



THE BENEFITS OF PRACTICING PILATES

Ionela Cristina NAE¹

Abstract

In the early 20th century, Joseph Pilates started one of the most used and famous physical training techniques. Pilates was originally used by its inventor against rheumatic fever and asthma of which he was suffering. Joseph Pilates's theory states that the mind has control over the body, reason for the initial name of his creation – "Contrology".

Pilates was created to train the whole body, by using positions and movements which straighten and correct body posture.

Pilates is extremely useful for increasing joint mobility and musculature strengthening but also for partially healing some of the symptoms of: fibromiopathy and chronic fatigue.

This method of training is particularly suitable for people who have a sedentary lifestyle which most often suffer from increased joint and muscle problems.

Keywords: *Pilates, body posture, concentration, fitness.*

JEL classification: *I1, I19*

1. Introduction

The founder of Pilates training system

Born in 1880 in Monchengladbach, Germany, Joseph Pilates was one of the forefathers of modern weightlifting, stating the human body needs daily exercising and that both mental and physical health are tightly intertwined.

In the early 20th century, Joseph Pilates started one of the most used and famous physical training techniques. Pilates was originally used by its inventor against rheumatic fever and asthma of which he was suffering. Joseph Pilates's theory states that the mind has control over the body, reason for the initial name of his creation – "Contrology".

Joseph Pilates studied early 20th century existing physical training methods, from which he got the inspiration for creating special Pilates exercising machines, with the initial purpose of curing different medical conditions. His devices and theory represent the starting point for developing "correction exercising" and "medical gymnastics", and his methods are also applied today in kineto-therapy and also in world's most prestigious physical education and sports universities.

Throughout his career, Joseph Pilates developed over 600 different types of exercising for mattress use and invented a series of devices. The whole idea behind

¹ Ionela Cristina Nae, The Bucharest University of Economic Studies, cristinuta_criss@yahoo.com



these devices is based on: “in order to be healthy, you must train in full”(Pilates, 2010).

Pilates was created to train the whole body, by using positions and movements which straighten and correct body posture. For example, certain moves generate both concentric and eccentric muscle contractions stimulating functional muscular activity, while other groups of muscles are used to keep the whole body in balance.

Pilates’s life principles reflect in his own health state and longevity – he died in 1967, aged 87.

“Pilates is a technique learned in time, but as concentration levels over your own body is higher, the higher the probability of doing an efficient workout and having good results, increases”. (<http://www.desprespa.ro/Blog-SPA/Blog-de-Pilates>)

One of the most unfortunate practices of Pilates is doing it by mimic. Starting this kind of exercising at home by only mimicking videos or the Internet and without knowing the main objectives of the whole thing, leads to more harm than good.

Another negative effect comes from perceiving Pilates as a light sport of which you don’t have to strain hard. You don’t feel the results as long as you don’t do it correctly.

2. Pilates exercising principles (Siler, 2011)

2.1. Breathing

Breathing has a crucial role in Pilates. This role consists of facilitating muscle activity in a certain order and to maximize certain muscle group movement against others. In order to fulfill Pilates specific objectives, increasing the oxygen intake is extremely important. Inhaling and exhaling are key elements.

In Pilates, one must exhale when actively moving and inhale while passively moving, by focusing on the lower and side lung parts instead of the diaphragm, so that stomach muscles can be tense without restricting the oxygen intake of the body.

2.2. Focus and movement control

This principle can be defined as directing attention on one objective, in this case mastering one Pilates technique. This element separates Pilates from other physical training methods by involving the mind.

During Pilates, one must focus on slow execution of every maneuver and on the whole body. The way in which these exercises are done is more important even than the actual methods used. Nothing of this method is random, that is why



maximum focus is needed to have full control on every move. Pilates teaches us to gain control over our bodies and not to be led by it.

2.3. Centering or center of strength

This concept is what Pilates is all about. In order to gain control over your body, we must have a starting point: the center. A center represents the backbone of all bodily energy types. That is why many Pilates specialists refer to central body muscle groups as “a center or power core” (stomach, lower and upper back, hips, thighs). Basically, all Pilates moves must start in the center and work their way to the exterior (limbs).

