

Strategic behavior in the perspective of the Miles and Snow model: a cross-sectional study

Comportamento estratégico na perspectiva do modelo de Miles e Snow: um estudo transversal

Comportamiento estratégico en la perspectiva del modelo de Miles y Snow: un estudio transversal

Gérson Adriano Chequi Pinto¹, Gabrielli Mottes Orlandini², Luis Fernando Ferreira³,
Marcelo Schenk de Azambuja⁴, Luís Henrique Telles da Rosa⁵

ABSTRACT | This study aimed to identify the profile and strategic behavior of physical therapy service managers in Rio Grande do Sul (RS) according to Miles and Snow's typology. A descriptive and quantitative survey was conducted with 112 managers who had been active for at least two years. The online questionnaire assessed the profile of the services, managers, and their strategic behavior. We compared the means between strategic profile categories and its association with descriptive variables. Considering services sustainability, resolution of health needs and scarcity of publications in this area, this study justifies its execution and relevance. The results showed that, in the association of descriptive variables with the managers' profile, only gender was significant ($p=0.027$). Most managers were female, aged from 30 to 39, combining clinical and managerial activities, with over six years of experience, postgraduate specialization, and short-term management training. The analysis of strategic behavior indicated a defender profile, followed by prospector, analyzer, and reactor. The results are supported by the researched theory and highlight the need for better knowledge in service management and the development of essential skills for physical therapy service managers since undergraduate education. Thus, there will be better

preparation and a possible shift in focus, currently centered more on sustainability than on expanding services.

Keywords | Physical Therapy; Strategy; Health Services.

RESUMO | O objetivo deste estudo foi identificar o perfil e o comportamento estratégico dos gestores dos serviços de fisioterapia do Rio Grande do Sul conforme a tipologia de Miles e Snow. Realizou-se uma survey descritiva e quantitativa com 112 gestores ativos há pelo menos dois anos. O questionário on-line verificou o perfil dos serviços, dos gestores e seu comportamento estratégico. Compararam-se as médias entre as categorias do perfil estratégico e a associação das variáveis descritivas com esse perfil. Considerando a sustentabilidade de serviços, a resolutividade das necessidades de saúde e a escassez de publicações nessa área, este estudo justifica sua realização e relevância. Os resultados mostraram que, na associação das variáveis descritivas com o perfil dos gestores, apenas o sexo foi significante ($p=0,027$). Os gestores em sua maioria eram do sexo feminino, com idade entre 30 e 39 anos, acumulando a atividade clínica e a de gestão, atuando há mais de seis anos, com pós-graduação em nível de especialização e formação de curta duração na

This study was extracted from the dissertation entitled *The strategic behavior of physical therapy clinics in the state of Rio Grande do Sul from the perspective of the Miles and Snow model*, developed in the master's program in Information Technology and Health Management (TIG Saúde) at the Federal University of Health Sciences of Porto Alegre (UFCSPA), Porto Alegre (RS), Brazil. This study was carried out in physical therapy clinics in Rio Grande do Sul, Brazil.

¹Universidade Federal de Ciências da Saúde de Porto Alegre (UFCSPA) – Porto Alegre (RS), Brazil. E-mail: gersonchequi@gmail.com. ORCID: 0000-0003-3342-6270.

²Universidade Federal de Ciências da Saúde de Porto Alegre (UFCSPA) – Porto Alegre (RS), Brazil. E-mail: gmorlandini@gmail.com. ORCID: 0000-0002-7288-0858.

³Universidade Federal de Ciências da Saúde de Porto Alegre (UFCSPA) – Porto Alegre (RS), Brazil. E-mail: proffermandof@gmail.com. ORCID: 0000-0002-9496-4884.

⁴Universidade Federal de Ciências da Saúde de Porto Alegre (UFCSPA) – Porto Alegre (RS), Brazil. E-mail: marcelos@ufcspa.edu.br. ORCID: 0000-0002-9811-1459.

⁵Universidade Federal de Ciências da Saúde de Porto Alegre (UFCSPA) – Porto Alegre (RS), Brazil. E-mail: luisr@ufcspa.edu.br. ORCID: 0000-0002-4807-7176.

área da gestão. A análise do comportamento estratégico indicou um perfil defensor, seguido de prospectivo, analítico e reativo. Os resultados sustentam-se na teoria pesquisada e mostram a necessidade de um melhor conhecimento em gestão de serviços e desenvolvimento das competências essenciais para o gestor dos serviços de fisioterapia desde a graduação. Assim, haverá um melhor preparo para o exercício dessa função e uma possível mudança de atuação, atualmente centrada mais na sustentabilidade do que na ampliação dos serviços.

Descritores | Fisioterapia; Estratégia; Serviços de Saúde.

RESUMEN | El objetivo de este estudio fue identificar el perfil y el comportamiento estratégico de los gestores de los servicios de fisioterapia en Rio Grande do Sul (RS) según la tipología de Miles y Snow. Se realizó una encuesta descriptiva y cuantitativa con 112 gestores, activos durante al menos 2 años. El cuestionario en línea evaluó el perfil de los servicios, de los gestores y su comportamiento estratégico. Comparamos las medias entre las categorías del perfil estratégico y la asociación de las variables

descriptivas con dicho perfil. Dado el enfoque en la sostenibilidad de los servicios, la resolución de las necesidades de salud y la escasez de publicaciones en esta área, este estudio justifica su realización y relevancia. Los resultados mostraron que, en la asociación de las variables descriptivas con el perfil de los gestores, solo el género fue significativo ($p = 0,027$). La mayoría de los gestores eran mujeres, con edades entre 30 y 39 años, con experiencia en actividades clínicas y de gestión durante más de 6 años, con posgrado en nivel de especialización y formación de corta duración en gestión. El análisis del comportamiento estratégico indicó un perfil defensor, seguido de un perfil prospectivo, analítico y reactivo. Los resultados se respaldan en la teoría investigada y destacan la necesidad de una mejor comprensión de la gestión de servicios y el desarrollo de competencias esenciales para los gestores de servicios de fisioterapia desde la graduación. Esto permitirá una mejor preparación para desempeñar esta función y un posible cambio en el enfoque, que hoy se centra más en la sostenibilidad que en la expansión de los servicios.

