Studying the differences in attitudes towards e-learning among female students of the Faculty of Physical Education

Prof/ Magda Mohamed Ismail
Professor of Sports Psychology in the Department of Educational, Psychological, and Social Sports Sciences, Faculty of Physical Education - Helwan University.
magda_iismail@pef.helwan.edu.eg

Prof/ Mona Mokhtar Almorsy
Professor of Sports Psychology in the Department of Educational, Psychological, and Social Sports Sciences, Faculty of Physical Education - Helwan University.
mona_aziz@pef.helwan.edu.eg

Researcher / Fatma Abdelhafiz Ismail
Faculty of physical education for girls- Helwan university.
fatmaabdelhafeezbadr@gmail.com

Abstract:

The research aims to study the differences in attitudes towards e-learning among female students of the Faculty of Physical Education, Helwan University, whose ages range between (18-22 years). The descriptive approach was used with steps and procedures to suit the nature of the research, and the research population was selected from the students of the four teams at the Faculty of Physical Education for Girls, Helwan University for the academic year 2022/2023 AD, and the exploratory research sample was selected randomly and consisted of 100 female students, whose ages ranged between (18 - 22 years old) from the students of the four teams at the Faculty of Physical Education for Girls, Helwan University, for the purpose of calculating the scientific coefficients of the scale, and the basic research sample consisted of (300) female students from the four teams, (30) female students from the first year, (50) female students from the second year, (100) female students from the third year, (120) female students from the fourth year. The results showed that there were no statistically significant differences between the attitudes of female students in the four groups towards e-learning.

المتخصّص:

هدف البحث هو دراسة الفروق في الاتجاهات نحو التعليم الإلكتروني بين طالبات كلية التربية الرياضية جامعة حلوان، التي تتراوح أعمارهن ما بين (18-22 سنة)، تم استخدام المنهج الوصفي بخطوات وإجراءات ملامسته طبيعة البحث، واختيار مجتمع البحث من طالبات الفرق الاربعة بكلية التربية الرياضية للبنات جامعة حلوان للعام الجامعي 2022/2023، وتم اختيار
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Introduction and Research Problem:

The topic of attitudes towards e-learning has received the attention of many researchers, revealing global attitudes in e-learning applications and the possibility of benefiting from them in Arab institutions of higher education. (Al-Qarwani, 2011, p. 33)

Attitude is a tendency to respond in a certain way towards a special or specific group of stimuli. It is also “An assumed state of readiness to respond in an evaluative way that supports or opposes a particular stimulating position. Attitude is a state of mental and nervous preparation that is organized by previous experience and which directs the individual’s responses to different situations and stimuli.” (Abdulaziz, 2016, p. 214)

Attitude is an individual’s response or willingness to accept or reject a particular topic, person, idea, or opinion. (Amasha, 2014, p. 554).

“Salah Allam” (2002) refers to the tendency as an assumption that includes a motivating response, when the individual faces prominent social stimuli and these responses are characterized by certain characteristics. (Allam, 2002, p. 299).

“Fahd Al-Kanaan and Ahmed Khater” (2015) confirm that measuring attitudes is one of the important methods for identifying the extent of students’ preparations and their satisfaction with the courses they are studying, and thus judging the extent of their success in their profession.
in the future, which gives a clear vision of the importance of measuring attitudes in students’ lives and their personal and psychological stability and satisfaction with the work they do. (Al-Kanaan, Khater, 2015, p. 32)

Todays, the world is experiencing an information explosion and rapid technological changes, which has led to the traditional educational system facing serious challenges regarding its need to provide broader additional educational opportunities. (Al-Amin, Adam, Hussein, Maria, 2013, p. 20)

E-learning is one of the formulas that became popular at the beginning of the twenty-first century, and specifically in the year 2022 AD. The profession of physical education is considered one of the professions with educational principles that are based on a set of scientific foundations that contribute to raising the level of the individual and society and increasing their psychological efficiency and productivity through multiple groups of activities which interact to form a balanced, integrated individual capable of adapting to his environment and society. Faculties seek to achieve progress and growth, and education seeks to prepare female students scientifically by providing them with the greatest amount of knowledge, skills, and attitudes. (Jaber et al., 2017, p. 203)

Al-Amin and Hussein define “e-learning” as: “an educational system in which courses are presented and managed electronically via the computer, its networks, and various electronic and multimedia, in a way that allows students to actively interact with these courses, whether on their own or with the help of a teacher or peers, synchronously or asynchronously, and in Different environments, virtual or real, at a pace that suits students’ circumstances and special abilities.” (Al-Amin, Adam, Hussein, Maria, 2013, p. 23)

Of the above, there is a need to know the attitudes of female students towards e-learning because of its impact on the extent to which they accept the concepts and experiences of the academic subject and employ them in education, and thus their academic achievement in this subject is affected. The student who has an attitude towards e-learning achieves more success than if he had a negative attitude towards it.

