Social Media and Smart Devices Effects on Postural Muscles Among College Students in Jordan

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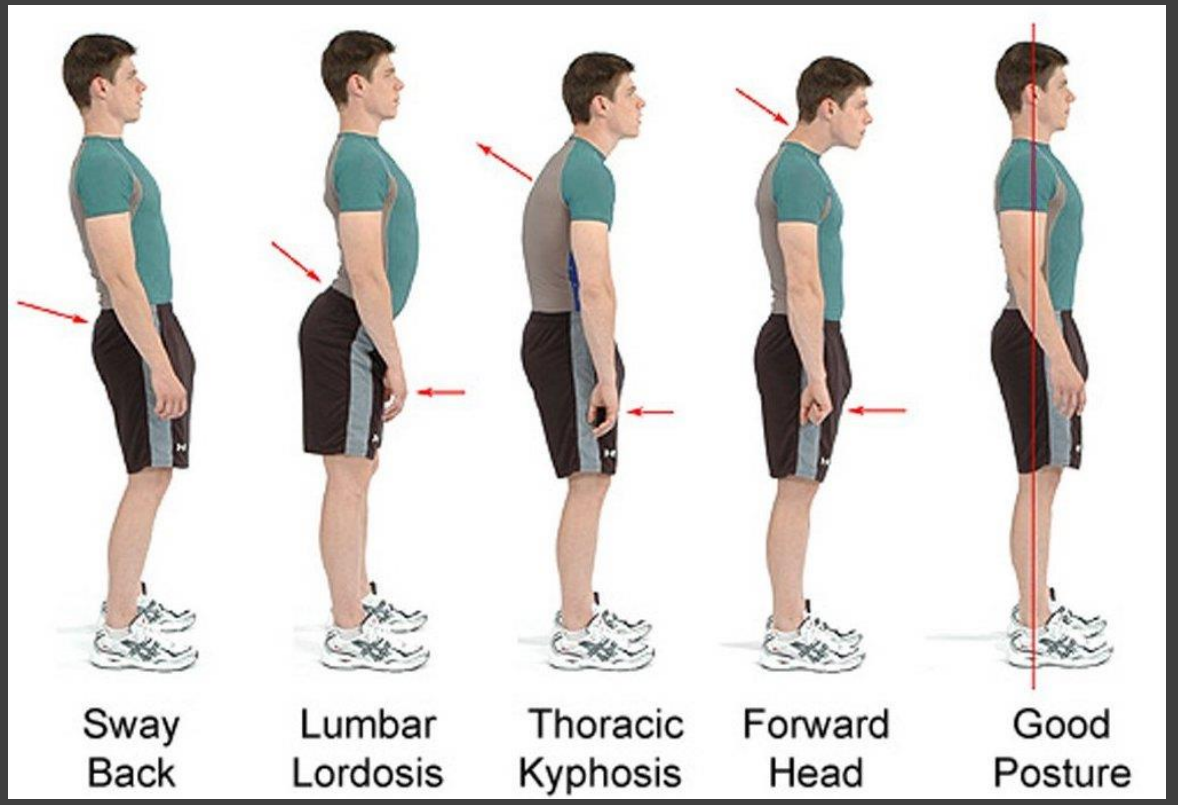
Body Posture

Body posture=body alignment

The manner or position that the individuals holds their body segments.



