to 55 years old who have their menstrual cycles active.

4 DEVELOPMENT

For the excursion, in the district of São Carlos do Jamari, about 7 cardboard boxes were distributed by the Campuses I and II of UNISL, being 3 boxes on campus I and 4 boxes on campus II. This action relied, solely, on the donation of the academic community of this educational institution. The boxes from unit I were placed in 3 different points of the campus from October 20th until November 1st, and the boxes from unit II were placed in 4 different places of the campus from October 28th until November 1st. After the period, a total of 1776 units of pads were collected, including 175 packages with 8 units, 20 packages with 16 units, 1 package with 32 units and 24 loose units. The excursion took place from November 3rd to 6th, and 111 kits with about 16 units each were delivered during the period of the excursion, to a total of 98 women from the community, aged between 10 and 54 years.

5 CONCLUDING REMARKS

This project, carried out by the pharmacy course students from UNISL, was satisfactory, generating 111 packages of 16 units of pads, which were distributed in the district of São Carlos do Jamari. Through this action it was possible to guarantee the right to menstrual dignity for the women of the region attended, as well as to provide professional growth for the students who participated in the expedition.



REFERENCES

MOTTA, Maria Carolina Carvalho et al. Pobreza Menstrual e a Tributação Dos Absorventes. **Confluências|Revista Interdisciplinar de Sociologia e Direito**, v. 24, n. 1, p. 33-54, 2022.

UNICEF et al. **Pobreza Menstrual no Brasil: Desigualdades e Violações de Direitos**. 2021.



Rehabilitation, education and work: the criminological examination as an instrument for resocialization and integration of the subject into society

  10.56238/thebestiimulti2022-006

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ABSTRACT

The respective object will have the proposal to develop a study about the importance of the Criminological Examination regarding the rehabilitation and integration of the individual in society, as an instrument that makes it possible to offer the convict the opportunity to receive treatment, education and work, to undergo a process of social recovery. The Exam is located in the Execution Law and in the Penal Code, in the legal device nº 7.210/84 and the enactment of Law nº 10.792/03, which revoked the obligation of the referred exam and became optional. The objective of the work is to reflect the value of such a procedure that arises to promote/guarantee the dignity, humanization and individual/collective rights of the prisoner. The methodological procedure will be based on the bibliographic review, through specialized literature of scientific articles, books and doctrines, in the search to support the study and offer content based on the most renowned authors, such as: Bitencourt (2004); Capez (2007); Fernandes (2002); Fernandes (2010); Marcao (2009); Mirabete (2002); Mirabet (2004). With the application of the Exam it would be possible to draw a study about the personality of the individual and to analyze the circumstances that led to the commission of the crime, as well as to grant prison benefits, conditional release and regime progression. It was concluded that, the advent of the new Penal Execution Law, discarded the obligation of the prisoner the due condition to be evaluated, which would serve as the basis for the decisions of judges and courts when applying the granting of prison privileges.

Keywords: Exam, Criminological, Resocialization, Integration

1 INTRODUCTION

The Criminological Examination is located in the Execution Law and in the Penal Code, more specifically, in legislative order nº 7.210/84 and the advent of Law nº 10.792/03, which revoked the obligation of the exam and became optional, in which it includes a set of social, political and legal aspects, becoming a controversial subject because there are some questions about whether the new device can be considered as progress or regression.

Law No. 10,792, of December 1, 2003, amended the structure and provisions of Law No. 7,210, of July 11, 1984, establishing that convicts should be grouped according to their background and personality, with the aim of guiding individualization sentence and granting prison benefits within the scope of Criminal Execution.



In turn, the main alteration introduced by Law n° 10.792/03 was the waiver of the Technical Commission's opinion, which is expressed in article 112, in the caput of the aforementioned article, with the aim of simplifying the method of incidents in Criminal Execution, as well as conditional release and the progression of the prison regime.

The objective of the work is to reflect the value of such a procedure that arises to promote/guarantee the dignity, humanization and individual/collective rights of the prisoner, since the subject has been raising questions about the contradictions in the Prison Constitutions and the return of the criminal to society.

In order to verify this question, Law n° 10.792, of December 1, 2003, which changed the structure and devices of Law n° 7.210, of July 11, 1984, should be analyzed, establishing that convicts should be grouped according to their antecedents and personality, with the aim of guiding the individualization of the sentence and the granting of prison benefits within the scope of Criminal Execution.

The Commission's Opinion and the technicians' report form the Technical Commission, which monitors the convict. The Classification exam, on the other hand, influences personality characteristics, social and family life, and antecedents. Finally, the Criminological Examination, which is related to the psychic and psychiatric elements of the convict, in order to evaluate his re-education.

It is essential to note that the main change introduced by Law No. 10,792/03 was the waiver of the Technical Commission's opinion, which is expressed in Article 112, more specifically, in the caption of that article, with the aim of simplifying the method of incidents in Criminal Execution, as well as conditional release and the progression of the prison regime.

In this sense, article 122, in its new wording, resulted in a controversy, in the extinction of its sole paragraph, which expresses about the progression of the prison regime, citing that the decision must be for reason and preceded by the technical commission of classification and the criminological examination, with a view to repealing the sole paragraph that arises from understandings, namely, the progression of the regime has become automatic and that the judge of executions continues to verify the merit of the convict.

On the other hand, the reality is different, since the penalties would not be working and there would be no prevention of the crime and neither would it disapprove of the same, as well as it would not be serving for the recovery of the convict, both for his rehabilitation and for his return. to society, bearing in mind that, with examination, it



could be possible to create new methods to prevent crime, mainly preventing the person's incarceration from happening.

2 METHODOLOGY

The methodological procedure will be based on the bibliographic review, through specialized literature in scientific articles, books, legislation, jurisprudence and doctrines, in the search to support the study and offer content based on the most renowned authors, such as: Bitencourt (2004) ; Capez (2007); Fernandes (2002); Fernandes (2010); Marcao (2009); Mirabete (2002); Mirabet (2004).

With the application of the Exam in the context of Criminal Execution, it would be possible to analyze the individual in every way, from the historical context of his life to the causes or circumstances that led to the crime, because, without this analysis, the convict would not see justice correct and effective, considering that it would incorrectly use the criminal law and put society at risk again.

The Criminological Examination should represent an indispensable technical tool in Criminal Execution, with the aim of analyzing the personality characteristics and the recovery of the convict, evaluating the psychic capacity and seeking his rehabilitation, since it is through the examination that the category of the prisoner is defined, which would support the court decision.

3 THEORETICAL FOUNDATION

In order to understand the origin of the criminological examination in the field of penal execution, it is extremely important to mention the historical evolution, based on its phases and periods, being a passage that did not happen at the same time and much less in a single period, but in the union of countless factors and moments that contributed to the course of human history.

There is not enough information to prove the appearance of the feathers, but for most peoples and cultures, the first act outside the law that the human being committed, was when Eve and Adam tasted the sacred fruit, being considered the first crime, which, consequently, led the two to be expelled from paradise, since God punished them, serving as a basis for the formation of penalties and demonstrating the need for rules to regulate man's behavior. (NADER, 2001)

Thus, feathers increasingly demonstrated their religious character and the sacred will to regulate man's behavior prevailed, where the gods were seen as divine beings and



being the only ones who had the power to punish, as well as having the function of repairing and protecting. , having to strictly follow the obligations in order not to suffer the serious punishments, which were divided into forbidden and sacred, establishing rules that regulated society.

Humanity was going through a primitive period, aggressive and without rules, since man lived alone and exposed to constant dangers, having his safety threatened by phenomena of nature, by animals and by other people who struggled to survive, he saw the need to create groups to preserve their lives and to defend themselves against attacks from other groups, giving rise to the penalty that could protect themselves from attacks and at the same time take revenge. (PRADO, 2012)

To ensure the safe and peaceful coexistence between individuals in society, man created the prison system, and prisons were castles, churches, jails, houses, hospices, establishments and institutions, with the need to punish, punish and correct those who broke the rules or committed certain crimes, with the application of punishment through inhuman punishment, unfair sanctions and abandonment, which most often resulted in death.

In the old Roman perception, the law considered the penalty a sacred form based on customs, being mostly sanctions through punishments and threat, as well as being a rigorous system, where there was no difference between public and private crimes, demonstrating that public crimes resulted in death sentences and for private crimes, it was referred to the individual, since the State did not intervene directly, but only to regulate. (NADER, 2001)

Since its foundation, Roman law has shown to have many elements, being a mixture of norms that were in use and in force at the time, with the penalty having a sacred character, based on the principle of moral duty, since, in general, the Roman people they were treated more like members of a group, emphasizing the figure of the family, as well as the security of the people depended more on the community than on the State.

Luiz Regis Prado (2012, p. 86), explains that Roman Law established that:

Roman law distinguished between offenses punishable by *jus publicum* (crimina) and *jus civile* (delicta). The former – infractions of a social order that attack the *civitas* (eg, the *perduellio*; *parricidium*) – gave rise to a public prosecution carried out through *provocatio ad populum* or the *quaestiones perpetuae* and ended with a public poem (eg, *supplicium capitale* ; *interdictio aqua et igni*; *mulcta* ou *damnum*). The second – *delicta* (v.g. *furtum*; *iniura*) – were understood as an offense to the individual and authorized, in the early days, a reaction of a private nature.



It is noted that Roman law did not differentiate between public and private crime, where the first was about treason and murders involving the State, with the death penalty, while the other was about insults and disrespect to the individual, being his responsibility judging the crimes of those who offended them, and the State should also have the right to get involved when it was to regulate the due legal exercise.

It is evident that at that time the penalties were about revenge between groups and other communities, having their application based on pure revenge, both there were aggressions by the offended party as well as by the attacked party, reaching the point of committing injustice between them, since there was no there was justice, in the sense that Roman law summarized its way of thinking based on ancient society, making a connection between the ancient and modern world, which the landmark of that time was Law XII of Tablets and written by the Romans, initiating a new period, the legislative.

With the XII Boards Law and the Notary Law, the basis of all the law of that time, where they believed to be the tools that would correct evil, violence, disorder and injustice, it ended up becoming just old and perverse rules, demonstrating that acts The most serious crimes committed by people were death and betrayal.

Thus, the State was responsible for duly sanctioning those who practiced such criminal acts, as well as it could not clothe and defame, being considered the less serious criminal actions, leaving it up to the individual to use the punishment, according to the study by Guilherme de Sousa Nucci (2005, p. 65) on this subject:

In the Ancient East, punishment of a religious nature was based on punishing the offender harshly to appease the wrath of the gods. The predominance of the notary was noted, which, if it had any merit, consisted in reducing the extent of punishment and avoiding the endless wave of private revenge. In Ancient Greece, as portrayed by the philosophers of the time, punishment maintained its sacred character and represented a strong intimidating expiratory tendency. In a first phase, blood revenge prevailed, which ended up giving way to the notary and the composition.

In a time when revenge, violence, injustice and death prevail, the Law of Notary came to combat this problem, which said: “an eye for an eye, a tooth for a tooth”, with the aim of reducing acts of revenge and injustice practiced by groups and members of other gangs, giving the victim the right to punish his offender in kind,

The position of Luiz Prado Meira (2005, p. 69), on the penalties imposed, referring to the XII Tábuas Law, in Tábua VII:

Whoever intentionally set fire to a house or a heap of wheat near a house, let him be beaten with rods and then thrown into the fire. If anyone bears false



witness, let him be cast from the Tarpeian rock. If someone killed a free man and lent him sorcery and poison, let him be sacrificed as the last punishment. If someone killed his father or mother, let him wrap his head around it, put it in a sewn bag and throw it into the river.

Over time, the penalty became more elaborate, being analyzed in the specific case, transforming the punishments into a more individualized penalty, since such progress was only possible through the composition, which is currently called the Code Criminal, giving rise to fines and the elaboration of civil damages, demonstrating the importance of Roman Law for history and the construction of law.

In that period, the majority of the population had the thought that all events were linked to divine power, as well as believed that the right to punish a person came from God, using punishment as a means of revenge, owing those who practiced the shameful act and disrespectful to pay with pain, where they were thrown into hot water or forced to walk over fire, with no chance of defense.

According to Cezar Roberto Bitencurt (1993, p. 19) about the Middle Ages, it provides that:

The Middle Ages was also characterized by ordalic law, which was also used by Spanish law. The best proof of the individual's wickedness is the abandonment that God makes of him when withdrawing his help to overcome the tests to which he is submitted - water, fire, burning iron, etc. punishment, judgment of God whose result is accepted more or less resignedly (...). The culprit, that is, the one who does not pass the test, convinces himself of his own wickedness and abandonment by God.

For this reason, it is noted that the crimes committed by man were seen as a sin, the ways to correct such acts being cruel and inhumane, as well as the punishment was mostly the amputation of arms, hanging and death, demonstrating that to redeem himself from the evil committed and to assuage the guilt, the condemned person had to make a sacrifice to get closer to God and to pay for the sin.

According to Adeilson Nunes (2005, p. 46) about the Middle Ages, where he demonstrates the importance of the church for the condemned regarding the recognition of their sins:

In the Middle Ages, the church was a precursor in the application of prison, as a form of punishment for those who infringed its precepts, making rebellious monks or offenders recognize in individual cells, where thanks to prayers and reflections they recognized their own sins and did not commit again. them.

Thus, the landmark of Law at that time was the great cruelty that occurred with



people, where most of them lived in fear and insecure with the violence and abuse of power by the State, even more so when the only holder of power , used this privilege and condition, failing to comply with and follow the rules that existed there, demonstrating that he assigned the penalties in the way he understood and wanted, without even respecting the law and people.

At that time, it boiled down to terror and insecurity, as the holder of power were the feudal lords, where he applied the penalties the way he wanted, most of them without any justification and without respect for the people who suffered there from his abuse of power. power, demonstrating no mercy when applying the penalties, reaching the point of using the same sanction twice on the same person, regardless of the crime that was committed, thus reigning his will.

Over the years, in the Modern Age, the emergence of capitalism was inevitable, bringing with it industrial capitalism, creating a socioeconomic model of society, which was not very different from the feudal system, but which ended up making the situation even worse. of the population and for those who committed certain crimes that, with the increase in the poverty rate, the number of crimes grew, since it was considered a crime to not have a job and stay on the street doing nothing.

Due to this movement referring to the injustices caused by a capitalist system without limits, the attempt to build organized prisons and custodial sentences, over time, this need increased and with it came the realization of this desire, and that is, around the turn of the century. XIX.

During this period, the deprivation of liberty became a primordial tool for controlling the prison, turning a dream into reality, and which gradually developed the thought that, if there is a punishment or crime, it is of paramount importance to the prison, demonstrating its connection and need.

To understand better, observe the understanding of Sérgio Salomão Shecaira (2002, p. 35) about the emergence of the custodial sentence:

The appearance of deprivation of liberty put an end to the crisis of capital punishment, which proved to be incapable of reducing crime, in addition to being, in some cases, completely inoperable due to the excessive number of defendants. Hence why the famous prison conceptualized as the punishment of civilized societies.

With the construction of control of a penal system, which was considered a great victory, since the idea of deprivation of liberty, even though it was a revolutionary thought



that would help everyone, has not yet managed to achieve success, having to create a complement, which could fill the gap that was missing, since there were many cases of abandonment, where it was necessary to create a regime, giving rise to the progressive regime.

From the Progressive Regime, the convict could enjoy certain privileges, once the main characteristic of the regime was respected, which competed for distributing the time referring to each crime that a person committed, having a connection with the sentence, in order to be able to grant some benefits and enjoy some advantages, and may, if you follow such procedures, return to society without having to finish your sentence..

For Oswaldo Henrique Duek (2000, p. 52) on Beccaria's thinking about cruel penalties, torture and death, in the quest to prevent the criminal from committing crimes again:

Recognized as the first abolitionist of the death penalty, considering it cruel and ineffective as general prevention, Beccaria comprehensively rebelled against the injustices of eighteenth-century absolutism. In his work, he supported the mitigation of penalties, with the following foundation: "The penalties that go beyond the need to maintain the deposit of public salvation are unjust by their nature; and the more just they will be the more sacred and inviolable the security and the greater the freedom that the sovereign grants to his subjects". The measure of the penalty, then, should follow the criterion of necessity to safeguard ancient society for the crime, within the scope of legal prevention.

According to the author's clarifications, it exposes the idea of analyzing the penalties and that it would be perverse and undue, that they would be causing numerous injustices and that they should be greater than the need, and should follow certain methods, as well as privileges in prisons. and the convict having his freedom before serving the end of the sentence, being a situation that was expanding in the social, penal and prison environments, influencing other criminal institutions to adopt this procedure.

The Penal Execution Law is considered a step forward for the legal and social system, which has as one of its goals to treat those interned and convicted, in addition to being subordinated to the fulfillment of the sentence and individualization, in which the State, which is the only holder of power , should apply due punishment to those who break the rules and maintain the good coexistence of individuals in society. (CAPEZ, 2007)

In this sense, Criminal Execution seeks that the condemned person does not violate the rules that make up the social environment and prevent him from committing new crimes, aiming at correction and prevention, that the penalty must have a character



of rehabilitation, resocialization and integration, and must offer treatment, education and work so that the prisoner is able to live harmoniously with other individuals.

To better understand the Penal Execution Law, which is a process that must go beyond administrative and jurisdictional functions, it is necessary to verify the words of Julio Fabbrini Mirabete (2004, p. 28) about the system guaranteeing rights and harmonious condition for the return of the condemned to the social environment:

In addition to trying to provide conditions for the harmonious social integration of the prisoner or internee, the legal diploma seeks not only to take care of the passive subject of criminal execution, but also of social defense. The immanent meaning of social reintegration, as established in the implementing law, comprises assistance and help in obtaining the means capable of allowing the return of the convict and the internee to the social environment in favorable conditions for their reintegration.

According to the author, the Penal Execution Law must carry out an activity beyond the administrative and legal exercise, and must, mainly, offer favorable harmonic conditions for the condemned or interned, who need to consider not only the legal certificate, but the treatment and resocialization, in which the prison system has to provide measures that can contribute to the rehabilitation of the convict and his return to society.

For the effective regime progression to occur, it is of paramount importance that the prisoner has completed one sixth of the sentence and has an exemplary conduct within the scope of the prison establishment, having to undergo an evaluation process in criminal execution and wait for the director of the penal system to send a report to the judge so that he can request the transfer of a more onerous regime to a less rigorous one.

In this way, with the execution of the sentence regarding the criminal execution and the fulfillment regime involving the convict, the process begins to allow the progression of the regime and the prison benefits, where for each crime committed there is a rule to follow, for those who commit common crimes, one-sixth of the sentence is fixed, while for the most serious crimes, such as heinous crimes, two-fifths and three-fifths if you are a primary offender.

It is clear that in order for the regime to progress, it is necessary that the penalties are deprivation of liberty and based on the requirements provided for by law, and must move from a more severe regime to a less rigorous one and the judge must use his judicial authority to impose, as well as evaluating a part of the sentence and the report of good behavior.

To better understand this subject, it is of paramount importance to mention the



understanding of Luiz Regis Prado (2009, p. 82), on regime progression:

Thus, for the progression of the regime, in addition to the formal requirement, objectively proven (compliance with at least one sixth of the sentence of the previous regime); it is also necessary, the material requirement represented by the merit of the accused (article. 33, paragraph 2, Penal Code), which is objectively proven by the display of good prison behavior, proven by the director of the establishment, in addition to other elements valued as relevant to characterize the aforementioned merit. In this way, the referred articles are not in a relation of antinomy, but of complementarity. On the other hand, a teleological interpretation is imposed, that is, the purpose of the Brazilian penal execution law that aims at the rehabilitation of the convict, provided that the interests of social defense are ensured, that is, the reaffirmation of the legal system and preventive purposes. The certificate of good prison behavior represents a plus to assess the merit of the convict, that is, in order to guarantee individual freedom and the real protection of fundamental legal interests, the convict cannot be allowed to have the right of progression if he has not had decent disciplinary behavior in prison; with such requirement it is guaranteed that the accused only obtains the progression if he had a good prison behavior, what before the modification of the wording of the article 122 of the LEP.

In order for the regime to progress within the scope of criminal execution, it is necessary for the convict to serve at least one sixth of his sentence, which is a temporal and objective requirement, and must also be submitted to the subjective criterion, which is the merit that is related to the accused and having to prove good conduct within the penal establishment, so that it is evaluated and later, the director will sign the report in favor of the benefits.

On the other hand, let's see the position of Julio Fabbrini Mirabete (2004, p. 387) about the procedure that involves the criminal execution in a way that respects the rules that establish the progressive form, reports:

[...] the execution process must be dynamic, subject to mutations dictated by the convict's response to penitentiary treatment. Thus, by directing the execution to the "progressive form", establishes the article. 122 progression, that is, the transfer of the convict from a more rigorous regime to a less rigorous one when he demonstrates conditions of adaptation to the milder one.

Depending on the behavior of the convict in the face of his treatment within the scope of the prison, as mentioned above, the penal execution in its evaluation and re-education process must be effective, respecting the rights and guarantees, even more so when it is to provide some benefits, as regime progression and adequate conditions for the prisoner to return to the rehabilitated social environment.

Conditional freedom represents the last phase with regard to the progression of regime related to the fulfillment of a custodial sentence, considering that the convict must



meet certain requirements and how the law provides, such conditions, the time lapse and the good prison behavior, where you can enjoy some privileges and benefits, such as parole.

To find out better about the subject addressed, it is necessary to reflect on the thinking of Júlio Fabbrini Mirabete and Renato Fabrini (2010, p. 320) on the penalty and the return of the condemned to the social environment:

Considering that one of the purposes of penal sanction is the readaptation of the criminal, the ideal system should be based on the imposition of indeterminate sentences, unnecessary as it is a reprimand when the convict has already been recovered. One of the institutes that is oriented towards this indetermination, through the executive individualization of the sentence, is the conditional release, the last stage of the progressive penitentiary system.

With the exposition of the author's words on this subject, it is evident that in order to have the adequate system and that provides the due re-socialization of the convict, it is necessary and primordial to occur the conditional release, because in addition to the criminal execution process to contain flaws and to be contradictory in the says respecting the protection of the rights provided for in the law, with the freedom and individualization of the sentence, there would be a chance of recovering the prisoner.

The pardon has the purpose of forgiving the sentence that involves the condemned in the scope of the execution and is connected with the causes that concern the extinction of the punishment, where it will choose a group of prisoners and select those by the character of the crime committed and the number of sanction duly imposed penalty, as well as will consider the requirements that must be followed to grant the benefits of pardon.

In order to fulfill the requirements to grant the pardon of the penalty, it is necessary to verify the fulfillment of the penal sanction that is defined as the objective condition, as well as to analyze the primacy of the convict that is stipulated as the subjective part, and the Penitentiary Council must elaborate a document that can be requested by the prisoner, the Public Prosecutor's Office or anyone else. (MIRABETE, 1997)

In turn, the pardon is only granted by the President of the Republic or in an act of clemency by the said Public Power, through a presidential decree and which will extinguish the condemned person's sentence, but for that, it is necessary that he fulfills all the legal requirements for the concession of benefits, observing good behavior, the time lapse, as well as presenting conditions of blindness, being quadriplegic and paraplegic.

According to Aloysio de Carvalho's understanding of the pardon and its



particularities:

Is the person subject to fulfillment of a future condition or requirement, by the person pardoned, such as good social conduct, obtaining a lawful occupation, carrying out an activity beneficial to the community for a certain period, etc. If the condition is not met, the favor ceases to exist, and the judge must determine the resumption of the sentence.

As the author wisely prescribes on the subject exposed, it is clear that for the pardon to be granted, it is necessary to establish certain requirements, taking into account the conditions that involve good behavior, the exercise of an activity that is legal and carrying out work that is helpful throughout the elapse of the time that the service is rendered, otherwise the judge in charge may demand that the sentence be served.