Palabras clave | Fisioterapia; Estrategia; Servicios de Salud.

INTRODUCTION

Physical therapists are health professionals known for working in patient care, research and teaching^{1,2}, but not for being managers³, since their training is focused on rehabilitation⁴. They are also recognized⁵⁻⁷ as liberal professionals⁸, working in clinics, microenterprises (ME) or small enterprises (SE)⁹.

In Brazil, the survival rate of an ME drops by 20.4% over five years, and 16.2% for an SE. Considering all companies of these sizes, the south of Brazil has a 74.8% drop rate, the lowest among all regions. This is the second region with the shortest survival time of MEs and SEs, with 1 year, 6 months and 8 days. It is surpassed only by the central-west, with 1 year, 5 months and 28 days; only a 20 day difference¹⁰.

Companies of these sizes that operate in the service sector showed a 19.7% survival drop compared to the first and fifth years of analysis¹⁰.

The main reasons given for the closure of such companies are lack of personal preparation: little experience and inadequate training; poor service planning and management, highlighting the need for a business and strategic angle; lack of differentiation of products and services; and external problems, such as lack of defenses against threats¹¹. An example of a real threat that afflicted

the world economy was the COVID-19 pandemic, whose impact generated a 3.3% drop in the Brazilian gross domestic product (GDP), with the service sector being the most affected.

In 2020, the pandemic significantly distressed the health sector. In that year alone, the consumption of health goods and services fell by 4.4%. Paradoxically, the health spending share in GDP increased, as did the employment share. In the following year, the country's GDP recovered and the health sector continued to grow, especially concerning jobs in private health, from 0.2% in 2020 to 10.8% in 2021¹².

The skills of health service managers are fundamental for the success of these services^{13,14}, and must involve strategic behavior associated with process management, quality and innovation—foundations that sustain SEs^{15,16}.

Miles and Snow propose an identification of strategic behaviors that could typify the profile of managers of different types of companies¹⁷, which can be used in companies of different sizes and sectors^{15,18}. Strategic behaviors can be classified as prospective, defensive, analytical, or reactive^{17,18}.

The prospective profile constantly seeks new market opportunities with innovative processes and new product developments¹⁹. The defensive profile aims to protect its market share without innovating, emphasizing cost

reduction and increased efficiency¹⁹. The analytical profile is a mixture of the previous profiles, defending stable areas and innovating in turbulent times¹⁹. Finally, the reactive profile only responds to competitive events when it is forced to, and it does so inconsistently or unstably¹⁹.

For physical therapists, service management is a challenge, mainly because of their limited training on this field²⁰. The literature shows few studies exploring physical therapists as health service managers²¹.

Given the need to understand effective management practices that promote the success and sustainability of physical therapy services, it is essential to qualify physical therapists as managers. Hence, this study aimed to analyze the predominant strategic behavior of managers of physical therapy clinics in Rio Grande do Sul (RS) and to characterize their profile and services.

METHODOLOGY

This was a cross-sectional, descriptive and quantitative survey²², suitable to obtain data or information about characteristics, actions or opinions of a certain group, defined as representative of a target population. The population comprised 1,491 physical therapy clinics in RS, with a non-probabilistic and voluntary sample. The sample calculation considered the heterogeneity of responses in the population (50%), the prevalence of strategies, a 9% margin of error and a 95% confidence level. Thus, it was determined that the representative sample should be composed of 110 clinics. Figure 1 shows the selection stages of the final sample of the study. A total of 1,491 questionnaires were sent, 129 were returned voluntarily and, after analysis, 112 clinics were included.