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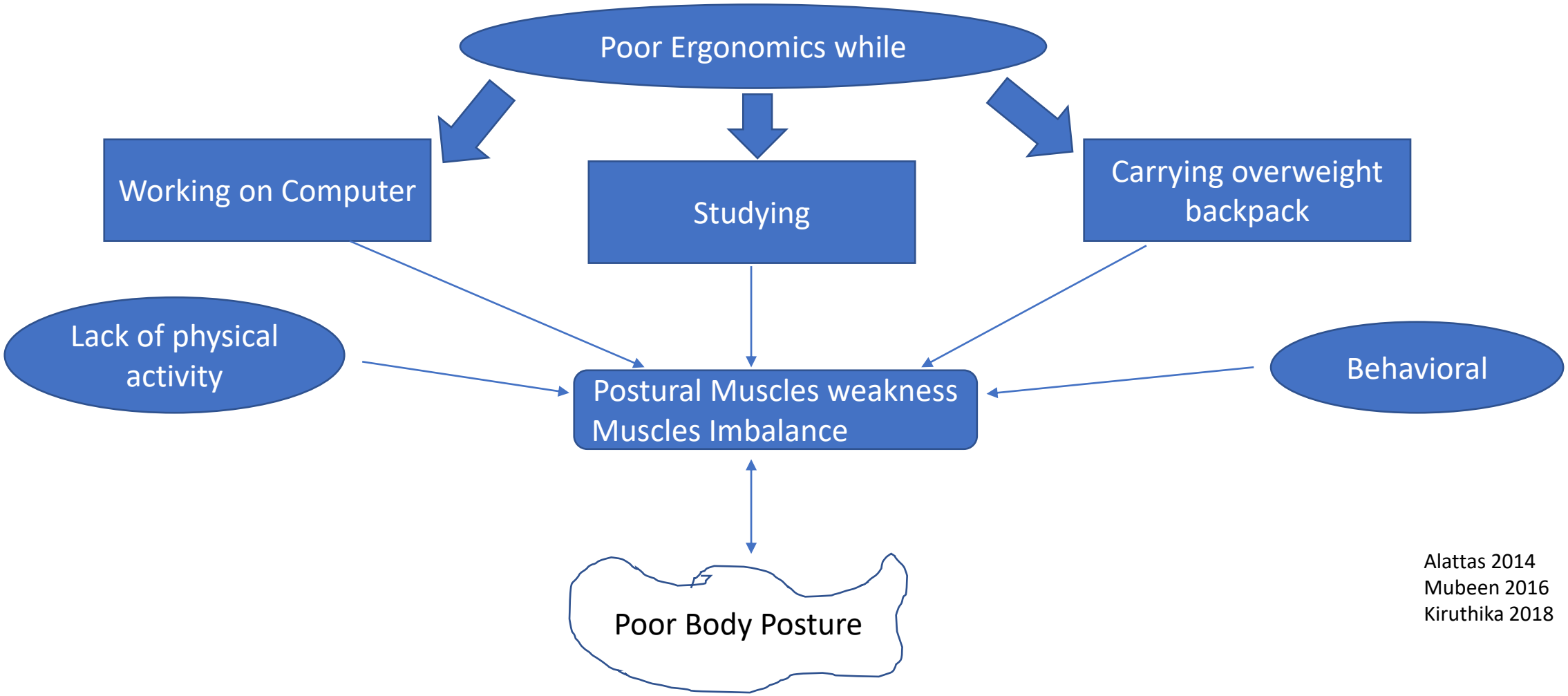
Factors Control Body Posture

- Muscles strength
- Muscles balance
- Body shape
- Body Ergonomics
- External Environment

Poor Body Posture



Alattas 2014
Mubeen 2016
Kiruthika 2018

Usage of Smart Device and Social Media

- The usage of social media and smart devices has increased among college students.
- College students relate the usage of smart devices and social media to stay permanently connected (PC) with other.
- College students expressed strong emotional responses about a temporary loss of internet coverage.

