

Session 1

Introduction: Somatotype, Posture and Postural Deviation

A. Introduction

This health-related course is not clinical in nature but this can be one of the measures in making teaching Physical Education, Sports, and Dance more meaningful as it can also be used in real-life situations when needed.

Comprehension and memorization of important terms are deemed necessary in this course so we can clearly establish an equal weight in memorizing technical terms and how those terms are applied in human movements. This will likewise provide insights to gain understanding about the anatomical positions of the body and the directional terminologies being used to clearly and easily guide you in the future class interaction.

Important topics about the human body posture and some deviations from the postural norms will be assessed. An assessment of posture will be conducted but only for identifying reasons for movement efficacy and as well as movement difficulties.

B. Session Objectives

- ✓ Identify the common body types including the advantages and setback of each type.
- ✓ Describe the human body in terms of anatomical positions to properly refer to relative positions or movements.
- ✓ Describe human posture and postural deviations.
- ✓ Identify the advantages of having good posture in comparison with postural discomfort in relation to movements

C. Session Content

1. Topic 1

Somatotype

Somatotype refers to the classification of human body type that was introduced by Dr. William H. Sheldon in the year 1940s. The theoretical



Figure 1: Who remembers William Sheldon?
(Source: Hanson, B. 2015:Online)

background of the body classification or body typing is not only for physical classification but also for personality and other influencing factors to human development. There are three (3) major classifications of the human body and these are **endomorph**, **mesomorph** and

ectomorph. Each body type has its unique characteristics and provides advantages and

disadvantages to human movement. There are also body types that are common to people and these describes the body according to apple and pear shape. This method of classifying the body types allow an individual to be guided in knowing what to improve in the framework of the body. See Fig.2 for the illustration of the Sheldon's Somatotype.

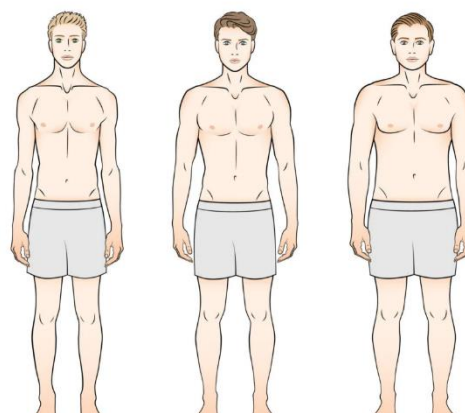


Figure 2: Sheldon's Constitutional Theory: Somatotyping.
(Source: Nickerson, C. 2024:Online)

2. Topic 2

A proper alignment of the body segments in relation to the position of the different parts of the body is considered as proper or correct posture. Maintaining a good or proper posture in demonstrating physical activity or

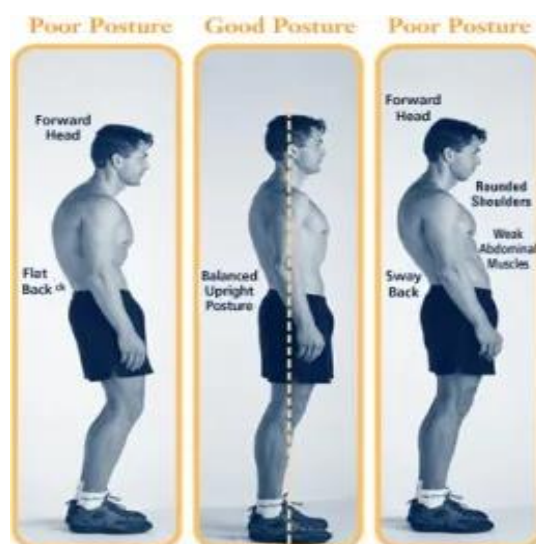
exercise is sometimes overlooked by the person in-charge of the activity. In sports training for advanced or skilled athletes, having good posture in executing a specific or complex skill is necessary in order to attain desired performance efficacy. For example, in sprint events in which time is the measure of the performance referring to seconds of the time. In order to beat the given standard time, one must perform in an appropriate running form, otherwise improper running form will result to inefficient movement thus the performance time will not meet the target.

Two types of Posture:

Dynamic posture is how you hold yourself when you are moving walking, running, or bending.

Static posture is how you hold yourself when you are not moving sitting, standing, or lying.

The following are the postural deviations that bring discomfort to individual who have experience these kind of body misalignment.



This illustration is characterized by a forward head and round shoulder. The neck is extended forward and the scapulae is pulled forward and the shoulders are round oriented that makes it hard for an individual to move easily. Whereas, having good posture will allows an individual to move freely and conveniently with a wider range of movement.

Figure 6: Simple ways to Assess and Correct Poor Posture.
(Source: Omokha, D. 2013:Online)



Kyphosis is another postural deformity that is described as having an over-curvature of the thoracic vertebrae.

Figure 7: Medical Encyclopedia - Kyphosis.
(Source: Benjamin, C 2022:Online)

Lordosis is the over-curvature of the lumbar area of the body. People having this deformity usually experience lower back pain because of uneven distribution of the weight of the upper body.

