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# Shantala: The Touch to Improve the Quality of Life in Babies Attending a School in the Midwest of Santa Catarina

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# ABSTRACT

**Introduction:** Shantala is a technique that was created by an Indian mother, with the aim of massaging the baby. Your movements must be performed rhythmically and follow an order, becoming delicate and providing pleasure to the recipient. Many benefits are reported with Shantala, some of which include reducing intestinal colic, improving sleep quality and reducing stress and anxiety.

**Objective:** To analyze the effectiveness of applying the Shantala massage technique to a group of babies enrolled in a school in the Midwest of Santa Catarina.

**Methods:** This study is characterized as experimental research of an exploratory and descriptive nature. The sample consisted of 7 babies aged 4 to 12 months, of both sexes. The assessment was applied through a questionnaire on the perception of babies' behaviors, answered by their guardians, and sleep quality was assessed using the Brazilian version of the Children's Sleep Habits Questionnaire (CSHQ), both were applied pre and post -treatment. Afterwards, patients underwent 10 Shantala sessions. Participants only received care after consent from their guardians and approval from the ethics and research committee.

**Results:** The results demonstrated that the babies' eating habits improved when compared pre- (28.6%) and post-treatment (57.9%), being classified as very good and 42.9% as excellent. In relation to social behavior, only 14.3% were classified as excellent before massage applications, increasing to 57.1% post-treatment. No child showed any symptoms of intestinal colic, anxiety or stress after the applications, which were present pre-application. The quality of sleep also improved post-treatment, showing an improvement in this habit in relation to the time of going to bed and waking up, including during the night.

**Conclusion:** The research demonstrated that the Shantala technique promoted the reduction of stress levels, anxiety, reduced symptoms of intestinal colic and improved the quality of sleep, eating habits and social interaction, which consecutively generates a better quality of life in children.

KEYWORDS: Massage. Shantala. Babies.

## INTRODUCTION

Massage is a pleasant form of therapy that does not require large resources to be carried out on people of all ages, including babies and children. Eastern culture works and passes on to the world many natural techniques that help in a better quality of life and well-being and one of them is baby massage known as Shantala. (LESTARI et al., 2021). Shantala is a technique created with the aim of massaging babies, becoming known in the West through Dr. Frederick Leboyer , who witnessed the technique in Calcutta, India, when, walking through the streets, he saw a paraplegic mother massaging her baby (LUNA; AUGUSTO; MEDINA, 2022). Leboyer was enchanted by the strength, beauty and delicacy with which the movements were generated in a

# ARTICLE DETAILS

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rhythmic and orderly way. When sharing the technique, he named it after that woman, that is, Shantala (ASTUDILLO ÁLVAREZ; ORDÓÑEZ PESÁNTEZ, 2021).

This massage is carried out using a sliding means, which must be done carefully so as not to cause skin irritation, also avoiding strong or unpleasant smells so that the baby does not feel unwell when receiving the massage. These precautions should be combined with a calm environment, with neutral colors, with calming background music recommended, causing greater relaxation (NETA, 2019).

Currently, people spend a large part of their day in work environments and, consequently, babies and children spend more time in school environments, generating greater stress and anxiety in them. Ribeiro-Lima and Cavalcante (2020) state that infant massage techniques help reduce stress in babies who remain in collective care environments, thus improving quality of life, leaving the body in homeostasis.

Shantala massage has numerous benefits, improving the physical, emotional and behavioral health of the baby. It also helps reduce stress, cramps and emotional bonding, leaving you more confident, harmonized and happy (CANAAN et al., 2021). The technique is important for children in daycare centers, as many of them spend the whole day away from their working parents and end up being more exposed to stress and anxiety. With Shantala, they become more relaxed, reducing these symptoms.

Nowadays, people tend to have extended working hours, thus spending more time away from home. As a result, children also spend a longer period of time in schools or daycare centers, generating more anxiety and stress.

Colic is usually common in the first months of life and may be caused by the immaturity of the intestinal system or the food offered to the child. Shantala is important for the baby's relaxation, helping to improve intestinal function and automatically reducing this symptom.

So, because the Shantala technique has so many benefits, can it promote an improvement in the quality of life of a group of babies who attend a school in a city in the Midwest of Santa Catarina?

The general objective of this research was to analyze the effectiveness of applying the Shantala massage technique to a group of babies enrolled in a school in the Midwest of Santa Catarina. In relation to the specific objectives, the presence of colic, sleep quality, reports from those responsible through the questionnaire answered about the baby's general behavior before and after treatment were evaluated.

## METHODS

This research is based on experimental research of an exploratory and descriptive nature. Thus, to better analyze the data obtained, it is proposed to use the qualitative and quantitative methodology in order to establish characteristics and descriptions, in addition to statistics and exact data.