Vorderer 2016

Trista Bridges 13 February 2014

Usage of Smartphones and Physical Activity

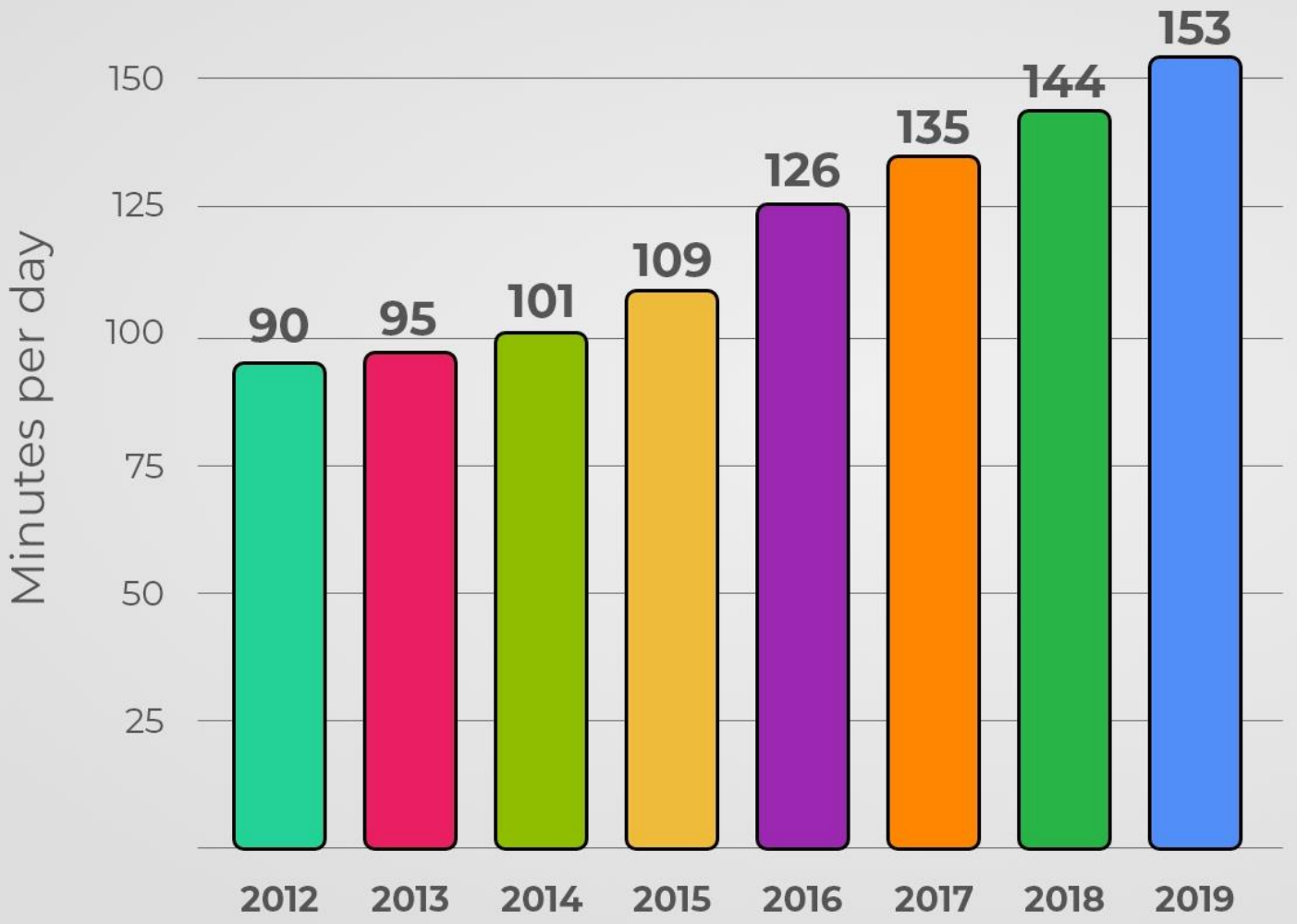
- Study was conducted on college students in USA vs Thailand about the time spent on smartphones compared to physical activity daily.
- There was a significant inverse relationship between the time spent on smartphones and time spent on physical activity among American and Thai college students.
- College students in USA spent about 2.75 hours daily on smartphones.
- College students in Thailand spent about 3.25 hours daily on smartphones
- Another study y Baylor University Researcher indicated that the students spend more than half of their waking time on smartphones.

Penglee 2019

Psych Central

Daily Time Spent On Social Networking

2012-2019 (in minutes)



Broadbandsearch.net

Usage of Smart Device and Social Media

- Do we utilize proper ergonomics while working on smart devices or social media?
- How long does the people spend time daily of smart devices or social media?
- If we know that more than one-third of college students spend more than 4 hours on smart devices and social media daily, is that raising a red flag regarding body posture?

Research Questions

- Is there a relationship between the time spent on social media and postural muscles strength or flexibility?
- Is there a relationship between the time spent using smart devices and postural muscles strength or flexibility?

Purpose

- The purpose of this study was to examine the relationship between usage of smart devices and social media with postural muscles deficits.
- Ultimate goal is to develop a service program that can be implemented in the schools to improve body posture.

Methods

Study Design

- Cross sectional observational study

Sample Size

One hundred and ninety-nine participants were recruited for this study using fliers and a word of mouth.

Sample size (N)	Age (Av. ± SD) Year	Weight (Av. ± SD) Kg	Height (Av. ± SD) Cm
199 subjects	21.2 ± 1.3	64.6 ± 15.7	166.2± 9.3

Table 1. Demographic data of subjects

Participants

- Inclusion Criteria:
- Age 18-24 years
- Healthy

- Exclusion Criteria:
- Musculoskeletal deformity
- History of spine surgery
- Musculoskeletal surgeries

Measurements

1- Deep neck flexor strength

2- Pectoralis muscles flexibility

3- Shoulder retractor muscles strength

4- Questionnaire

Results

37.2% of students spent more than 3 hours on smart devices daily.