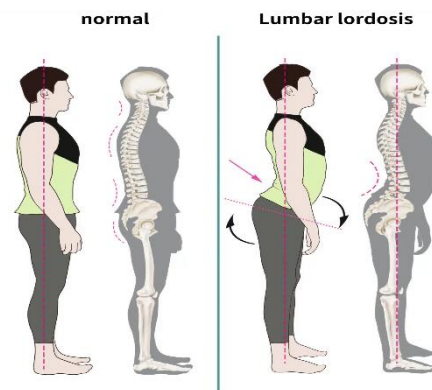
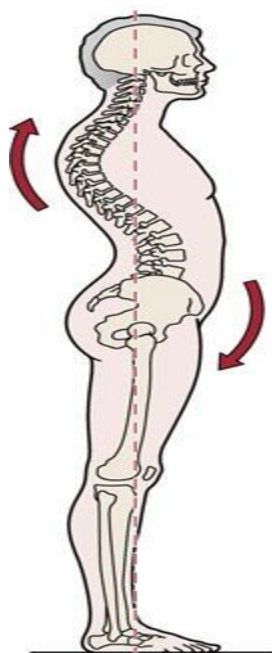


Figure 8: Lumbar Lordosis, Definition, Causes, Symptoms, Diagnosis and Treatment
(Source: Harison, D. 2022:Online)



Kypholordosis this deformity describes the over-curvature of both lumbar and thoracic region that makes it even harder to execute complex movements. As seen in the illustration, the spinal column are not properly aligned.

Figure 9: Assessment of Posture.
(Source: Orthopedic Physical Assessment, 2015:Online)

Scoliosis

Is the lateral curvature of the vertebral column

- Single curve "C"
- Double curve "S"
- Functional scoliosis
- Structural scoliosis

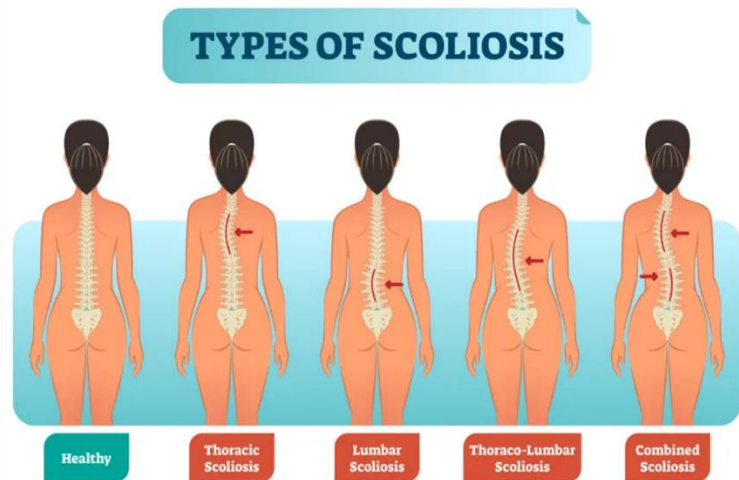


Figure 10: Symptoms of Scoliosis.
(Source: Rodts, M. 2019:Online)

Functional scoliosis – this is a type of deformity that can be corrected by an appropriate set of physical exercise with the assistance of a more knowledgeable individual.

Structural scoliosis – this type of scoliosis can not be corrected by an exercise like the functional type because the source of the deformity is the bone itself and the tissues that are involved in it.

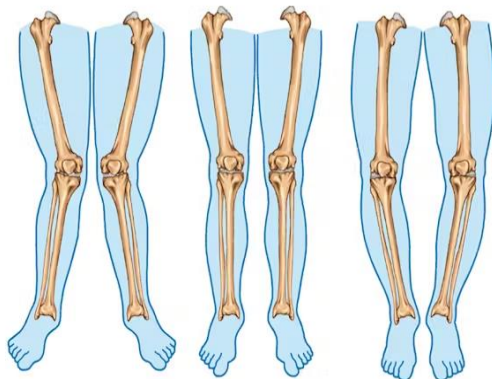


Figure 12: Explainer: What causes knock knees and do they have to be treated?
(Source: Burns, J. & Pacev, V. 2016:Online)

Genu Varum – (bowlegs) deformity of lower extremities wherein the knees are separated when the feet are joined together

Genu valgum – (knock knee) the knees are drawn together and the feet become separated.

Pes Planus

-(flatfoot) is a decreased longitudinal arch of the foot. The depression of the arch is usually accompanied by a pronation and abduction of the foot which makes it weak and inefficient.

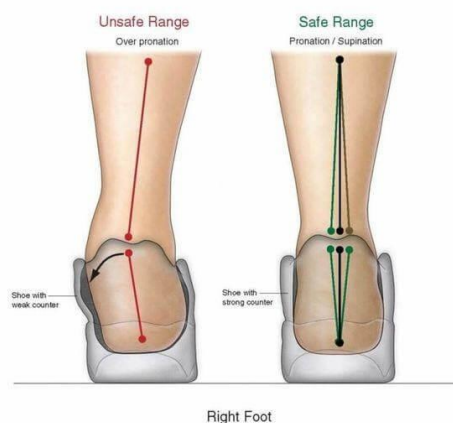


Figure 13: Flat feet Overpronation Causes, Treatment and Prevention. (Source: Gershman, S. 2022:Online)

D. Conclusion

Understanding the self in terms of physical aspect is as equally important as we understand our emotions or feeling. Movement is vital to everybody, everyday. Not a single day that we miss moving from one place to another or even in a stationary place. The role of the proper posture in our daily lives is to help us move freely and pain-free. While we can not avoid at times the discomfort we feel especially when one gets tired for doing physical activities, we must be reminded that we still need to check on ourselves about our posture to avoid it from being routinary.

E. References

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