The population of the study was a total of 7 babies aged 4 to 12 months, of regardless gender, enrolled at Colégio Aplicação located in Caçador, a city in the Midwest of Santa Catarina, with the consent of their guardians.

For the analysis, male and female participants aged 4 to 12 months from the city of Caçador were included, whose guardians agreed and signed the free and informed consent form (TCLE).

Participating babies who were allergic to the oil or who did not adapt to the application of the Shantala technique were excluded.

The evaluation of the participating babies was carried out through questionnaires answered by those responsible who spend most of the time with the baby, who could be a father/mother or another. The questionnaires had the characteristics of the sample to better understand the baby's daily habits, such as colic frequency, eating and behavioral habits. A specific questionnaire to assess the quality of sleepin newborns called the Children's Sleep Habits Questionnaire (CSHQ) was also used.

The physical assessment always took place before applying the Shantala technique, where the general condition of the baby was assessed, his skin, whether there were any wounds in the region, hydration of the mucosa and the emotional state, whether the child was irritated, agitated or calm. to carry out the technique. The risk of allergy to the oil used was also tested. While the physical performance was applied in such a way that the responsible researcher applied some of the oil to the baby's forearm region and observed if any type of allergic reaction occurred, this was not the case for any baby.

The Children's Sleep Habits Questionnaire (CSHQ) assessed the baby's sleep behavior, which is classified on a three-point scale, being "usually" (five to seven times a week, totaling three points), "sometimes " (two to four times a week, totaling two points) or "rarely" (0 to once a week, totaling one point), parents/guardians also answered a questionnaire about their perceptions of the babies' behaviors.

The sessions were held twice a week, lasting 50 minutes, during the period the baby was at school, totaling 10 sessions at the end of the treatment.

#### **RESULTS AND DISCUSSION**

The sample consisted of 07 (seven) babies aged between 4 and 12 months, 06 (six) female babies and 01 (one) male baby. They all attended nursery school at Colégio Aplicação in the city of Caçador/SC and did not present any contraindication to the application of Shantala.

In total, the babies received 10 sessions from Shantala, at least twice a week, which took place in the classroom with the presence of teachers and classmates.

Table 1 represents the pre- and post-application data of Shantala, evaluating the babies' eating habits, their social behavior, the frequency of colic and stress in their daily lives. It can be seen that all items improved after the application of

Shantala, where there was an evolution in eating habits and social behavior and a decrease in the presence of intestinal cramps and daily stress.

Souza et al. (2020), confirm in their studies the benefits of applying Shantala, it was applied to 09 (nine) children with an average age of 1 year and 04 months and with an average of 14 (fourteen) applications of the Shantala technique. At the end of its applications, it demonstrated an improvement in sleep quality and psycho -physical-social development, a reduction in child colic and also reported that during day-today life the children appeared calmer. Another study analyzed demonstrated through literary research that Shantala helps improve sleep quality, gastrointestinal maturation, reducing colic and gas and improving the baby's emotional development (LUNA; AUGUSTO; MEDINA, 2022).

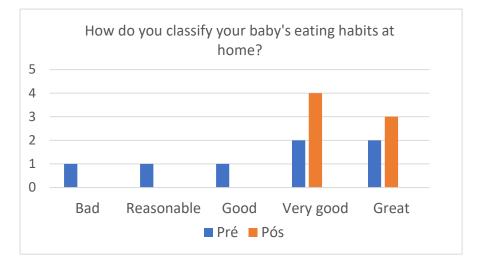
This research study corroborates the findings above, as they showed that the benefits of the technique are real and beneficial, improving the quality of life of babies and those who live with them.

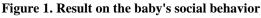
 Table 1. Assessment of eating habits, frequency of colic and stress of babies before and after treatment carried out by parents.

	Pre	%	Powders	%
How do you classify your baby's eating habits at home?				
Bad	1	14.3	0	0.0
Reasonable	1	14.3	0	0.0
Good	1	14.3	0	0.0
Very good	two	28.6	4	57.1
Great	two	28.6	3	42.9
What is the baby's social behavior like? (Presence of more people in the same environment)				
Bad	0	0.0	0	0.0
Reasonable	two	28.6	0	0.0
Good	1	14.3	two	28.6
Very good	3	42.9	1	14.3
Great	1	14.3	4	57.1
Does the child have intestinal colic?				
Never	two	28.6	4	57.1
Rarely	3	42.9	two	28.6
Possibly	1	14.3	1	14.3
Often	0	0.0	0	0.0
Very often	1	14.3	0	0.0
Is your baby anxious and stressed?				
Never	0	0.0	1	14.3
Rarely	two	28.6	3	42.9
Possibly	3	42.9	3	42.9
Often	1	14.3	0	0.0
Very often	1	14.3	0	0.0