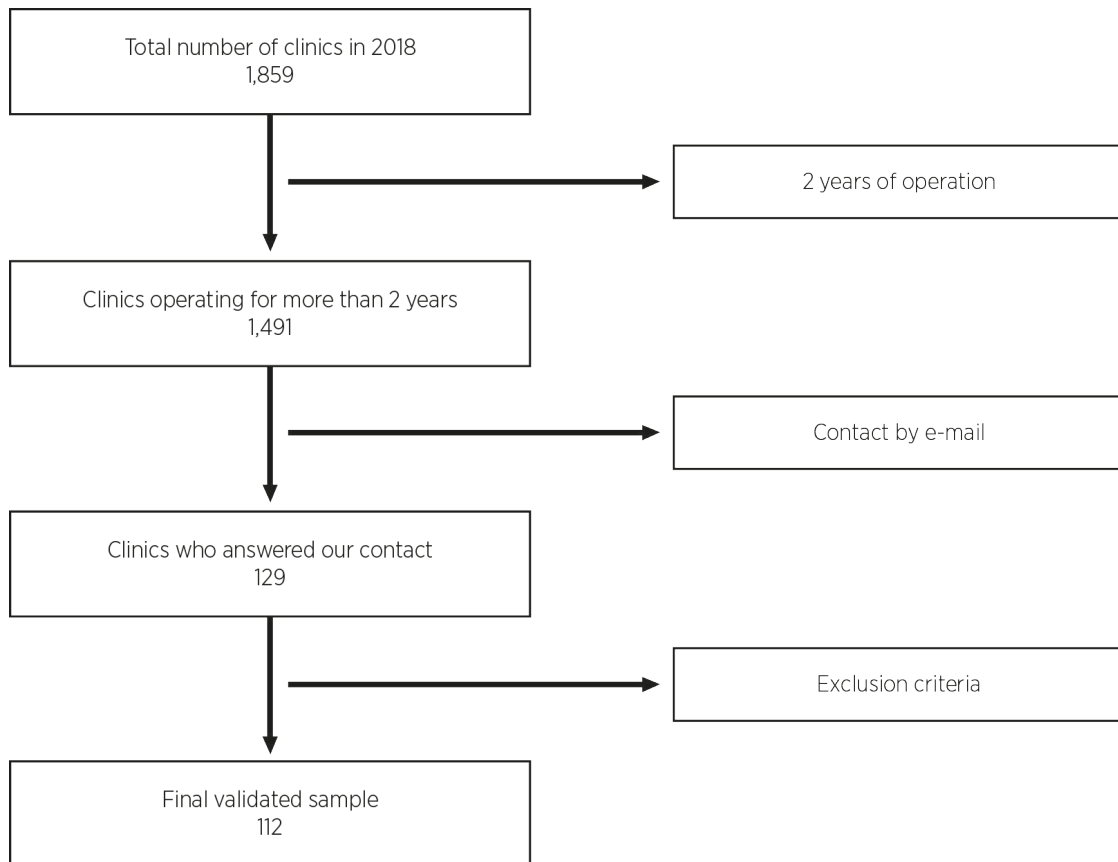


Figure 1. Allocation flowchart of selected clinics

Inclusion criteria were: regular registration in the Regional Council of Physical Therapy and Occupational Therapy of the 5th Region (CREFITO-5²³); be in business for at least two years; and be willing to participate in the study, expressed via informed consent. The exclusion criterion was not filling out questions

about the characterization of the company in terms of time in business, as well as questions in the strategic behavior section.

The study was submitted to the Research Ethics Committee of the Federal University of Health Sciences of Porto Alegre (UFCSPA) and received approval under

No. 3,288,413. Managers who agreed to participate in the study gave informed consent by accepting in a specific field in the online questionnaire. For data collection, an online instrument based on Miles and Snow²⁴ was adapted for this research and used.

For the initial stage, the questionnaire was submitted to five managers of physical therapy clinics in Porto Alegre, to verify the comprehension of language and concepts. Necessary adjustments were made after this evaluation.

The questionnaire was divided into two parts: the first collected descriptive information about the clinic and the manager, and the second aimed to identify the strategic behavior adopted¹⁷. The latter consisted of 11 adapted and validated questions²⁵, aligned with the dimensions of the model described: product-market dominance, success stance, environmental monitoring, growth, technological objective, technological amplitude, technological shields, dominant coalition, planning, structure, and control. For each question, four answer options were provided: prospective, analytical, defensive, or reactive. Using Likert scale questions, the respondent indicated the answer that best corresponded to the way they managed the company.

The strategic behavior classification considered the answer with the highest number of associated responses²⁵.

The questionnaires were sent via email by CREFITO-5 for the 1,491 companies, and resent a second time after 30 days.

Descriptive data are presented in absolute and relative frequencies (n and %). The association between categorical variables was verified using the chi-square test, considering a 5% significance level (p<0.05). Analyses were performed using the SPSS software, version 25.0.

RESULTS

Table 1 shows most of the sample was composed of women, in a ratio of almost three to one. The most prevalent age group is 30 to 39, followed by 40 to 49. Both ranges combined make up more than three-quarters of the sample. In addition, only half of managers have specific training, and over seven out of ten work as both manager and clinician, not being exclusively dedicated to either.

Table 1. Characterization of managers of physical therapy clinics in Rio Grande do Sul (n=112)

Parameter	n (%)	Parameter	n (%)
Gender		Education level	
Male	29 (25.9)	Undergraduate	23 (20.5)
Female	83 (74.1)	Specialization or MBA	69 (61.6)
Age group		Master's/Doctorate	20 (17.9)
Less than 30	12 (10.7)	Specific training in management	56 (50)
30 to 39	48 (42.9)	Type of specific training	
40 to 49	38 (33.9)	Short-term	34 (58.6)
Over 50	14 (12.5)	Long-term	17 (29.3)
Manager role		MBA	7 (12.1)
Less than 1 year	11 (10.4)	Activity	
1 to 3 years	14 (13.2)	Management only	16 (14.4)
3 to 6 years	14 (13.2)	Clinic only	15 (13.5)
Over 6 years	67 (63.2)	Both	80 (72.1)

Legend: n: absolute sample; %: relative sample; MBA: Master in Business Administration.

Table 2 shows the characterization of physical therapy clinics included in the study, emphasizing clinics specialized in Trauma-Orthopedics, which make up for two-thirds of

the sample, and small clinics, since almost three-quarters have about one to three physical therapists on their staff, and most of them see less than 100 patients per month.

Table 2. Characterization of physical therapy clinics in the state of Rio Grande do Sul (n=112)

Parameter	n (%)	Parameter	n (%)
Specialty		Number of physical therapists (%)	
Trauma-Orthopedics	76 (69.1)	1 to 3	73 (65.2)
Osteopathy	7 (6.4)	4 to 6	21 (18.8)
Neurofunctional	6 (5.5)	7 or more	18 (16.1)
Others	21 (19.1)	Time in business (years)	
Number of attendances (month)		2 to 11	49 (50.5)
100 or less	65 (58.6)	12 to 23	40 (41.2)
Over 100	46 (41.4)	24 or more years	8 (8.2)

Legend: n: absolute sample; %: relative sample.

Finally, Table 3 shows the data grouped according to the behavioral profile defined by Miles and Snow¹⁷. A third of the sample was composed of managers classified as “defender,” followed by almost a quarter classified as

“prospective” or “analytical,” and less than a fifth as “reactive.” There was only a statistically significant association between genders when the majority of men presented a “prospective” profile and the majority of women a “defender” profile.