The Criminological Examination studies the characteristics of the convicted person's personality, based on the degree of their dangerousness, which will be analyzed by experts, psychologists, psychiatrists and social workers from the prison establishment, thus constituting the basic principle of criminology, through techniques of medical, clinical, educational and social character. (BITENCOURT, 2004)

The Exam is the scientific foundation for evaluating prisoners in the field of criminology, exploring the criminal personality, which is carried out by specialists in the prison system laboratory and sent the report to the judge, consisting of: Legal-Criminal Information; Clinical Examination; Morphological Examination; Neurological Examination; Electroencephalographic examination; Psychological Examination; Psychiatric Examination; Social Exam.

With the use of the Criminological Examination, the professional can analyze the psychological profile of the convict, through the psychological, psychiatric and social examination, as explained by the scholar Newton Fernandes (2002, p. 252):

The psychological examination aims to apprehend and describe the psychological profile of the examined person, regardless of whether or not there is a suspicion that he or she has a mental pathology. Thus, it can be applied to any individual, as it will unquestionably always bring information of interest to the understanding and understanding of the way in which the mental activities of the examinee are carried out.

In turn, it is worth mentioning the study by Valter Fernandes (2010, p. 226), regarding the importance of psychiatric examination for the treatment, rehabilitation and integration of the prisoner into society:

The psychiatric examination is, so to speak, the center, the core of criminological



observation, even because it will interfere with the infliction or not of punishment (in the phase of whether or not the accused is liable), in the possible reduction of imprisonment (due to the dangerousness of the delinquent) or in the treatment of the convict, aiming at his return to social life after serving the sentence.

The Social Examination, the work of Júlio Fabbrini Mirabete (2002, p. 51), explains that an interview is carried out by social workers, who must verify the data about the family and social conditions

The social examination (family information, social conditions in which the act was performed, etc.). The expertise must provide the criminological synthesis, this implies framing each case in items of a classification, in the selection of the destination to be given to the examiner/examiner and in measures to be adopted.

According to the studies, it is evident the importance of the Criminological Examination to further strengthen Criminal Execution, the legal process, Justice, the humanization of sentences, the modernization of the prison system, the rights of the condemned and the integration of the subject to society, in which the examiner will carry out a social assessment and monitor the development of the convict, as an instrument that will discover whether the causes of the crime were linked to trauma, disorders and mental pathology.

In recent years, the Bill (PL 1294/2007) was in progress in the National Congress, which provided for the possibility of returning to the mandatory Criminological Examination for the progression of regime in Criminal Execution, but the STJ decided and consolidated that such a procedure it is more obligatory for the prisoner to have the right to progression to the prison regime, thus the magistrate must request the examination to be carried out at the time he deems opportune and through a substantiated request.

The study by Luiz Flávio (2012) explains the subject about the Crimonological Examination, the STF judgment and the HC 109.565/SP:

The stir surrounding the criminological examination comes from a legislative reform of the Penal Execution Laws in 2003. Until then, it was required as a requirement for regime progression not only the fulfillment of at least 1/6 of the sentence (objective requirement) and the merits of the sentenced person, but also an opinion from the Technical Commission for Classification and Criminological Examination (subjective requirement). After the alteration suffered by article 122, there is no longer any express provision on the requirement of criminological examination. Today, for the progression of the regime, in addition to the time requirement, there is only a requirement of good behavior, which will be proven by the director of the establishment.



In view of the above, it is analyzed that the criminal enforcement judge assesses the requirement of the Criminological Examination, based on criteria defined by the Penal Execution Law and the merit of the convicted person, which has an objective and subjective character, considering that the objective requirement is in the serving a fraction of the sentence (1/6 of the sentence), while the subjective concerns Law No. 10,792/03 (Opinion of the Technical Commission), which now requires only the declaration of good prison behavior.

The respective examination cannot be replaced by criteria of only one sixth, two five, or three fifths of the sentence, in addition to the declaration of good prison behavior and authorization/proof from the director of the prison institution, to finally grant the prison benefit and progression regime, which is a contradiction, as the prison administrator has neither the knowledge nor the training to decide on the issue. (MARCÃO, 2009)

The application of the Criminological Examination is essential, both for the prisoner and for the decisions of the judges or courts, since the two do not have the same knowledge of the psychologist and the psychiatrist, in the sense that the law is based on legal studies and ignores health mental, even more so when the life of the convict and other people who may suffer from the consequences of a system that does not re-socialize is at stake.

To better clarify this controversy that involves the criminological examination and its value in criminal execution, it is essential to expose the position of the Public Prosecutor, Cleonice Maria, on the methods currently used to grant prison privileges, it has not been fulfilling its role and so little adequate, because the convict would not be being resocialized:

I think it would need to be improved, because when only the temporal criterion and the certificate of good behavior are considered as a requirement, it makes it difficult to individualize the sentence because you put, for example, a perpetrator of theft with a psychopath, serial killer, because in practice that's it, if the two maintain a good behavior and make a time requirement, they will have the right to progression. So in the system, when the law establishes it this way, it makes it more difficult for criminal execution, for operators to identify those who have a problem to go to the street at that moment to be released, which does not. So I think we would have to have a slightly more advanced mechanism for us to be able to work better and really identify even in the way it was in the previous law before the 2003 reform.

Available in: <http://www.conteudojuridico.com.br/pdf/cj037294.pdf>.
Accessed in: May 2nd, 2014.

According to the Public Prosecutor, the criminological examination should be

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improved, since the requirements that correspond to the time and the certificate of good behavior that the criminal execution establishes would not be having positive effects, with problems with the individualization of the sentence and the progression of the regime, where it provides benefits for psychopaths and convicts, being a very serious failure.

In the same sense, it is extremely important to address the understanding of the Judge of Law, Nelson Ferreira, about the value of the criminological examination and that the criteria used for granting benefits are superficial, demonstrating that it is convenient to have, in fact, it is a flawed procedure and that does not offer adequate conditions for the rehabilitation of the convict:

The subjective issue has undergone changes over time, before the reform of the penal execution law, which even dealt with the issue of the criminological examination of article 112 of the LEP, there was a classification commission within the penal establishments where a group closer to the prisoner issued an evaluation, each prisoner was analyzed, the behavior for the purpose of progression, from this change onwards, only good behavior was required by the prison director, this usually in the internal regulations of prisons is linked to a time, this criterion I think very superficial, first because the director hardly has direct contact with the prisoners, the units are large, today the overcrowding of the prisons almost prevents it, you simply put the prisoner in there and he is not placed in a situation where you can assess the his behavior, he behaves well because he didn't get involved in serious misconduct, I think it's a flawed criterion today, the legislation should not move forward so that you could test the prisoner in situations close to the reality he would have out here in society, today we don't have that, he simply goes into a cell, courtyard, sunbath and comes back, always in single contact and exclusive with the other prisoners, so this behavioral assessment of him as good, for the simple fact that he was not involved in any serious infraction, it is very superficial and fragile for you, but it is what the law provides today.

Available in: <http://www.conteudojuridico.com.br/pdf/cj037294.pdf>. Accessed in October 20th, 2022.

According to the Judge of Law, Nelson Ferreira, it is analyzed that there are different opinions about the value of the criminological examination in the context of criminal execution, more specifically, for the criteria currently used, which, in general, do not meet the needs and so are little adequate, both for granting benefits and for the due rehabilitation of the convict.

On the other hand, it observes the words of the Public Prosecutor, Helena Rodrigues, about the criminological examination being the most adequate instrument to analyze individuals who commit more serious crimes, demonstrating that it will evaluate the convict considering his characteristics and personality, as well as investigate other important factors about your life and what led you to commit the crime:

For the most serious crimes it is extremely necessary, because it allows the personality traits of the individual who committed that crime to be evaluated. Because the simple criterion of good behavior and the criterion of objective, the temporal criterion, are not enough to assess in depth the personality of that criminal. Many times a person has personality disorders who has committed a



very serious crime, has good prison behavior, has never committed any offense, and other times, someone who has committed theft, a simple crime, because he is very young, even because of immaturity, has bad behavior, so, the his progression is often delayed because of misbehavior and this does not necessarily indicate that he would offend again when released.

Available in: <http://www.conteudojuridico.com.br/pdf/cj037294.pdf>.
Accessed in October 20th, 2022.

As can be analysed, according to the position of the Public Prosecutor, Helena Rodrigues, the criminological examination is essential to deal with the most serious crimes, as well as it will assess the personality characteristics and whether the individual has a mental problem or what were the reasons that led to commit the crime, demonstrating that the objective and subjective criteria, in general, are not enough.

In turn, the Law Judge, Bruno de André, explains how important the value of the criminological examination is in the context of criminal execution and that its extinction was a mistake, as it would serve as support in the decisions of Judges and Courts regarding the recovery of the convict, resulting in numerous losses and consequences for those who seek prison benefits, based only on objective and subjective criteria:

I brought it, because now it is much more difficult for you to determine that the exam should be carried out, because, to take the exam, I have to explain why he is going to take this exam. Before it was automatic, it was in the law that he had to take the exam so I ordered him to do the exam, now I have to explain why that convict is different from the other 99%, so it takes a lot of work, you have to analyze the crime, you have to analyze the personality, you have to analyze his performance during the sentence, you have to analyze a series of factors and put it on paper and explain, why the lawyer will appeal, because he does not want the convict to do what criminological examination, because this criminological examination will remove his mask, it will tell the judge who he is and this is not always good from the point of view of the defense.

Available in: <http://www.conteudojuridico.com.br/pdf/cj037294.pdf>.
Accessed in: October 28th, 2022.

For this reason, it is evident that the repeal of the mandatory criminological examination in the scope of criminal execution, ended up causing several losses, as mentioned by the magistrate, Bruno André, in the sense that the granting of prison benefits would not be fulfilling its role and its objectives. methods would be superficial, not serving to know if in fact he deserves such a privilege and to re-socialize the convict.

4 CONCLUSION

It was concluded that, in order for children to achieve reader protagonism, they need to be practicing at school, in the classroom, on the street, in the community and at



their family's homes, with the help of parents and teachers, being a unique moment for further develop speech, dialogue, interaction, socialization and understanding of the world and, at the same time, having the opportunity to build values and principles, which contributes both to learning and to reader protagonism.

Thus, social reading is a method of paramount importance to work in the period of childhood and in the schooling of children at such a school moment, which arouses curiosity, imagination and autonomy, as well as stimulates learning and interest in studying, and there must be a pedagogical action that uses significant strategies and methods to stimulate reading and social development of students.

On the other hand, children are not born with their interests ready and this construction of interest depends a lot on the collaboration of adults during childhood, with parents helping during this process and the teacher building a pedagogical practice, using the social reading method to encourage and to contribute to the development process of the reader, cognitive and social subject of students in that school period.

One of the most efficient ways to create the possibility of seeing more and more adults who are readers and aware of their own readings of the world is to create the habit and the pleasant connection with literature since childhood, that is, that it is through reading that people children will have contact with the ludic, awakening their imagination and stimulating their reading capacity.

In view of the above, measures must be taken to encourage reading, both by parents who need to adopt a daily reading habit to encourage their children to read more and by schools that must promote reading through literary fairs, soirées and the creation of a reading club, in order for students to create a reading habit and build reader protagonism.



REFERENCES

BRASIL. **Constituição da República Federativa do Brasil de 1988**. São Paulo: Saraiva, 2005.

BRASIL. Supremo Tribunal Federal. **HC 109.565 / SP e HC 93.108 / SP**. Disponível em: http://www.stf.jus.br/portal_stj/publicacao/engine.wsp?tmp.area=682&tmp.texto=97101> acessado em 20 de outubro de 2022.

_____. Superior Tribunal de Justiça. **Habeas Corpus**. Execução da Pena. Progressão ao Regime Semiaberto cassada pelo tribunal de origem. Submissão ao exame criminológico. Evidenciada com base em elementos concretos. Personalidade voltada á prática de crimes. Periculosidade evidenciada. Súmula 439/STJ. Ordem denegada. Habeas Corpus nº142309, Relator Ministro Jorge Mussi. Brasília, DF. 05 de out. 2010. Disponível em <<http://www.stj.jus.br>>. Acesso 05 de outubro 2022.

_____. Superior Tribunal de Justiça. **Habeas Corpus. Execução. contra decisão monocrática**. Ato de desembargador. Cabimento. Precedentes do STJ. Livramento Condicional. Requisito subjetivo. Avaliação pelo Tribunal de origem com base em parecer psicossocial. Possibilidade ordem denegada. Habeas Corpus nº145587, Relator Ministro Arnaldo Esteves Lima. Brasília,DF. 05 de out. 2010. Disponível em <<http://www.stj.jus.br>>. Acesso em 05 outubro de 2022.

_____. Tribunal de Justiça do Distrito Federal e Territórios. **Agravo em execução.Acórdão n. 547141, 20110020108454RAG, Relator GEORGE LOPES LEITE, 1ª Turma Criminal, julgado em 06/10/2011, DJ 11/11/2011 p. 174**. Disponível em:<<http://tjdf19.tjdft.jus.br/cgibin/tjcgil?DOCNUM=21&PGATU=2&l=20&ID=62559,60883,11540&MGWLPN=SERVIDOR1&NXTPGM=jrhtm03&OPT=&ORIGEM=INTER&pq1=exame%20criminologico>>. Acesso em: 12 outubro de 2022.

_____. Tribunal de Justiça do Distrito Federal e Territórios. **Agravo em execução. Acórdão n. 567231, 20110020180659RAG, Relator JOÃO TIMOTEO DE OLIVEIRA, 2ª Turma Criminal, julgado em 23/02/2012, DJ 28/02/2012 p. 217**. Disponível em:<<http://tjdf19.tjdft.jus.br/cgibin/tjcgil?DOCNUM=6&PGATU=1&l=20&ID=62559,60883,11540&MGWLPN=SERVIDOR1&NXTPGM=jrhtm03&OPT=&ORIGEM=INTER&pq1=exame%20criminologico>>. Acesso em: 12 outubro de 2022.

_____. Tribunal de Justiça do Distrito Federal e Territórios. **Agravo em execução. Acórdão n. 541742, 20110020117739RAG, Relator GEORGE LOPES LEITE, 1ª Turma Criminal, julgado em 06/10/2011, DJ 19/10/2011 p. 190**. Disponível em: <<http://tjdf19.tjdft.jus.br/cgibin/tjcgil?DOCNUM=26&PGATU=2&l=20&ID=62559,60883,11540&MGWLPN=SERVIDOR1&NXTPGM=jrhtm03&OPT=&ORIGEM=INTER&pq1=exame%20criminologico>> Acesso em: 05 outubro de 2022.

_____. Superior Tribunal de Justiça. **Habeas Corpus. Progressão Prisional art.112, da LEP, com alterações da Lei nº 10.792/03**. Benefício concedido em primeiro grau de jurisdição e cassado pelo Tribunal a quo. Acórdão84 fundamentado. Habeas Corpus nº 169968, Relator Ministro. Celso Limongi (Desembargador Convocado do TJ/SP), DF. 05 de out. 2010. Disponível em: <<http://www.stj.jus.br>>. Acesso em 05 outubro 2022.



_____. Superior Tribunal de Justiça. **Súmula 439**. “Admita-se o exame criminológico pelas peculiaridades do caso desde que em decisão motivada”. Disponível em <<http://www.migalhas.com.br> > acessado em 05 outubro de 2022.

_____. Supremo Tribunal Federal, **HC 109.565 / SP e HC 93.108 / SP**. Disponível em: http://www.stf.jus.br/portal_stj/publicacao/engine.wsp?tmp.area=682&tmp.texto=97101> acessado em 09 de outubro de 2022.

_____. Supremo Tribunal Federal. **Súmula Vinculante n.26**“ Para efeito de progressão de regime no cumprimento da pena por crime hediondo, ou equiparado, o juiz da execução observará a inconstitucionalidade do artigo 2 da Lei 8.072, de 25 de julho de 1990, sem prejuízo de avaliar o condenado preenche ou não os requisitos subjetivos do benefício, podendo determinar, para tal fim, de modo fundamentado, a realização exame criminológico”. Disponível em: <http://www.stf.jus.br> > Acesso em 09 de outubro de 2012.

BITENCOURT, Cezar Roberto. **Tratado de direito penal**. ed. 4°. São Paulo: Saraiva, 2004.

_____. Cezar Roberto. **Falência da pena de prisão: Causas alternativas**. São Paulo: Revista dos Tribunais, 1993.

CAPEZ, Fernando. **Execução penal**. 13ª. ed. São Paulo. Damásio, 2007.

CARVALHO, Aloysio de Filho. **Comentário ao código penal**, 4. ed. São Paulo: Forense, 1958, v. 4, p. 189 apud CAPEZ, Fernando. **Direito penal: parte geral: (1º a 120)**, 16. ed. São Paulo: Saraiva, 2012.

Conselho Nacional de Procuradores-Gerais de Justiça quer **adiar votação do projeto no Senado que pede extinção do exame criminológico**. Notícias/Release. Assessoria de Comunicação Social do Ministério Público Estadual. (TrabReleaseAsscomN2003 Exame Criminológico adiamento) NC .Exame criminológico. O Estado de São Paulo, São Paulo, 19 maio 2003. Fórum de Leitores. Disponível em: < <http://www.estado.estadao.com.br/editorias/2003/05/19/leitores030519.html> > <http://www.estado.estadao.com.br/editorias/2003/05/19/leitores030519.html>>. Acesso em: 10 de outubro de 2022.

FERNANDES, Newton, FERNANDES, Valter. **Criminologia integrada**. 2.ed. ver., atual São Paulo: Revista dos Tribunais, 2002.p. 429.

FERNANDES, Valter; FERNANDES, Newton. **Criminologia integrada**. 3ª ed. São Paulo: Revista dos Tribunais, 2010.

MARCÃO, Renato Flavio. **Curso de execução penal**. 7ª ed. São Paulo: Saraiva, 2009.

MARQUES, Oswaldo Henrique Duek. **Fundamentos da pena**. São Paulo: Juarez de Oliveira Ltda, 2000.

MIRABETE, Julio Fabbrini. **Execução penal**. 7ª ed. São Paulo: Atlas, 1997.



_____, Julio Fabbrini. **Execução penal**. 10º Ed. São Paulo: Atlas, 2002.

_____. **Execução Penal: Comentários a Lei nº 7.210, de 11-7-1984**. 11. rev. e atual. São Paulo, 2004.

MIRABETE, Júlio Fabbrini; FABBRINI, Renato N. **Manual de direito penal**, Parte geral. 26º Ed. São Paulo: Atlas, 2010.

NADER, Paulo. **Filosofia do Direito**. 11. ed. Rio de Janeiro: Forense, 2001.

NUCCI, Guilherme de Souza. **Código penal comentado**. 9ª ed. São Paulo: Revista dos Tribunais, 2009.

PRADO, Luiz Regis. **Execução penal. Processo e execução penal**. São Paulo: Revista dos Tribunais, 2009.

_____, Luiz Regis. **Curso de direito penal brasileiro, parte geral – arts 1.º a 120**. 11ª ed. São Paulo: Revista, Atualizada e Ampliada, 2012.

SHECARIA, Sérgio Salomão e JÚNIOR, Alceu Corrêa. **Teoria da pena, finalidades, direito positivo, jurisprudências e outros estudos de ciência criminal**, São Paulo: Revista dos Tribunais, 2002.



Recycling habits, recycling attitudes and beliefs and awareness of individual consequences in brazilians living in Portugal

  10.56238/thebestiimulti2022-007

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1 INTRODUCTION

Many constructs based on the research on habits, could be explored in order to explain recycling habits, however, in the present paper it is intended to analyze the importance of the following variables: attitudes and beliefs in recycling (ACR) and awareness of individual environmental consequences (CCI). This study decided to investigate these constructs due to the evidence in the literature on the topic, which points to their positive association influencing habitual recycling behaviors (Meng *et al.*, 2019; Abd'Razack, Medayese, Shaibu, & Adeleye, 2017; Rodrigues & Girandola, 2017; Halvorsen, 2012).

Among the concepts that serve as a basis for a better understanding about habits, there are those that define them as already established behaviors which have a tendency to repeat past actions; others, which postulate them as processes, having their beginnings from contextual cues; and still others that see habits as direct responses to situational cues (Gardner & Lally, 2018; Verplanken & Roy, 2016; Verplanken, Walker, Davis, & Jurasek, 2008). Studies are also found that define habits as repetitive behaviors, which happen with a certain frequency, are provided with automaticity, and take place in stable contexts (Verplanken & Sui, 2019; Gardner & Lally, 2018).

Thus, it can be inferred that the fact that a habit is a repetitive behavior also makes it difficult to control, because habitual, and therefore already established, behavior makes little use of consciousness, which entails automaticity of action (Verplanken & Orbell,



2003); and that given that habit is a behavior dependent on contextual cues, it is understandable that habitual behaviors are persistent, even if individuals lack conscious motivation to perform them (Gardner & Lally, 2018).

Specifically regarding the studies that investigated the recycling habit, different constructs and environments were analyzed. In Rodrigues and Girandola's (2017) investigation, the role of past behavior, attitudes and beliefs, along with the justification for non-behavior were analyzed in the context of self-reporting. In 2018, authors Whitmarsh, Hagggar, and Thomas; used the Theory of Planned Behavior (TPB), which is composed of the constructs - attitude, social norm, and perceived behavior control; associated with identity, personal norms, and recycling information to predict recycling behavior in home, work, and holiday environments.

Regarding attitudes, these can be understood as a positioning of the subject as to their favorability or unfavorability about a given behavior or action, and is aligned with the behavioral intention (Xu, Ling, Lu, & Shen, 2017). Thus, the attitude of recycling has a positive association with the moral duty and responsibility to be participatory regarding the separation and disposal of household waste, but for this, it is necessary the pre-existence of an individual belief on the issue of recycling, which puts the individual in a situation to position himself against or in favor of the actual practice (Ajzen, 1991; Xu, Ling, Lu, & Shen, 2017).

Some studies point out that the recycling attitude that an individual possesses, is able to predict behavior, if and only if, based on that individual's positive past recycling behavior (Knussen, 2008; Saphores & Nixon, 2014). For Meng et al. (2019), willingness to participate in recycling (behavioral attitude), environmental awareness, and social responsibility are factors that influence an individual's recycling behavior.

And with regard to individual environmental consequence awareness (CCI), the assessment of environmental awareness stands out, which, is understood to be the concerns and perceptions of individuals about environmental challenges and problems (Chen et al., 2019); but also, conceptualized in terms of the importance the subject places on their behavior to develop a safe and healthy environment (Umuhire & Fang, 2015).

It follows from the study of the aforementioned authors that the ICC and the Recycling Habit (RH) are associated, because they are considered directly proportional elements, since the authors point out that the greater the environmental awareness of the individual, the more prone he is to environmental preservation.



In the same direction, Bezzina and Dimech (2011) and Oyekale (2017), recognize that CCI is associated with increased citizen participation in local recycling, and agree that efficient public management regarding household waste recycling, should consider CCI as a potential influencer of behavior, since it considers psychological and moral factors at the time of action. Still in the same line of thought, Meng et al. (2019) state that environmental awareness, social responsibility, and behavioral attitudes play an influential role on individuals' recycling behavior. With this, this paper aims to evaluate the relationship between recycling habits from attitudes and beliefs in recycling and awareness of individual environmental consequences in Brazilian families living in Portugal.

2 METHODOLOGY:

2.1 SAMPLE

The sample was of the non-probabilistic type and by convenience, which would include people of Brazilian nationality and older than 18 years old. The sample 'n' was evaluated in the statistical package GPower 3.1, considering the statistical criteria [probability of 95% ($p < 0.05$), the magnitude of the sample effect ($r \geq 0.50$) and a standard of hypothetical power ($\pi \geq 0.80$)] that guaranteed that the sample with 352 people was adequate for the study, having its statistical indicators being ($n = t \geq 1.98$; $\pi \geq 0.95$, p-value 0.01) reliable; with this, the sociodemographic data were as follows: all participants were Brazilian, with 78% female, 31% aged 26 to 35 years, 47% with the licensed educational level, 58% were married. Regarding professional activity, 18% were still students, but 13% worked in the health area and 23% had other professional occupations. As for the time they have lived in Portugal, there was a very disperse distribution, but it was observed that 13% have lived in the country for three years, 8% for two years, and 7% for one year.