2.4. Fluency and move precision

This principle means chaining together all moves in a smooth flow. This method is based on movement elegance and continuity obtained through right transition elements. By obeying movement accuracy, exercises melt together, developing strength and stamina. Like all physical activities, one can gain better results by concentrating energy in just a few precise efforts, than by wasting energy in more uncoordinated slow moves. The main goal is to obtain precision and use it in real life.

3. Pilates beneficial effects

- It develops “the center of strength”, which is recognizable through having a flat stomach and a strong back. This center includes deep stomach muscles along with back muscles, especially those close to the spine. This control unites the chest area with basin and hips.
- Pilates leads to knowing your own body by increasing the control you have over it. IT focuses on right breathing, correctly positioning of the spine and basin and focusing on smooth moving helps connect the whole body
- Develops a smooth, right and gracious musculature
- Improves muscle elasticity and joint mobility, ensuring an optimum balance between strength and flexibility therefore reducing injury risks.
- Helps to uniformly train the body and improving sport performance in other areas of activity.
- Unlike all other functional training techniques which tend to train the same muscle groups (usually the large groups), Pilates uses deeper musculature, avoiding a muscle unbalance which would lead to high injury risk and back pain.
- Another positive effect is efficient movement. By training multiple muscle groups at the same time in a smooth way and by developing a right technique, we can train our bodies so that it moves efficiently.



- Pilates is a forgiving training method, non-invasive and non-aggressive on joints. Most of the training is executed on the floor, from sitting or lying without any shocks. These qualities have made Pilates the right training method even for medical convalescence. Moves are challenging and captivating due to the fact that difficulty can be adjusted all the way from beginner to expert.
- Pilates helps improve balance by using posture musculature which develops body overall stability.
- Pilates improves coordination.
- This method uses breathing as a fundamental element for body functioning by highlighting physical and physiological benefits that it brings: breathing nurtures the circulatory system, which in turn removes toxins from blood and refreshes cells.
- Using lateral breathing over long periods of time helps executing moves in an efficient way, ensuring better tissue oxygen intake, which can also diminish stress.
- Increases the focus capacity. Pilates have a thorough logic to them which is based on anatomy and bio mechanics, which require muscles to contract in a certain order, following a move succession as well as being precise in execution. All these contribute to focusing on the entire body which in time leads to a much better understanding of its functions.
- Pilates contributes to relaxation and stress removal – alongside muscle definition, Pilates also includes stretching sessions.
- By knowing and using the pelvis area, Pilates helps improve sexual life and in elderly case, helps prevent urinary incontinence.

4. Exercises

Pilates is represented by a very accurate exercising set, done in a specific order and combining strength with increased joint mobility and flexibility. This type of exercising is used in classic Pilates, still practiced in some traditional work studios.

Over time, several factors have led to evolution and development of Pilates. Lifestyle change has led to a change in needs of all participants and Pilates became a method accessible to everyone who wants to exercise, unlike the old days when Pilates was mostly used by dancers and those who intensely worked out. Instructors had to adapt classical methods and develop new types of exercises, often less complex in order to help the participants to understand the method and to advance. Another factor can be considered to be the evolution of science, medical research and biomechanics progresses, all contributing to an increased degree of safety when practicing Pilates.



We choose to analyze the first Pilates official exercise method which has become the signature method for Pilates for stomach. This exercise is called “The Hundred”, its major objective being to warm up the middle body portions – center of strength, preparing it for all upcoming stresses. Its name comes from the 100 arm claps executed in series of 10 claps per series, all coordinated with breathing – 5 claps per inhale and the other 5 per exhale all done in a specific body posture which specifically targets the center of strength or powerhouse.



Image 1 „The Hundred”

Source: <http://www.desprespa.ro/Blog-SPA/Blog-de-Pilates/Exercitii-semnatura-in-Pilates---Suta->

Original instructions meant working out with perfectly straightened legs, close to the ground and raised arms, thus increasing the challenge of balancing shoulder muscles. Executed like described, this exercise is quite difficult and requires a good body coordination and an already developed powerhouse. This is the main reason why modern, modified versions of this exercise appeared for everyone to be able to do it. The main goal of this is strengthening stomach muscles. The secondary objective is stabilizing upper body so that it moves at the same time with your arms – commonly encountered in beginners training.