Table 3. Association between strategic behavior¹⁷ and the characteristics of physical therapy managers and clinics in Rio Grande do Sul (n=112)

Characteristic n (%)	Behavioral profile, n (%)				p-value
	Analytical	Defender	Prospective	Reactive	
Total	27 (24.8)	38 (34.9)	28 (25.7)	19 (17.4)	
Gender					0.027
Male	5 (18.5)	5 (13.2)	11 (39.3)	8 (42.1)	
Female	22 (81.5)	33 (86.8)	17 (60.7)	11 (57.9)	
Age group					0.677
39 or less	15 (55.6)	22 (57.9)	15 (53.6)	8 (42.1)	
40 or older	12 (44.4)	16 (42.1)	13 (46.4)	11 (57.9)	
Manager role					0.195
Up to six years	11 (40.7)	16 (42.1)	5 (17.9)	7 (36.8)	
Over six years	14 (51.9)	21 (55.3)	21 (75)	11 (57.9)	
Specific training in management					0.913
Yes	12 (44.4)	19 (50)	15 (53.6)	10 (52.6)	
No	15 (55.6)	19 (50)	13 (46.4)	9 (47.4)	
Number of attendances (month)					0.984
100 or less	17 (63)	21 (55.3)	16 (57.1)	10 (52.6)	
Over 100	10 (37)	17 (44.7)	11 (39.3)	8 (42.1)	
Number of physical therapists (%)					0.096
3 or less	17 (63)	27 (71.1)	17 (60.7)	12 (63.2)	
More than 3	10 (37)	11 (28.9)	11 (39.3)	7 (36.8)	
Activity					- a
Management only	3 (11.1)	8 (21.1)	3 (10.7)	2 (10.5)	
Clinic only	6 (22.2)	5 (13.2)	1 (3.6)	3 (15.8)	
Both	18 (66.7)	25 (65.8)	23 (82.1)	14 (73.7)	
Education level					- a
Undergraduate	4 (14.8)	8 (21.1)	8 (28.6)	3 (15.8)	
Specialization	16 (59.3)	26 (68.4)	15 (53.6)	12 (63.2)	
Master's/Doctorate	7 (25.9)	4 (10.5)	5 (17.9)	4 (21.1)	

Legend: n: absolute sample; %: relative sample; p-value: chi-square test; a: p not presented because some variables did not have a minimum sample for test reliability.

DISCUSSION

A homogeneous distribution was identified among strategic behaviors¹⁷, which are mostly manifested by women. In Brazil, this can first be seen in the academic formation of physical therapists, with courses that are mostly made up of women⁵⁻⁷. The characteristics of female leadership and entrepreneurship include, among others, the search for financial independence, dissatisfaction with the style of male leadership, family influence⁶, motivation for identifying opportunities, business innovations⁷ and self-realization²⁶. Regarding entrepreneurship, women are motivated by opportunities to create new businesses in a new market niche²⁷.

Managers work both in managerial and clinical functions, requiring balance between the two skills; however, clinical knowledge predominates⁷. The accumulation of functions leads professionals to divide their time between determining the objectives of their business, attracting new patients, and collecting and analyzing information about administrative results, in addition to performing their duties as physical therapists, evaluating patients, outlining treatment strategies, recording the evolution of clinical cases, among others⁷.

An adequate organization helps the manager to use correct sources for decision-making, avoiding non-scientific sources²⁸. During the COVID-19 pandemic^{29,30}, accurate information allowed for better decision-making. This is corroborated by the fact that most patients use health insurance, creating additional demands both in care and management, given the administrative processes associated with it^{5,7}. The data collected in this research support this, since most managers in our research have a postgraduate degree in the area. Continuing education is highly valued by physical therapists^{5,7}, and a solid management knowledge contributes to a better administration^{9,28}.

The predominance of Trauma-Orthopedics in the clinics studied is due to the contents and training activities related to musculoskeletal issues, as well as high demand⁵⁻⁷. However, the perpetuation of healing practice models, especially in hospital environments, restricts the scope of professional development⁵⁻⁷.

The average operating time is higher than the national average³¹ and, because they are MEs⁹, there is a similarity with family businesses, in which the owner is an informal manager, assuming a conservative behavior³². However, companies that have professionals with specific knowledge to use a wider range of management tools have the best

results, since decision-making is based on concrete data and correct analysis³³.

Only gender showed a statistical difference, and the defender profile was predominant among managers. This shows women managers have a more conservative profile than men in this role, indicating a greater caution instinct when choosing lifestyle, source of financing for the initial investment from personal savings and risks, making more careful transactions³⁴.

Personal aspects, cognitive, psychological, social characteristics, acquired knowledge and skills, personal experiences and values make managers more competent³⁴. In addition, strategy and knowledge improve their resilience, their attention and, in the case of physical therapy, their assistance³⁰. However, the data showed that the level of education and specific training in management do not influence managers' strategic behavior. Their skills are important for clinics both in private and free healthcare, even if they differ in terms of results and processes⁷.

This study presented limitations in the stratification of the sample into subgroups and possible difficulties in interpreting some questions of the online questionnaire.

CONCLUSION

It was possible to identify, in the population evaluated, a similar proportion between defender, analytical, prospective, and reactive profiles. Regarding the association of variables, only gender was related to the types of profiles. Most clinics in this study work in Trauma-Orthopedics and have a lean structure, with small teams and low demand. The managers of physical therapy clinics in Rio Grande do Sul are mostly female, aged from 30 to 39, simultaneously performing technical care and management functions.

