

PASQUALE CAPONNETTO

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# Smartphone Addiction through age and gender during Italian lockdown for COVID-19

# Background

The dependencies related to the **Internet**, **technologies** and **smartphones** are define as **Dependencies 2.0**



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# A pilot study

The aim of the work is to document the **level of smartphone dependence** that people manifested during Italian lockdown for Covid-19



# Introduction

Technologies are useful resources in pandemic time because they allow people to communicate with others



Our analysis aimed to document the frequency of smartphone use in the Italian context using the

**NoMobilePhobia-Questionnaire**

# Introduction

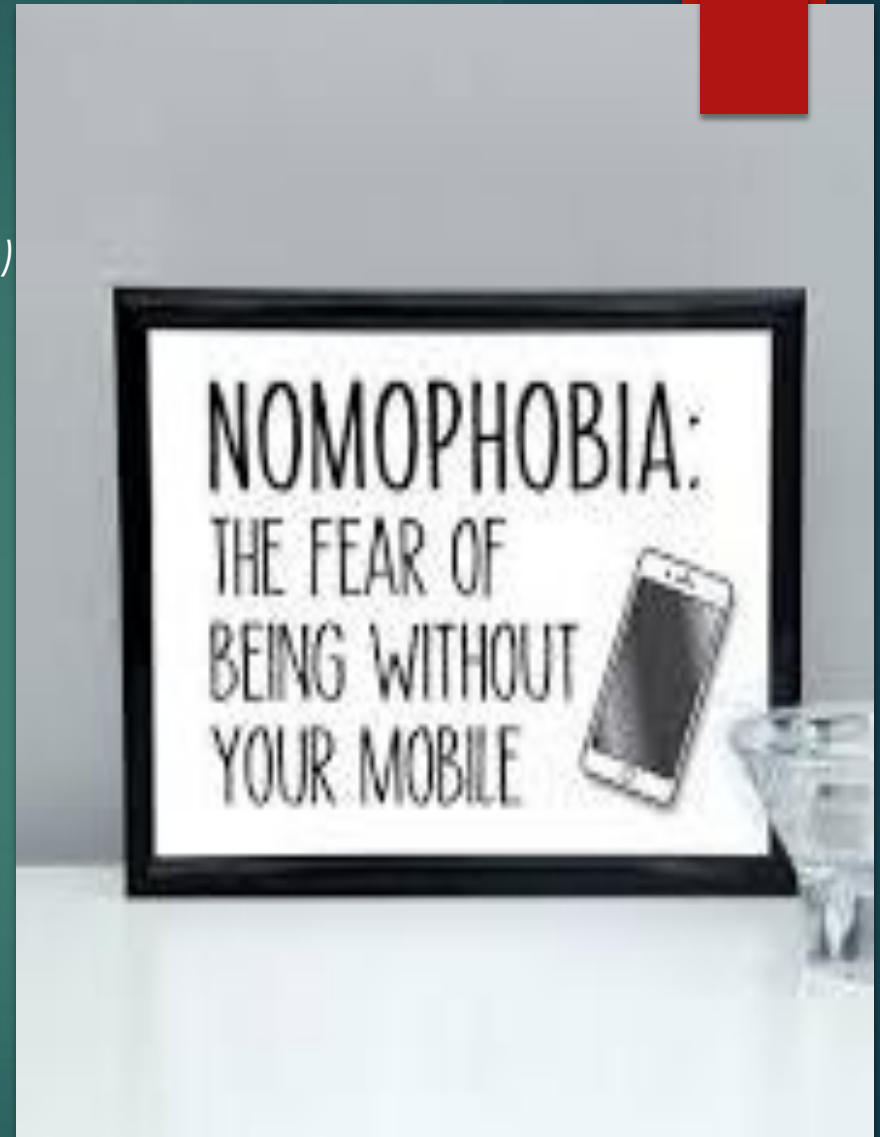
## Nomophobia

(*no-mobile-phobia* or *Disconnection Syndrome*)

is the fear of not being able to consult your mobile phone or not being connected or traceable.