**Source:** The authors (2023)

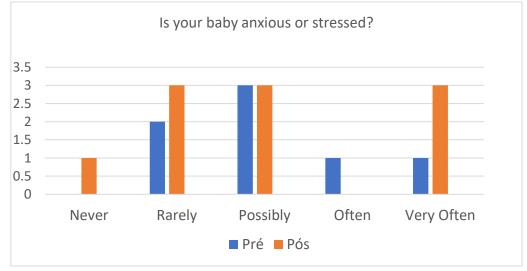
Shantala massage helps in the child's development because it will offer neurological stimuli which will provide greater nutritional progress, improving digestion and thus the association of foods (MOTTER, 2018). With the applications, babies tend to have better behavior and Canaan et al. (2021), brought in their study, through integrative research, that the Shantala technique facilitates the baby's relationship with society, as it will reinforce their affective and emotional bonds.

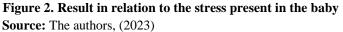




Source: The authors (2023)

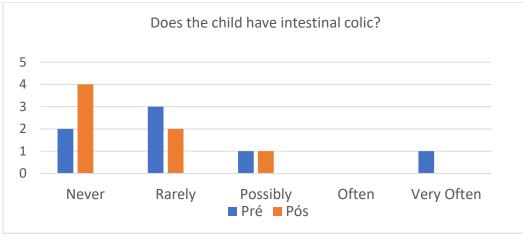
Motter et al. (2012), carried out applied research and their final data reported that both the students and the caregivers who participated in their project evaluated behavioral differences in the children who received the technique, as after the applications it was notable that they behaved calmer and happier, in addition to presenting an advance in their child development, which contributes to the baby's better social behavior and reduced stress and anxiety. Regarding this, it was also possible to observe in the study of Carvalho (2020), in which he carried out a bibliographical review research on searches in databases, finalizing his research on 08 (eight) studies and finding that Shantala massage improves the child's bond and communication with the applicator, stress diary, anxiety and relaxation. Thus, the results presented above corroborate those reported by the parents of the babies who participated in the study, which is represented in Figure 2, and a decrease in stress and anxiety can be observed after the application.

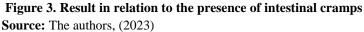




Luna; Augusto and Medina (2022), report in their findings that Shantala will immediately reduce the symptoms of colic and gas; this happens because it will beneficially affect the function of the gastrointestinal system, reducing the tension present there and relaxing the baby. Ribeiro -Lima and Cavalcante (2020), show that after application, children appear calmer and there is clearly an improvement in intestinal functioning, heart rate and breathing, improving children's relaxation. The results regarding the presence of colic are represented in Figure 3, and it can be seen that there was a reduction in frequency after application of the technique, corroborating the studies mentioned above.







To assess sleep quality, the Portuguese validation of the Children's Sleep Habits Questionnaire (CSHQ) was used, which assesses the perception of children's parents/guardians about their nights' sleep in the previous week, which was answered in this questionnaire regarding The higher the scores, the greater the problem with sleep (SILVA et al., 2014).The maximum values to indicate sleep problems at bedtime are 24 points, sleep behavior is 27 points, waking up

at night 06 points, waking up in the morning 15 points and drowsiness during the day 09 points. The score achieved by the children is represented in Table 2. It can be seen from these results that parents reported that there was an improvement in relation to bedtime and behavior during the night, with children reducing the number of times they woke up during the night and slept more in the morning, they also showed greater drowsiness throughout the day.

 Table 2. Result of the parents' assessment of children's sleeping habits before and after treatment with Shantala.

	Pretreatment	After treatment	
Bedtime	15.7	14.9	
Sleep behavior	16.6	14.4	
Wake up at night	4.3	3.3	
Wake up in the morning	7.9	8.1	
Drowsiness during the day	7.4	7.6	
Total points	51.9	48.3	

Source: The authors (2023).

Research such as that by Field (2019), observed that the practice of Shantala massage can result in significant improvements in neuropsychomotor development, an increase in the emotional bond between parents and the baby, in addition to contributing to sleep regulation and reducing excessive crying. These benefits are attributed to the physical contact, sensory stimulation and emotional interaction promoted during the massage.Furthermore, studies have shown that the regular application of the Shantala technique can positively influence the immune function of babies, promoting an increase in the production of protective cells of the immune system, which can contribute to better resistance to infections. However, it is important to consider that although the results are promising, more research is possible to confirm and fully understand the benefits of Shantala massage on babies' quality of life. Aspects such as the ideal massage frequency, its long-term effects and possible contraindications still need to be further investigated.