In light of the above, the problem of the current study emerged from the reality of the researcher’s work as a teaching assistant, as the researcher sensed that there is a problem among some female students, which is the
difficulty of moving from the traditional education style to the e-learning style, due to their lack of acceptance of this style of education, which requires the formation of positive attitudes towards it, with the adoption of e-learning by Helwan University as an important method of teaching and learning, the importance of revealing female students’ attitudes towards e-learning became apparent, with the aim of identifying the extent of their acceptance of it and their conviction in it as a new educational method and an alternative to the prevailing traditional pattern, since positive attitudes push them to work harder and have higher motivation than if the attitude was negative, and the differences in attitudes towards e-learning among female students of the Faculty of Physical Education were identified.

**Research Goal:**

The research aims to study the differences in attitudes towards e-learning among female students of the Faculty of Physical Education.

**Research hypothesis:**

There are no statistically significant differences in attitudes towards e-learning among female students of the Faculty of Physical Education.

**Introducing the concepts and terms used in the research:**

**The Attitude towards e-learning:**

“Qassim Al-Shunnaq and Hassan Doumi” (2010) defined it as the amount or intensity of emotion that the sample members show towards e-learning, through rejection, acceptance, or hesitation. The attitude towards e-learning is measured procedurally by the degree that the male or female student obtains through the response of the items of the scale towards e-learning. (Al-Shunnaq, Doumi, 2010, p. 12)

**Attitude towards e-learning:** The feelings and sensations that the student expresses by rejecting or accepting towards e-learning.

**Female students of the Faculty of Physical Education:** Female students of the four teams at the Faculty of Physical Education, Helwan University, for the academic year 2022-2023 AD, whose ages range between (18-22 years).

**Research procedures:**

1- Research methodology:
The researcher used the descriptive approach, with its steps and procedures, to achieve the research goal.

2- Research population and sample:
   a) The exploratory research sample: was selected randomly and consisted of 100 female students, whose ages ranged between (18 - 22 years) from the students of the four teams at the Faculty of Physical Education for Girls, Helwan University, for the purpose of calculating the scientific coefficients of the scale.
   b) Basic research sample: The sample was selected randomly from the same research population and from outside the exploratory research sample which consists of (300) female students from the four teams, with (53) female students from the first year, (67) female students from the second year, (84) female students from the third year and (95) female students from the fourth year, for the purpose of applying the scale, and finding the significance of the differences between the female students of the four groups, as illustrated in table (1).

Table (1)
Numerical Distribution of the Research Sample

<table>
<thead>
<tr>
<th>Sr.</th>
<th>Research population</th>
<th>Exploratory research sample</th>
<th>Basic research sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>First Team</td>
<td>15</td>
<td>53</td>
</tr>
<tr>
<td>2</td>
<td>Second Team</td>
<td>15</td>
<td>67</td>
</tr>
<tr>
<td>3</td>
<td>Third Team</td>
<td>20</td>
<td>84</td>
</tr>
<tr>
<td>4</td>
<td>Forth Team</td>
<td>50</td>
<td>Education 30</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Training 45</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Administration 20</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>300</td>
<td></td>
</tr>
</tbody>
</table>

Sample selection criteria:
   The research population and sample were selected from female students at the Faculty of Physical Education for Girls, Helwan University
   - Selecting female students from the four teams
   - Age group from 18-22

3- Data collection tools:
The researcher based data collection for this research on the following methods:

a) Analysis of scientific references and researches in the field of sports psychology regarding the attitude towards e-learning for university students.

b) Personal interviews with some sports psychology professors.

c) Scale of attitudes towards e-learning for university students (Prepared by Omar Abdel Hakam Abdel Mawjoud (2021) The scale consists of (41) statements.