REFERENCES

1. World Confederation for Physical Therapy. Policy statement – description of physical therapy [Internet]. London: WCPT; 2023 [cited 2024 Dec 17]. Available from: <https://world.physio/policy/ps-descriptionPT>
2. Guedes MJP, Alves NB, Wyszomirska RMAF. Ensino e práticas da fisioterapia aplicada à criança na formação do fisioterapeuta. *Fisioter. mov.* 2013;26(2):291-305. doi:10.1590/S0103-51502013000200006

3. Brasil. Decreto-Lei nº 938, de 13 de outubro de 1969: Provê sôbre as profissões de fisioterapeuta e terapeuta ocupacional, e dá outras providências [Internet]. Diário Oficial da União. 1969 Oct 14 [cited 2024 May 9]. Available from: https://www.planalto.gov.br/ccivil_03/decreto-lei/1965-1988/del0938.htm
4. Conselho Nacional de Saúde. Resolução nº 559, de 15 de setembro de 2017 [Internet]. Brasília: CNS; 2017 [cited 2024 Dec 17]. Available from: <https://www.gov.br/conselho-nacional-de-saude/pt-br/acao-a-informacao/legislacao/resolucoes/2017/resolucao-no-559.pdf>
5. Badaró AFV, Guilhem D. Perfil sociodemográfico e profissional de fisioterapeutas e origem das suas concepções sobre ética. *Fisioter. mov.* 2011;24(3):445-54. doi: 10.1590/S0103-51502011000300009
6. Shiwa SR, Schmitt ACB, João SMA. O fisioterapeuta do estado de São Paulo. *Fisioter. Pesqui.* 2016;23(3):301-10. doi: 10.1590/1809-2950/16115523032016
7. Mariotti MC, Bernardelli RS, Nickel R, Zeghbi AA, Teixeira MLV, Costa RM. Características profissionais, de formação e distribuição geográfica dos fisioterapeutas do Paraná – Brasil. *Fisioter. Pesqui.* 2017;24(3):295-302. doi: 10.1590/1809-2950/16875724032017
8. Brasil. Lei Complementar nº 123, de 14 de dezembro de 2006: Institui o Estatuto Nacional da Microempresa e da Empresa de Pequeno Porte; altera dispositivos das Leis nº 8.212 e 8.213, ambas de 24 de julho de 1991, da Consolidação das Leis do Trabalho – CLT, aprovada pelo Decreto-Lei nº 5.452, de 1º de maio de 1943, da Lei nº 10.189, de 14 de fevereiro de 2001, da Lei Complementar nº 63, de 11 de janeiro de 1990; e revoga as Leis nº 9.317, de 5 de dezembro de 1996, e 9.841, de 5 de outubro de 1999 [Internet]. Diário Oficial da União. 2006 Dec 15 [cited 2024 May 9]. Available from: https://www.planalto.gov.br/ccivil_03/leis/lcp/lcp123.htm
9. Serviço Brasileiro de Apoio às Micro e Pequenas Empresas. Perfil das microempresas e empresas de pequeno porte 2018 [Internet]. Brasília: Sebrae; 2018 [cited 2024 May 9]. Available from: <https://sebrae.com.br/sites/PortalSebrae/ufs/ro/artigos/perfil-das-microempresas-e-empresas-de-pequeno-porte-2018,a2fb479851b33610VgnVCM1000004c00210aRCRD>
10. Serviço Brasileiro de Apoio às Micro e Pequenas Empresas. Sobrevivência das empresas mercantis brasileiras (2017-2022). Brasília: Sebrae; 2023.
11. Serviço Brasileiro de Apoio às Micro e Pequenas Empresas. Apresentação executiva – Pesquisa “Sobrevivência de Empresas”. Brasília: Sebrae; 2021.
12. Instituto Brasileiro de Geografia e Estatística. Conta-Satélite de Saúde: Brasil 2010-2021. Rio de Janeiro: IBGE; 2024.
13. Sánchez J. The influence of entrepreneurial competencies on small firm performance [Internet]. *Rev. latinoam. psicol.* 2011;44(2):165-77 [cited 2024 Dec 17]. Available from: <https://www.redalyc.org/pdf/805/80524058013.pdf>
14. Nassif VMJ, Andreassi T, Simões F. Competências empreendedoras: há diferenças entre empreendedores e intraempreendedores? *Rev Adm Inov.* 2011;8(3):33-54. doi: 10.5773/rai.v8i3.858
15. Federação dos Hospitais, Clínicas e Laboratórios do Estado de São Paulo. Boletim Econômico da FEHOESP aponta crescimento da saúde privada no Brasil [Internet]. 2020 [cited 2024 May 9]. Available from: <https://fehoesp360.org.br/sindsuzano/boletim-economico-da-fehoesp-aponta-crescimento-da-saude-privada-no-brasil/>
16. Chichoski IO, Ceretta GF, Rocha AC. Comportamento estratégico baseado na tipologia de Miles e Snow: um estudo com empresas do setor industrial de Ampére-PR [Internet]. *Qualitas Rev Eletr.* 2013;14(1) [cited 2024 Dec 17]. Available from: https://www.academia.edu/48801474/Comportamento_Estrat%C3%A9gico_Baseado_Na_Tipologia_De_Miles_e_Snow_Um_Estudo_Com_Empresas_Do_Setor_Industrial_De_Amp%C3%A9re_PR
17. Miles RE, Snow CC, Meyer AD, Coleman HJ. Organizational strategy, structure, and process. *Acad Manage Rev.* 1978;3(3):546-62. doi: 10.2307/257544
18. Anwar J, Hasnu S. Business strategy and firm performance: a multi-industry analysis. *J Strategy Manag.* 2016;9(3):361-82. doi: 10.1108/JSMA-09-2015-0071
19. Blumentritt T, Danis WM. Business strategy types and innovative practices [Internet]. *J Manag Issues.* 2006;18(2):274-91 [cited 2024 Dec 17]. Available from: <https://www.jstor.org/stable/40604538>
20. Rosa EF. Sistematização de um modelo de planejamento estratégico e avaliação de desempenho para pequenas empresas de serviços: o caso de uma clínica de fisioterapia [dissertação] [Internet]. Porto Alegre: Universidade Federal do Rio Grande do Sul; 2016 [cited 2024 Dec 17]. Available from: <http://hdl.handle.net/10183/149192>
21. Meneses AS, Silva JSM, Silva LE. Financial perspective on waiting regulation for physiotherapy in primary health care [Internet]. *SciELO Preprints.* 2020 [cited 2024 Oct. 9]. Available from: <https://preprints.scielo.org/index.php/scielo/preprint/view/590>
22. Alyrio RD. Métodos e técnicas de pesquisa e administração. Rio de Janeiro: Fundação CECIERJ; 2009. p. 7.
23. Conselho Federal de Fisioterapia e Terapia Ocupacional. Resolução nº 80: Baixa Atos Complementares à Resolução COFFITO-8, relativa ao exercício profissional do FISIOTERAPEUTA, e à Resolução COFFITO-37, relativa ao registro de empresas nos Conselhos Regionais de Fisioterapia e Terapia Ocupacional, e dá outras providências [Internet]. Brasília: Coffito; 1987 [cited 2024 Dec 17]. Available from: <https://www.coffito.gov.br/nsite/?p=2838>
24. Conant JS, Mokwa MP, Varadarajan PR. Strategic types, distinctive marketing competencies and organizational performance: a multiple measures-based study. *Strategic Manage J.* 1990;11:365-83. doi: 10.1002/smj.4250110504
25. Gimenez FAP. O estrategista na pequena empresa: da ação empreendedora à estratégia. Curitiba: PUCPress; 2022.
26. Jonathan EG. Mulheres empreendedoras: o desafio da escolha do empreendedorismo e o exercício do poder. *Psicol Clin.* 2011;23:65-85. doi: 10.1590/S0103-56652011000100005
27. Greco SMS, Onozato E, Bastos Junior PA, Souza VL. Empreendedorismo no Brasil – 2019. Curitiba: IBQP; 2019.
28. Becker LA, Rech CR, Reis RS. Acesso à informação para tomada de decisão com base em evidências segundo a percepção de Secretários Municipais de Saúde do Estado do Paraná, no ano de 2014. *Cad Saúde Pública.* 2018;34(7):e00003918. doi: 10.1590/0102-311X00003918
29. Eggmann S, Kindler A, Perren A, Ott N, Johannes F, Vollenweider R, et al. Early physical therapist interventions for patients with