This fear consequently evokes reactions of **anxiety** with specific **physiological related** (breathlessness, sweating, tremor, heart acceleration, sweating)

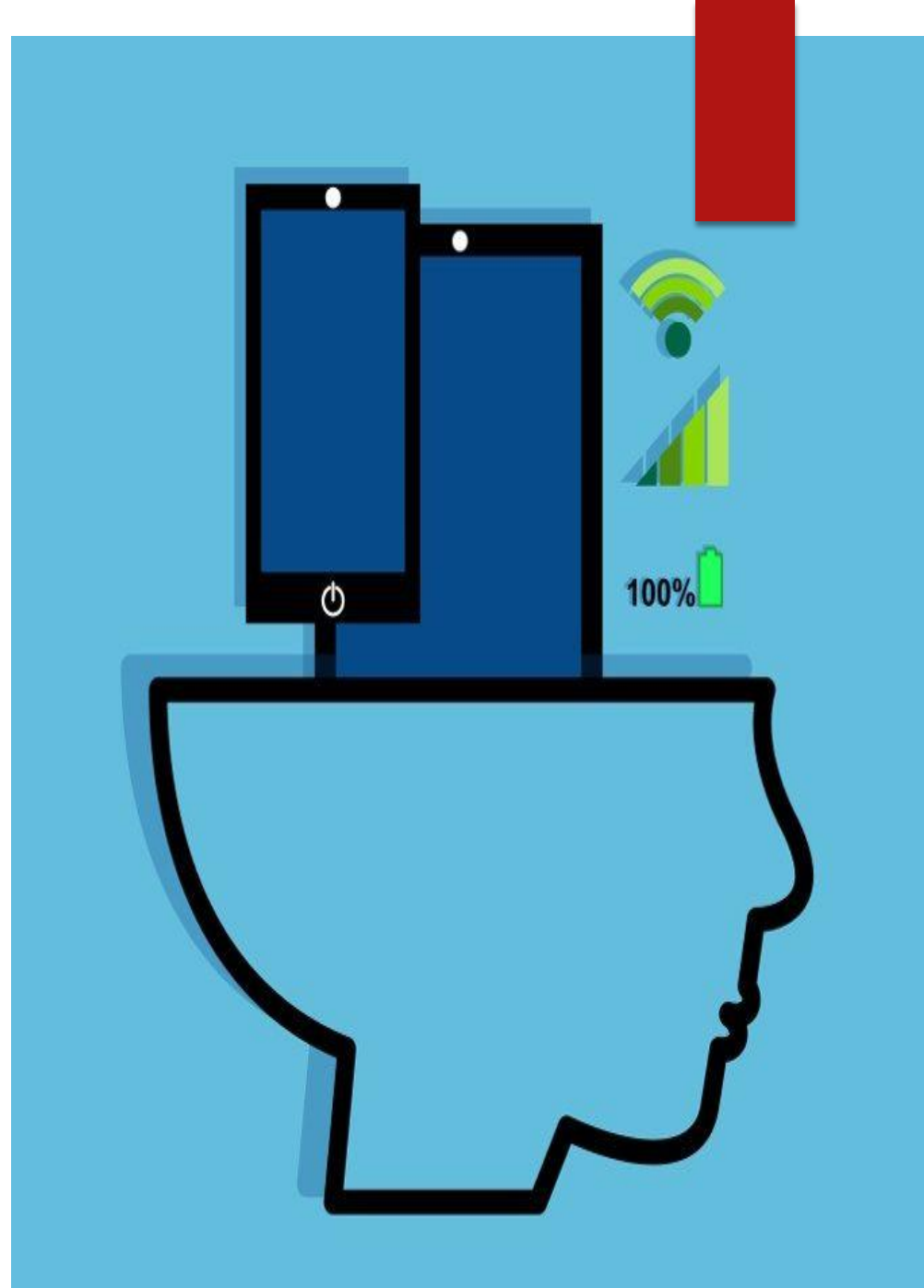
*Johnson et al, 2014*



# Introduction

In a study (Yildirim, Correia 2015) some key dimensions of nomophobia were related to the fear of being without smartphones:

- ▶ Be disconnected
- ▶ Not being able to communicate with others
- ▶ Lack of access to information
- ▶ Give up comfort



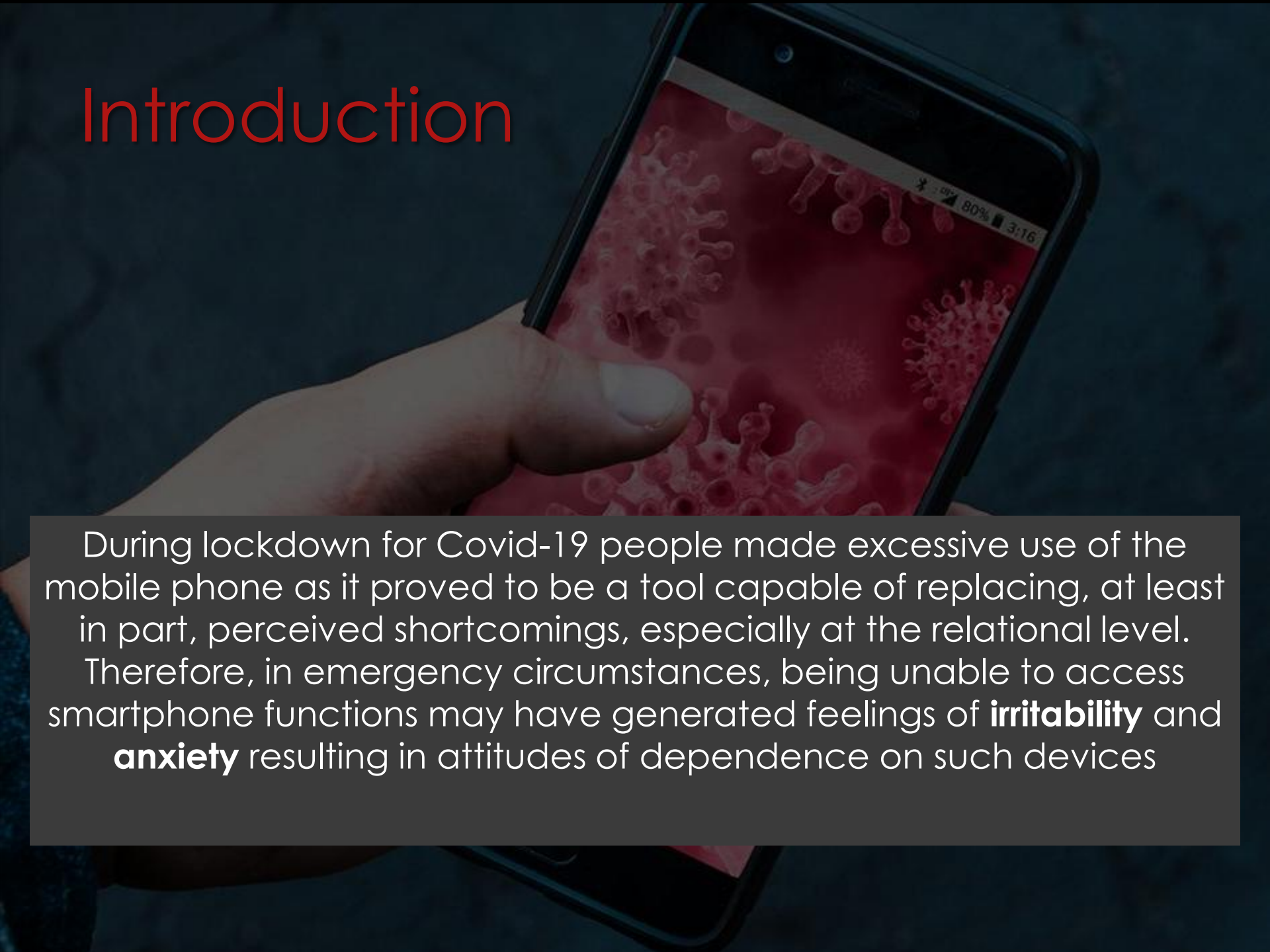
# Introduction



People with nomophobia search the smartphone constantly, check it every time that they can do it (in the bathroom, during the shower, etc.) and they have feelings of helplessness when are separated from it.

We know that the mobile phone is an integral part of our life that is useful to communicate, to socialize but also to organize our lives (calendar, alarm, clock, mobile bank etc.)

# Introduction



During lockdown for Covid-19 people made excessive use of the mobile phone as it proved to be a tool capable of replacing, at least in part, perceived shortcomings, especially at the relational level. Therefore, in emergency circumstances, being unable to access smartphone functions may have generated feelings of **irritability** and **anxiety** resulting in attitudes of dependence on such devices



# Introduction

Research on this phenomenon is still limited but those available to date reveal that nomophobia is quite widespread in the population.

A study conducted in India found that about 22% of participants had significant levels of nomophobia and more than half of the respondents, about 60%, had moderate symptoms

*(Farooqui, Pore, Gothankar, 2018)*

The background features a stylized illustration of four people interacting with their smartphones. On the left, a woman with long black hair and a red top looks at her phone. Next to her, a woman with short red hair and a black dress also looks at her phone. In the center, a woman with short black hair and a red top holds a phone displaying a red-haired woman's face. On the right, a man with short black hair and a red shirt looks at his phone. The background is dark blue with various white icons: a heart, a person silhouette, a gear, a shield, and an envelope. A vertical red bar is on the far right.

