

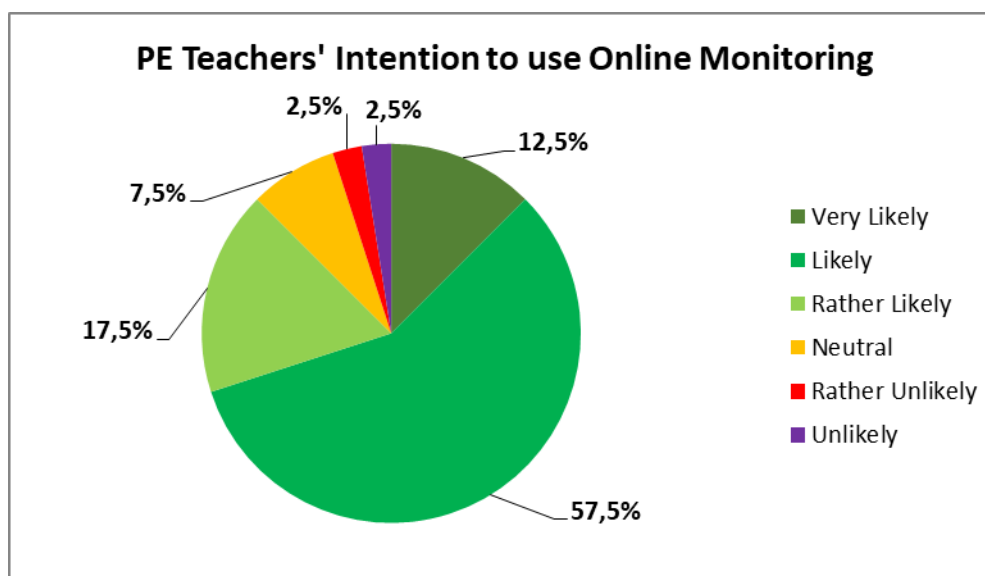
## Website - Web measure Studies

### Purpose

An innovative website supporting both the implementation and dissemination activities of the IMPACT project was developed. It was used for online measurement including innovative functions providing automatic feedback to PE teachers and students, for online teacher education (webinars) and for dissemination in the remaining part of the project. Following its development, four studies were conducted investigating (a) the intentions of PE teachers to use Information Technology (IT) to promote their pupils' PA levels, and (b) the utility and the effectiveness of the website/ web-measure with regard to the aims of this project.

### Website Study 1

More specifically, in Greece, we examined the **intention** of PE teachers at the experimental group to ask their pupils to **use online surveys** in order to monitor their PA levels. An online survey was delivered to them ( $n = 40$  participants) with two items during the implementation of the IMPACT intervention (e.g., I INTEND/ I am DETERMINED to ask my pupils to use online surveys to monitor their PA levels). Responses were given on a 7-point Likert scale from 1 (Very unlikely) to 7 (Very likely). Results showed that PE teachers had strong positive intentions to ask their pupils to use online surveys to monitor their PA levels with 87.5% of them reporting that they intent to use this tool in the future (Figure 7.1.).