Scale of attitudes towards e-learning:

The researcher used the Attitudes Towards E-Learning scale, prepared by Omar Abdel Hakam Abdel Mawjoud (2021), and the scale consists of (41) paragraph.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Positive Phrases</th>
<th>Negative phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of phrases that indicate it</td>
<td>1,2,4,6,8,9,11,12,14,15,22,24,32,33,34,39</td>
<td>3,5,7,10,13,16,17,18,19,20,21,23,25,26,27,28,29,30,31,35,36,37,38,40,41</td>
</tr>
<tr>
<td>Total</td>
<td>16 Phrases</td>
<td>25 Phrases</td>
</tr>
</tbody>
</table>

Table (2) shows the following:

(16) positive items and (25) negative items, and the scale is corrected in light of a five-graded scale using a Likert scale (5, 4, 3, 2, 1) for positive items and vice versa for negative items, as the scale score is limited to (41-205) degree. A high score indicates a positive attitude of students towards practicing e-learning, while a low score indicates a negative attitude towards e-learning.

4- Calculating scientific coefficients for measuring attitudes towards e-learning:

Calculating the internal consistency validity coefficient:

The researcher applied a scale of attitudes towards e-learning for female students of the Faculty of Physical Education, which consists of 41 items, on a sample of 100 female students from the same research population, in order to verify the correlation coefficient between the score of each phrase and the total score of the scale as illustrated in table (3).
Table (3)
The correlation values between the score of each phrase and the total score of the attitudes towards e-learning scale

<table>
<thead>
<tr>
<th>Sr.</th>
<th>Correlation Coefficient</th>
<th>Sr.</th>
<th>Correlation Coefficient</th>
<th>Sr.</th>
<th>Correlation Coefficient</th>
<th>Sr.</th>
<th>Correlation Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>*0.512</td>
<td>13</td>
<td>*0.500</td>
<td>25</td>
<td>*0.293</td>
<td>37</td>
<td>*0.288</td>
</tr>
<tr>
<td>2</td>
<td>*0.373</td>
<td>14</td>
<td>*0.480</td>
<td>26</td>
<td>*0.445</td>
<td>38</td>
<td>*0.400</td>
</tr>
<tr>
<td>3</td>
<td>*0.245</td>
<td>15</td>
<td>*0.615</td>
<td>27</td>
<td>*0.374</td>
<td>39</td>
<td>*0.485</td>
</tr>
<tr>
<td>4</td>
<td>*0.297</td>
<td>16</td>
<td>*0.242</td>
<td>28</td>
<td>*0.229</td>
<td>40</td>
<td>*0.513</td>
</tr>
<tr>
<td>5</td>
<td>*0.614</td>
<td>17</td>
<td>*0.296</td>
<td>29</td>
<td>*0.481</td>
<td>41</td>
<td>*0.555</td>
</tr>
<tr>
<td>6</td>
<td>*0.225</td>
<td>18</td>
<td>*0.300</td>
<td>30</td>
<td>*0.626</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7</td>
<td>*0.380</td>
<td>19</td>
<td>*0.342</td>
<td>31</td>
<td>*0.511</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>8</td>
<td>*0.627</td>
<td>20</td>
<td>*0.510</td>
<td>32</td>
<td>*0.603</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>9</td>
<td>*0.331</td>
<td>21</td>
<td>*0.287</td>
<td>33</td>
<td>*0.397</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>10</td>
<td>*0.524</td>
<td>22</td>
<td>*0.628</td>
<td>34</td>
<td>*0.632</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>11</td>
<td>*0.230</td>
<td>23</td>
<td>*0.398</td>
<td>35</td>
<td>*0.487</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>12</td>
<td>*0.699</td>
<td>24</td>
<td>*0.486</td>
<td>36</td>
<td>*0.375</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

* R value = (0.205)

Table (3) illustrates the following:
There is a statistically significant correlation between the score of each phrase and the total score of the scale, ranging between (0.225 - 0.699), which indicates the validity of the internal consistency of the scale and that it is valid for application.

Calculating the reliability coefficient for the scale of attitudes towards e-learning:
The researcher found the reliability coefficient using the split-half methods and the Cronbach's alpha coefficient on a sample of 100 female students from the same research community, as illustrated in table (4).