2.2 ETHICAL PROCEDURES AND SURVEY ADMINISTRATION

As for the ethical procedures of the research, the criteria established by the Helsinki declaration for research with human beings were followed, and then the instruments were sent to the respondents through an electronic form available online on the GoogleDocs page, which was shared on social networks of groups of Brazilians living in Portugal for a period of 30 days. Participation was solicited informing them that the objective of the study would be to evaluate recycling habits, and that the study would be



voluntary, with virtual signature of the Informed Consent Form (ICF). We ensured the anonymity of the answers and that they would be treated as a whole and not in the particularity of each subject. Thus, an average time of 10 minutes was enough for the activity to be completed.

2.3 INSTRUMENTS

With regard to the constructs administered, the participants responded to the following instruments:

Recycling Habits Scale (HRS) - The Self-Report Habit Index (SRHI) was developed by Verplanken and Orbell (2003) and is based on the main characteristics of the habit, such as repetition, control, little use of awareness, personal identification, and efficiency of the behavior. The scale contains the following statement: "Behavior X is something that...", read X as the behavior to be studied (e.g., recycling behavior) and is formed by 12 items, but, of these, we chose to select 5 items from the scale precisely because it presents tautologies in its expressions, as well as some of the items do not meet the research objective. The participants had to indicate their answer on a five-point Likert scale (where "1 = strongly disagree" and "5 = strongly agree").

Recycling Attitudes and Beliefs Scale (EACR) - The Recycling Attitudes and Beliefs Scale (EACR) refers to a scale that aims to assess the individual's perception of what they believe is right to do with regard to recycling. This scale was constructed based on authors such as Bezzina and Dimech (2011) and contains 6 items. Respondents were asked to answer the items on a five-point Likert scale (with "1=Strongly Disagree" and "5 = Strongly Agree").

Individual Consequence Awareness Scale (ECCI): the individual consequence awareness scale (ECCI) aims to assess the individual's perception regarding the importance of being aware of the consequences of recycling for the environment. This scale was based on authors such as Bezzina and Dimech (2011), and Ofstad, Tobolova, Nayum, and Klöckner (2017), and is composed of 3 items. Respondents were asked to answer the items on a five-point Likert scale (with "1=strongly disagree" and "5=strongly agree").

Data Analysis

SPSS software, version 24.0, was used to tabulate the data and perform the data analysis. In addition to descriptive statistics (mean, standard deviation, frequency), a principal component analysis (PC) was performed, taking as criteria the *KMO* equal to or



greater than 0.70 and the *Bartlett's Test of Sphericity* (chi-square, χ^2) significant ($p < 0.05$) (Tabachnick & Fidell, 2001; Dancey & Reidy, 2006). As well, Kaiser's (eigenvalue equal to or greater than 1) and Cattell's (graphical distribution of eigenvalues, aiming to distinguish those spare) criteria tend to maximize the number of factors to extract decided (Dancey & Reidy, 2006). The internal consistency was also calculated through Guttman's Lambda 2 and the ICC of the factor resulting from each scale (Hair Jr. et al., 2009). It was also applied the Anova test with the purpose of analyzing the variances with the presented hypotheses and the multiple linear regression test, which is an analysis method involving a single dependent metric variable, considered to be related to two or more independent metric variables (Hair et al., 2009).

3 CONCLUSION:

Once data collection was completed, the statistics referring to multicollinearity and *outliers* revealed acceptable statistical indicators, respectively, correlation of 0.23 to 0.54, which had $r \geq 0.90$ and the *Kolmogorov-Smirnov* (KS) indicator, 1.45 and p-value < 0.29 . In the factorial analyses, the calculations, considering the principal axes method (PAF), Oblique rotation, saturation ≥ 0.30 , eigenvalues ≥ 1 (Kaiser criterion), the distribution of the graphic slope with the cut-off point above 1.00 (Cattell criterion) (O'Connor, 2000; Hayton *et al*, 2004; Dancey & Reidy, 2006), revealed that the three measures (recycling habits, recycling attitudes and beliefs, and Awareness of individual consequences), showed the adequacy of the correlation matrix for all scales: recycling habits (KMO = 0.77 and Bartlett's Test of Sphericity,² /gl = 287.21/3, $p < 0.001$), attitudes of recycling beliefs (KMO = 0.74, Bartlett's Test of Sphericity,² /gl = 757.92/15, $p < 0.001$) and awareness of individual consequences (KMO = 0.77 and Bartlett's Test of Sphericity,² /gl = 287.21/3, $p < 0.001$). It is noteworthy that Guttman's Lambda 2, as an estimate of reliability of scales, intended for the evaluation of measures formed by few items (Formiga, Souza, Costa, Gomes, Fleury & Melo, 2015), as well as, the ICC (intraclass correlation) that assess reproducibility (Hutz, Bandeira, Trentini, 2015; Pasquali, 2011) indicated scores above 0.70, which were within the required statistical parameter.

Based on these empirical assumptions, we calculated a multiple regression analysis using the *Enter* method. The fact that this method was chosen is due to the originality of the study, in which the prediction of recycling attitudes and beliefs and of



the awareness of the individual consequence on recycling habits was hypothetically established. Considering recycling habits as a total score, in table 1 it is possible to observe that there are non-significant results. Although there is an indicator of multicollinearity of the prediction (i.e., the VIF) in the required range (< 5.00), still, the proposed model was not significant.

Table 1 - Multiple regression of the effects of the dependent variables on the independent variable

Predictors	Criteria variable: Recycling habits [#] (HR)					
	Average (p.d.)	B	IF	Beta	t ($> 1,96$)	VIF
<i>Intercept</i>	---	-5,03	2,81	---	-3,77*	---
Recycling Attitudes and Beliefs (RCA)	23,92 (2,60)	0,70	0,22	0,18	3,32*	1,42
Individual consequence awareness (ICC)	14,04 (1,42)	0,68	0,12	0,33	5,75*	1,42
Regression Coefficient (R^2)	0,20					
Explained Variance ($_{Adjusted} R^2$)	0,20 (20%)					
Model	F (2/356) = 45.38, $p < 0.01$					

* $p < 0.01$; [#] Total HR Score; VIF = Factor Variance Inflation

In the results highlighted in the table above, it is possible to observe that the predictive 'Betas' were positive and significant, both for attitudes and beliefs, and for awareness of the individual consequence. The multicollinearity evaluation observed in the VIF (defined in Portuguese as: Inflation of Factor Variance) should not present scores ≥ 5 , because it would imply in the low quality of the estimated empirical model (Hair, Tatham, Anderson & Black, 2005); thus, in the aforementioned table, it was observed that the VIF was 1.42 ($p < 0.01$). With regard to the significance of the predictive model and the variance explained of this ($_{adjusted} R^2 = 0.20$, i.e., explaining 20% of the variance) with statistical indicators that ensure the influence of this variable in the model [$R^2 = 0.20$; $_{adjusted} R^2 = 0.20$, $F (2/356) = 45.38$, $p < 0.01$].

From the predictive scores, which revealed an acceptable model, an ANOVA was performed, associated with the *Scheffé post-hoc* test, in order to evaluate the differences in mean scores in the dependent *versus* independent variables (see table 2). With this, it was observed that the mean scores were significant both for the direct effect having ACR and CCI, specifically, presenting higher means in the high score of both constructs; as for the ACR versus CCI interaction effect, also significant, for high ACR and high CCI in relation to recycling habits. In the *Scheffé* test, it was observed that in the interaction



result, ACR versus CCI, the mean scores were distinct, in which, confirmed that, as a function of HR, higher ACR and higher CCI for the respondents ($c > b > a$).

Table 2: Differences between the means in the constructs according to the habits of recycling

Construct	Levels	Average	d.p.	Statistics		
				F Friedman	gl	p-value
ACR	Bass	1,97	0,09	9,78	2	0,01
	Moderate	1,81	0,07			
	High	2,35	0,05			
JRC	Bass	1,54	0,06	15,38	2	0,01
	Moderate	2,19	0,08			
	High	2,54	0,04			
ACR <i>versus</i> ICC	Bass	1,76 ^a	0,15	5,10	4	0,01
	Moderate	2,23 ^b	0,09			
	High	2,56 ^c	0,04			

Notes: HR = Recycling Habits; ICC = Individual Consequences Awareness; ACR = Recycling Attitudes and Beliefs.

According to the empirical findings of this article, it is possible to state that both scales were reliable, since they presented factorial organization, represented by the factorial scores where the measures evidenced a valid item-factor relationship regarding their content and construct; the scale used to measure recycling habits (EHR) consists of the assumption of self-perception of the main characteristics of the habit, where repetition of the behavior, control, diminished use of awareness, self-identification, and efficiency of the behavior are observed. The scale of awareness of individual consequences (ECCI), seeks to evaluate the individual's perception of awareness of the consequences of recycling for the environment. The scale on attitudes and beliefs on recycling (ACR), on the other hand, is an instrument whose objective is to evaluate the individual's perception on what he/she believes is or is not correct to do regarding recycling.

Thus, it is understood that, from the moment the subject has a positive attitude towards recycling, it will probably result in a better development of a behavioral awareness that may influence the individual in a repetitive behavior of the action, i.e., the recycling habit. Such reflection corroborates several studies, such as Meng et al. (2014), where the authors show that the willingness to participate in recycling (behavioral attitude), and environmental awareness, influence recycling behaviors; Ofstad (2017), reveals that when a behavior is recognized as positive and useful, that is, when an attitude is favorable, this behavior will be marked in memory and will probably be repeated.

The aforementioned studies show that, between attitude and behavior, there is one more element, namely awareness, which, in turn, drives the individual to action, which is



also in relation to the research of Tsalis, Amarantidou, Calabró, Nikolaou, and Komilis, (2018), where the authors show that the attitude and belief in relation to recycling as influential factors in the participation of local campaigns. Thus, it is understood that the subject's action cannot exist without first having a favorable attitude added to an individual awareness regarding the importance of this action. Such reflection also corroborates with Forward (2019), where the author shows, from an investigation on the use of public transportation, that being favorable and believing that a certain behavior is the best alternative, leads the subject to a state of awareness or acceptance that that behavior is the right one.

From the moment an individual is aware of the consequences of his behavior and opts for friendly actions, such as recycling, which has good results, this individual tends to repeat such behavior responsibly and frequently. Thus, it is possible to infer that individual awareness influences the habitual behavior of individuals, and this inference finds theoretical support, as in Díaz Meneses and Beerli Palacio (2006), where the authors stated that habitual recycling behaviors present in themselves a recycling awareness; in Abd'Razack et al. (2017), where awareness is seen as a key element when it comes to strengthening the habit of maintaining a clean environment.

In sum, the findings of this study have a logical theoretical orientation, which suggests that attitudes and beliefs about recycling arouse in the subject an awareness of the consequences of his actions, which will lead him to a habitual behavior of separation and disposal of his waste. This study aimed to contribute to the evaluation of the formation of recycling habits in Brazilians living in another country, having as evaluative constructs Recycling Attitudes and Beliefs, and Awareness of Individual Consequences. Given that the initial explanatory model proposal was not confirmed, an alternative direction was reflected upon, which, directed towards a mediation model between ACR, CCI and HR, which, proved to be assessable, reliable, and within a theoretical logic.

The findings of this research have implications for both practical application and theoretical appreciation. For theory, it contributes not only to information regarding individuals' usual recycling behaviors, but also to a better understanding of the recycling behaviors of the immigrant public. As a practical application, it contributes both to the development of campaigns targeting the participation of citizens, be they native or foreign, and to the formulation of public policies, which are aimed at seeking the efficiency and effectiveness of the population's recycling behaviors.



REFERENCES

- ABD'RAZACK, N. T. A., MEDAYESE, S. O., SHAIBU, S. I., ADELEYE, B. M. Habits and benefits of recycling solid waste among households in Kaduna, North West Nigeria. Sustainable Cities and Society, V. 28, p. 297–306, 2017.
- AJZEN, I. The Theory of Planned Behavior. *The Theory of Planned Behavior*, 50, 1991. 179–211p.
- BEZZINA, F. H., DIMECH, S. Investigating the determinants of recycling behaviour in Malta. Management of Environmental Quality, 22(4), 463–485, 2011.
- CHEN, X., HUANG, B., LIN, C. TE. Environmental awareness and environmental Kuznets curve. Economic Modelling, V. 77, p. 2–11, 2019.
- DANCEY, C.P., REIDY, J. Estatística sem matemática para psicologia usando SPSS para Windows. Porto Alegre: Artes Médicas, 2006.
- DÍAZ, G. M., BEERLI, A. P. Different kinds of consumer response to the reward recycling technique: Similarities at the desired routine level. Asia Pacific Journal of Marketing and Logistics, V. 18(1), p. 43–60, 2006.
- FORMIGA, N., SOUZA, M., COSTA, D., GOMES, M., FLEURY, L., MELO, G. Comprobación empírica de una medida relacionada al excesivo consumo de alcohol en Brasileños. LIBERABIT. Revista Peruana De Psicología, 21(1), 91 – 101, 2015.
- FORWARD, S. E. Views on public transport and how personal experiences can contribute to a more positive attitude and behavioural change. Social Sciences, V. 8(2), 2019.
- GARDNER, B., LALLY, P. Modelling Habit Formation and Its Determinants. In Verplanken B. (Ed.), The Psychology of Habit, p. 207–229, 2018.
- HAIR JR., J.F. WILLIAM, B., BABIN, B., ANDERSON, R.E. Análise multivariada de dados. 6.ed. Porto Alegre: Bookman, 2009
- HAIR, J. F., TATHAM, R. L., ANDERSON, R. E., & BLACK, W. *Análise Multivariada de dados*. Porto Alegre: Bookman, 2005.
- HALVORSEN, B. Resources, Conservation and Recycling Effects of norms and policy incentives on household recycling: An international comparison. “Resources, Conservation & Recycling.” V. 67, p. 18–26, 2012.
- HAYTON, JAMES C.; ALLEN, DAVID G.; SCARPELLO, Vida. Factor retention decisions in exploratory factor analysis: A tutorial on parallel analysis. Organizational research methods, V. 7, n. 2, 2004. p. 191-205.
- HUTZ, C. S., BANDEIRA, D. R., & TRENTINI, C. M. (Eds.). *Psicometria*. Porto Alegre, RS: Artmed, 2015.



KNUSSEN, C. “I’m Not in the Habit of Recycling” The Role of Habitual Behavior in the Disposal of Household Waste. Environment and Behavior, V. 40(5), p. 683–702, 2008.

MENG, X., TAN, X., WANG, Y., WEN, Z., TAO, Y., & QIAN, Y. Investigation on decision-making mechanism of residents’ household solid waste classification and recycling behaviors. Resources, Conservation and Recycling, V. 140, p. 224–234, 2019.

O’CONNOR, B. P. Behavior Research Methods. Instruments & Computers, v. 32, 2000. p. 392-396.

OFSTAD, S. P., TOBOLOVA, M., NAYUM, A., KLÖCKNER, C. A. Understanding the mechanisms behind changing people’s recycling behavior at work by applying a comprehensive action determination model. Sustainability (Switzerland), V. 9(204), V. 1–17, 2017.

OYEKALE, A. S. Determinants of households’ involvement in waste separation and collection for recycling in South Africa. Environment, Development and Sustainability, V. 20(5), p. 1–29, 2017.

OYEKALE, A.S. Determinants of households’ involvement in waste separation and collection for recycling in South Africa. Environ Dev Sustain, V. 20, p. 2343–2371, 2018.

PASQUALI, L. Psicometria: Teoria dos testes na psicologia e na educação. Petrópolis, RJ: Vozes, 2011.

RODRIGUES, L., GIRANDOLA, F. Self-prophecies and cognitive dissonance: Habit, norms and justification of past behavior. North American Journal of Psychology, V. 19(1), p. 65–86, 2017. Retrieved from

SAPHORES, J. D. M., NIXON, H. How effective are current household recycling policies? Results from a national survey of U.S. households. Resources, Conservation and Recycling, V. 92, p. 1–10, 2014.

TABACHNICK, B., FIDELL, L. Using multivariate statistics. Needham Heights: Allyn & Bacon, 2001.

TSALIS T, AMARANTIDOU S, CALABRÓ P, NIKOLAOU I, KOMILIS D. Programas de coleta de recicláveis porta a porta: Disposição para participar e fatores influentes com um estudo de caso na cidade de Xanthi (Grécia). Gestão e Pesquisa de Resíduos.; V. 36(9), p. 760-766, 2018.

UMUHIRE, M. L., & FANG, Q. Method and application of ocean environmental awareness measurement: Lessons learnt from university students of China. Marine Pollution Bulletin, V. 102(2), p. 1–6, 2015.

VERPLANKEN, B., ORBELL, S. Reflections on Past Behavior: A Self-Report Index of Habit Strength. Journal of Applied Social Psychology, V. 33(6), p. 1313–1330, 2003.



VERPLANKEN, B., ROY, D. Empowering interventions to promote sustainable lifestyles: Testing the habit discontinuity hypothesis in a field experiment. Journal of Environmental Psychology, V. 45, p. 127–134, 2016.

VERPLANKEN, B., SUI, J. Habit and Identity: Behavioral, Cognitive, Affective, and Motivational Facets of an Integrated Self. Frontiers in Psychology, V. 10, p. 1–11, 2019.

VERPLANKEN, B., WALKER, I., DAVIS, A., JURASEK, M. Context change and travel mode choice: Combining the habit discontinuity and self-activation hypotheses. Journal of Environmental Psychology, V. 28(2), p. 121–127, 2008.

WHITMARSH, L. E., HAGGAR, P., THOMAS, M. (2018). Waste reduction behaviors at home, at work, and on holiday: What influences behavioral consistency across contexts? Frontiers in Psychology, V. 9, 2018.

XU, L., LING, M., LU, Y., SHEN, M. Understanding household waste separation behaviour: Testing the roles of moral, past experience, and perceived policy effectiveness within the theory of planned behaviour. Sustainability (Switzerland), V. 9(4), 2017.



Phytochemical analysis of the leaves of the *Mussaenda alicia* plant

  10.56238/thebestimulti2022-008

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Key words: Saponin, Inflammatory, Antitumor, Phytochemical.

1 INTRODUCTION

Studies in the area of natural products have been developed with the biomonitoring of their plant extracts, a fact that improves research on bioactive substances of economic interest. Therefore, there is a demand for scientific studies involving plants with biological activity, so that such practice should be encouraged, forming a promising and effective path for the discovery of new drugs. These new products can bring foreign exchange, besides offering opportunities for job creation along the production chain, not only in the urban area, but, above all, in the rural area, contributing to the deconcentration of income and, therefore, to the internalization of the development of the Amazon (SILVA, 2013).

The use of plant species for the treatment and cure of certain diseases is a practice as old as the human being, who seeing being passed from generation to generation in the treatment of numerous diseases, which is evident that knowledge about medicinal plants represents, "often, the only therapeutic resource of various communities and ethnic groups" (FIRMO et al., 2011, 92).

In Brazil, the Ministry of Health (MS) determines to prioritize the investigation of medicinal plants and the implementation of phytotherapy as an official practice of medicine, because in view of the country's biodiversity and in order to improve the health of the population, the Ministry of Health began to invest in the use of phytotherapy as a



complement to the SUS. However, for this to happen adequately and safely, it is indispensable that trained professionals understand the chemistry, toxicology and pharmacology of medicinal plants, in addition to the active ingredient, taking into account popular knowledge (SANTOS, et al., 2011).

It is emphasized that plants are complex living beings and, as such, have a formidable metabolism, which induces the production of a wide variety of chemical substances, such as: proteins, lipids, carbohydrates, in addition to nucleic acids that are common to all living beings, which influence the growth, reproduction and maintenance of vegetables (SILVA, 2009).

However, a high number of chemical compounds produced by plants have other purposes, such as: pigments (flavonoids, anthocyanins and betalains) and essential oils (monoterpenes, sesquiterpenes and phenylpropanoids) approximate pollinators; tannins, sesquiterpene lactone, alkaloids and iridiums present unpleasant flavors and can be toxic and irritating to other organisms. These substances work as food deterrents and protect plants from predators and pathogens (CAMPOS, et al., 2016).

The *Rubiaceae* family is the largest of the *order Gentianales* and involves about 640 genera and approximately 10,700 species, classified into four subfamilies (*Cinchonoideae*, *Ixoroideae*, *Antirheoideae* and *Rubioideae*) and 44 tribes, essentially tropical, being considered the fourth largest family of Angiosperms. Several genera are endemic to the neotropical region, which exhibits about 4,555 species. *Psychotria* L. is the largest genus in the family, represented worldwide by about 1,650 species. For Brazil, about 96 genera are considered, and for the Northeast region, there are 66 genera and 277 species, and the other (30 genera) are distributed in the other regions of the country (PEREIRA; BARBOSA, 2004).

Several species of *Rubiaceae* up to economic value, being used in the food, ornamental aspect, as well as in the pharmaceutical industry, as medicinal and/or toxic. It is noteworthy that the *rubiaceae* family stands out for the production of bioactive alkaloids that generate several drugs, which are still analyzed as chemotaxonomic markers of some subfamilies and genera. The amount of products described, their structural variety and pharmacological activities make alkaloids, along with antibiotics, one of the most important groups among natural substances with therapeutic importance (SOUZA; MARIE; SILVA, 2013).

This species differs from the other by dense branching, acute leaf apex and obtuse base, inflorescence with 27-45 flowers and corolla lobes with acute apex, blooming from



November to September and, fruiting in the months of February to September. Therefore, choosing the plants to be researched makes it necessary to take into account botanical and chemotaxonomic information, because the probability of finding bioactive substances are unpublished or already described in the literature is much higher. Such less exploited or unexplored sources of biodiversity are frequently related to the new chemical diversity (SANTOS; SANO, 2012).

Phytochemical research has shown that rubiaceal alkaloids are part of more than 10 distinct classes, especially in isoquinonics, with 44 substances described; quinycinics, with 70 alkaloids; indolic compounds with 391 isolated compounds. It is emphasized that indole alkaloids are fundamental chemical markers of this family, because in addition to the compounds mentioned, aglycones and heterosides of iridoids, anthraquinones, triterpenic saponin, flavonoids, lignoids, terpenoids and phenolic derivatives were still confirmed (MORAES, 2013).

Considering the chemical profile of the *Rubiacea* family, they have many species without any study, which prevents taxonomists from performing divisions in the family and subfamily. Thus, the in-depth knowledge of *the Rubiaceae family*, of great metabolic diversity and pronounced pharmacological potential can open perspectives for the chemistry, pharmacology and chemotaxonomy of this family, because these studies are an important tool for the chemotaxonomic classification of species within genera (FERREIRA JÚNIOR; VIEIRA, 2015).

The genus *Mussaenda* belonging to this family covers about 200 species, which are native to Tropical Africa, Asia and the Pacific Islands. Many of these species are used as ornamental shrubs, due to the fact that their showy and colorful bracts are similar to white sepals, bordered (white with pink margins), pink or red with yellow flowers, in addition to their pleasant fragrance (FERREIRA JÚNIOR; VIEIRA, 2015).

This class has few phytochemical studies carried out until present. However, Zhao et al., (apud NASCIMENTO; SOARES; VALVERDE, 2017), investigating the natural products of *the species Mussaenda pubescens*, identified substances belonging to the class of triterpene saponins, in addition to some mono and triterpenes. The species *Mussaenda alicia*, botanical synonymy botânica *Mussaenda erythrophylla rosea*, is popularly known as *mussaenda-rosa*, *mussaendarosa-arbustiva*, *mussaendarosa-arbustiva*, and it is verified that the hydroalcoholic extract of *M. alicia* has a high antioxidant activity.