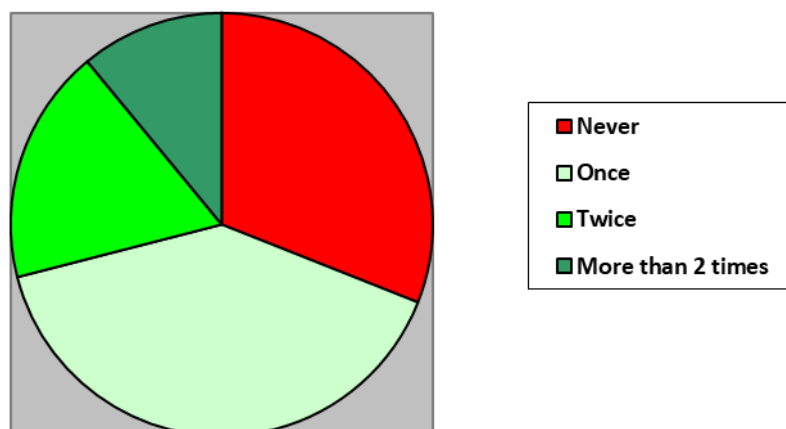


**Figure 7.1.** PE teachers' intention to ask their pupils to monitor their PA levels through online surveys

### Website Study 2

Using a sample of Greek PE teachers from the experimental group ( $n = 45$ ; 22 males and 23 females), we tried to explore if they used the online **FEEDBACK tool** to monitor their pupils' PA levels and to set goals to be more physically active during the implementation of IMPACT intervention, how easy/ important/ useful they found it and if they intend to use it next year. An online survey was delivered to them with six items during the implementation of the IMPACT intervention (e.g., Did you use FEEDBACK tool to monitor your pupils' PA levels; How many times did you use FEEDBACK tool to monitor your pupils' PA levels; How easy/ important/ useful did you find

FEEDBACK tool; Next school year, do you intend to use FEEDBACK tool to monitor your pupils' PA levels). Responses were given in a 2-point scale (YES/ NO), in a 3-point scale (1 time, 2 times, more than 2 times) and in 7-point Likert scales from 1 (Very Difficult/ Not Important at All/ Very Useful) to 7 (Very Easy/ Very Important/ Very Useful). Thirty-one PE teachers reported that they used the FEEDBACK tool to monitor their pupils' PA levels at least once (Figure 7.2.), while 14 responded that they did not use it at all.



**Figure 7.2.** Use of FEEDBACK tool by PE teachers

More specifically, 74.2% of the PE teachers found the FEEDBACK tool rather easy, easy or very easy to use (Table 7.2), 83.9% found it rather important, important or very important (Table 7.3) and 87.1% found it quite useful, useful or very useful to increase their pupils' PA levels (Table 7.4). They also reported that they intended to use it again at the next school year (93.6%; Table 7.4).

**Table 7.2.** How easy did PE teachers find FEEDBACK tool

|             | Frequency | Percent |
|-------------|-----------|---------|
| Neutral     | 8         | 25.8    |
| Rather Easy | 13        | 41.9    |
| Easy        | 8         | 25.8    |
| Very Easy   | 2         | 6.5     |
| Total       | 31        | 100     |

**Table 7.3.** How important did PE teachers find FEEDBACK tool

|                  | Frequency | Valid Percent |
|------------------|-----------|---------------|
| Neutral          | 5         | 16.1          |
| Rather Important | 12        | 38.7          |
| Important        | 11        | 35.5          |
| Very Important   | 3         | 9.7           |
| Total            | 31        | 100           |

**Table 7.4.** How useful did PE teachers find FEEDBACK tool

|               | Frequency | Valid Percent |
|---------------|-----------|---------------|
| Neutral       | 4         | 12.9          |
| Rather Useful | 12        | 38.7          |
| Useful        | 12        | 38.7          |
| Very Useful   | 3         | 9.7           |
| Total         | 31        | 100           |

**Table 7.5.** PE teachers' Intention to use FEEDBACK tool

|                 | Frequency | Valid Percent |
|-----------------|-----------|---------------|
| Unlikely        | 1         | 3.2           |
| Rather Unlikely | 1         | 3.2           |
| Neutral         | 2         | 6.5           |
| Rather Likely   | 11        | 35.5          |
| Likely          | 11        | 35.5          |
| Very Likely     | 5         | 16.1          |
| Total           | 31        | 100           |