- COVID-19 in the Acute Care Hospital: a case report series. *Phys Ther.* 2021;101(1):pzaa194. doi: 10.1093/ptj/pzaa194
30. Musumeci MM, Martinez BP, Nogueira IC, Alcanfor T. Recursos fisioterapêuticos utilizados em unidades de terapia intensiva para avaliação e tratamento das disfunções respiratórias de pacientes com COVID-19. *ASSOBRAFIR Ciênc.* 2020;11(Supl 1): 73-86. doi: 10.47066/2177-9333.AC20.covid19.007
31. Serviço Brasileiro de Apoio às Micro e Pequenas Empresas. *Global Entrepreneurship Monitor: empreendedorismo no Brasil.* Brasília: Sebrae; 2017. p. 27.
32. Cassol A, Lorandi B, Artifon R, Ramos F. Comportamento estratégico de micro e pequenas empresas do setor de prestação de serviços baseado na tipologia de Miles e Snow. *Anais do V SINGEP;* 2016.
33. Vendruscolo B, Hoffmann VE, Freitas CA. A influência de ferramentas de gestão estratégica e de stakeholders no desempenho de organizações do ramo particular de saúde do Distrito Federal. *Rev Iberoam Estratég.* 2012;11(1):30-61. doi: 10.5585/ijsm.v11i1.1799
34. Gouvêa ABCT, Silveira A, Machado HPV. Mulheres empreendedoras: compreensões do empreendedorismo e do exercício do papel desempenhado por homens e mulheres em organizações. *REGEPE.* 2013;2(2):32-54. doi: 10.14211/regepe.v2i2

APPENDIX – QUESTIONNAIRE

STRATEGIC BEHAVIOR OF PHYSICAL THERAPY CLINICS IN THE STATE OF RIO GRANDE DO SUL FROM THE PERSPECTIVE OF THE MILES AND SNOW MODEL

Shall we make a difference?

Hello, colleague!

First of all, thank you very much for reading this material! This research is part of the master's project of the Graduate Program in Information Technologies and Health Management (PPG-TIGSaúde) of the Federal University of Health Sciences of Porto Alegre (UFCSPA), which is being developed by me, Gérson Chequi, along with Prof. Luís Henrique Telles da Rosa and Prof. Marcelo Schenk de Azambuja. Our goal is to understand what is the dominant strategic profile in your clinic.

We know managing a business is hard, even more so for physical therapists who see patients while having to make the best financial decisions, according to marketing and innovation; that is, how to attract and retain patients, making the clinic stable and sustainable.

In addition to thanking you for your time in filling out this tool, we want to offer you, who filled all answers, a four-hour online workshop, TOTALLY FREE, about Marketing in Health Services and Financial Management. And if you choose to receive a feedback, it will be done individually. Nothing could be fairer, since you collaborated with our study.

Thank you again!

INFORMED CONSENT FORM (ICF)

First of all, we need to know whether you agree to participate in this survey. Read the term carefully and, at the end, click on “I accept” or “I do not accept” to proceed.

Project: “The strategic behavior of physical therapy clinics in the State of Rio Grande do Sul from the perspective of the Miles and Snow model.”

You are invited to participate in the research above, whose objective is to identify the dominant strategies in physical therapy clinics in Rio Grande do Sul, based on the typology of Miles and Snow.