In view of the above, this article presents as objective to evaluate the phytochemical profile of *the crude extract of M. erythrophylla rosea* and its partitions by



qualitative tests, as well as to correlate the observed antioxidant activity, the concentration of total phenolics.

2 METHODOLOGY

2.1 CHARACTERIZATION OF THE COLLECTION SITE

On May 19, 2017, between 20 and 21h, the first collection of tree leaves located in Floriano Peixoto Square in Macapá - AP - Brazil was performed.

On May 27, 2017, around 3:30 p.m., the second collection was carried out in a private plantation, located on Avenida Pedro Lazarino in Macapá - AP - Brazil.

Five branches were used to make the exsicates to be sent for identification by specialists in the Herbarium Amapaense (HAMAB) of the Institute of Scientific and Technological Research of the State of Amapá, in Macapá - AP - Brazil.

Presses, newspapers and cardboards were used to assemble the exsicate, which were placed overlapping with each other.

2.2 EXPERIMENTAL PROCEDURE

For the composition of the phytochemical study, the extract was obtained according to the steps described below:

Obtaining the gross extracts

a) The leaves of the first collection were washed and dried at room temperature for 5 days and subsequently dried at $45\pm 1^\circ\text{C}$, in a recirculating air oven for 30 minutes; The leaves from the second collection were taken directly to the greenhouse on June 7, 2017, as they did not require washing.

b) The botanical material of the first collection was manually crushed on May 24, 2017 and the material of the second collection, on June 7, 2017.

c) The extraction method used was macerated, where 327 g of plant material was placed together with 3L of alcohol 92.8°C , at room temperature, with occasional agitations, in a glass container closed for 3 days and then filtration.

The process was repeated 3 times, changing only the amount of alcohol, which became 2L in the last two times, due to the decrease in the volume of plant material.

d) On June 8 and 12, the evaporation route of the filtrates was made

e) Thus obtaining the alcoholic crude extract of the leaves of *Mussaenda alicia* (117.02g).



Phytochemical screening

According to Barbosa (2004) the methodology for the implementation of phytochemical studies occurred as follows:

3 CONCLUSION

From 327g of plant matter, 117.02g of crude alcoholic extract was obtained, which presented black and pasty appearance.

The phytochemical study of the raw alcoholic extract of *the leaves of Mussaenda Alicia* showed positive results for the presence of secondary metabolites such as saponins, reducing sugars, alkaloids, purines, azulenos, depsidios and depsidons and coumarin derivatives, Negative results were also observed for organic acids, polysaccharides, proteins and amino acids, phenols and tannins, flavonoids, cardiac glycosides, catechins, sesquiterpenolacones, steroids and triterpenoides, carotenoides and anthraquinones. (Table 1). However, these results do not state that there is a presence or absence, since there are divergences about extraction techniques, collection period and oversights associated with the legitimacy of plant material (MARQUES et al. 2012)

Table 1 - Data from phytochemical analysis of secondary metabolites.

Secondary metabolite	Result
Saponins	+
Organic acids	-
Reducing sugars	+
Polysaccharides	-
Proteins and amino acids	-
Phenols and tannins	-
Flavonoids	-
Alkaloids	+
Purines	+
Cardiac glycosides	-
Catechins	-
Sesquiterpenolacones	-
Steroids and Triterpenoids	-
Azulens	+
Carotenoides	-
Depsidia and Depsidones	+
Coumarin derivatives	+
Anthraquinonas	-

+ Presence; He's out of absence.

Source: Eduardo Kauê Mota Pantoja



Generally, secondary metabolites that occur in low concentration do not directly participate in plant growth and development. The production and storage of these metabolites comprise the defense against attacks by herbivores and pathogens and varies according to variations in climatic conditions such as water availability, radiation, temperature and light conditions.

According to Cartejon (2011) there are numerous lines of research that confirm that saponins are found as an active ingredient of various plant extracts and that to obtain a positive result in relation to this secondary metabolite it is necessary that, in aqueous solution, it occurs to the permanence of foam in abundance. In the research by Vieira et al., (2001) saponins are usually glycoide triterpenoids consisting of aglycone (sapogenol) linked to one or more units of sugar.

The importance of this class of metabolites is the result of industrialization, being possible to find it in food, textile, cosmetic and mainly pharmacological sectors, in view of the action of antiplatelet, hypocholesterolemic, antitumor, immunoadjuvant, anti-inflammatory, antibacterial, insecticide, fungicide and leishmanicide (COSTA, 2014).

From an *in vitro* assay to verify the effect of saponins present in yerba mate with bile acids and cholesterol, FERREIRA et al. (1997 apud CASTEJON, 2011) concluded that there is a decrease in these acids and increased excretion, and therefore part of the cholesterol in the bloodstream would be diverted to supply its deficiency in bile.

Saponins are important for the action of plant drugs, especially those traditionally used as expectorant and diuretics. However, the mechanism of action of these drugs is not well understood. Some authors argue that irritation in the respiratory tract would increase the volume of respiratory fluid and reduce its viscosity. Another possibility would be related to its superficial tension originating, lower viscosity and greater ease of mucus expulsion. Diuretic activity is attributed to irritation of the renal epithelium caused by saponins. However, in a study conducted by DINIZ (2006), triterpene saponins reduced urinary flow in rats.

The likely mechanism would be increased water resorption in the recurrent tubules, since there was an increase in the activity of the ATPases. Other posted jobs are as adjuvants to increase the absorption of medicines by increasing solubility or interference in absorption mechanisms and as an adjunct to increase the immune response (CASTEJON, 2011).

According to Demiate et al., reducing sugars are efficient carbohydrates in the reduction of cationic ions, such as copper and iron, in alkaline solutions and are



characterized by compute in their structure clusters of aldehydes or free ketonas. These sugars are represented by monosaccharides, such as glucose and fructose; and certain types of disaccharides, such as maltose, derived from glucose, and lactose formed from galactose and glucose.

Leaf sugars influence the metabolic state of photosynthesis and/or the translocation capacity of these to the reserve tissues (ZIELINSKI et al. 2009) and in circumstances involving water deficit, as it causes an increase in sucrose synthesis that collaborates with osphototic regulation without the inhibition of photosynthesis (ROSÁRIO; ALMEIDA, 2016)

Alkaloids are natural compounds that can form from amino acids or terpenes and sterols and constitute a heterogeneous group, having a complex structure. In its chain are present carbon, hydrogen and nitrogen that mostly form an oxygenated heterocyclic ring (CABRAL; PITA, 2015)

According to the America Dietetic Association (2014 apud SILVA, 2005) the definition of alkaloid is based on a substance identified in vegetables, and when consumed in correct amounts, it has devices for the maintenance of human metabolism, gaining the title of chemopreventive because they have prophylactic actions such as inhibiting cancer cells and acting as myorelaxant, aiding the excretion of kidney stones.

Purines have a central biosynthesis pathway in the metabolism of any organism being precursors of DNA, RNA and important cofactors such as Coenzyme A, FAD, NAD and NADP. In plants this pathway is of great relevance, since their products (IMP, AMP and GMP) are precedents of cytokinins, uredids, compounds involved in symbiotic fixation/nitrogen storage in legumes and alkaloids such as theobromine and caffeine (FEITOSA et al. 2005).

According to Marque et al. (2011) Azulene is an isomer of naphthalene that has some pharmacological properties. Classified as an essential oil, it is present in plants and can serve as an anti-inflammatory action, such as chamomile for example.

According to Medeiros (2010 apud ROSARIO; ALMEIDA, 2016) depsidonas and depsidonas are policetides that derive from the dehydration and formation of a cyclic chain of orselinic acid. These metabolites are related to anti-inflammatory and antibiotic effects and are therefore being studied so that their synthesis can be used for pharmacological purposes.

With regard to coumarin derivatives, they are found everywhere in a plant. Because they have a lactating ring, when extraction occurs in alkaline medium, this ring



opens, which results in obtaining substances in the form of water soluble salts. However, studies have revealed that such substances can be toxic to be consumed, considering their addition to food as adulteration (SIMOES, 2012).

In the pharmacological area, the derivatives of 4-hydroxycoumarin, the first drug with anticoagulant action of dicumarol, which derive other drugs such as warfarin among others, stand out. In addition, coumarins also present vasodilator activity, indicated for the treatment of male impotence. Several other studies have already evidenced important pharmacological activity presented by xanthenes that have inhibitory action of the enzyme monoaminoxidase, linked to the treatment of depressive conditions (SIMOES, 2012).

Coumarins containing dihydroxylated groups in orthoposition such as fraxetin 10 (7,8-dihydroxi-6-methoxy-coumarin), esculetin 11 (6,7-hydroxi-coumarin and 4-methylettagedin 12 (6,7-dihydroxyl-4-methylcoumarin) are powerful inhibitors of lipid peroxidation, in addition to eliminating superoxide radical anion and squeeking iron ions. These properties make them substances of interest as antioxidants, of possible application in the prevention of diseases caused by free radicals (SIMOES, 2012).

Through phytochemical tests performed, it was possible to identify the presence of some classes of secondary metabolites, such as saponins, reducing sugars, purines, coumarin derivatives, depsidios and depsidonas, as determined by the objective of this study. Classes that are interested in pharmacology, thus allowing the discussion of scientific knowledge of the plant *Mussaenda Alicia*.



REFERENCES

BARBOSA, WRL. Manual para Análise Fitoquímica e Cromatográfica de Extratos Vegetais. 2a. edição revisada. **Revista Científica da UFPA**, 2004.

DEMIATE, IM; WOSLACKI, G; CZELUSNIAK, C; NOGUEIRA, A. Determinação de açúcares redutores e totais em alimentos. Comparação entre método colorimétrico e titulométrico. **Revista Publicatio UEPG - Ciências Exatas e da Terra, C. Agrárias e Engenharias**, 8(1): 65-78, 2002.

CABRAL, C; PITA, JR. Alcalóides - Relevância na farmácia e no medicamento. **Ciclo de Exposições: Temas de Saúde, Farmácia e Sociedade**: catalogo. Coimbra, 2015.

CAMPOS, SC; SILVA, CG; CAMPANA, PRV; ALMEIDA, VL. Toxicidade de espécies vegetais. **Revista Brasileira de Plantas Mediciniais**, Campinas, v.18, n.1, supl. I, p.373-382, 2016.

CASTEJON, FV. **Taninos e Saponinas**. 2011, 26 p. (Mestrado) Universidade Federal de Goiás/ Goiânia, 2011.

COSTA, F. **Saponinas Triterpênicas: Biossíntese e Atividade Biológica**, 2014, 90 p. Universidade Federal do Rio Grande do Sul. (Pós Graduação), 2014.

DINIZ, L.R. **Efeito das saponinas triterpênicas isoladas de raízes da *Ampelozizyphus amazonicus* Ducke sobre a função renal**. 2006.116 f. Dissertação (Mestrado em Ciências Biológicas – Fisiologia e Farmacologia) – Departamento de Fisiologia e Biofísica, Universidade Federal de Minas Gerais, Belo Horizonte, 2006.

FEITOSA, LCL; DEBARRY, RB; JUNIOR, WJAM; ALVES, DF; MARBACH, PAS. História evolutiva da via biossintética de purinas revela antigos segredos da vida. In: 51º Congresso Brasileiro de Genética. **Anais...** 2005, Vila Velha, ES.

FERREIRA JÚNIOR, M; VIEIRA, AOS. Espécies arbóreo-arbustivas da família Rubiaceae Juss na bacia do rio Tibagi, PR, Brasil. **Hoehnea** 42(2): 289-336, 21 fig., 2015.

FIRMO, WCA; MENEZES, VJM; PASSOS, CEC; DIAS, CN; ALVES, LPL; DIAS, ISL; SANTOS NETO, MS; OLEA, RSG. Contexto histórico, uso popular e concepção científica sobre plantas mediciniais. **Caderno de Pesquisa**, São Luís, v. 18, n. especial, dez. 2011.

MARQUES, GS; LYRA, MAM; PEIXOTO, MS; MONTEIRO, RPM; LEÃO, WF; XAVIER, HS; SOARES, LAL; ROLIM NETO, PJ. Caracterização fitoquímica e físico-química das folhas de *Bauhinia forficata* Link coletada em duas regiões brasileiras. **Rev Ciênc Farm Básica Apl**. 33(1): 57-62, 2012

MARQUES, LF; SCHIAVON, GT; CORTEZ, LER.; AMARAL, V. Atividade anti-inflamatória do óleo essencial de mil-folhas (*achillea millefolium*). In: VII EPCC – Encontro Internacional de Produção Científica. **Anais...** 2011, Maringá, PR.

MORAES, AP. **Alcaloides indólicos das partes aéreas de *psychotria sp.*(rubiacae) e síntese de tihidantoínas e tioureias derivadas de aminoácidos e do r-(+)-limoneno**.



2013. 169 f. Dissertação (Mestrado em Química) - Universidade Federal de Goiás, Goiânia, 2013.

NASCIMENTO, RF; SOARES, A; VALVERDE, AL. **Perfil Fitoquímico e Concentração de Fenólicos Totais na Espécie Mussaenda alicia Hort.** Sociedade Brasileira de Química (SBQ). Disponível em: <<http://sec.sbq.org.br/cdrom/32ra/resumos/T1317-1.pdf>> Acesso dia 01jul2017.

NASSER, ALM; PAVAN, FR; BORALLE, N; ZOCCOLO, GL; SANTOS, LC; MARCHI, MRR; LEITE, CQF; VILEGAS, W. Esteróide e Triterpenos de espécies de Qualea – Bioatividade sobre Mycobacterium tuberculosis. **Revista de Ciências Básica e Aplicada**;34(4):513-517, 2013.

PEREIRA, MS.; BARBOSA, MRV. A família Rubiaceae na Reserva Biológica Guaribas , Paraíba , Brasil . **Acta bot. bras.** 18(2): 305-318. 2004

ROSÁRIO, Ana Carolina de Almeida do; ALMEIDA, Sheylla Susan Moreira da Silva de. Análise fitoquímica da espécie Phyllanthus niruri L. (quebra-pedra). **Estação Científica (UNIFAP)**, Macapá, v. 6, n. 1, p. 35-41, jan./abr. 2016.

SANTOS, RL; GUIMARAES, GP; NOBRE, MSC; PORTELA, AS. Análise sobre a fitoterapia como prática integrativa no Sistema Único de Saúde. **Revista brasileira de plantas medicinais.** vol.13 n. 4 - Botucatu, 2011.

SANTOS, MF; SANO, PT. Flora fanerogâmica da Serra do Ouro Branco, Minas Gerais: Myrtaceae. **Rodriguésia** 63(4): 1065-1083. 2012.

SILVA, L. C. Plantas ornamentais tóxicas presentes no shopping Riverside Walk em Teresina – PI. **REVSBAU**, Piracicaba – SP, v.4, n.3, p.69-85, 2009

SILVA, L. L. da. **Análise fitoquímica e determinação das atividades antioxidantes e vasculogênica dos extratos aquosos padronizados de Coffea arabica e Theobroma cacao.** 2005. 141 p. Dissertação (Mestrado) – Programa de Pós-Graduação em Biotecnologia, Universidade Federal de Santa Catarina. Florianópolis, 2005.

SILVA, M. E. M. **Estudo de plantas medicinais utilizadas popularmente no tratamento da obesidade em Araranguá.** 2013. 95 f. Trabalho de Conclusão de Curso (graduação) - Universidade Federal de Santa Catarina, Centro de Ciências Biológicas. Graduação em Ciências Biológicas. Araranguá, 2013.

SIMÕES, C MO. **Farmacognosia:** da planta ao medicamento. Porto Alegre / Florianópolis: Editora da Universidade Federal do Rio Grande do Sul / Editora da Universidade Federal de Santa Catarina, 2012.

SOUZA, RKD; MENDONÇA, ACAM; SILVA, MAP. Aspectos etnobotânicos, fitoquímicos e farmacológicos de espécies de Rubiaceae no Brasil. **Revista Cubana Plantas Medicinales.** vol.18 no.1 Ciudad de la Habana ene.-mar. 2013.

VIEIRA, MEQ; COSTA, C; SILVEIRA, AC; ARRIGONI, MB. Porcentagens de Saponinas e Taninos em Vinte e Oito Cultivares de Alfafa (Medicago sativa L.) em Duas



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Épocas de Corte - Botucatu - SP. **Revista Brasileira de Zootecnia**. vol.30 no.5 Viçosa Sept./Oct. 2001.

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Application of a didactic sequence: the collaborative scientific doing for the teaching of chemistry in basic education

  10.56238/thebestiimulti2022-009

Maria Salome Ramos Medeiros

ABSTRACT

This article is the result of research that focused on the study of scientific work with collaborative proposals and as a field of study, "Chemistry and Kitchen". In this way, we sought to dynamize the teaching-learning process of Chemistry, establishing the School as an ideal space for stimulating scientific research and building a fair, democratic, and inclusive society, based on everyday practical activities. The research was divided into the following steps: bibliographic review for the formation of a database on the subject under study, followed by the application of a didactic sequence with collaborative proposals for second and third-year high school students of the Technical course in Agroecology of a school of the state education network, in a small town in the interior of Bahia, in the year 2021. After the application of the didactic sequence, in possession of the data, the analysis was carried out, finally presenting the results of the research. It is worth mentioning that, during an asynchronous period, scientific research relied on the help of some digital tools, such as online laboratories and their potential, for the beginning of practical activities in the discipline of Chemistry in High School.

Key words: Chemistry, Kitchen, Collaborative Proposals, Inclusion.

1 INTRODUCTION

Chemistry is present in all compounds. Thus, there is no product without "chemistry". And, the kitchen is a complete laboratory. Chemical knowledge is there empirically.

In the 18th century, the French Menon inserted the term "culinary art", demonstrating that a relationship is needed between practical experience in cooking and scientific theory to obtain the best dishes. With chemical knowledge, we can gain numerous experiences in our kitchen, and basic concepts of chemistry can help us in the preparation of food and understand its composition to obtain better results.

According to Cury (2012, p. 41),

The information becomes knowledge through actions that encourage students to think about, connect and contextualize them, finding points of approximation and distancing to articulate the diversity of the data. Knowledge is, in this sense, information treated, signified by thought operations. This process should become a systematic and permanent practice because it will sustain the approach to complex problems.



At the time that no one learns alone, the kitchen presents itself as a link between scientific doing and collaborative teaching: the student is the protagonist of the learning process. Thus, Collaborative Teaching appears as an important instrument, as an inclusion strategy, because it enables the sharing of knowledge among professionals and contributes to the learning processes of individuals, the target audience of Special Education.

Therefore, we sought to investigate how collaborative proposals can make chemistry teaching more attractive and meaningful and what is the importance of chemical knowledge in the preparation of a recipe. With the application of a didactic sequence, producing a double exchange relationship between "Scientific Doing" and the "Collaborative Proposals" in the discipline of Chemistry in High School, Chemistry and Cooking are an ideal atmosphere to evaluate the previous knowledge of research participants, using chemical knowledge as a form of social integration and, creating arguments based on data and information gathered, for the formulation, adjustment, and defense of common ideas, points of view and decisions that respect and promote human rights, citizenship, and quality education.

It is noteworthy that the entire methodological approach was based on qualitative research, always trying to investigate behavior changes over time, seeking proof of information through observations and experiments. It should be said that, during the asynchronous period, online simulators were used.

The human being has the right to live and live with other human beings, without discrimination, and without hateful segregation. And the more "different" the human being, the more needs he has, and the more this right is imposed. And this is a natural right, which would not even need to be positive in law. It didn't have to be in the Constitution. At the same time, a collaborative proposal aims at the collaboration of all students, encouraging them to be curious and independent, being able to appreciate the reality lived with other looks, with the eyes of those who accept or refute ready definitions. The search for reflection on the relationship - Teaching chemistry x insignificance x exclusion - as well as other factors, point to the intense need to investigate ways for chemistry teaching not to be restricted to just decorating formulas and concepts for competitions and vestibular.

It is of fundamental importance that such science has applicability in life.

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2 LITERATURE REVIEW

As the literature points out, chemistry classes are considered the least important by the majority of students, since they claim a certain distance between theory and everyday life. The teaching of Chemistry follows in a traditional and decontextualized way with daily life, generating in students disinterest in the subject even the chemistry is present in our daily life. Learning chemistry should enable students to give students a critical view of the chemical transformations that occur in the physical world, as well as to judge the information acquired in the media, school, and society. From there, the student will make his decision and thus interact with the world as a citizen (SILVA, 2013).



On the other hand, taking into account the thought of Chassot (1995), there is a boundary between the abstraction of chemistry and the reality of the student. In 2004, the same author stated that the contents of Chemistry in high school are inserted in a curriculum that does not lead to the release of students because they were or are written by those who hold power and have no intention of losing it. We need to break this barrier, starting with scientific literacy so that chemical knowledge is the domain of all and not just of a closed group (CHASSOT, 2004).

To reduce this stigma, it is necessary to innovate the pedagogical process so that there is a greater appreciation of the discipline, simultaneously promoting inclusion, since, in the present day there is still the view that, "chemistry is only for the intelligent". In this perspective, the collaborative proposal favors the sharing of decision-making and responsibilities. When we transport this concept to the educational universe, full of characters and languages so different, we attach even more value to the exchange of experiences between teachers and students.

According to Irala (2004), collaborative learning is part of the idea that knowledge is the product of a consensus of a knowledge community, something that people build by talking, working together directly or indirectly, and reaching an agreement. Collaborative proposals are teaching tactics that encourage student participation in the learning process and make learning an active and effective process. It is a set of educational approaches that helps teachers make their pedagogical practice inclusive.

And, the struggle to build a truly inclusive school is great, but putting a child or young person with a special need, within a common classroom, does not mean the effectiveness of the practice of Inclusive Education.

Mantoan (2004) states:

Conceptual problems, disrespect for constitutional precepts, biased interpretations of our educational legislation, and prejudices distort the meaning of school inclusion, reducing it only to the insertion of students with disabilities in regular education and disregarding the benefits that this educational innovation provides to the education of students in general, by provoking basic changes in the pedagogical organization of schools and in the way of conceiving the role of the school institution in the formation of new generations.

(MANTOAN, 2004, p. 2).

According to the Salamanca Declaration and the Brazilian Constitution of 1988, inclusive education in the Regular School is a process that requires respect, dedication, and understanding of others, both educational institutions, and the people who receive



these students, accepting the differences of each one. In the era in which we live, there are no longer educational processes instituted in a manicomial way as they suggest from the 1960s and 1970s (SALAMANCA, 1994; BRAZIL, 1988).

Based on mantoan's ideas (2010), all teaching units should be a space of inclusion for all, so that students build their knowledge according to their peculiarities and times, participating in the teaching and learning process and developing as active subjects in the act of learning. These ideas dialogue with the proposal of the National Common Curriculum Base (BNCC) since it proposes that, as mediators of knowledge, we need to think about how the subject relates to the territory and sees ourselves facing it. It is of fundamental importance that the classroom dialogue with the daily life of the student, and perform educational practices that value the cultural diversities of the municipality, without forgetting the different subjects that constitute it. It is necessary to seek teaching techniques that enable the integral development of the subject, exercising more and more creative actions that value communities, whether rural, quilombolas, indigenous, landless, or Roma among others (BRASIL, 1996).

As the contents of Chemistry are broad and as a false discourse has been created in high school that science teaching serves only for competition and vestibular, the Chemistry present in the kitchen besides demystifying this idea is a way to work the formation of the subject integrally. With the development of new teaching strategies, it is possible to break with practices that prevent access for all to quality education (SANCHES; TEODORO, 2006).

According to a series developed at Unesp, entitled Chemical Series in the kitchen, Emiliano CHEMELLO is based on the application of Principles and Laws of Chemistry to address common topics in our kitchen as "salt" (sodium chloride), and onion, among others. In 2018, the Journal of Science and Mathematics Teaching brings a report addressing the positive effects that the workshop on chemistry in the kitchen brought to the production of scientific knowledge.

According to Piaget (1978), knowledge is in mental procedures and cognitive abilities, where successive discoveries lead to the formation of new constructions. The student gradually forms his intellect, interacting with the environment in which he lives, his world.