Specific upgrades of this method include: leg position – vertically straightened and with 90 degree knees flexing and also upper body position – which can be held down on the mattress in order to protect the neck and cervical areas.

These upgrades aim to:

- Avoiding hyper-lordosis – when the abdomen is not strong enough, lowering your legs closely to the ground will cause an excessive and dangerous arching of the back
- Abdomen contraction – when all abdomen muscles are not used, the stomach will contract upwards – a sign that the strain is too hard or not all the muscles are used. This classic exercise is particularly efficient if done properly.

“The Roll-up” is the second type of basic Pilates exercise done on the ground. This exercise impresses through fluidity and harmony of body movement, just like all exercises that involve rolling the back.



The main objective is to warm up the center of strength and harden abdominal musculature, the main groups of muscles being the right abdominal muscles and internal and external oblique muscles. This is perfect for the spine. Just like any other Pilates exercise, one's body is moving as a whole, straining more and more muscles, crucial in a proper execution of the method.

The "Roll-up" has 2 stages:



Image 2 „Roll-up”

Source:<http://www.desprespa.ro/Blog-SPA/Blog-de-Pilates/Exercitii-semnatura-in-Pilates:-azi,-The-Roll-%E2%80%93-Up>

First, where you start from laying on your back with your arms above your head and by using torso's flexing muscles but also the abdominal transversal muscle, you roll gently up, by rolling the back on the mattress, in order to reach a vertical torso position. In the first part of this motion you inhale by raising your arms, head and shoulders off the mattress, and then, in order to better control the vertical climb, you exhale. The movement is completed in a point in which shoulders are above the hips, arms straight in front, parallel to the ground, a powerfully contracted abdomen musculature and a back in a "C" shape. We must have a stability sensation but also a stretching one. It is essential to control the back rolling movement by clearing the back from the mattress, from head to lumbar area, vertebrae by vertebrae – this sequential approach creates the rolling feeling and beneficially articulating the spine.

The second stage of this exercise is to lower the back onto the mattress, in the same way by rolling it vertebrae by vertebrae until the sacrum bone connects with the mattress and the rest of the back comes down, your head and arms being the last parts that come back to starting position.

5. Conclusions

Pilates allow an optimum training program adjustment according to health, age and physical shape of the participants by posing a minimum risk and rightly nurturing the whole musculature.

Pilates is extremely useful for increasing joint mobility and musculature strengthening but also for partially healing some of the symptoms of: fibromiopathy and chronic fatigue.



This method of training is particularly suitable for people who have a sedentary lifestyle which most often suffer from increased joint and muscle problems. This is one type of physical exertion that must be slowly integrated in everyday life.

Pilates must not be done by people who have not done any kind of physical exertion in a long period of time – these require a 7 to 10 days lighter exercises in order to prepare their bodies for the necessary future strains.

Initially, Pilates cannot be practiced at home due to the risks on health, but after training with a specialist, some techniques can be executed in your home in order to maintain a better physical exertion continuity over time.

REFERENCES

1. Blandine Calais-Germain, Bertrand Raison, 2013, *Pilates fara riscuri*, Ed. House of Guides, Bucharest, 35-56
2. Brooke Siler, 2011, *Gimnastica Pilates*, Ed. All, Bucharest, 21-25
3. Aldrich Mattheu, 2011 *Pilates*, Ed Niculescu, Bucharest, 61-75
4. Pilates, G.H., 2010, *Metoda Pilates*, Ed. Teora, Bucharest, 9,
5. <http://www.desprespa.ro/Blog-SPA/Blog-de-Pilates> (Accessed 7.03.2015)
6. http://www.realitatea.net/cum-sa-obtii-un-corp-de-invidiat-cu-exercitii-pilates-pentru-acasa_1290574.html (Accessed 7.03.2015)
7. http://www.sfatulmedicului.ro/Sanatate-prin-sport/beneficiile-exercitiilor-pilates_10177 (Accessed 7.03.2015)
8. <http://www.sanatateatv.ro/emisiuni-medicale/medicina-fizica/exercitiile-pilates/> (Accessed 7.03.2015)