You will participate by answering an online questionnaire with open- and closed-ended questions about the strategic profile adopted by your clinic, according to the typology of Miles and Snow. The estimated time to complete this questionnaire is 15 minutes. Your participation will help in the development of new knowledge, which may eventually benefit you and others in the future. The minimum risks proven to arise from the research will be the sole responsibility of the researchers. Your records will always be treated confidentially, and the results of this study may be used for scientific purposes only. Your participation is voluntary, so if you decide not to participate, you will not be jeopardized. There is no cost and you will not be paid for participating. Your participation is not mandatory, and at any time you may withdraw your consent. Your refusal will not jeopardize the researcher or the institution. This document will be automatically authorized when you click on “I accept” and will be available for you to edit after submission.

If you have questions or wish to request clarification, you can contact the main researcher, Luís Henrique Telles da Rosa, at (51) 99334-1085 or luisr@ufcspa.edu.br, or the Research Ethics Committee of UFCSPA, at (51) 3303-8804 or Rua Sarmiento Leite, 245, Porto Alegre—RS.

Researcher in Charge: Luís Henrique Telles da Rosa

Do you agree to participate in this research based on the Informed Consent Form above? *Required answer

I accepted () I do not accept ()

PART A—RESPONDENT CHARACTERISTICS

A.1—Name: (OPTIONAL)

A.2—Gender:

Male () Female ()

A.3—Age group:

- () Less than 30
- () 30 to 39
- () 40 to 49
- () 50 to 59
- () Over 60

A.4—Among your professional activities as physical therapist, select the option that best defines your performance:

- () Administrative/Management only, go to question A.5
- () Clinical only, go to question A.6
- () Both, go to question E.4

A.5—How long have you been working as manager?

- () less than 1 year
- () 1 to 3 years
- () 3 to 6 years
- () over 6 years

A.6—What is your academic degree? (you can select more than one option)

- () Undergraduate
- () Postgraduate specialization
- () Master's degree
- () Doctorate

A.7—Do you have management training? (you can choose more than one option)

- () Short-term (up to 20 hours)
- () Specialization or MBA
- () Undergraduate
- () Long-term (over 20 hours)
- () Master's degree
- () Doctorate
- () I do not have training

PART B—ENVIRONMENT PERCEPTION

Environment can be understood as physical and social aspects external to the clinic (company) that are taken into account by managers in the administrative decision-making process. External environments in which physical therapy clinics are involved can be divided into the following aspects:

- **COMPETITORS:** Physical therapy services that directly or indirectly compete with the same services your clinic offers.
- **CUSTOMERS:** Patients or companies that hire services performed by your clinic.
- **SUPPLIERS:** Any company that provides products, equipment or utensils necessary for your clinic to provide services.
- **ECONOMIC ASPECTS:** Such as inflation, international trade, municipal, state and federal revenue, fees, taxes.
- **TECHNOLOGICAL ASPECTS:** Includes innovation in techniques and/or methods in the provision of current services, development of new services, and general trends in research and development relevant to your clinic.
- **REGULATORY ASPECTS:** Laws, rules, regulations, code of ethics or resolutions that can influence the activities of your clinic, issued by all levels of government—federal, state and municipal—including regional and federal physical therapy councils.
- **SOCIOCULTURAL ASPECTS:** The environment in which the clinic is inserted; they involve social values shared by the general population, ethical standards at work.
- **DEMOGRAPHY:** Includes changes in aspects such as population growth, income, schooling, and changes in the profile of families, age groups, etc.
- **CHANGE RATE:** Refers to the frequency of changes that occur in the environment external to your clinic.
- **COMPLEXITY RATE:** Refers to the heterogeneity of external factors and events that are relevant to the clinic.
- **IMPORTANCE RATE:** Relevance of external factors for the clinic to achieve its goals.

Considering the description of the external environment (market in which you operate) and its aspects, answer questions B.1, B.2 and B.3, selecting (1) for a low perception and (5) for a high perception.

B.1—What is the CHANGE RATE you perceive? A low change rate (1) means things stay as they are from year to year, while a high change rate (5) means things change quickly and unpredictably from year to year.

Competitors

1 2 3 4 5

Customers

1 2 3 4 5

Suppliers

1 2 3 4 5

Economic aspects

1 2 3 4 5

Technological aspects

1 2 3 4 5

Regulatory aspects

1 2 3 4 5

Sociocultural aspects

1 2 3 4 5

Demography

1 2 3 4 5

B.2—What is the COMPLEXITY RATE you perceive? A low complexity rate (1) means the environment aspect involves issues with little difference between them, while a high complexity rate (5) means the external environment aspect involves many issues with large differences between them.

Competitors

1 2 3 4 5

Customers

1 2 3 4 5

Suppliers

1 2 3 4 5

Economic aspects

1 2 3 4 5

Technological aspects

1 2 3 4 5

Regulatory aspects

1 2 3 4 5

Sociocultural aspects

1 2 3 4 5

Demography

1 2 3 4 5

B.3—What is the IMPORTANCE RATE you perceive? A low importance rate (1) means the environment aspect has little effect on the achievement of your clinic’s goals, while a high importance rate (5) means that the external environment aspect greatly affects the achievement of your clinic’s goals.

Competitors

1 2 3 4 5

Customers

1 2 3 4 5

Suppliers

1 2 3 4 5

Economic aspects

1 2 3 4 5

Technological aspects

1 2 3 4 5

Regulatory aspects

1 2 3 4 5

Sociocultural aspects

1 2 3 4 5

Demography

1 2 3 4 5

PART C—BEHAVIOR ANALYSIS

Each question in Part C is followed by four options, and you must choose one that best reflects the current situation of your clinic. There is no “good” or “bad” option; they only reflect predominant characteristics. Thus, even if two or more statements seem fit, we ask that you only choose one option for each question.