Fig1: Conclusion of the SD - Presentation of the students at the Solidarity Economy Fair of the



Municipality

Fig1: Conclusion of the SD - Presentation of the students at the Solidarity Economy Fair of the Municipality. (MEDEIROS, M.S.R, 2022).

Figure 1 shows this relationship of integration with the internal and external world of the individual. For Piaget (1978), doing and understanding do not happen simultaneously.

To understand in action a certain situation, to a degree sufficient to achieve the proposed objectives, and to understand is to achieve in thought to dominate situations, until it can solve the problems raised by it, with why and how of the connections found and, on the other hand, used in the action. (PIAGET, 1978, p.176).

With the arrival of the Renaissance, when culture and values turned to man, there was a change in this phase of ignorance and transformation of routines, beginning to speak of the rights and duties of the disabled. In this sense, it is also the purpose of high school, according to the National Common Curriculum Base (BNCC) (Brazilian Ministry of Education, 2018), the "improvement of the student as a human person [...] to build a fairer, more ethical, democratic, inclusive, sustainable and supportive society" (p. 466). It advocates the need, in high school, to build personal and collective projects based on cooperation, which in a way strengthens the concept of collaborative activities.

For Moran (2000), one learns when he relates, establishes bonds between what was loose, chaotic, dispersed, interacting with it in a new context, giving it meaning, finding a new meaning, learning when one is on the antenna when one asks, questions, learns by interest, need.



According to Oliveira et al (2012), we understand things better when we experience the practice and this makes us understand that the best way to teach the student to learn is when he starts to have direct contact with the object of study. The school plays the role of bringing the student knowledge and understanding of the problems that are around us.

When researching a product and /or processes present in the routine of our kitchen, it is expected the construction of knowledge is a significant way, since the teacher should play the role of advisor in the formation of a citizen who can seek and build collaborative paths, so that there is a production of knowledge in a critical and participatory way, since, in doing pedagogical and great value, it involves the reality of the day-to-day of each one.

3 RESEARCH METHODOLOGY

The methodological assumptions were based on qualitative research (GIL, According to Gil, the research is a "rational and systematic procedure that aims to provide answers to the problems that are proposed".

The work presented here focused on a descriptive developmental approach, in which we sought to investigate behavior changes over a time interval, seeking information about the study variables. Therefore, the didactic sequence (DS) was initiated as the application of an individual preliminary questionnaire, in which the relationship between the laboratory and the kitchen, the scientists and the cooks, and the varieties of chemical solutions found in the kitchen were discussed. The focus was to investigate the students' previous knowledge of the theme. Soon after, through debates on the collected data, the chosen content was introduced (Mixtures and Solutions), where conceptual differences were worked through virtual simulators such as Labvirt.

However, as we advocate the use of collaborative proposals, part of the studies was carried out in groups of five students, considering different and complementary skills of each member for a true implementation of the youth protagonism. Aiming at a greater opportunity for participation and commitment in the learning process, we include discussions, exchanges of experiences, and points of view.

Thus, we request the construction of a string depicting the theme "Chemical Solutions" and associating the same with our daily life in the kitchen.

It is noteworthy that all the work ensured the development of skills and skills defined by bncc. Finally, we seek proof of information through observations and experimentation through the production of a jelly.



4 RESULTS AND DISCUSSION

We live in a society imbued with science and technology. The mastery of certain scientific and technological knowledge can be of great value to understanding and being able to evaluate important issues for society. The teaching of Chemistry can contribute to this process by correlating the contents with technological applications, and their social, environmental, political, and economic implications, to spread a scientific culture that allows people to judge, with foundations, the knowledge disseminated by various sources of information and assume their decisions, as an individual and member of a social group. Thus, an approach to content through themes that enable the social contextualization of scientific and technological knowledge can broaden students' interest in science, favoring scientific literacy at higher levels than just knowledge of facts and processes (SHWARTZ et al., 2005, SILVA; MARCONDES, 2010).

In this context, active methodologies present themselves as a new way of thinking about traditional teaching. This is because one of the principles of bncc is the promotion of the student as the protagonist of their teaching-learning process. Thus, active methodologies emerge as an alternative to provide students with the means for them to be able to guide their educational development, fleeing the teaching model in which the teacher had all the knowledge within the classroom.

Still, within this model, collaborative proposals present themselves as a pedagogical action that seeks to meet new demands presented, both by students and their teachers, in the paradigm of inclusion. Here, the teacher should look for methodologies that prevail principle of equity, because regardless of the area, Education is a right of all.

Fig2: Final product of the Didactic Sequence - Fresh jam with typical fruits of the region.



Fig2: Final product of SD - Fresh jam with fruits typical of the region. (MEDEIROS. M.S.R., 2002)



And, thinking about the integrator axis, "Chemistry in the Kitchen", the use of workshops to work on the proposed concepts and contents, as shown in Fig .2 is an excellent request. In a workshop, with the Production of Jam in nature, we can work the content "Substance, Mixtures and Solutions" through the pectin test.

Fig 3: Pectin 3d structure

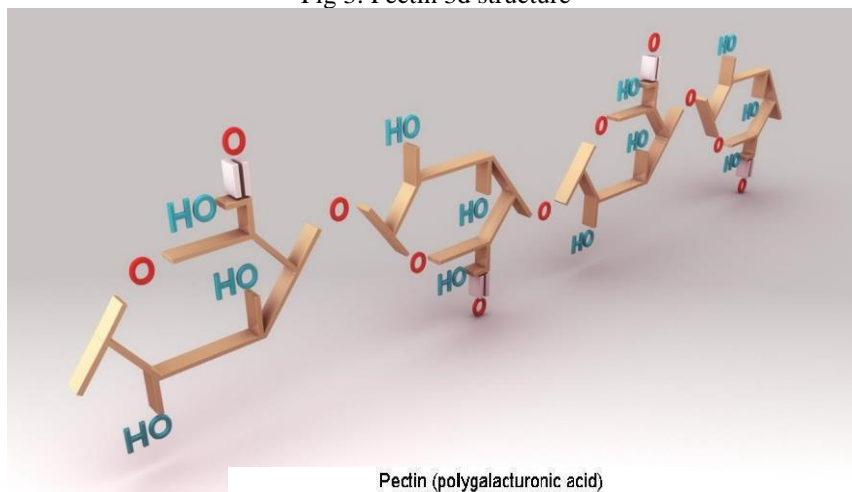


Fig. 3 -Pectin structure 3d. n-structure/1082657. On 10/09/2022Image extracted from https://www.turbosquid.com/pt_br/3d-models/3d-model-pecti

As we can see in the above structure, pectin is a polysaccharide, that is, they are carbohydrates that, by hydrolysis, originate a large number of monosaccharides. They're natural polymers. Thus, sugar also helps to form the jelly, contributing to gelatinization because it promotes the dehydration of pectin molecules (highly hydrophilic). It also acts as a preservative, preventing the product from being easily debased. Also, it improves the flavor of the jam and increases its brightness and degree of softness. Other culinary practices can assign values when doing scientific, taking away the abstraction of the Sciences and resignifying them.

According to Chalmers (1993),

Scientific knowledge is proven knowledge. Scientific theories are derived rigorously from obtaining experience data acquired by observation and experiment. Science is based on what we can see, hear, touch, etc. Personal opinions or preferences and speculative assumptions have no place in science. Science is objective. Scientific knowledge is reliable knowledge because it is objectively proven knowledge (CHALMERS, 1993, p. 17).

Regarding the "collaborative proposal", Mendes, Vilaronga, and Zerbato (2014), state that:



However, the proposal of collaborative teaching is not that of work centered on students with disabilities, it is assumed that both teachers work with all students in the classroom, suiting the activities so that all students have access and can participate in the activity planned to reach the curriculum (MENDES, VILARONGA AND ZERBATO, 2014, p.76).

Thus, a teaching proposal is sought focused on equality and equity, because the Education is everyone's right. And, "Chemistry and Cooking" is an integrating axis that, through collaborative proposals, enables the discussion of science putting everyone on the same level.

*In our everyday kitchen
Chemical solutions are present
They are homogeneous mixtures
formed by solutes and solvents.
(GROUP 2, 2021.)*

5 CONCLUSIONS AND IMPLICATIONS

The scores made in this study indicate the need for innovative pedagogical practices, in addition to encouraging scientific research already in some stages of Basic Education, to develop in students the ability to analyze problems and think about the data, instead of simply decorating formulas. For the teaching of the area in question, to promote the development of the capacity for analysis and synthesis, it is essential to seek support in overcoming outdated pedagogical practices subsidized by protocol logic, in which concepts are taught according to formalism.



Fig. 4: Group 2 - Solidarity Fair Exhibition



Fig. 4: Group 2 - Municipal Solidarity Fair Exhibition. (MEDEIROS. M. S.R,2022)

*Chemistry and cooking
It is a relevant theme
Addressing science,
An inherent object*

*In the kitchen is the first laboratory
With reagents such as acids, oils, and biological yeast
Many experiments are possible to make
Physical reactions and chemical concepts are likely to realize
(GROUP 1, 2021)*

Thus, taking into account Vygotsky's sociointeractionism, the theme "Chemistry and Cooking" as a collaborative proposal favors social interaction, which enables school inclusion and, consequently, we will have a more effective production of knowledge since collaborative teaching values diversity and the right to schooling for all. It foresees the individualization of teaching, with collaborative teaching, is a strategy that enables the learning of students with specific educational needs in inclusion processes, through care proposals that consider caring not to generate discrimination and segregation, and enable reflection on more effective pedagogical practices for all students.

*When we talk about Solutions
We highlight some relevant aspects
Some have a false appearance
With a scattered part
And a dispersant
(GROUP 3, 2021).*

The Best Articles:

Application of a didactic sequence: the collaborative scientific doing for the teaching of chemistry in basic education



This is our challenge as mediators of knowledge: to seek valorization and recognition of scientific knowledge, which is not a simple task, taking into account the complexity of human relations and transformation processes.



ACKNOWLEDGMENT AND SUPPORT

First, I thank the Supreme Father for his life and the opportunity to have come this far. Then I return to my family, not only the blood but also the creation. Thanks to his teachings and encouragement I was able to overcome barriers imposed by life, and difficulties that were emerging on the way, but which never brought me down. Thank you for the support I've always had!

As Rubem Alves said, schools that are wings do not love caged birds. What they love is birds in flight. They exist to give birds the courage to fly. Teaching the flight, that they can't do, because the flight is already born inside the birds. Flight cannot be taught. It can only be encouraged. At that point, I am proud of my beloved UESB. Gratitude to the teachers with whom I lived from my graduation to the time of graduate school. Especially, I turn my attention to Professor Dr. Joelia Martins Barros, who has always been guiding me, and encouraging me to walk the path of science! I couldn't forget my school, CEMJA. That, since I got out of the UESB, has been my knowledge barn. Thank you to my colleagues and especially management and my great colleague and friend, Professor Ma. Josleide Cristina D'Oliveira Mattos, who was always my supporters at all times. Thank you very much for the support received during this important stage of my life! I could not forget also IFNMG: Thank you to all the advisors I have had so far, especially my Tutor Crislayne de Souza. May the Lord bless you!



REFERENCES

Batista, Cristina Jardim; Motta, Luciana Keller Ponce da; Medeiros, Ligia Maria Sampaio de; "O Potencial Transformador do Desenho em Experimentos Colaborativos", p. 2165-2177 . In: Anais do 12º Congresso Brasileiro de Pesquisa e Desenvolvimento em Design [= Blucher Design Proceedings, v. 9, n. 2]. São Paulo: Blucher, 2016.

Brasil. Base Nacional Comum Curricular (BNCC). Educação é a Base. Brasília, MEC/CONSED/UNDIME, 2017.

Brasil, Ministério da Educação. Lei de Diretrizes e Bases da Educação Nacional. Brasília: MEC, 1996.

Chalmers, A. F. Tradução: Raul Filker. O que é ciência afinal? São Paulo: Brasiliense, 1993.

Chassot, Attico. Alfabetização Científica: questões e desafios para educação. Ijuí: Ed. UNIJUÍ, 2001. Para que(m) é útil o ensino?. 2.ed. Canoas: Ed. Ulbra, 2004.

Chemello, Emiliano. Série Química na Cozinha. Unesp, 2016.

DECLARAÇÃO DE SALAMANCA: Sobre princípios, políticas e práticas na área as necessidades educativas especiais. Salamanca – Espanha, 1994. Freire, Paulo.

Pedagogia do oprimido. Rio de Janeiro: Paz e terra, 2005.

Gil, Antonio Carlos. Como Elaborar Projetos de Pesquisa. 5. ed. São Paulo: Atlas, 2010. 184p.

<http://www.quimica.net/emiliano/especiais/quimicanacozinha/index.htm>. Acesso em: Nov./2020

<https://www.redalyc.org/pdf/1891/189117791011.pdf>. Acesso em: Nov./2021 Irala, Esrom Adriano Freitas. Grupos de Consenso: Uma Proposta de Aprendizagem Colaborativa para o Processo de Ensino-Aprendizagem. Revista Diálogo Educacional (PUCPR), Curitiba - Paraná, v. 05, n.13, p. 134-150, 2004.

Mantoan, M. T. É. O Direito de Ser, sendo Diferente na Escola. Revista CEJ. Conselho da Justiça Federal/Centro de Estudos Judiciários da Justiça Federal. Brasília/DF. n. 26, set. 2004, p. 36-44.

Moran, José M. Marcos, Behrens, Marilda. Novas tecnologias e Mediação Pedagógica. São Paulo: Papyrus Editora, 2000.

Nunes, A. S.; Ardoni, D.S. O ensino de química nas escolas da rede pública de ensino fundamental e médio do município de Itapetinga-BA: O olhar dos alunos. In: Encontro Dialógico Transdisciplinar - Enditrans, 2010, Vitória da Conquista, BA. - Educação e conhecimento científico, 2010.

Pacheco, José. Caminhos para a inclusão: um guia para o aprimoramento da equipe escolar. Porto Alegre: Artmed, 2007.

Piaget, J. A Epistemologia Genética, tradução de Nathanael C. Caixeiro, Zilda Abujanra Dacir e Célia E.A. di Piero, 2 ed. São Paulo: Abril Cultural, 1983.



Sanches, I.; Teodoro, A. Da integração à inclusão escolar: cruzando perspectivas e conceitos. Revista Lusófona de Educação, v. 8, n. 8, p. 63-83, 2006. Recuperado de <https://revistas.ulusofona.pt/index.php/rleducacao/article/view/691>. Acesso em: Set /2020.

Shaw, g. s. l.; da Silva Junior, G. S. Oficina iniciação à Química na cozinha e as concepções de natureza da ciência de estudantes do Ensino Fundamental. Revista de Ensino de Ciências e Matemática, v. 9, n. 4, p. 126-138, 29 set. 2018.

Silva, S. G. As Principais Dificuldades na Aprendizagem de Química na Visão dos Alunos do Ensino Médio. In: IX Congresso de Iniciação Científica do IFRN. 2013.

Vygotsky, I.s. Pensamento e Linguagem. São Paulo: Martins Fontes, 1989.



Study on the importance of the professional internship process in the perception of angolan and Brazilian interns

  10.56238/thebestiimulti2022-010

Imaculada da Conceição

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ABSTRACT

People management, due to the search, development and maintenance of talents, has been increasingly highlighted in organizations, being currently considered strategic in companies in general. In this context, this study aimed to conduct a survey to verify the importance of the internship process, the gateway to the labor market, in the perception of the interns themselves. The sample included Brazilian and Angolan trainees, without intending to segment or compare them, since the focus was on the internship process and conditions in both countries. The situations regarding interns in Angola and Brazil are contextualized. The study shows that there are several factors to be improved and gaps to be filled both by educational institutions and by the granting organizations, in order to make this process more efficient and effective for the training of new talents with gains for all stakeholders. As a limitation of the study, it is recognized that the small sample size does not allow the results to be generalized, which is why it is suggested that new studies be carried out that can be generalized in both countries.

Keywords: Angola, Brazil, Talent development, Professional education, Internship.

1 INTRODUCTION

This study was motivated by the experience of living and studying in Angola and Brazil, two countries that have many points in common, since both had the same Portuguese colonizer, consequently speak the same language, had strong religious influence in education, and suffered with slavery for a long period. Angola is a country that is in a development phase, and many things still need more attention and, even though education is a priority of the local government, there is still a lot to be improved, and the reality of the supervised internship is one of these issues. There are still very few companies in Angola that allow the hiring of interns, because not all of them have a structure to train university students, and health and teacher training schools are the segments that most receive interns so that students can apply in practice what they learn in theory.

In the old days, being an intern meant serving coffee, printing documents, etc., and the intern did everything but put into practice what he had learned in the classroom. Nowadays the trainee's function is not only to be an order taker, his duties go far beyond this. The companies



prepare an activity plan for the intern, based on his/her area of interest, and the student already enters the company knowing his/her functions within the organization.

It is possible to consider internship, on the part of students, as an indispensable factor in the students' education, being of fundamental importance in professional training, based on the teaching-learning process. On the part of the granting organizations, internships are invaluable opportunities to identify, develop, and retain talent throughout the internship period. In fact, internships can provide experience and maturity, enrich practical knowledge, and develop professional and interpersonal skills, the so-called hard skills and soft skills, respectively. The disadvantage of a student not doing an internship while in college is that he or she will not be equipped enough to join companies, where margins for error are hardly admissible.

Taking into account the above considerations, the objective of this work was to survey the similarities and differences of Angolan and Brazilian companies in relation to the conduct of supervised internships in normal and pandemic situations, as well as to identify the perception of interns regarding the internship process and the benefits of doing an internship while still studying.

The research allowed us to understand how companies implement and conduct their internship processes, as well as to identify several opportunities for improvement, in the view of the interns, to make the process more efficient and effective. These opportunities lie with both the granting organizations and the educational institutions.

2 THEORETICAL FRAMEWORK

All organizations are made of people for people, who constitute what we call human capital, which is the company's greatest wealth and its main tool for success. But not all people generate this wealth, only the good ones, that is, the ones who are capable, engaged and productive. Thus, companies, regardless of their segment, need a good group of collaborators so that they can function and continuously adapt to their market (CHIAVENATO, 2002).

People management covers a set of practices, aiming to attract, retain and develop talent in companies, so it seeks to apply the best techniques of motivation, communication, retention and training of employees so that they can improve their performance. Hiring and training the team can be the starting port to manage people and, although it seems simple, the area of people management has a big challenge when working to add and retain talent (CHIAVENATO, 2014).

Thus, finding the right people and managing them has become a challenge within Brazilian and Angolan organizations, since the intensification of globalized competition leads



companies to be in constant competition for the best professionals in the labor market. Generally, the entrance into the labor market in Brazil occurs in three very characteristic ways, as shown in Chart 1.

Table 1 - Ways in which young people enter the labor market in Brazil.

Mode	Form of Hiring	Specific Legal Basis	Age	Requirements	Goals
Internship	Contract of up to 2 years.	Law No. 11.788/2018.	Unrestricted	Be studying in high school, technical school, or university.	To provide opportunities to put into practice what has been learned in the course.
Young Apprentice	Hired under CLT for a fixed term	Law 10.097/2000.	Between 14 and 24 years old	This is a social program for young people within the age group, especially for those in socially vulnerable situations.	Fostering job openings for young people to enter the job market.
Trainee	Hiring under CLT.	No	It depends on the company.	According to the rules established by the company in the selection process.	To train professionals for management, leadership, and strategic positions for the organization's business.

Source: research

In fact, the attraction, acquisition, development, and retention of qualified talents, creative and committed to the organization, from the stage of their training, constitute the greatest contribution of the people management area to the organizations, since even technology or strategy cannot be realized alone, without the presence of skilled teams willing to develop them.

It can be stated that the talent supply subsystem is the head of the human resources subsystems, because it is responsible for the important process of recruitment, selection and hiring of professionals whether internal or external. It is in the provision subsystem that also includes market research and the definition of who will work in the company (CAMILO, FORTIM, CRUZ, 2018).

According to Lacombe and Heilborn (2011, p. 243), "the success of a company depends on the competence and motivation of its employees, on who is hired and who is fired; in short: to keep in the company the appropriate team to produce efficiently and effectively". The human resources area needs to be prepared to supply the organization with employees properly qualified to perform the functions for which they are hired and to develop the tasks described in the job manual that are an integral part of the compensation subsystem.

There is perhaps no more important topic in HR Management than employee selection. If it is true that organizations succeed or fail based on the talents of their employees, then managers directly influence this success by the people they hire. Regardless of whether companies are large or small, hiring the best and the brightest employees is the solid foundation for excellence. On the other hand, it is common to



hear managers, who fail to recognize this, lament that they spend too much time trying to correct poor selection decisions. The result is that good selection decisions make a difference. So do bad ones (BOHLANDER, 2005, p. 102).

Candidates recruited through the media appropriate to the public that one intends to attract, selected according to the established profile, with values and behaviors that allow a faster and safer adaptation to the organization's culture, constitute true treasures to be stimulated and developed, so that they can play their roles well in the company. In fact, Milkovich and Boudreau (2000, p. 163) state that we usually "view careers as an individual thing, but they are also vital to organizations and are often an essential activity of human resource managers.

Until the last century, people were hired predominantly based only on objective criteria such as: previous experience, in case the demand was for an experienced professional, or academic performance if the demand was for an intern or trainee (CAMILO, FORTIM, CRUZ, 2018).

In Angola, for example, there are companies that still adopt these criteria for selecting candidates. In even earlier times, the selection criteria were linked to the physical characteristics of the candidates. These processes were also quantitative, measurable through the results of objective tests and practical tests. Today, this scenario has changed somewhat, because companies are now looking for people with competencies and potential analyzed through specific instruments and behavioral profile analyses.

According to Walhers, Muondo and Oliveira (2020, p.2), in order to qualify professional training, the supervised internship is configured as one of the fundamental elements of the indissociability process between theory and social reality. This understanding attributed to the supervised internship is due to the accumulations and social advances in the labor market.

In fact, the organizations themselves increasingly understand the importance of hiring students, because besides being in a training phase, they learn very fast and often become key contributors to the development of the companies where they make their careers. The companies train and empower the trainees to have an exceptional professional career, there are companies that even end up hiring the trainees to be a framework for the organization.

2.1 THE PROFESSIONAL INTERNSHIP IN ANGOLA

There is a lack of information and research on the supervised internship in Angola, a fact confirmed by the time spent in Angola and by research on search engines, so we highlight a study on the importance of professional internship for Angolan Social Workers that we use in this topic.



According to Walhers, Muondo and Oliveira (2020, p. 9), the Higher Institute of Social Service of Luanda, for example, since it began operating in 2010, has been managed at the directorate level by directors with no training in Social Work, particularly in areas such as Psychology, Philosophy and Education Sciences, a situation which does not prioritise internships as a fundamental element in the exercise of the professional practice of Social Workers. Faced with this situation, the authors report, teachers face great difficulties when trying to impose themselves on the board, justifying the need and the great importance of internships as a mandatory and indispensable training component, integrated into the curriculum of the Social Service course.

The internships in Social Work obey a period of time that varies according to the year of attendance and are held in the second semester of each academic year, reserving the first semester for the preparation of the entire administrative process.

In this way, for the first year students, the internship called Social Observatory takes place, without any interruption, throughout the 2nd semester, once a week, with 4 (four) hours a day, visiting several institutions or communities, under the attentive, critical, and constructive eye of a single supervisor, who, at the end of the process, requests a Report from the interns, containing the information related to each field observed.

The 2nd year internship is called the Study of Social Resources or Permanence, and is conducted throughout the 2nd semester, twice a week, with a duration of 6 (Six) hours a day, in a single institution or community, in which the respective operation is observed and understood, verifying the aspects inherent to it, and presenting a monthly report and a final one after the end.