# Introduction

Nomophobia is therefore a growing problem in addition to other behavioural addictions related to the use of technologies. This problem will grow exponentially and to affect especially the new generations. The **National Institute on Drug Abuse for Teens** suggests that smartphone absence anxiety may be more common among **teens** and **young people** (NIDA for teens) because they are digital natives and the smartphone is often an integral part of their lives

# Introduction

In order to diagnose the presence or not of pathology, a test has been developed (the only one currently validated in Italy) which is able to discriminate people potentially at risk from those at low risk

The **Nomophobia Questionnaire (NMP-Q)**

is a questionnaire containing twenty items. For each of them, the subject can express his consent on a likert scale ranging from 1 (totally disagree) to 7 (completely agree). The sum of the scores reveals the presence or not of nomophobia

*(Yoldrim-Correia, 2015)*



# Introduction

We have conducted a study aimed at administering NMP-Q to the Italian population during the lockdown for Covid-19

The aim of our research was to identify those who were potentially at risk or who had increased smartphone use during the social isolation until they experienced feelings of extreme discomfort without connection



# Methods

The research was based on the administration to Italian people of the **NoMobilePhobia-Questionnaire** (NMP-Q)

The study was approved by the IERB of the Department of Education Sciences University of Catania. The study was conducted in agreement with the ethical norms set by the Italian National Psychological Association



# Structure of NMP-Q

The NMP-Q is based on four dimensions related to the dysfunctional use of the smartphone:

1. Not being able to communicate;
2. Lose connection;
3. Not being able to access the information;
4. Give up comfort

*Yildirim & Correia, 2015*



# Scoring

- ▶ Scores of **20 or less** indicate the absence of nomophobia;
- ▶ Scores between **21 and 59** indicate a light form of nomophobia, not dysfunctional for the individual;
- ▶ Scores between **60 and 99** contain moderate levels of nomophobia;
- ▶ Scores between **100 and 140** are associated with severe rates of nomophobia, capable of inducing – as mentioned – serious states of separation anxiety