C.1—Compared to other physical therapy clinics, the services offered by yours are better, because:

- They are more innovative, in continuous change and the most varied in the market.
- Part of the services has not undergone many changes and is quite stable, while other services are innovative and undergo changes.
- They are well-focused, relatively stable, and consistently defined across the clinic and market segment.
- Your services are constantly changing to offer answers to the opportunities and threats of the market environment.

C.2—Compared to other physical therapy clinics, your clinic gives the market an image of a business that:

- Offers few specific services, but of high-quality.
- Adopts new ideas and innovations after careful consideration.
- Is able to take advantage of opportunities and react appropriately to market threats to maintain or improve their position.
- Has a reputation for being very creative and innovative.

C.3—The time your clinic uses to keep up with market changes and threats can be described as:

- Prolonged: continuously following the market.
- Minimum: does not spend much time following trends and changes.
- Average: spends a reasonable amount of time following trends and changes.
- Variable: sometimes spends a lot of time, and other times, spends little time monitoring market changes and trends.

C.4—Variations in the demand for your clinic’s services, compared to others, are probably due to the:

- Ability to be a reference in the market in which the clinic operates.
- Ability to respond and adapt to market pressures, taking few risks.
- Ability to be competitive when offering new types of services.
- Ability to succeed in the market in which it operates and thoroughly analyze the potential for offering new services.

C.5—One of the most important goals of your clinic, compared to others, is the dedication and commitment to:

- Keep costs under control.
- Analyze costs and revenues carefully, keep costs under control, and selectively create new services or enter new markets.
- Ensure that people, resources and equipment required to develop new services and new markets are available and accessible.
- Be prepared against threats, being able to take any necessary action.

C.6—The skills and abilities that best characterize the manager(s) of this clinic are:

- Analytical: their skills allow them to identify trends and develop new services and markets.
- Specialist: their skills and competencies are concentrated in one or more specific areas.
- Broad and entrepreneurial: their skills and competencies are diverse and flexible, allowing them to create changes.
- Flexible: their skills are related to short-term needs and demands.

C.7—What most protects/defends the clinic regarding its competition is:

- The ability to analyze emerging trends and adopt only those with proven potential.
- Be able to do a limited number of things exceptionally well.
- Be able to respond to trends when they arise, even with moderate response potential.
- Have a consistent ability to develop new services and new markets.

C.8—The clinic manager(s), compared to others, is (are) more focused on:

- Maintaining a secure financial position using cost and quality control measures.
- Analyzing opportunities in the market and select only those with proven potential, maintaining a secure financial position.
- Innovating, considering opportunities or problems currently faced.
- Developing new services and expanding into new market segments.

C.9—The clinic prepares for the future by:

- Identifying the best possible solutions to problems or challenges that require immediate attention.
- Identifying trends and opportunities that can result in new services that reach new markets.
- Identifying problems that impact the improvement of the service offer.
- Identifying trends other clinics have used to solve problems related to the market in which the clinic operates.

C.10—The organizational structure of the clinic is:

- Functional by nature, e.g.: organized by areas such as administrative, rehabilitation, human resources, projects, innovation, etc.
- Service- or market-oriented, e.g.: Trauma-Orthopedics, Pilates, Dermatofunctional, Neurofunctional, Pediatrics, Gerontology, etc.
- Primarily functional, but with some service-oriented areas or markets.
- Continuously changing, seeking to solve problems and find opportunities.

C.11—The procedures the clinic uses to evaluate its own performance are described as:

- Decentralized and participatory, stimulating the involvement of professionals who are part of the clinic.
- Strongly oriented towards solving problems that require more attention.
- Centralized in the responsibility of the manager.
- Centralized in more established and participatory areas or sectors of the clinic.

C.12—Which description is more appropriate for your clinic, compared to others?

It seeks to identify and maintain a specific service niche (audience segment), safely and stably. It offers a more limited number of services than competitors, but with high quality or lower prices. The company is not seen as innovative in physical therapy, as it tends not to consider changes that do not have a direct influence on its area(s) of expertise, focusing instead on doing the best possible work.

It offers a wide range of services that are constantly being redefined. It values being at the forefront of innovation, even though the development of new markets is not so profitable. It responds quickly to new opportunities that often lead to a new competitive position; however, the clinic may not be strong in all areas in which it operates.

It maintains a limited and stable services supply, seeking to develop new services in promising areas. It does not seek for innovation in physical therapy. However, it follows activities of its main competitors, aiming to offer services at a more efficient cost.

It does not have a specific market strategy/orientation. It tends to offer competitive responses according to market pressures that require changes.

PART D—COMPANY CHARACTERIZATION

Each question is followed by several options, and you must choose one that best reflects the clinic's situation. Even if two or more statements seem to fit the company's reality, choose only one option per question.

D.1—What is the main branch of activity of the clinic?

- Acupuncture
- Aquatic
- Cardiovascular
- Dermatofunctional
- Sports
- Gerontology
- Occupational Health
- Neurofunctional
- Oncology
- Respiratory
- Trauma-Orthopedic
- Osteopathy
- Chiropractic
- Women's Health
- Intensive Care

OTHER: _____

D.2—How long has the clinic been in operation? Specify in years: _____

D.3—How many physical therapists work in the clinic? Specify in numbers:

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- over 10

D.4 - How many patients does the clinic serve per month on average? _____

PART E—PERFORMANCE ANALYSIS

E.1—Indicate to what extent the clinic manager(s) is(are) satisfied with the performance, with one (1) meaning very low satisfaction and five (5) meaning very high satisfaction.

Sales of products and services

1 2 3 4 5

Patient maintenance

1 2 3 4 5

Attracting new patients

1 2 3 4 5

Work team

1 2 3 4 5

Profitability

1 2 3 4 5

PART F—OTHER INFORMATION

F1—Are you interested in receiving the results of this survey?

() Yes

() No

F2—If so, what is the best way to send it? _____