In the 3rd year of formation, the internship is called Community or Institution and is carried out with the duration of a formative semester, with a weekly frequency of 3 (Three) days and a workload of 6 (Six) hours a day. In this period the intern is enabled to elaborate and present an Internship Project, attaching the respective Action Plan, resulting from the choice of a theme, in a determined intervention space, presenting at the end of each month a report, according to the structure approved by the educational institution and, one after the end of the internships.

The internship in the 4th and last year of formation, called Community Internship, also takes place for one formative semester, 4 (Four) days a week and 6 (Six) hours a day. It is the final moment of the professional practice of the future Social Worker, which materializes from the Internship Project. The 4th year students, as finalists, are required, within the institution's norms, to present a Research Project that, elaborated based on a theme related to the internship field, defines the elaboration of the Course Conclusion Work, under the supervision of the same supervisor.

For the guidance of trainees in the 3rd and 4th years of training, preference is given to specialists in the professional category of Social Worker, a situation that often does not happen, reducing the formative quality of the future candidate to exercise the profession, generating some uncertainties and some despair in their performance (WALHERS, MUONDO and OLIVEIRA, 2020, p. 10).

Also according to Walhers, Muondo and Oliveira (2020), the institutional supervisor acts in coordination with the field supervisor who, as a rule, should also be a professional with experience in the trainee's training area, as a Social Worker, who acts in coordination with the field supervisor. In general, the lack of Social Workers to supervise students' internships, both at the academic level and in the internship field, results in the failure of training, poor quality,



and in the recognition of the profession in different areas or sectors of social life, which somehow ends up leaving the student unprepared for the labor market and, as a consequence, many of them end up being rejected by companies because they do not have enough experience for a certain position, since Angolan companies give more opportunities to professionals who already have a significant number of years of experience.

On the other hand, it can be said, from experience in Angola, that it is not uncommon for companies not to have the patience to accompany a student who is looking for an internship, so that there is a loss for both parties: the student loses the opportunity to do an internship while studying, and the companies lose the opportunity to train a future professional who could add value to the organization.

2.2 SUPERVISED INTERNSHIP IN BRAZIL

There are some benefits for companies that hire students for the internship period, and one of them is the issue of companies training these interns to leverage their careers and if it is of interest to companies, it can hire the same not to have to return to the competition, making both have a gain, the company wins retaining a talent within the company and the intern wins acquiring professional experience. Following the line of reasoning of Pontes (2016, p. 81), the internship should be the space of "mediation between the singular and the universal, through social particularities, seeking to apprehend the social reality in its movement, in search of the social totality through the multiple determinations that make up the logic of capitalist society and that constitute the social processes.

According to Marran and Lima (2011, p. 4) on September 25, 2005, a new internship law n°11.788 (BRASIL, 2018) was approved, which amended the wording of art. 428 of the Consolidation of Labor Laws - CLT. The objective of the Brazilian law of the supervised curricular internship is the preparation for the academic productive work, aiming at the learning of skills proper to professional activities and the curricular connection. Its provision must be included in the pedagogical projects of undergraduate courses and integrate the formative itinerary of the learner, therefore, in a provocation or search for the instrumentalization of the student in any modalities, stages or levels. According to the authors:

The perspective of "productive work" brought by the referred legislation provides clues to the questioning of at least two axes present in the main demands of multilateral organizations, namely: "what kind of man is intended to form?" and chained to this: "For what society?" These questions are intrinsic when discussing the supervised curricular internship in Brazil, especially in Higher Education, as a tendency for teaching and the distancing of research and extension (MARRAN AND LIMA, 2011, p. 4).



[...] the contribution of the internship in professional training, from the know-how is not reduced to the knowledge of a handful of techniques and teaching methodologies, but with what to do to promote the quality of the intervention, resulting in a significant learning on account of the improvement and development of skills and competencies students in the light of a critical-reflective posture, so at any time will be revisiting the issues of ethical, instrumental, epistemological and human, among others. The internship in turn, as an unfolding of professional self-sufficiency, favors the understanding of the inseparability between theoretical and practical training, so the importance of a student being able to relate learning in both aspects to leverage professional development in the workplace (MARRAN AND LIMA, 2011, p. 6).

Freire (2001, p.6) emphasizes that the internship experience is "fundamental to the formation of a professional who is coherent with the totality of the praxis experienced in his or her field of knowledge", thus being configured as a process of personal and cognitive development of those involved in the teaching-learning relationship. Therefore, the internship emancipates the student by placing him/her as the protagonist of his/her choices regarding his/her insertion in the world of work and of eventual possibilities of his/her professional reconstruction.

Werneck, Senna, Drumond, and Lucas (2007) state that the main objective of the professional internship is to build the students' capacity for professional and political autonomy, because it favors ethical action and the development of skills acquired through experience in solving real and specific work problems, it cannot be an intramural experience.

The internship within the walls does not contemplate the student's contact with social reality. On the contrary, this reality is masked by the weight of the institutional structure that limits and transforms the individual's capacity for expression, by the impossibility of seeing, perceiving and feeling the environment, the physical environment of origin of the people it serves (WERNECK, SENNA, DRUMOND E LUCAS, 2007, p. 223).

The articulation between theoretical teaching in the classroom and practical learning in the work field through supervised internship is foreseen in the National Curriculum Guidelines - DCN, according to the undergraduate course, highlighting the relevant participation of the granting organizations (where the internship takes place), together with the Educational Institutions, in the preparation of the internship program and supervision of the internship process.

It is worth mentioning that Law 11.788/2018 (BRASIL, 2018), called the internship law in Brazil, refers to the importance of the term of commitment between the professional training institution and the institution granting the internship, in its third, seventh, ninth, tenth, and sixteenth articles. This document should ensure the purpose of the supervised curricular



internship, because it is from it that the activities that the student will develop in the internship field are established.

The Administration course, for example, in its DCN (CFA, 2022, p. 52) recommends the realization of "assisted internships" as an active methodology with the purpose of promoting the development of competencies that require "practice in environments similar to the future reality of action and receive constructive feedback regarding their performance". The same DCN prescribes the mandatory realization of supervised internships (or similar activity) in the pedagogical projects - PPC of the courses.

Art. 11 The Course Pedagogical Project (PPC) must foresee effective interaction with the labor market or future performance of its graduates.

§ The interaction referred to in the caput must be coherent with the profile desired for the graduates and their main focus of action, whether local, regional, national or global.

§ The interaction referred to in the caput must occur in several dimensions:

I. In the definition and periodic review of the competencies defined for graduates, through consultation and/or participation of market players in councils and collegiate bodies;

II. In the evaluation of competencies, through the participation of market players in evaluation panels;

III. In the creation of learning experiences that simulate the real environment in which the graduates will work;

IV. In mandatory supervised practical activities, which may take the form of a supervised internship or similar activity that meets the training objectives;

V. In extension activities (CFA, 2022, P. 54-55).

Thus, as Oliveira (2004, p. 67) reports, from this perspective, the supervised internship acquires a privileged weight in the students' professional training process, and can provide opportunities not only for approaches in the process of theoretical and methodological training for professional practice.

Thus, the internship is the beginning of a professional career and the first gateway to the corporate world, so it is very important that the educational institutions and the granting organizations encourage, facilitate, and monitor the internship for students to complement their training and later join the labor market.

2.3 PARALLELS BETWEEN INTERNSHIP SITUATIONS IN ANGOLA AND BRAZIL AND THE IMPACTS OF COVID-19

The pandemic brought many impacts in the most diverse areas of work for the whole world, and for the hiring of trainees the situation was no different. At the beginning of the pandemic, many companies were frightened by the scenario that presented itself, which led many of them to reduce the number of professionals working in the companies, that is, many



trainees saw their experiences interrupted because of the pandemic, especially companies that did not bet on technology.

The internship and trainee programs were canceled because of the pandemic, and slowly the companies are starting to resume hiring young talents that are essential to oxygenate the operation and bring innovation. In addition, while the trainees were not going in person to the companies, most companies, if not all, temporarily cut the transportation voucher benefit, and others also cut the meal voucher benefit with serious impacts to low-income trainees.

In Angola, even though the number of cases is lower than the number of cases in Brazil, many companies have been paralyzed by the pandemic, because many Angolan organizations still do not have a complete structure for home office work.

The trainees are the ones who are most affected by this situation, because it has become even more difficult to hire them in the companies and the possibility of doing a home office traineeship was almost null, due to the lack of technological structure of the companies.

As can be seen, in Brazil the case was quite different, because as seen above, with regard to supervised internship, the Brazilian system is already well constituted and organized, i.e., companies already have a whole structure to recruit and keep interns, even during a pandemic. It can be seen, therefore, that Angola still has a long way to go to be like Brazil in the matter of hiring students as interns.

3 METHODOLOGY

To obtain primary data, the collection instrument was a *survey*, applied to Angolan and Brazilian trainees through an electronic form developed on Google Forms®, which was available for a 37-day period.

Links to answer the questionnaire were forwarded to people in the researchers' relationships who were known to be interns or had been interns, with the guidance that they answer and forward to other people with the same requirements, according to a technique called snowballing (COSTA, 2018).

The links were sent to students from the most varied universities in Angola and Brazil, and the biggest difficulty in the course of the survey was with the respondents in Angola, since many of them failed to answer, as found out, due to lack of internet because internet in the country is very expensive and not everyone can have internet in their homes.

This is a descriptive research, according to Gil (2022), which aimed to conduct a study on the perception of Brazilian and Angolan interns as to their respective internship processes,



in order to capture the importance that companies in both countries devote to this type of work relationship and professional growth for students.

Still resorting to Gil (2022), this research made use of two technical procedures, the first being the bibliographic research that was developed based on already prepared material, consisting mainly of books and scientific articles and the survey to directly question Angolan and Brazilian trainees, to then, through quantitative analysis, obtain the assessments corresponding to the data collected performed with the help of Excel© software that allows the preparation of tables and extraction of graphics. The questionnaire was structured with 40 closed questions, addressing the most relevant issues to the theme that would allow the research objectives to be met, and was open to respondents from October 9 to November 15, 2021.

4 DATA PRESENTATION AND ANALYSIS

In the survey conducted with students from various colleges in Angola and Brazil, it was possible to obtain a total number of 75 respondents and among them, 43 of these are Brazilian students which is equivalent to 57.3% and 32 of the respondents are Angolan students which is equivalent to 42.7% of the respondents. The survey was answered by students from 17 years old to 27 years old, with 45.3% being in the age group of 20 to 24 years old, 28% above 27 years old, 25.3% between the age group of 24 to 27 years old, and 1, 3% are between 17 and 20 years old.

With regard to the gender of the respondents, it was possible to observe that they are mostly male, totaling a percentage of 50.7%, while 49.3% are female. Within what was considered as basic information for this research, we tried to find out from the respondents what their occupation is, and we obtained that 52% work and study, 20% are students and do internships, 14.7% are students looking for an internship opportunity, and 13.3% of these are only students.

As for the level of education of the students, 85, 2% are pursuing undergraduate degrees, 10, 7% are pursuing technological degrees, and 2, 7% of this are graduate students. Regarding the courses, the survey participants are in several areas: Administration, Architecture, Computer Science, Natural Sciences, Humanities, Accounting, Law, Economics, Building, Nursing, Engineering, Teacher Education, Marketing Management, Human Resource Management, Management in Internet Systems Technology, Computer Science and Communications, Mathematics, Medicine, Editorial Production and Creative Writing, Psychology, Information Systems, Technology in Tourism Management. It should be pointed out that Engineering students prevailed with 32% of the respondents and Management with 24%, totaling 56% of



the sample, with the remaining 44% of students distributed among the other twenty related courses.

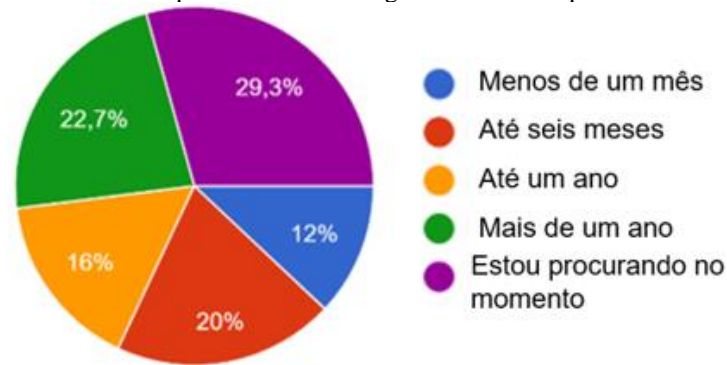
When asked if the students' course was full time or not, in order to understand the availability for dedication to the internship, the result for this question showed that 46.7% of the students study full time and 53.3% do not study full time, thus giving the latter time to do an internship and improve the theoretical learning in practice, besides being able to pave the way for the construction of a professional career while still studying.

With regard to their internship income, 20% of the students responded that their internship income is more than two minimum wages, 20% responded that they receive more than one minimum wage, 14.7% responded that their internship income equals one minimum wage, 13, 3% earn less than one minimum wage, 5, 3% responded that they receive more than two minimum wages, and 4% receive up to one minimum wage. In Angola the "single guaranteed national minimum wage is officially set at 32.181,15 kwanzas" (ANGOLA, 2022) which is equivalent to US\$ 74,9 in the quotation of 24/06/2022 (<https://wise.com/br/currency-converter>).

In some Angolan universities as well as in some Brazilian universities, the internship is not compulsory. In Angola for example, some courses such as medicine, nursing and teacher training and some engineering courses the internship is mandatory. In Brazil, the vast majority of universities have a mandatory internship, especially in courses such as Business Administration, Economics, Accounting, and others. In this sense, 74.4% of the respondents say yes, when asked about the mandatory nature of the internship, and 25.3% say it is not mandatory.

Usually, colleges advise students to look for an internship from the second year of college on, because it is in the second year that the student is already more familiar with the choice of course and it is a good time to seek knowledge beyond what is taught in the classroom. The search for an internship is not always an easy task for the students, some find it in less time and others take longer to find it. Questioned about how long it took them to get their last internship, the answers shown in Graph 1 below were obtained.

Graph 1 - Time Looking for an Internship



Source: research.

Asked whether they consider the internship an important tool for learning, 78.7% totally agree with this statement, 20% only agree, and 1.3% disagree with this statement. Also when asked whether the student considers the internship a bridge between the theory learned in college and the practice, 62.7% of the respondents said they totally agree with the statement, 29.3% only agree, 6.7% are indifferent, i.e., neither agree nor disagree, and 1.3% of these disagree. The contribution of the internship in professional training is not reduced to knowledge of techniques and methodologies, but to a significant learning on account of the improvement and development of skills and competencies. Corroborating this perception, the result of the question whether the internship was an option to gain more experience, the absolute majority, i.e., 98.7% answered yes, that the internship is fundamental to gain more experience, acquire skills and competencies.

At the same time, there are students who seek internships not only to acquire new learning or gain more experience, but who seek internships for a matter of income, to be able to help with household expenses, or even in the case of those who take advantage of this income to pay for college, or even to support some whims. The survey shows that although 58.7% of the respondents say that they do not look for an internship for the sake of income, 41.3%, which is a very considerable percentage, say that yes, they do look for an internship for the sake of income.

The internship in turn, as an unfolding of professional self-sufficiency, favors the understanding about the inseparability between theoretical and practical training, hence the importance of a student being able to relate the learning in both aspects to leverage professional development in the workplace. Furthering this point, the respondents were asked whether in their internships the tasks or activities developed in the internship were or are related to the training area, obtaining a result in which 36% of the respondents totally agree with this statement, 25.3% only agree, 17.3% neither agree nor disagree, 14.7% disagree with this



statement, and still 1.3% responded to this statement saying that not everything, since knowledge is multidisciplinary.

When asked if there was internship supervision at the company, the scenario for this question was as follows: apart from the 7.9% of respondents who answered this question who are not doing an internship, 48% say that they have or have had supervision, 34.7% have or have had supervision when possible, and 9.3% say that they have had no supervision at all during the internship period. This question leads one to reflect on the extent to which companies are actually committed to transferring the practical knowledge that students seek when they undergo an internship.

There comes a point when we enter a fundamental point even for a self-evaluation of the trainee itself, which is the feedback during the course of the internship. The most committed managers are always concerned with passing on a vision of how their trainee is doing in a given period of time. Feedback for a trainee can be weekly, biweekly or monthly at the latest, so that he already knows in advance the points in which he developed well and the points to be improved. Thus, 36% of our respondents pointed out that they receive feedback weekly, 24% receive feedback monthly, 22.7% receive no feedback, 2.7% receive feedback every three months, and 1.3% receive feedback every two weeks.

Colleges in which internship is mandatory have a greater tendency to supervise the internship of their students, however, with the research it was possible to understand more about this subject and it was found that 38.7% of the students were supervised by the college during the internship period, 30.7% were supervised by the college when possible, and 20% had no supervision whatsoever from the college.

In Brazil, the current Internship Law (BRASIL, 2008), which has been in effect since September 25, 2008, defines the parameters that regulate the hiring of interns, limiting the maximum workload to six hours/day (thirty hours a week) and this workday can be fulfilled in more than one organization, as long as it does not exceed, in total, the legal limit allowed.

In Angola, despite not having a specific law for the intern, the internship hours are determined by the companies themselves, but the hours vary between 4, 6, and 8 hours daily. From this, we were able to raise that on a daily basis, 42.7% of the respondents do their internships for up to six hours a day, 22.7% do their internships for four hours, 21.3% do their internships for eight hours, and 5.3% do their internships for more than eight hours.

When we talk about internship, we are not referring only to the search for practical knowledge or learning, as people work to achieve expectations, this is one of the factors that also influence interns to motivate themselves to work better on a daily basis within the



company. Along these lines, we asked if the corporate benefits offered to interns are important in the choice of where to intern, obtaining the following answers: 36% responded that they totally agree, 33.3% responded that they only agree, 22.7% neither agree nor disagree, 4% disagree, and 4% totally disagree. This leads to the conclusion that the benefits that a company offers are also taken into consideration when the student chooses where to do his or her internship, in the perception of the respondents.

The intern has many benefits and they are not limited to tangible benefits, they can also be intangible, such as specific events that only by being an intern can the student participate in, for example, some companies offer their interns very good opportunities. We also tried to find out whether the interns had or have the opportunity to participate in events because of the internship, 52% answered no, and 48% answered yes.

Companies need to prepare internally to receive their interns, the activity plans so that the interns already enter the company knowing what functions they will perform within the company. Unfortunately we still have few companies that do not prepare an activity plan beforehand.

In this view, the question was asked whether upon entering the company, a plan of activities was drawn up for their internship, 68% answered yes, 26.7% answered no, and the rest are students who are still in this struggle of looking for an internship.

There are companies that offer interns the opportunity of *Job Rotation* (rotation of tasks, functions, and sectors). This allows the intern to discover himself, since he is starting his career in the best way to have an opportunity to get to know other areas besides the one he applied for. When asked if the company where the student did his/her internship gives him/her the opportunity to do *Job Rotation*, 40% said never, 36% said not always, and 16% said always.

The internship is contributing or has contributed a lot to my learning. For this question 56% responded that they totally agree, 30.7% responded that they agree, 6.7% neither agree nor disagree. This statement proves the power and importance that an internship has in the life of an intern.

During the course of their student career is a time when students strive to get internships early on, the earlier they start doing internships the more chances they have to do more than one internship. So when asked about the number of internships the respondents have done, 48% have done only 1 internship so far, 29.3% have done 2 internships, 9.3% have done 3 internships so far, 9.3% have done no internships so far, and 4% have done more than 3 internships.

Making a connection with the previous question, it was important to understand how long the last internship lasted, taking into account that in Brazil the maximum internship time



in the same company is two years, except when it comes to disabled interns or if both parties are interested in hiring them. Thus, 33.3% said less than six months, 18.7% said less than a year, 10.7% said two years, 10.7% are still not doing their internship, and 9.3% said less than a month. This applies to both Angolan and Brazilian students.

There may be many reasons that lead to the termination of an internship contract, from incompatibility with the manager, bankruptcy of the company, promotion to a new position, hiring, or simply because the internship time is over. In this sense, as we could see, the three most frequent reasons were termination of the contract (38.7%), leaving because a better opportunity was found (28%), and failure to comply with the terms agreed upon in the contract (5.3%), which account for 72% of the reasons.

The benefits offered by the companies granting the internship and those inherent to the internship itself are part of the attraction factors that candidates observe when analyzing a particular vacancy. Considering this fact, Table 1 below shows the percentage of trainees who promote (grades 9 and 10) the benefits they obtained during the internship period.

Table 1 - Benefits Perceived and Percentage of Promoters (Grades 9 and 10).

Benefit Received or Received	Percentage of grades 9 and 10
There was work experience prior to the academic training.	57,3%
It confirmed my choice for the right course.	33,3%
There was learning from professionals in the field.	56,0%
Networking (Expansion of the contact network).	41,4%
Putting what I learned in college into practice.	29,3%
Insert yourself in the job market.	53,3%
Important for professional career.	66,7%
It also provided personal growth	69,4%
I received continuous feedbacks from the company supervisor during the internship.	34,7%

Source: research.

When a student is looking for an internship, he is not only looking for monetary benefits or to fulfill a certain requirement of the college to finish the course, he is looking for the most varied experiences that he can get as an intern. And the companies themselves are also prepared to provide learning and incredible experiences, or at least they should be. In this line of thought, we tried to understand to what extent this theory is based on the daily life of an intern. As we can see from Table 1, 57.3% of the students were able to have such an experience even before they finished college. Normally, when students start college, they are full of doubts and not very sure about the course they have chosen to take, and, in a way, the internship is a way of helping to confirm that they are in the right course, because many of them only have the practice and end up getting certified or having a clearer notion of what they really want. In Table 1 we can see that this is a reality for 33.3% of the students.



The immediate managers are those to whom the interns report and they follow the evolution of the student during the internship period and, in a way, these professionals are like pillars in this learning phase. As can be seen in the table, we have around 44% of respondents who did not learn from the professionals during the internship period, although 56% learned a lot from the professionals in the companies. It really has to be this way, because the internship period is a time when the student is discovering himself as a professional, and if he doesn't have a good experience he may break all expectations regarding the labor market and even create a block for future opportunities that may exist.

Networking, or networking, as the name implies is a network that allows us to meet people from different types of positions, social status, influential people that in a way help us to meet people or places that many times by ourselves we would not be able to meet or reach. In the internship is a proper place for us to expand our network of contacts, relating well with people, the way we treat our co-workers counts a lot, and showing interest and willpower to do our job very well, by itself, the intern ends up gaining a prominent place among the people with whom he works and this can even generate indications for a future job or change of position within the same company, or even a possible hiring. In Table 1 we can see that a good part of the trainees (41.4%) manage to expand their network of contacts during the internship period, and this is what I call a vision for the future.

The internship is a complement to everything learned in college, and to give meaning to the theoretical teachings learned in the classroom there is this need on the part of the student to seek an internship to connect theory with practice. As can be seen in Table 1, only 29.3% strongly confirm this link between these two learning sources, managing to put into practice everything learned in college in their internships. This is a sign that these students are being well educated and that the colleges are doing their role in forming great cadres for the labor market, but there is still a lot to be improved in this aspect.

Many interns, when they finish their internship contract, are hired by the company itself; others do not even need the internship period to end before receiving such an offer. Both in Angola and Brazil, in order to enter the job market, many people had to go through the internship condition. Both in Angola and Brazil, this is a reality, and we have examples of great executives and directors of large companies who tell us that their career in the company started as interns. And this is confirmed by 53.3% of the respondents.

Continuing along the same line of reasoning, most of the trainees (66.7%) have a strong notion of the importance of the internship in their professional lives. The internship is fundamental, the gateway to the professional world, and the market itself highly values



professionals who started their careers as interns, because we know that the intern, at this stage of discovery, hardly stays in a single company seeking diverse knowledge until he finds his vocation. At this point, it can be said that the student filters for himself a lot of knowledge and this, many times, is a competitive differential that the organizations themselves seek when hiring a professional. In this research we can see that more and more trainees have this reality in mind and seek to improve their knowledge to be ready for their professional careers.