# Scoring

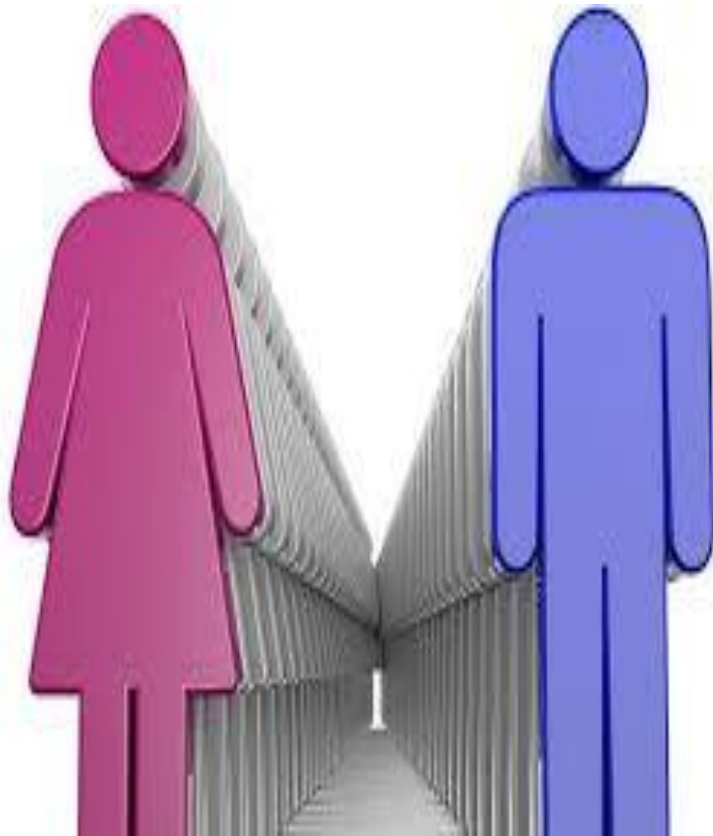
The final score, given by the sum of the individual values provided in each of the statements, is a Dependent Variable contained in our Dataset and named “Score”. Each person who participated in the study is identified with a unique code that combines that variable with information such as **Age** and **Gender**. In addition, based on age – the subject was assigned to one of these groups:

- ▶ **Group 1** (ages in years 15-24)
- ▶ **Group 2** (ages in years 25-34)
- ▶ **Group 3** (ages in years 35-44)
- ▶ **Group 4** (ages in years 45-54)
- ▶ **Group 5** (age in years 55-67)





# Statistical analysis



**Independent Variables** are:

- the "**Sex**" factor in two levels  
(1st - Male and 2nd Female)
- the "**Age Group**" factor in 5 levels  
(1st Group A; 2nd Group B; 3rd Group C; 4th Group D)

**Dependent Variables** are equivalent to the "**Score**"

# Results

- ▶ The Dependent Variable taken into account, "Score" allowed us to detect a **significant interaction** between the "**Sex**" factor and the "**Age Group**" factor;
- ▶ For the youngest subjects (from group 1 to group 3), the "women" group has the highest score on the questionnaire;
- ▶ For older age groups (group 4 to group 5), male subjects report higher scores for the Score variable