34.2% of students spent more that 3 hours on social media daily.

There was a significant relationship between the time spent on smart devices and the time spent on social media (P=0.000).

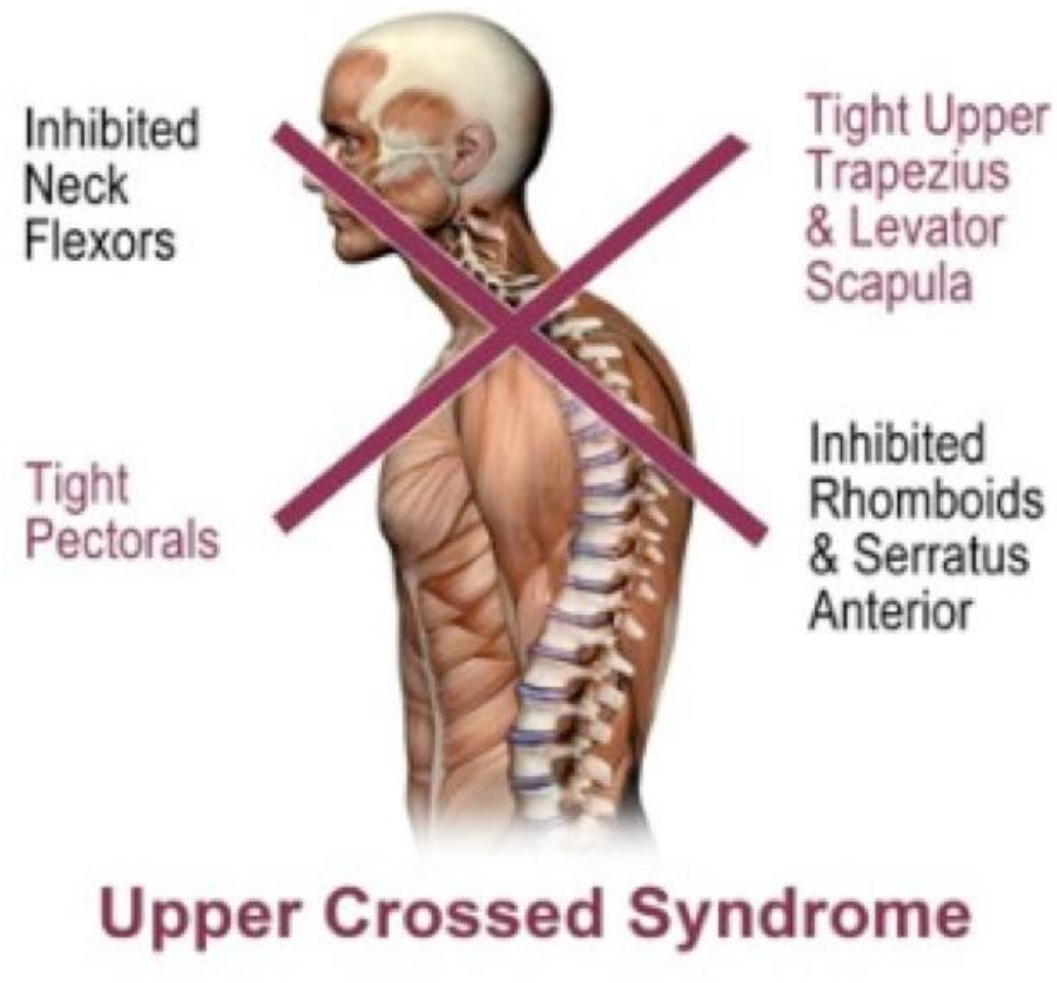
There was significant relationship between the time that the students spent on smart devices with:

- Weakness of deep neck flexor muscles (P=0.000)
- Weakness of bilateral shoulder retractor muscles (P=0.000)
- Tightness of bilateral pectoralis muscles

Results

- there was a significant relationship between time spent on social media with:
    - Weakness of deep neck flexor muscles (P=0.02)
    - Weakness of bilateral shoulder retractor muscles (P= 0.01)

Discussion



Movement Solutions

Conclusion

Students who spent more time on smart devices and social media developed more postural muscles dysfunction which can be a red flag for side effects on their level of productivity and overall wellness.

Students who spend more time using smart device and social media are at high risk of developing postural deformities.

Refrences

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