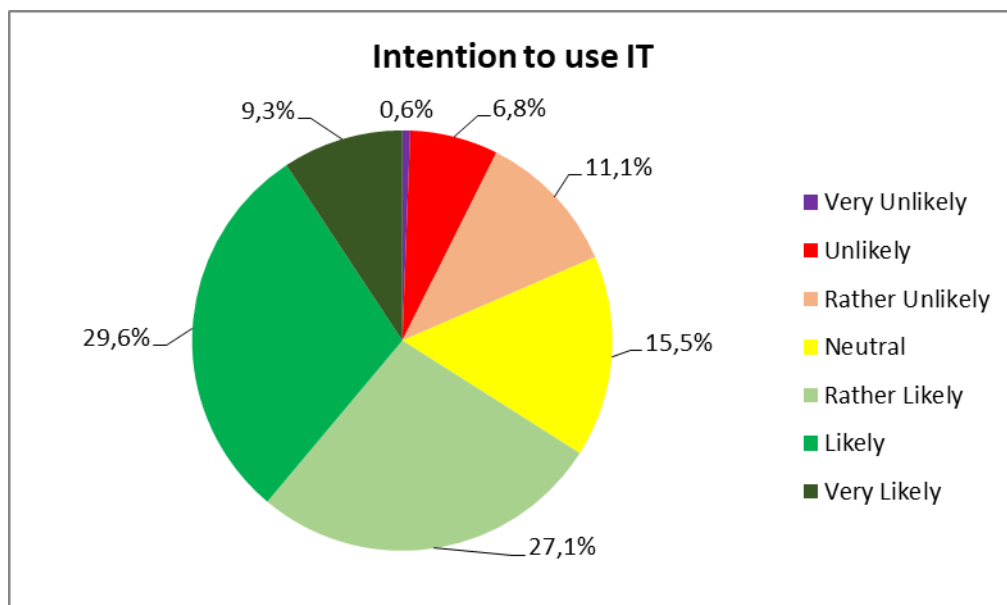
### Website Study 3

Participants were one hundred sixty two PE teachers ( $n = 162$ ) from the 4 countries who received training through the IMPACT webinars (FR: 28; GR = 51; IT = 46; TR = 37). They completed an online questionnaire measuring their **intention** (3 items; e.g., I intend to use Information Technology - IT in order to promote my pupils' PA levels), their **perceived behavioral control** (3 items; e.g., How confident are you to use Information Technology - IT in order promote your pupils' PA levels) and their **attitudes to use IT to promote their pupils' PA levels** (4 items; e.g., For me, to use Information Technology - IT in order to promote my pupils' PA levels is good/ pleasant/ interesting/ useful). All responses were given in 7-point Likert scales from 1 (e.g., Very Unlikely or Totally Disagree or Very bad/ Very unpleasant / Very boring/ Very useless) to 7 (e.g., Very likely or Totally agree or Very good/ Very pleasant/ Very interesting/ Very useful respectively). Means, standard deviations, reliabilities and correlations between the examined variables are presented below in Table 7.6.

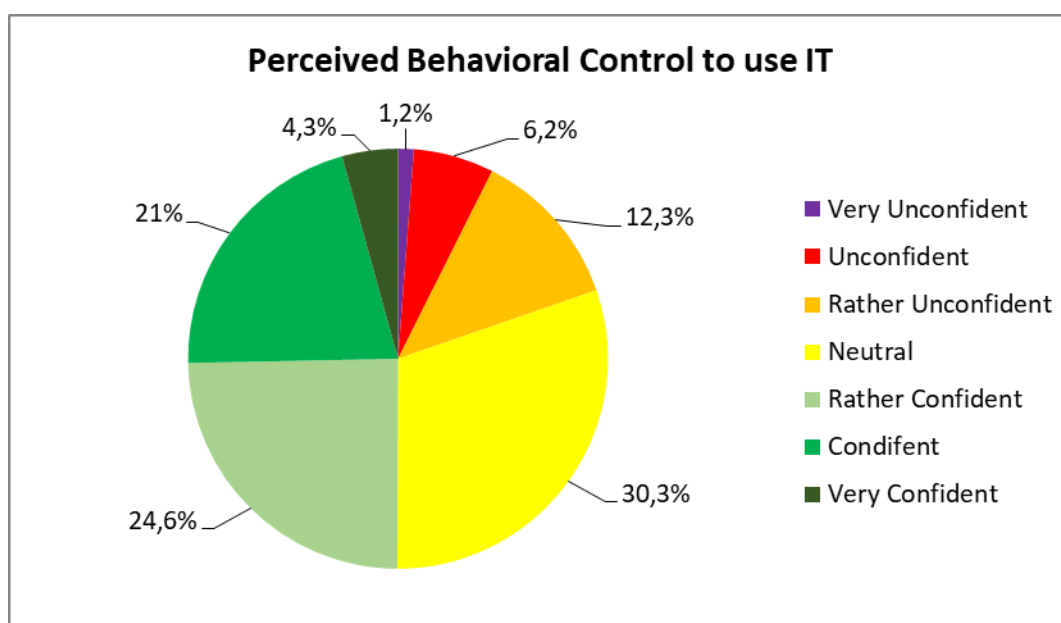
**Table 7.6.** PE teachers' Intention, Perceived Behavioral Control and Attitudes to use IT