# Results

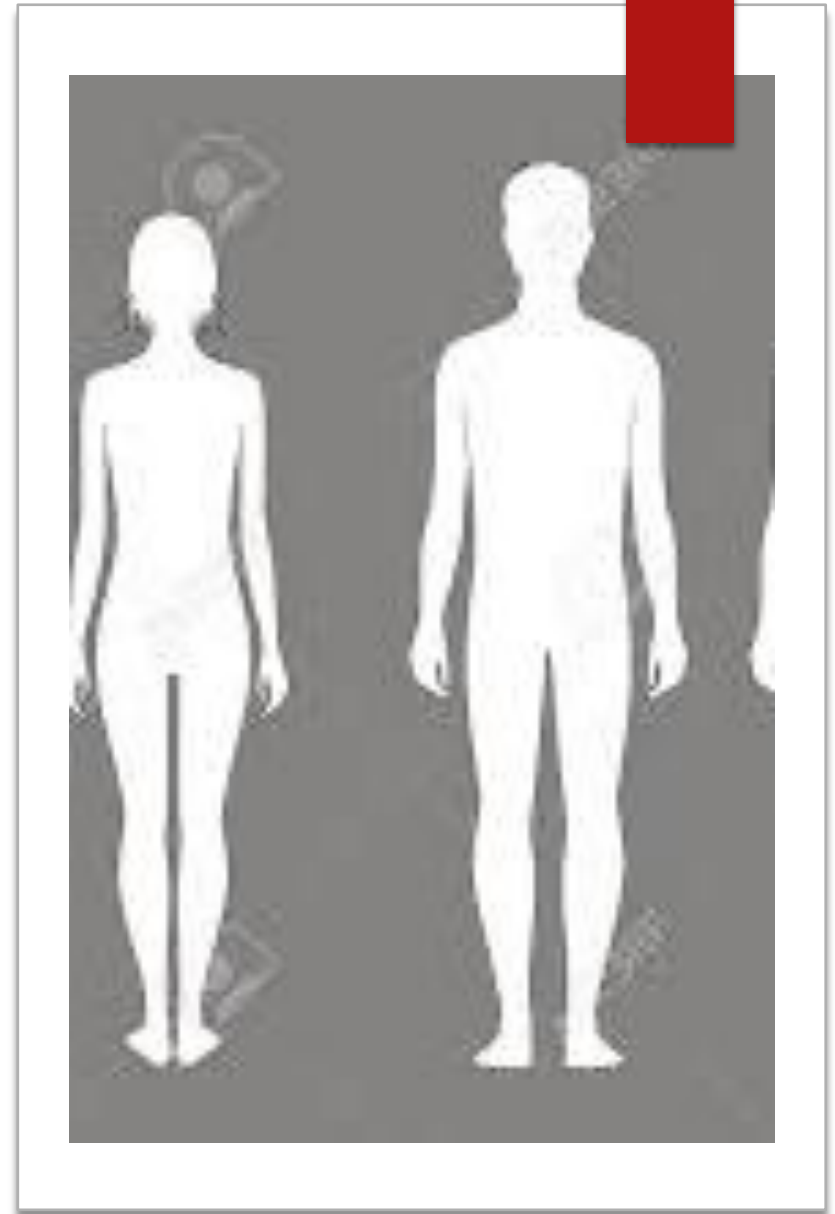
As age increases in subjects, the score they get by compiling the **NoMobilePhobia-Questionnaire** increases, we did not detect significant major effects due to the gender or age of the subjects