# FINAL CONSIDERATIONS

The research demonstrated that the Shantala technique promoted the reduction of stress levels, anxiety, reduced the symptoms of intestinal colic and improved the quality of sleep, eating habits and social interaction, which consequently generates a better quality of life in children.According to the answers to the questionnaires answered by the participants' parents/guardians, the study proves that the Shantala protocol was effective. Thus, this study was of great value to the children and their relatives, as it demonstrated many benefits and generally contributed to a better quality of life for the participants. The limitations of this study were considered to be the scarcity of more up-to-date content on the research subjects, the unsuitable space for carrying out the technique, as the room was noisy and the application taking place in winter and without an ideal climate, made -the use of a piece of clothing, preventing the baby from feeling cold, another limiting factor was a small sample size. For these reasons, consecutive studies are

suggested, perhaps with other means of data collection, just to have more comparative studies, and also a more significant sample number, which could better qualify subsequent studies. In conclusion, recent studies suggest that Shantala massage can offer a range of benefits to babies, including improvements in neurodevelopment, emotional bonding, sleep regulation and immune function. However, further research is possible to fully understand its impact and guide clinical practice.

#### REFERENCES

- I. ASTUDILLO ÁLVAREZ, VE; ORDÓÑEZ PESÁNTEZ, MV Effects of the Storybook application: massages and stories in attachment and death in school-aged children at CEIAP Universidad del Azuay, , 2021.
- II. Canaan, R.; Da Silva, Ea; Da Silva, Gsv; Da Silva Souza, A.; Silva, Jslg; Alves, M. Shantala and the benefits for the physical, emotional and behavioral development of babies. Pró-univerSUS Magazine, v. 12, no. 2 Special, p. 53–57, 2021.
- III. CARVALHO, SGNV Use of Shantala in nursing care Juazeiro do NorteCENTRO UNIVERSITÁRIO DOUTOR LEÃO SAMPAIO, , 2020. Available at: <a href="https://sis.unileao.edu.br/uploads/3/ENFERMAGEM/S">https://sis.unileao.edu.br/uploads/3/ENFERMAGEM/S</a> TEF\_NNY\_G\_ZIANNY\_NOGUEIRA\_VIEIRA\_CA RVALHO.pdf>
- IV. FIELD, T. Pediatric Massage Therapy Research: A Narrative Review. Children, vol. 6, no. 6, p. 78, 6 June. 2019.
- V. LESTARI, KP; NURBADLINA, FR; WAGIYO, W.; JAUHAR, M. The effectiveness of baby massage in increasing infant's body weight. Journal of public health research, v. 10, no. s1, May 31, 2021.
- VI. LUNA, DMS; AUGUSTO, F.; MEDINA, YES. M. The effects of Shantala on full-term babies: focus on sleep quality, colic and emotional control. FAP Science Magazine, n. 5, 2022.
- VII. MOTTER, AA Benefits of shantala in babies at a public school in Matinhos/PR. Extension in Focus , v. 1, no. 15, 2018.
- VIII. MOTTER, AA; FELISBINO, I.; KRUPNISKI, E.; MICOS, AP; DA VEIGA, TP Experience report: shantala – massage for babies – Rosa Maria early childhood education center. Divers@!, v. 5, no. 2, 2012.
  - IX. NETA, SMDEL Effects of applying Shantala massage on the sleep of children with microcephaly João Pessoa/PB, 2019. Available at: <a href="https://bdtcc.unipe.edu.br/wp-content/uploads/2019/08/ARTIGO-COMPLETE-SERGINA-OK">https://bdtcc.unipe.edu.br/wpcontent/uploads/2019/08/ARTIGO-COMPLETE-SERGINA-OK</a>>
  - X. RIBEIRO-LIMA, TV; CAVALCANTE, LIC Shantala to promote the health and comfort of babies: literature review. Electronic Magazine Acervo Saúde, n. 48, p. e2375–e2375, 2020.
- XI. SILVA, FG; SILVA, CR; BRAGA, LB; SERRÃO

NETO, A. PortugueseChildren'sSleepHabitsQuestionnaire-validationandcross-culturalcomparison. Journal of Pediatrics , v. 90, p. 78–84, 2014.

XII. SOUZA, EK DE; FELISBINO, I.; VEIGA, TP DA; SANTOS, MF DOS; SOARES, PD; MICOS, AP; MOTTER, AA Benefits achieved with the application of Shantala to babies at an early childhood education center. In: Psychology and Its Interfaces in the Social Field . [sl] Editora Científica Digital, 2020. p. 106–117.