|              | M $\pm$ SD      | $\alpha$ | 1     | 2     | 3 |
|--------------|-----------------|----------|-------|-------|---|
| 1. Intention | 5.04 $\pm$ 1.36 | .76      | -     |       |   |
| 2. PBC       | 4.79 $\pm$ 1.26 | .80      | .34** | -     |   |
| 3. Attitudes | 5.41 $\pm$ 1.35 | .96      | .44** | .62** | - |

Notes. PBC: Perceived Behavioral Control; M = Mean; SD = Standard Deviation;  $\alpha$  = reliability; \*\*  $p < .01$



**Figure 7.3.** PE teachers' Intention to use IT to promote their pupils' PA levels



**Figure 7.4.** PE teachers' Perceived Behavioral Control to use IT to promote their pupils' PA levels

The majority of the PE teachers (63%) reported that they intended to use IT to promote their pupils' PA levels (Figure 7.3) and half of them (50%) reported that they were confident to use IT in the future to promote pupils' PA (Figure 7.3).

Regarding their attitudes towards IT, the majority (74.1%) reported that it is good or very good to use IT to promote their pupils' PA levels (Table 7.7). Similarly, 72,2% reported that they found it pleasant or very pleasant to use IT to promote their pupils' PA levels (Table 7.8).

**Table 7.7.** How well did PE teachers find the use of IT to promote their pupils' PA levels

|             | Frequency | Percent |
|-------------|-----------|---------|
| Very Bad    | 2         | 1.2     |
| Bad         | 3         | 1.9     |
| Rather Bad  | 10        | 6.2     |
| Neutral     | 27        | 16.7    |
| Rather Good | 33        | 20.4    |
| Good        | 42        | 25.9    |
| Very Good   | 45        | 27.8    |
| Total       | 162       | 100.0   |

**Table 7.8.** How pleasant did PE teachers find the use of IT to promote their pupils' PA levels

|                   | Frequency | Percent |
|-------------------|-----------|---------|
| Very Unpleasant   | 5         | 3.1     |
| Unpleasant        | 4         | 2.5     |
| Rather Unpleasant | 9         | 5.6     |
| Neutral           | 27        | 16.6    |
| Rather Pleasant   | 30        | 18.5    |
| Pleasant          | 51        | 31.5    |
| Very Pleasant     | 36        | 22.2    |
| Total             | 162       | 100.0   |

Also, more than half of them (55.5%) reported that they found it interesting or very interesting to use IT to promote their pupils' PA levels (Table 7.9). Finally, 43.2% of the PE teachers reported that it is useful or very useful to use IT to promote their pupils' PA levels (Table 51).