# Results

**Female** subjects report significantly higher than the male gender (Ss of age group 1,2,3).

**Male** subjects report significantly higher scores than female subjects (Ss of age group 4, 5)

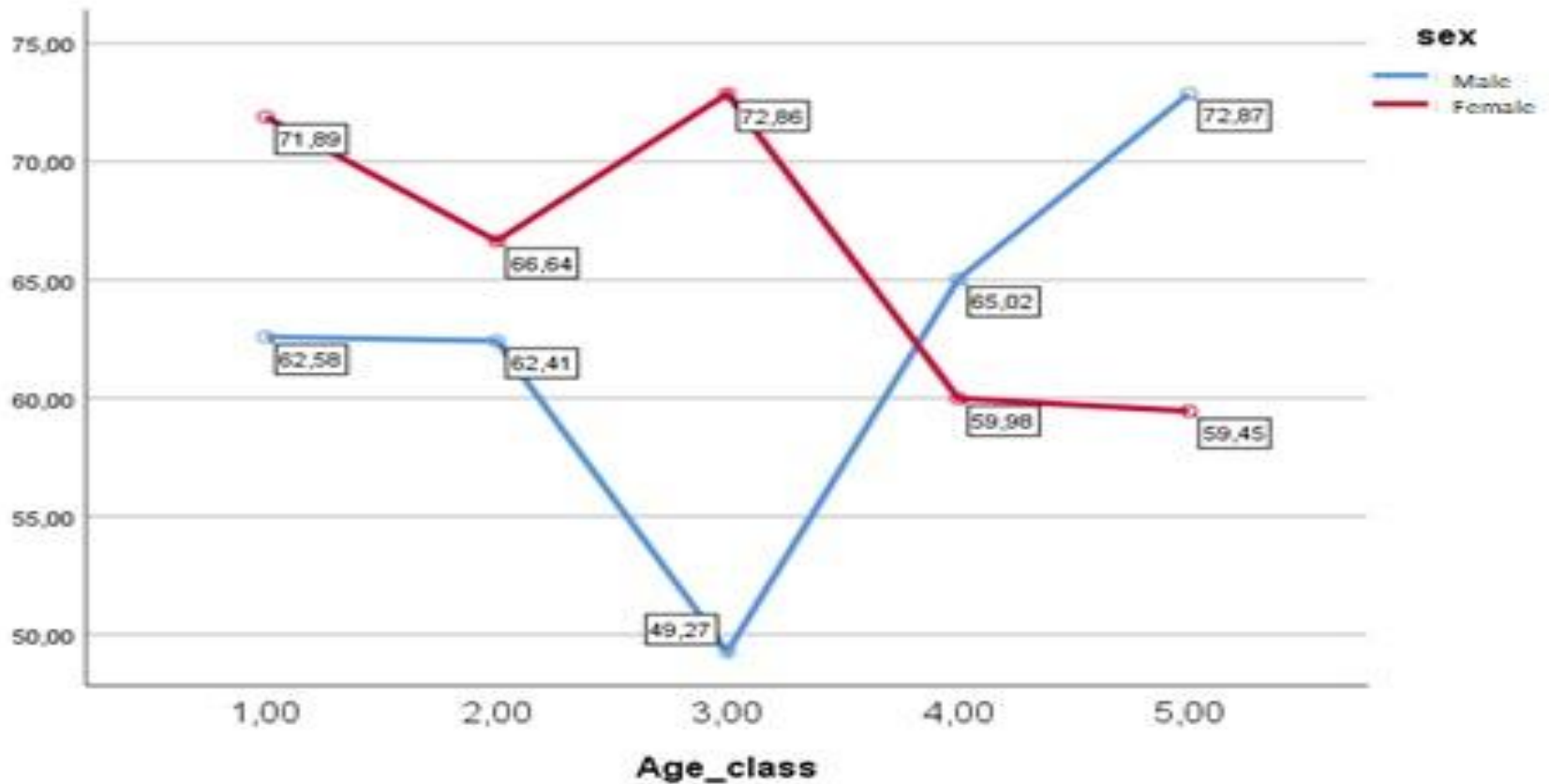


# Results



The main effects of the "Sex" factor [ $F_{(1,1256)} = 3.179$  and  $p=0.75$ ] and "Age\_class" [ $F_{(4,1253)} = 1.82$  and  $p=0.12$ ] are not significant; the interaction between the Sex-Age\_class factors is significant with  $F_{(4,1253)} = 7.06$  and  $p < .001$  and an observed power close to 1 (0.99)

# Mean values on "Score" measure for Male/Female group



# Results

The correlation between the Variable "Score" and the measure of the "Age" was found to be significant (negative) linear relationship (r of Pearson = -.093 and  $p < .001$ ) considering the whole sample

If we compare the male group with that of the Females, the correlation is significant in negative linear relationship for the Females (r of Pearson = .159 and  $p < .001$  in two queues) and is not significant for the Male group (r of Pearson = .026 and  $p = .368$ ). So we can say that for the group of females as they get older, the score reported in the test decreases significantly

# Discussion