The internship brings to the student not only commitment to his obligations during the period in which he is an intern, but also responsibility and commitment to honor the vote of confidence that is given to the intern himself, and consequently generates more responsibility and professional and personal growth for the student. So much so that 69.4% of the respondents strongly consider (9 and 10 on a scale of 0 to 10) that doing the internship has brought them personal growth.

Feedback is a form of communication between the immediate manager and his intern, which gives the student an insight into how he is doing in the company. It is at this moment that the manager can highlight the positive points or points for improvement. Table 1 shows that this is not a reality for many trainees, that is, many of them do not receive this follow-up from their supervisors, as only 34.7% strongly affirmed that they receive feedback from them. In this question it is noteworthy that 12% marked 0, indicating not receiving a single feedback during the internship period.

And finally, we tried to verify what is the minimum number of hours of internship required by the faculty: 38.7% of the respondents said that in their faculties 380 hours are required; 16% answered that more than 380 hours are required; 25.3% said that there was no such requirement; 2.7% require 180 hours; and 2.7% require 200 hours or less.

The results point to a great importance of the professional internship in the students' perception, but also show important gaps that require more attention from the educational institutions and the granting organizations.

5 CONCLUSION

This research achieved its specific objective of showing how the internship process really works in Brazil and in Angola in the perception of the interns themselves and, as a result, it was concluded that the internship process is a fundamental pillar for a student to start his journey in the labor market. It was also seen that it is not enough just to be in the companies doing internships. It is necessary that the intern is accompanied by the educational institution and by a supervisor in the company, who must undergo training to be able to guide and give



feedback to his interns. It was also possible to understand that the benefits of internships in general are very important in the student's choice of where to do the internship, and that these benefits can be monetary or non-monetary.

It has been shown that two countries with the same language and strong ancestral ties are very different when it comes to the internship process. In Brazil, for example, companies, whether small, medium or large, offer students the opportunity to put into practice everything they learn in the college course, while in Angola few companies offer internships and this somehow hinders the insertion of the student in the labor market, because most organizations require professionals to have work experience. This creates a contradiction, since companies want experience from novice professionals, but close their doors to students during their college years. If this situation continues in Angola there will be more and more students graduating with a large deficit of practical learning.

It is hoped that this study will contribute to open the eyes of Brazilian and especially Angolan companies to how important it is to do an internship while attending college and how this practice benefits not only the organizations, but also the interns. Perhaps it will even stimulate the Ministry of Education in Angola to think about an Internship Law.

Our desire as researchers, Angolan and Brazilian, is that companies in both countries can see the gain they have in adopting the hiring of interns, they have the opportunity to prepare talents to occupy prominent positions in their own companies. But that is not all, for all parties to benefit, including society as a whole, it is necessary to fill the gaps and improvements that were pointed out in this study, especially those highlighted in Table 1.

Finally, we recognize the limitations of the study, represented by the small sample of Brazilian and Angolan trainees, but we understand that this is an opportunity for further research and studies aimed at improving the internship process, an important talent development practice by the people management area.



REFERENCES

ANGOLA. *Diário da República*. Órgão Oficial da República de Angola. I Série, número 32. Luanda: Angola, Quinta-feira, 17 de fevereiro de 2022. Disponível em <<https://governo.gov.ao/ao/noticias/decreto-presidencial-publicado/>> Acesso em 24/06/2022.

BOHLANDER, George M.; NELL, Scott; e SHERMAN, Arthur. *Administração de recursos humanos*. São Paulo: Editora Pioneira Thomson Learning, 2009.

BRASIL. *Lei Nº 11.788*: Dispõe sobre o estágio de estudantes. Brasília: Presidência da República, 25 de setembro de 2008. Disponível em <http://www.planalto.gov.br/ccivil_03/_ato2007-2010/2008/lei/111788.htm> Acesso em 22/06/2022.

BRASIL. *Lei Nº 10.097*: Altera dispositivos da Consolidação das Leis do Trabalho. Brasília: Presidência da República, de 19 de dezembro 2000. Disponível em <http://www.planalto.gov.br/ccivil_03/leis/110097.htm>; Acesso em 22/06/2022.

CFA, Conselho Federal de Administração. *Diretrizes curriculares nacionais do curso de graduação em Administração*: comentada. Brasília: Conselho Federal de Administração, 2022.

CAMILO, Juliana; FORTIM, Eveline; CRUZ, Myrt Thânia de Souza. *Gestão de pessoas: práticas de recrutamento e seleção por competências*. São Paulo: SENAC, 2018.

CHIAVENATO, I. *Gestão de pessoas: o novo papel dos recursos humanos nas organizações*. São Paulo: Manole, 2014.

CHIAVENATO, Idalberto. *Recursos humanos*: São Paulo: Editora Atlas, 2002.

COSTA, Barbara Regina Lopes. Bola de neve virtual: o uso das redes sociais virtuais no processo de coleta de dados de uma pesquisa científica. *Revista Interdisciplinar de Gestão Social - RIGS*. v. 7 n. 1. Centro Interdisciplinar de Desenvolvimento e Gestão Social –

CIAGS. Salvador: Escola de Administração; Universidade Federal da Bahia, 2018. Disponível em <<https://periodicos.ufba.br/index.php/rigs/article/view/24649>> Acesso em 23/06/2022.

FREIRE A. M. Concepções orientadoras do processo de aprendizagem do ensino nos estágios pedagógicos. *Colóquio*. Modelos e práticas de formação inicial de professores, Faculdade de Psicologia e de Ciências da Educação, Universidade de Lisboa. Lisboa, Portugal, 2001. Disponível em: <http://www.educ.fc.ul.pt/recentes/mpfip/pdfs/afreire.pdf>. Acesso em: 21/06/2022.

GIL, Antonio Carlos. *Como elaborar projetos de pesquisa*. São Paulo: Atlas, 2022.

LACOMBE, Francisco José Musset; HEILBORN, Gilberto Luiz José. *Administração: princípios e tendências*. São Paulo: Saraiva, 2008.

MARRAN, Ana Lúcia; LIMA, Paulo Gomes. Estágio curricular supervisionado no ensino superior brasileiro: algumas reflexões. *Revista e-curriculum*. V7 n.2. São Paulo: Pontifícia Universidade Católica de São Paulo Programa de Pós-graduação Educação: Currículo, agosto



de 2011. Disponível em:
<https://revistas.pucsp.br/index.php/curriculum/article/view/6785>; <http://revistas.pucsp.br/index.php/curriculum> Acesso em 04/06/2022.

MILKOVICH, George T. e BOUDREAU, John W. *Administração de recursos humanos*. São Paulo: Editora Atlas, 2000.

OLIVEIRA, Dirlene A. H. S. Formação profissional em serviço social: "velhos" e novos tempos, constantes desafios. *Serviço Social e Realidade*. v. 13, n. 2. Franca: UNESP, v 13, n. 2, 2004.



PONTES, R. N. *Mediação e serviço social*. 2. ed. São Paulo: Cortez, 2016.

WALHERS, Maicow Lucas Santos; MUONDO, Daniel Luciano Muondo; OLIVEIRA, Cirlene Aparecida Hilário da Silva. Reflexões sobre o estágio em Serviço Social: Brasil e Angola. *Anais*. 8º Encontro Internacional de Política Social e 15º Encontro Nacional de Política Social ISSN 2175-098X, novembro de 2020. Disponível em:
<https://periodicos.ufes.br/einps/article/view/33359/22064> Acesso em 04/06/2022.

WERNECK, Marcos Azeredo Furquim; SENNA, Maria Inês Barreiros; DRUMOND, Marisa Maia; LUCAS, Simone Dutra. Nem tudo é estágio: contribuições para o debate. *Ciência & Saúde Coletiva*. 15(1): (p. 221-231), 2007. Disponível em:
<http://www.scielo.br/pdf/csc/v15n1/a27v15n1.pdf>. Acesso em: 21/06/2022.



The various normative fronts in the fight against terrorism and the limitations surround the concept

  10.56238/thebestimulti2022-011

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1 INTRODUCTION

The term "war on terrorism" is not a legal term, since by international law, for there to be a war, belligerent states must engage in armed conflict with each other. Therefore, although many states are engaged in the fight against terrorism, this fight only qualifies as war if and when there is a fighting state on the side of the terrorist organization, so there is nothing to prevent the "war on terrorism" from turning into an interstate war (CORDESMAN, 2018).

Moreover, the fact that the Taliban sheltered the perpetrators of the attack against the United States on September 9, 2001, although it was not behind the armed attack, constituted a violation of the norms of international law, as well as binding Security Council resolutions adopted before and after September 11 (STEWART, 2018). Considering the omission of Afghanistan, specifically the Taliban, in the face of the US government's ultimatum demanding that al-Qaeda bases be closed and their leaders handed over, the US and allies went to war in 2001 against the Taliban. Considering the peculiarities of the case, especially the relationship between the Taliban and al-Qaeda, the interstate war in Afghanistan was mixed with the fight against terrorists (WEDGWOOD, 2002). Thus, it is observed that in this case *ius in bello*, that is, International Humanitarian Law should be observed, as it aims to regulate the conduct of hostilities. However, actions against various terrorist groups in other parts of the world are not governed by the *ius in bello* (WATKIN, 2004).

Currently, there is no coherent and universal legislation on the definition of terrorism applicable to all in a binding way, since there are several United Nations Security Council resolutions and treaties that address the issue differently (DUGARD, 1973). Thus, it is observed that the main obstacle is due to the difficulty of establishing a definition of the term terrorism that is accepted by all. The international community itself has chosen a fragmented approach by adopting numerous conventions dealing with specific acts of terrorism. Therefore, there is a set of norms governing counterterrorism contained in several overlapping rules (DEBARRE, 2018; STEWART, 2018).



In practical counter-terrorism terms, the definition of terrorism is a problem in international law, which includes international humanitarian law (IHL). Different norms present different examples of terrorist acts without including a conceptualization, since the norms that define the term are not consensual among themselves (WATKIN, 2004). A better understanding of the concept of terrorism involves the analysis of normative instruments of various scopes, such as regional and international conventions of global scope, especially those of the United Nations. Without much detail, the norms of IHL also include terrorism, thus, gaps remain even with the combination of understandings present in different international normative instruments (DUGARD, 1973).

Therefore, the lack of a universal and binding definition of what terrorism is makes it necessary to understand the possible interaction, and the risks of overlap, between international law and other legal frameworks for combating terrorism. In other words, this article aims to present the legal framework that governs the fight against terrorism, and the possible convergence with IHL. Thus, initially, the complexity of the concept of terrorism will be presented. Subsequently, the regional conventions will be presented, as well as the documents of the United Nations and other legal instruments that protect counterterrorism. Finally, the scope of the fight against terrorism will be analyzed in light of International Humanitarian Law.

2 TERRORISM IN INTERNATIONAL LAW

The concept of terrorism is complex and has multiple aspects. However, one can arrive at a minimal definition that cuts across several perspectives, namely: the indiscriminate use of violence against civilians with the intention of creating a sense of fear and insecurity. This definition does not include political motivation, which is not a consensual element among the different views of terrorism. There is also the analogy with war crime, due to the use of cruel offensive methods on innocent targets or targets with no military relevance (FILIPPO, 2014).

One definition that includes political purpose is that which considers terrorist groups to have political objectives (which can be considered ideological or subversive), while ordinary crimes target material goods. A variant definition notes that the political element consists of violence aimed at exerting coercion on public authorities (regardless of ideology or political project to be developed on a large scale) (DUGARD, 1973).

Not all aspects of the concept of terrorism are marked by subjectivity. Some authors identify an objective element that complements the subjective element of the definition. For Filippo (2014), the objective element is the *modus operandi* (mode of operation or method), understood as attacks on people or property with symbolic value, creating insecurity for the



civilian population and public authorities, often involving innocent victims. The subjective element, for the same author, is the *dolus specialis* (special intention), that is, the motivation or political purpose.

According to Frías (2020), the objective element is the *actus reus* (guilty act), that is, the violent act or threat of such an act against civilians or other persons not directly participating in the armed hostilities. According to the same author, the subjective element is the *mens rea* (guilty mind), which means spreading terror among the civilian population or other protected persons, with the purpose of coercing public or private authority to take a certain course of action or inaction (DUGARD, 1973).

However, the definition of terrorism remains insufficient. For example, during an occupation situation, those who use violent actions to confront occupying forces can be classified as resistance, insurgent, liberation, guerrilla, or terrorist groups, depending on the perspective (PÉREZ-GONZÁLEZ, 2009). In light of this, different regional and international conventions have been drafted with the aim of making the fight against terrorism possible. However, the excess of legislation and binding documents makes the relationship between them a little confusing, depending on the scope in which they are to be applied, as observed in a scenario of armed conflict.

2.1 THE REGIONAL CONVENTIONS

Terrorism is the central object of several international conventions. However, not all of them have entered into force, such as the *Convention for the Prevention and Punishment of Terrorism of the League of Nations*, opened for signature on November 16, 1937. The difficulty of broader intercontinental consensus was ameliorated by the establishment of many region-wide conventions throughout the 20th century, such as: *Organization of American States Convention to Prevent and Punish the Acts of Terrorism Taking the Form of Crimes against Persons and Related Extortion that are of International Significance* (1971); *European Convention on the Suppression of Terrorism* (1977); *SAARC Regional Convention on Suppression of Terrorism* (1987); *Arab Convention on the Suppression of Terrorism* (1998); *Treaty on Cooperation among the States Members of the Commonwealth of Independent States in Combating Terrorism* (1999); *Convention of the Organization of the Islamic Conference on Combating International Terrorism* (1999).

The *Organization of American States Convention to Prevent and Punish the Acts of Terrorism Taking the Form of Crimes against Persons and Related Extortion that are of International Significance* (1971) was established to prevent and punish acts of terrorism, in



particular murder, kidnapping, and other attacks against the life or physical integrity of persons whom the state has a duty to provide special protection under international law, as well as extortion in connection with the aforementioned crimes. Criminal acts against persons entitled to special protection under international law occurred frequently and were of international relevance because of the possible consequences in the relationship between states. Persons charged with or convicted of the crimes listed above should be subject to extradition under the provisions of the extradition treaty between the parties. However, any person deprived of liberty through the application of the convention in question must enjoy the guarantees of due process of law (ORGANIZATION OF AMERICAN STATES, 1971).

The Organization of American States Convention has a feature that is different from other counter- terrorism conventions. A person accused of committing a terrorist act has rights, such as due process of law. This device goes in the opposite direction of political doctrines such as the War on Terror promoted by President George W. Bush, who kept thousands of individuals imprisoned during the armed conflicts in Afghanistan and Iraq as a result of military operations, without applying the International Humanitarian Law (BORELLI, 2005).

The *European Convention on the Suppression of Terrorism* (1977) was established out of concern over the increase in acts of terrorism. It states that extradition is an effective measure to ensure that perpetrators of such acts do not escape trial and punishment. Although it does not define terrorism, it is understood that terrorist acts are those that the Convention subjects to extradition among the signatory states, such as: kidnapping, hostage-taking or illegal detention; the use of bombs, grenades, rockets, automatic weapons, letters or packets to endanger persons; attempting, aiding, abetting or participating in any of the acts mentioned. All of the mentioned actions need to have political motivation to fall under the agreed upon norm (TURNER, 2016).

Furthermore, the European Convention established in 1977 is a response to the constant terrorist attacks that took place in Europe in the 1970s. From the year 1972 to the year 1976 there were between 200 and 300 attacks with at least one death. Political motivation is expressly mentioned in the Convention because most attacks came from separatist and extremist groups in Western European countries such as Spain and Northern Ireland (WASHINGTON POST, 2022).

The *SAARC Regional Convention on Suppression of Terrorism* (1987) also seeks measures to ensure that perpetrators of terrorist acts do not escape prosecution and punishment allowed by extradition established among the contracting states. For the signatories, the spread of terrorism is a threat to peace, cooperation, sovereignty, territorial integrity, and good relations among neighboring countries (GORDON, 2009). According to the Convention, acts of



terrorism include murder, manslaughter, attacks with bodily harm, kidnapping, hostage-taking, offenses with firearms, explosives, and the use of dangerous substances to perpetrate indiscriminate violence against persons or property (MALIK, 2009).

Political motivation must also be present in the acts listed above. For the purpose of extradition among SAARC members, two or more contracting states may include serious acts of violence that are not politically motivated. Thus, the South Asian Association for Regional Cooperation (SAARC) includes political motivation in its definition of terrorism, which brings subjectivity to the analysis. Among the acts listed as terrorist there is no exhaustion, since it is a list of examples (not exhaustive) (GORDON, 2009). Extradition is a measure used in the fight against terrorism, which can be used even for crimes without political motivation. Therefore, the Convention aims to deal with extradition not only for terrorist acts (MALIK, 2009).

The *Arab Convention on the Suppression of Terrorism* (1998) considers terrorist attacks to be actions such as attacks against kings and heads of states or their families, princes, vice-presidents, prime ministers, ministers of state, persons with diplomatic immunity (including diplomats and ambassadors); premeditated murder and robbery accompanied by indiscriminate use of force against individuals or authorities of means of transportation or communication; acts of sabotage and destruction of public property or property in the service of the public; the illicit manufacture, trade, or possession of weapons, ammunition, or explosives that can be used to commit terrorist attacks (TURNER, 2016). Political motivation is not required and actions are concerning authorities to individuals and property of member countries. The Convention at hand makes it clear that actions of struggle, including with the use of weapons, against foreign occupation forces and aggression for freedom and self-determination are not considered terrorist attacks, provided that they are in accordance with international law. The intention is not to damage the territorial integrity of any Arab state. Finally, it should be noted that the aforementioned document stresses that extradition is also a measure indicated for combating terrorism (TURNER, 2016).

The Arab Convention does not include political motivation in the definition of terrorism. The focus of the concept is on attacks against authorities, although it also includes damage to public property and the use of weapons. Combating foreign occupations and aggression are outside the definition probably due to groups such as Hamas. For example, for Yemeni President Ali Abdullah Saleh, Hamas was not a terrorist group, but a group fighting for Palestinian independence (CHEN, 2010). The U.S. State Department, on the other hand, includes Hamas on the list of terrorist organizations (STATE, 2022).



The *Treaty on Cooperation among the States Members of the Commonwealth of Independent States in Combating Terrorism* (1999) defines terrorism as an illegal act, punishable under criminal law, committed for the purpose of undermining public security, influencing the decision-making process, or terrorizing the population, adopting various forms (STEWART, 2018). Among the acts expressly considered terrorist by the Treaty are violence or the threat of violence against natural and legal persons; the destruction or threatened destruction of property endangering people's lives; substantial damage to property so as to provide dangerous consequences for society; threatening the lives of statesmen or other public figures with the purpose of destroying the state or its public activities; attacks on representatives of foreign states or members of protected international organizations; other acts classified as terrorism in the national legislations of the states parties to the Convention or in instruments of international law aimed at combating terrorism (MCDERMOTT, 2004). The treaty also addresses "technological terrorism," which includes the use or threatened use of nuclear, radioactive, chemical, or biological weapons if they are used to undermine public safety or influence decisions of authorities to achieve a political objective. Cooperation among signatory states includes the extradition of persons who commit the listed criminal acts (MCDERMOTT, 2004).

The *Commonwealth* is an interregional organization, with 53 members spread over five continents. The Convention of that organization made a mistake in defining terrorism by using the verb "*terrorizing*" (Article 1). To say that terrorism "terrorizes" is like saying that the government "governs" and does not contribute to the explanation of the term. However, the *Commonwealth* Convention also introduces innovations such as introducing the concept of "technological terrorism," which meets international security concerns aimed at the spread of weapons of mass destruction such as nuclear, biological, chemical, or radioactive weapons (CENTER ON GLOBAL COUNTERTERRORISM COOPERATION, 2008).

The *Convention of the Organization of the Islamic Conference on Combating International Terrorism* (1999) defines terrorism as any act of violence or threat, regardless of its motives, with the aim of terrorizing persons, causing injury to them or threatening their lives, honor, liberties, security or rights, occupying or endangering national resources or international facilities, or threatening the stability, territorial integrity, political unity or sovereignty of independent states (HÜBSCHLE, 2011). The crime of terrorism is conceptualized by executing, initiating, or participating in the carrying out of a terrorist act. Persons fighting, including by armed means, against foreign occupation, aggression, colonialism and hegemony, aiming at freedom and self-determination are not considered terrorist crimes by the Convention, provided



that the principles of international law are observed. The contracting states must extradite those indicted or convicted of terrorist crimes, when extradition is requested by any signatory country in accordance with the rules and conditions stipulated by the Convention (DOBROT, 2007).

The Islamic Convention highlights the error of any attempt to link terrorism to Islam, since several Islamic countries undertake efforts to combat terrorism. It is worth noting that the Convention expressly considers terrorism a threat to freedoms and rights, unlike other international instruments on the subject (HÜBSCHLE, 2011). The Islamic Convention, like the Arab Convention, does not include motivation as a defining element of terrorism and makes exceptions for armed acts against foreign occupation aiming at self-determination, as long as international law is respected. However, the norms that would limit the aforementioned armed acts are not made explicit. In addition, armed acts against hegemony are also not considered terrorist acts, leaving even more open the margin for interpretation (DOBROT, 2007).

2.2 THE UNITED NATIONS CONVENTIONS AND RESOLUTIONS

Efforts to combat terrorism are not limited to regional efforts. In the late 1990s, two conventions on terrorism were approved at the United Nations, namely: *Convention for the Suppression of Terrorist Bombings* (1997) and *International Convention on the Suppression of the Financing of Terrorism* (1999). The United Nations Security Council also passed three resolutions on terrorism: *UNSC Resolution 1373* (2001), *UNSC Resolution 2178* (2014), and *UNSC Resolution 2242* (2015).

The *Convention for the Suppression of Terrorist Bombings* (1997) aims to increase international cooperation among states in adopting practical and effective measures to prevent terrorist acts and to prosecute and punish perpetrators. According to the Convention, a terrorist attack is committed by any person who unlawfully and intentionally delivers, places, discharges, or detonates an explosive or other lethal device in public places, government facilities, public transportation systems, or infrastructure installations, with the intent to cause death or serious bodily injury, or with the intent to cause intense destruction likely to result in greater economic damage (WITTEN, 1998). A person who has committed a terrorist attack is considered to be any person who attempts or participates in attacks listed above, organizes or commands others to commit attacks, or otherwise contributes to an attack carried out by a group or persons acting with a common purpose. Signatory states are required to make persons who commit the described attacks susceptible to punishment under domestic law, as well as deem them extraditable (O'CINNEIDE, 2008).



The UN Convention for the Suppression of Bombings does not expressly include political motivation in the definition of terrorist. However, a presence of political purpose is inferred by the exemplified locations where bombs could be detonated, such as public places and government facilities. Governments are likely to be compelled to act or omit to act by such attacks perpetrated by terrorist groups. The focus in combating terrorism is on multilateral cooperation, including punishment by domestic law and the practice of extradition (WITTEN, 1998).

The *International Convention on the Suppression of the Financing of Terrorism* (1999) was established due to concern over the escalation of international terrorism, as well as to promote cooperation among states for the maintenance of international peace and security. For the purposes of the Convention, a financier of terrorism is considered to be any person who directly or indirectly, unlawfully and willfully provides or collects funds with intent or knowledge that they will be used (in part or in full) to carry out acts causing death or serious injury to civilians, or to any person not party to the hostilities in an armed conflict, when the purpose of such act is to intimidate the population or compel a government or international organization to perform a certain act or to refrain from acting (BANTEKAS, 2003). Funds are defined as assets of any kind, tangible or intangible, movable or immovable, acquired by any instrument (including electronic or digital), and may be bank credits, traveler's checks, bank checks, money orders, stocks, bonds, securities, drafts, letters of credit, among other assets (ROSAND, 2003).