**Table 7.9.** How interesting did PE teachers find the use of IT to promote their pupils' PA levels

|                    | Frequency | Percent |
|--------------------|-----------|---------|
| Very Boring        | 3         | 1.9     |
| Boring             | 3         | 1.9     |
| Rather Boring      | 10        | 6.2     |
| Neutral            | 25        | 15.4    |
| Rather Interesting | 31        | 19.1    |
| Interesting        | 42        | 25.9    |
| Very Interesting   | 48        | 29.6    |
| Total              | 162       | 100.0   |

**Table 7.10.** How useful did PE teachers find the use of IT to promote their pupils' PA levels

|                | Frequency | Percent |
|----------------|-----------|---------|
| Very Useless   | 1         | 0.6     |
| Useless        | 5         | 3.1     |
| Rather Useless | 5         | 3.1     |
| Neutral        | 30        | 18.5    |
| Rather Useful  | 35        | 21.6    |

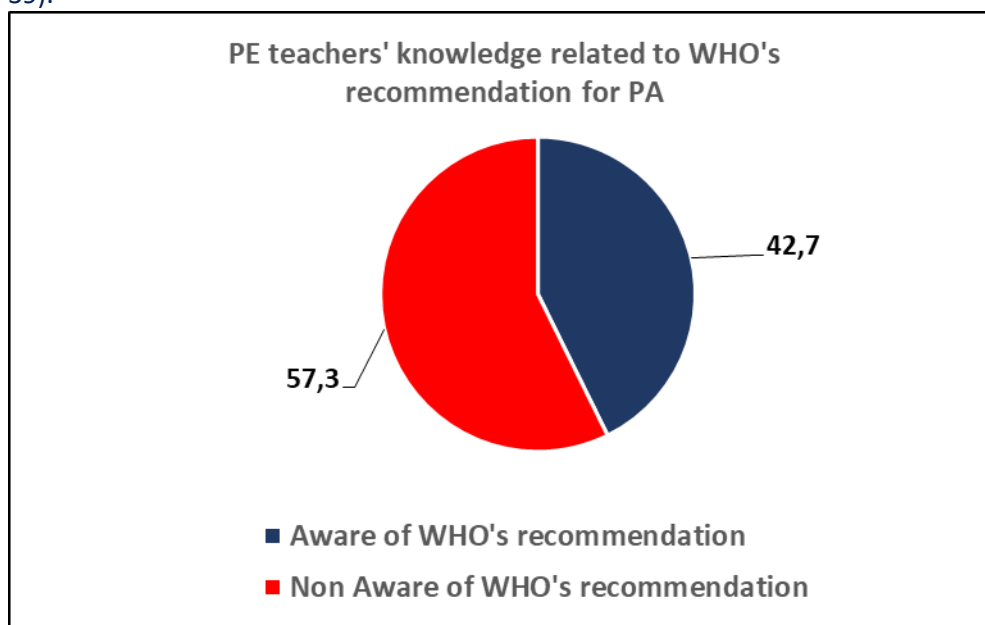
|             |     |       |
|-------------|-----|-------|
| Useful      | 35  | 21.6  |
| Very Useful | 51  | 31.5  |
| Total       | 162 | 100.0 |

#### Website Study 4

Finally, in the T2 measure, 4129 pupils from the four countries (FR, GR, IT, TU) responded to an item asking them to clarify the **way they prefer to complete the IMPACT questionnaire** (online or traditionally with pencil and paper). The vast majority of them (80.6%) answered they would prefer to complete the online questionnaire ( $n = 3329$ ), while only 19.4% of them ( $n = 800$ ) responded that they preferred the traditional way of completing the questionnaire (pencil and paper).

#### *PE teachers' knowledge about WHO Recommendations for adolescents' PA*

A **knowledge test** was delivered online twice (at the beginning and at the end of the project) to PE teachers that participated in the IMPACT project. The test included three questions related to health-related concepts, 4 questions related to goal setting theory and 13 questions related to empowering/disempowering motivational climate. The findings suggested that the majority of PE teachers were not aware of these concepts. More specifically, 57.8% of the participants were not aware of the WHO's recommendations, while 42.7% were familiar with this knowledge (see Figure 39).



**Figure 7.5.** PE teachers' awareness of WHO's recommendations for PA