The United Nations Convention for combating the financing of terrorism considers that the reduction of terrorist attacks is achieved through the suppression of funds for such acts. Due to the costs of terrorist attacks, the measures proposed by the Convention are important in confronting this threat to international security (ROSAND, 2003). For example, the September 11, 2001 attacks took eight years of preparation, including the participation of terrorists in aviation courses, training in flight simulators, and several trips to observe the structures and activities of airports and airlines (G1, 2022).

UNSC Resolution 1373 (2001) expressly condemned the terrorist attacks in New York and Washington on September 11, 2001, reaffirming that any act of international terrorism is a threat to international peace and security (FINLAY, 2012). One of the goals of the Resolution is to find ways to intensify and accelerate the exchange of operational information, regarding: the actions and movements of terrorist persons and networks; document forgery; trafficking in weapons, explosives, and sensitive materials; use of technological communications by terrorist groups; threat posed by the possession of weapons of mass destruction by terrorist groups



(HEUPEL, 2007). Among the measures to prevent and combat terrorism is the freezing of funds and other financial assets or economic resources of persons who commit or attempt to commit terrorist acts or participate in or facilitate the commission of terrorist acts.

Resolution 1373 was passed as a result of the attacks that occurred in the United States in 2001 (FINLAY, 2012). It is inferred that the sophistication of terrorist acts influenced the focus of the document, which includes combating networking, counterfeiting, and trafficking. While other instruments mention individuals and groups, the Resolution in question deals with the complex relationships that involve different terrorist activities (FINLAY, 2012). Therefore, the proposed cooperation between states highlights the relevance of the exchange of information, such as that collected by intelligence agencies from different countries. The financial aspect of the fight against terrorism is also reinforced with the measure to freeze funds, continuing what was proposed by the 1999 Convention on the suppression of terrorist financing (HEUPEL, 2007).

UNSC Resolution 2178 (2014) defines *foreign terrorist fighters to be* individuals who travel to a state other than that of their resident or nationality, for perpetrating, planning, preparing, or participating in terrorist acts, or providing or receiving terrorist training, including connection to armed conflict (KOEHLER; FIEBIG, 2019). The concern is with *foreign terrorist fighters* who were being recruited by the *Islamic State in Iraq and the Levant* (ISIL) and *Al-Nusrah Front* (ANF) and other cells, affiliates, splinter groups or derivatives of *Al-Qaida*, which also poses a threat. The Resolution also highlights the activities carried out by entities established within the United Nations, such as the *Counter-Terrorism Implementation Task Force* (CTITF), the *United Nations Office of Drugs and Crime* (UNODC), the *United Nations Centre for Counter-Terrorism* (UNCCT), and the *Counter Terrorism Committee Executive Directorate* (CTED), which provide technical assistance and coordinate with other organizations at the regional and international level to implement the *United Nations Global Counter-Terrorism Strategy* (KOEHLER; FIEBIG, 2019).

The definition of *foreign terrorist fighters* contributes to a more consensual conceptualization of what a terrorist would be, but with an emphasis on the foreign individual. As already evidenced by both empirical reality and counterterrorism instruments, the actions of terrorists often occur transnationally, that is, across state borders (FLORES-HERRERA; PENEV, 2018). For example, a terrorist network can recruit individuals in country "A", to be trained in country "B", to carry out an attack in country "C", as resources come from country "D". The transnational activities of groups such as *ISIL*, *ANF* and *Al-Qaida* were mentioned in the Resolution. One criticism that can be made is the mention of terrorist groups that have



committed attacks on Western powers (CHARNEY, 2001).

UNSC Resolution 2242 (2015) recognizes the differential impact of terrorism and extremist violence on the human rights of women and girls, including the context of health, education, and participation in public life. Acts of sexual and gender-based violence are known to be part of objectives and ideology of certain terrorist groups, who practice such acts as a tactic to increase their own power and destroy communities, as described in the *Secretary-General's Report on Sexual Violence in Conflict* and the *Global Counterterrorism Forum's good practices on Women and Countering Violent Extremism*. Among other measures, the Resolution proposes increased participation of women in leadership positions in the United Nations, taking into account geographic representation, accompanied by an increase in the number of women military and police officers employed in UN peacekeeping missions (BUCHAN, 2017; ARONSSON, 2021).

Resolution 2242 innovates by including the gender variable in the fight against terrorism, since the specific violence women suffer from terrorist acts was not mentioned in other instruments. According to feminist studies (AYDIN, 2016), the exclusion/invisibility of women occurs because of gender-based divisions of responsibilities and rights, which place women in the private sphere and men in the public sphere, as decision-makers and occupants of instances of power in the state and in the conduct of international politics. Thus, the suggestion of the Resolution in question to propose a greater female presence in leadership positions, both in political and military posts, is important (BUCHAN, 2017).

2.3 OTHER LEGAL INSTRUMENTS

However, in international law, terrorism is not only addressed when it is the central theme of conventions or resolutions, there are several mentions also in other instruments, such as: Report of the *Commission on the Responsibility of the Authors of the War and on Enforcement of Penalties* (1920), *Hague Rules of Air Warfare* (1923), *Fourth Geneva Convention* (1949), *Additional Protocol I* (1977), *Additional Protocol II* (1977), *Statute of the International Tribunal for Rwanda* (1994), *Draft Code of Crimes against the Peace and Security of Mankind* (1996), among others.

There are only two occurrences of the term "*terrorism*" in the Report of the *Commission on the Responsibility of the Authors of the War and on Enforcement of Penalties* (1920), namely:

Violations of the rights of combatants, of the rights of civilians, and of the rights of both, are multiplied in this list of the most cruel practices which primitive barbarism,



aided by all the resources of modern science, could devise for the execution of a system of **terrorism** carefully planned and carried out to the end" (COMMISSION ON THE RESPONSIBILITY OF THE AUTHORS OF THE WAR AND ON ENFORCEMENT OF PENALTIES, 1920, p. 113, emphasis added).

The Commission, impressed by their number and gravity, thinks there are good grounds for the constitution of a special commission, to collect and classify all outstanding information for the purpose of preparing a complete list of the charges under the following heads: The following is the list arrived at: (1) Murders and massacres; systematic **terrorism** (COMMISSION ON THE RESPONSIBILITY OF THE AUTHORS OF THE WAR AND ON ENFORCEMENT OF PENALTIES, 1920, p. 114, emphasis added).

The aforementioned Report does not define terrorism, but represented a first effort to address the issue by including the term in the list of war crimes. It is understood that the emphasis is on attacks carried out in a systematic way, due to the expressions "*system of terrorism*" or "*systematic terrorism*". However, a single attack had already proved to have enormous disastrous consequences a few years before the Report was written, namely, the attack that killed Franz Ferdinand, then heir to the throne of the Austro-Hungarian Empire, triggering World War I (DEBARRE, 2018).

Only one article of the *Hague Rules of Air Warfare* (1923) addresses the subject of terrorism and using yet another expression from the same semantic field: "CHAPTER IV - Hostilities. ARTICLE XXII Aerial bombardment for the purpose of **terrorizing** the civilian population, of destroying or damaging private property not of a military character, or of injuring non-combatants is prohibited" (HAGUE RULES OF AIR WARFARE, 1923, emphasis added). This instrument has a clear goal of protecting civilians from bombing by prohibiting air strikes intended to terrorize or injure the non-combatant population (DEBARRE, 2018).

The *Statute of the International Tribunal for Rwanda* (1994) only addresses the term terrorism in Article 4: "The International Tribunal for Rwanda shall have the power to prosecute persons committing or ordering to be committed serious violations [...]. These violations shall include, but shall not be limited to: [...] (d) Acts of terrorism". The Statute does not include a definition of the term, which may have made it difficult to apply punishments based on the said subsection. However, because this is a case of genocide, there is an overlapping of acts of human rights violations, since in addition to terrorist actions (subsection "d"), acts of violence against life, such as torture and mutilation (subsection "a"), offenses to people's dignity, such as degrading treatment and rape (subsection "b"), and other violent acts provided for in the same article are also punishable (DEBARRE, 2018).



The *Draft Code of Crimes against the Peace and Security of Mankind* (1996) at the 48th session of the *International Law Commission* and submitted to the United Nations General Assembly as part of the Session Report.

Article 20: War crimes - Any of the following war crimes constitutes a crime against the peace and security of mankind when committed in a systematic manner or on a large scale: [...] (f) any of the following acts committed in violation of international humanitarian law applicable in armed conflict not of an international character: [...] (iv) acts of **terrorism** (DRAFT CODE OF CRIMES AGAINST THE PEACE AND SECURITY OF MANKIND, 1996, emphasis added).

The document, besides including terrorism as a war crime, considers it as a crime against the peace and security of mankind, involving the context of International Humanitarian Law (IHL), but only in Non- International Armed Conflict (NICC). There is a reservation regarding two aspects, one related to the systematic character marked by the expression "*systematic manner*", and the other related to the proportion indicated by the term "*large scale*". With this, it is possible to interpret that not all terrorist attacks would be crimes against humanity, but only those carried out in a systematic manner or on a large scale (VANHULLEBUSCH, 2015).

3 TERRORISM UNDER INTERNATIONAL HUMANITARIAN LAW

Considering the founding norms of International Humanitarian Law (IHL), terrorism is present in both International Armed Conflict (IAC) and Non-International Armed Conflict (NICC) (MURPHY, 2004). In IAC, Article 33 of the Fourth Geneva Convention expressly states that terrorism is prohibited: "Collective penalties and likewise all measures of intimidation or of terrorism are prohibited. Furthermore, article 51, clause 2 of the I Additional Protocol uses the term "terror" to indicate a threat to the civilian population: "The civilian population as such, as well as individual civilians, shall not be the object of attack. Acts or threats of violence the primary purpose of which is to spread terror among the civilian population are prohibited" (emphasis added).

Regarding the IACC, Article 4.2 d of the Second Additional Protocol states that "*acts of terrorism*" are prohibited at any time and in any place. Furthermore, Article 13 (2) of the same Protocol also includes acts of "terror" as prohibited: "*Acts or threats of violence the primary purpose of which is to spread **terror** among the civilian population are prohibited*" (emphasis added). The alternation between the terms "terrorism" and "terror", from the same semantic field, evidences the intention to reinforce the prohibition of violent and indiscriminate acts against civilian populations (DEBARRE, 2018).

For the application of the Law of War or armed conflict between states and transnational



terrorist groups or networks, these groups or networks need to be brought under international humanitarian law with the same rights and obligations as the states parties to the conflicts, which states are reluctant to accept. Only combatants have the right to participate directly in hostilities. However, states deny combatant status to terrorists and treat them as criminals for their illegal participation in hostilities, so terrorists are also denied "prisoner of war" *status* (MURPHY, 2004).

Furthermore, the definition of a terrorist attack as an "act of war" and the consequent "war on terror" or "war on terrorism" are political rhetoric, with relevant practical implications, but which do not correspond to concepts of international law. The "Deterritorialization" of war, i.e., responses to terrorists in any state where they are instigated, and the "Privatization of war," i.e., the participation of private groups (with terrorist networks), also do not conform to international norms. This does not mean that terrorist acts cannot occur during an armed conflict, a situation in which International Humanitarian Law is applicable (PÉREZ- GONZÁLEZ, 2009).

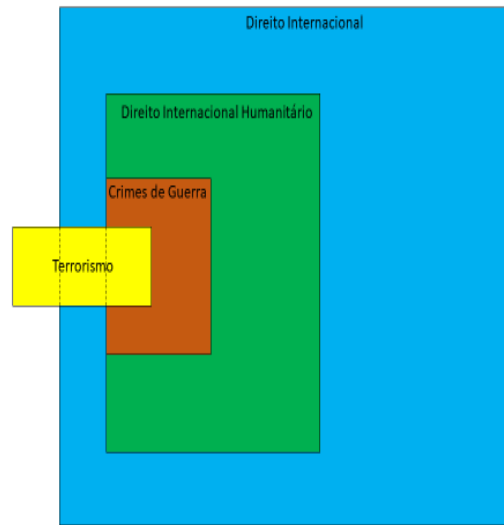
As per *United Nations Security Council Resolution 1566* (2004):

That they must ensure that any measures taken to combat terrorism comply with all their obligations under international law and should adopt such measures in accordance with international law, in particular international human rights, refugee and humanitarian law (UNITED NATIONS SECURITY COUNCIL RESOLUTION, 1566).

Failure to consider norms of international law or international humanitarian law in combating terrorism can provoke resistance from other states to develop cooperation. A counter-terrorism campaign involves multiple measures, not necessarily including the military, such as information gathering (intelligence actions), legal and police cooperation, extradition, criminal sanctions, diplomatic and economic pressure, financial investigations, freezing of assets, efforts to control the proliferation of weapons of mass destruction, etc. Armed action at the expense of intelligence procedures can undermine counterterrorism efforts (PÉREZ-GONZÁLEZ, 2009).

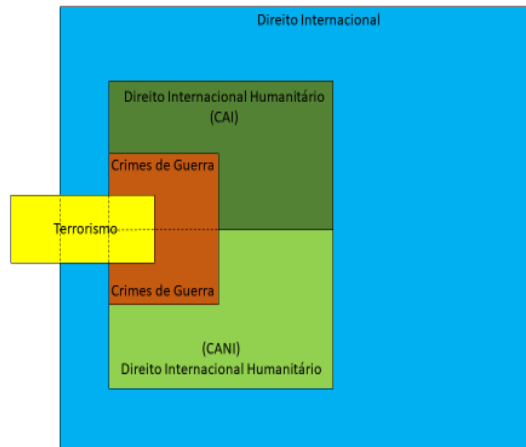
On the one hand, the norms of International Humanitarian Law (IHL) are a subset of the norms of international law, on the other hand, the norms on war crimes are a subset of the norms of IHL. It follows from the above that the concept of terrorism in part is present in IHL as a war crime, either for an International Armed Conflict or for Non-International Armed Conflict (DEBARRE, 2018). In the case of the absence of an armed conflict, terrorism can still be identified in international law norms, as to the objective aspect of the definition of the concept, as per the figures below:

Figure 1: Terrorism And International Humanitarian Law



Fonte: elaboração própria com base em informações de Filippo (2014), Frías (2020) e Pérez-González (2009)

Figure 2: Terrorism And International Armed Conflict And Non-International Armed Conflict



Fonte: elaboração própria com base em informações de Filippo (2014), Frías (2020) e Pérez-González (2009)

However, gaps persist due to the lack of precision of the subjective element of the term concerning political motivation not defined by the norms of international law. The same can be said about scenarios in which the parties to a political dispute consider the same group with opposite qualifications: "terrorists" or "liberators. This doubt does not exist if this group carries out indiscriminate attacks against civilians, because they would be terrorists falling under the objective criterion. However, in the situation where the group carries out attacks against oppressive armed targets, the doubt tends to remain, since it becomes more reasonable to identify the said group as liberators (DEBARRE, 2018).



4 CONCLUDING REMARKS

Terrorism is still an important phenomenon in the international environment, challenging the international community to face it. The situation remains delicate, since there is no consensus on the concept of terrorism, mainly due to the lack of interest of States, as well as the complexity of the phenomenon. Therefore, the United Nations has opted for the fragmentation of normative texts that dictate the rules to combat terrorism, without removing the primary role of States in undertaking efforts regarding the necessary measures to accomplish counterterrorism.

In this way, the article aimed to present the various normative fronts - regional and international conventions, Security Council resolutions, besides the special norm that regulates warlike hostilities, that is, the International Humanitarian Law - to combat terrorism. The consequence of the fragmentation of norms based on counterterrorism is their overlapping, as well as the apparent difficulty in reconciling them, essentially because States do not find a consensus on the definition of the concept of terrorism, both in the legal space and in political affairs.

The definitions in the different normative frameworks reflect the interests of state actors that hinder cooperation on the issue in question. Therefore, a binding and universally accepted conceptual construction on terrorism is necessary as a legitimate counterterrorism instrument, through the establishment of clear procedures. Only in this way will it be possible to legitimize the actions of states in a clear and objective manner in order to guarantee the effective combat against terrorist organizations.

Finally, although we can see dozens of regional and international conventions in the international community, in addition to the resolutions of the Security Council of Nations, as well as norms aimed at regulating war activities and fighting terrorism - International Humanitarian Law -, we can also see that without a clear legal and political scope, the objective of fighting terrorism is harmed. In short, the unilateral interests of state actors put in check how counterterrorism should be conducted, especially due to the political ideologies that influence state policy.



REFERENCES

ARONSSON, Lisa A. Women, Peace, and Security Agenda. NATO Partnerships for Women, Peace, and Security, Atlantic Council, 2021, p. 3–4.

AYDIN, Gulsen. Feminist Challenge to the Mainstream IR. Munich Personal RePEc Archive. MPRA Paper, n. 76314, 2016.

BANTEKAS, Ilias. The International Law of Terrorist Financing. *The American Journal of International Law*, v. 97, n. 2, 2003, p. 315–33.

BORELLI, Silvia. Casting light on the legal black hole: International law and detentions abroad in the “war on terror”. *International Review of the Red Cross*. v. 87, n. 857, 2005.

BUCHAN, Elisabeth, *et al.* *Women, Peace and Security: The Way Forward*. Australian Strategic Policy Institute, 2017.

CENTER ON GLOBAL COUNTERTERRORISM COOPERATION. “WORKSHOP 4: Enhancing Capacity Building for the Implementation of the UN Global Counter-Terrorism Strategy—Focusing Mainly on the Experiences in Southeast Asia.” *International Process on Global Counter-Terrorism Cooperation: A Compilation of Key Documents*, Global Center on Cooperative Security, 2008, p. 117–66.

CHARNEY, Jonathan I. The Use of Force against Terrorism and International Law. *The American Journal of International Law*, v. 95, n. 4, 2001, p. 835–39.

CHEN, Tianshe. Support or Hostility: the Relationship between Arab Countries and Hamas, *Journal of Middle Eastern and Islamic Studies (in Asia)*, v. 4, n. 2, p. 100-120, 2010.

COMMISSION ON THE RESPONSIBILITY OF THE AUTHORS OF THE WAR AND ON ENFORCEMENT OF PENALTIES (1920).

CORDESMAN, Anthony H. Terrorism: U.S. Strategy and the Trends in Its “Wars” on Terrorism. Center for Strategic and International Studies (CSIS), 2018.

DEBARRE, Alice. International Humanitarian Law in the UN Counterterrorism Framework. Safeguarding Medical Care and Humanitarian Action in the UN Counterterrorism Framework, International Peace Institute, 2018.

DI FILIPPO, Marcelo. The definition(s) of terrorism in international law. In: Saul, Ben. *Research Handbook on International Law and Terrorism* Cheltenham, UK / Northampton, MA, USA. 2014.

DOBROT, Laurence Andrew. The global war on terrorism: a religious war? Strategic Studies Institute, US Army War College, 2007.

DRAFT CODE OF CRIMES AGAINST THE PEACE AND SECURITY OF MANKIND (1996).

Disponível em: https://legal.un.org/ilc/texts/instruments/english/draft_articles/7_4_1996.pdf. Acesso em: 6 jun. 2022.



DUGARD, John. Towards the Definition of International Terrorism. *The American Journal of International Law*, v. 67, n. 5, 1973, p. 94–100.

FINLAY, Brian. Meeting the Objectives of UN Security Council Resolution 1540: The Role of Civil Society. Stimson Center, 2012.

FLORES-HERRERA, Albert; PENEV, Plamen P. The Importance of the Council of Europe's 24/7 Network of Contact Points on Foreign Terrorist Fighters. *Connections*, v. 17, n. 2, 2018, p. 37–46.

FRÍAS, Alejandro Sánchez. Bringing terrorists to justice in the context of armed conflict: interaction between international humanitarian law and the un conventions against terrorism. *Israel Law Review*, v. 53, n. 1, 2020, p. 71–99.

G1. Atentados de 11 de setembro de 2001. Disponível em: <http://g1.globo.com/11-de-setembro/noticia/2011/09/terroristas-comecaram-planejar-o-11-de-setembro-8-anos-antes.html>. Acesso em: 6 jun. 2022.

GORDON, Sandy. Regionalism and Cross-Border Cooperation against Crime and Terrorism in the Asia-Pacific. *Security Challenges*, v. 5, n. 4, 2009, p. 75–102.

HAGUE RULES OF AIR WARFARE (1923). Disponível em: http://lawofwar.org/hague_rules_of_air_warfare.htm. Acesso em: 6 jun. 2022.

HEUPEL, Monika. Implementing UN Security Council Resolution 1540: A Division of Labor Strategy. Carnegie Endowment for International Peace, 2007.

HÜBSCHLE, Annette. From Theory to Practice: Exploring the Organised Crime-Terror Nexus in Sub-Saharan Africa. *Perspectives on Terrorism*, v. 5, n. 3/4, 2011, p. 81–95.

KOEHLER, Daniel; FIEBIG, Verena. Knowing What to do: Academic and Practitioner Understanding of How to Counter Violent Radicalization. *Perspectives on Terrorism*, v. 13, n. 3, 2019, p. 44–62.

MALIK, V. P. The Need for Enhanced Regional Responses to Terrorism in South Asia. Global Center on Cooperative Security, 2009.

MCDERMOTT, Roger N. Countering global terrorism: developing the antiterrorist capabilities of the central asian militaries. Strategic Studies Institute, US Army War College, 2004.

MURPHY, Ray. Contemporary Challenges to the Implementation of International Humanitarian Law. *Connections*, v. 3, n. 3, 2004, p. 99–114.

O'CONNOR, Colm. "Strapped to the Mast: The Siren Song of Dreadful Necessity, the United Kingdom Human Rights Act and the Terrorist Threat." Fresh Perspectives on the "War on Terror," edited by Miriam Gani and Penelope Mathew, ANU Press, 2008, p. 327–360

ORGANIZATION OF AMERICAN STATES. Convention to Prevent and Punish the Acts of Terrorism Taking the Form of Crimes Against Persons and Related Extortion That Are of International Significance." *The American Journal of International Law*, v. 65, n. 5, 1971, p. 898–901.



PÉREZ-GONZÁLEZ, Manuel. Combating Terrorism: An International Humanitarian Law Perspective. *In: Fernández-Sánchez, Pablo Antonio. International Legal Dimension of Terrorism. Martinus Nijhoff Publishers. LEIDEN / BOSTON, 2009.*

ROSAND, Eric. Security Council Resolution 1373, the Counter-Terrorism Committee, and the Fight against Terrorism. *The American Journal of International Law*, v. 97, n. 2, 2003, p. 333–41.

STATE. Organizações terroristas conforme o Departamento de Estado americano. Disponível em: <https://www.state.gov/foreign-terrorist-organizations/>. Acesso em: 6 jun. 2022.

STATUTE OF THE INTERNATIONAL TRIBUNAL FOR RWANDA (1994). Disponível em: https://legal.un.org/avl/pdf/ha/ictr_EF.pdf. Acesso em: 6 jun. 2022.

STEWART, David P. Terrorism And Human Rights. *Terrorism and human rights: the perspective of international law*, Middle East Institute, 2018, p. 10–15.

TURNER, Ian. A Communitarian Justification for Measures to Prevent Terrorism in the UK. *Perspectives on Terrorism*, v. 10, n. 5, 2016, p. 68–82.

VANHULLEBUSCH, Matthias. Principles of Protection in Warfare under International Humanitarian Law. *War and Law in the Islamic World*, 2015, p. 45–74.

WASHINGTON POST. História do Terrorismo na Europa. Disponível em: <https://www.washingtonpost.com/graphics/world/a-history-of-terrorism-in-europe/>. Acesso em: 6 jun. 2022.

WATKIN, Kenneth. Controlling the Use of Force: A Role for Human Rights Norms in Contemporary Armed Conflict. *The American Journal of International Law*, v. 98, n. 1, 2004, p. 1–34.

WEDGWOOD, Ruth. Al Qaeda, Terrorism, and Military Commissions. *The American Journal of International Law*, v. 96, n. 2, 2002, p. 328–37.

WITTEN, Samuel M. The International Convention for the Suppression of Terrorist Bombings. *The American Journal of International Law*, v. 92, n. 4, 1998, p. 774–781.

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