Table (4)
Split-half values and Cronbach's alpha to calculate the reliability of the attitudes towards e-learning scale

(n=100)
The correlation coefficient between the two parts of the attitudes towards e-learning scale is (0.651), which are satisfactory values to accept the reliability of the scale.

- **Apply the scale to the basic sample:**
  The researcher applied the “attitudes towards e-learning” scale to the basic research sample of (300) female students in order to verify the research hypotheses. This procedure took place in the time period from 6/30/2023 to 7/21/2023, with emphasis on the confidentiality of information and its use for the purpose of scientific research, the electronic scale was applied.

5- **Statistical treatments of data:**
After completing all the research procedures for data fulfilling and classification, the researcher accepted the level of significance at 0.05, the researcher used the SPSS program to calculate the following statistical processing:

- Descriptive statistics.
- Cronbach’s alpha values.
- Testing the significance of differences.

**First: Results presentation:**
Presenting the results of the research hypothesis, which states that “there are not statistically significant differences between the attitudes of female students of the four teams in the Faculty of Physical Education towards e-learning,” where she calculated the arithmetic mean, standard deviation, and skewness coefficient for the average responses of the sample on the scale, and this is illustrated in table (5), (6).

### Table 4

<table>
<thead>
<tr>
<th>Description</th>
<th>Scale of attitudes towards e-learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>The correlation coefficient between the two parts</td>
<td>0.6511</td>
</tr>
<tr>
<td>Guttman Coefficient</td>
<td>0.7240</td>
</tr>
<tr>
<td>Alpha coefficient for the first part</td>
<td>0.7185</td>
</tr>
<tr>
<td>Alpha coefficient for the second part</td>
<td>0.6095</td>
</tr>
</tbody>
</table>

Table (4) illustrates the following:
The correlation coefficient between the two parts of the attitudes towards e-learning scale is (0.651), which are satisfactory values to accept the reliability of the scale.
The arithmetic mean, standard deviation, and skewness coefficient of the sample responses on the scale of attitudes toward e-learning

<table>
<thead>
<tr>
<th>Description</th>
<th>Arithmetic mean</th>
<th>Standard deviation</th>
<th>Skewness coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total score of the scale</td>
<td>142.10</td>
<td>15.38</td>
<td>0.501</td>
</tr>
</tbody>
</table>

Table (5) illustrates the following:

The arithmetic mean values of the sample responses on the scale of attitudes toward e-learning indicate an average level, which indicates that the total research sample falls within the moderate curve, and this indicates the homogeneity of the sample members in this measure.

Table (6)
The arithmetic mean, standard deviation of the sample responses on the scale of attitudes toward e-learning according to the academic group

<table>
<thead>
<tr>
<th>Scale</th>
<th>First (n=53)</th>
<th>Second (n=68)</th>
<th>Third (n=84)</th>
<th>Fourth (n=95)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AM (X̄)</td>
<td>SD (σ)</td>
<td>AM (X̄)</td>
<td>SD (σ)</td>
</tr>
<tr>
<td>Attitudes towards e-learning</td>
<td>142.60</td>
<td>14.00</td>
<td>143.44</td>
<td>15.45</td>
</tr>
</tbody>
</table>

Table (6) illustrates the following:

The arithmetic mean values of the female students’ responses on the scale of attitudes towards e-learning converged according to the four academic groups.

- To identify the significance of the differences in the scale of attitudes toward e-learning among the female students of the four teams at the Faculty of Physical Education at Helwan University, the researcher calculated an analysis of variance (ANOVA) among the female students of the Faculty of Physical Education on the scale of attitudes toward e-learning.

Table (7)
Analysis of variance (ANOVA) among female students of the four academic groups regarding their responses on a scale of attitudes toward e-learning
Table (7) illustrates the following:

There are no statistically significant differences between the attitudes of female students in the four groups towards e-learning.

**Second: Discuss and interpret the results:**

Discussing and interpreting the research hypothesis, which states that “there are no statistically significant differences between the attitudes of the female students of the four teams at the Faculty of Physical Education towards e-learning.” The results of tables (6) and (7) showed that there are no statistically significant differences between the attitudes of the female students of the four teams towards e-learning. The researcher attributes this to the scientific development and modernization of curricula and courses, and the use of all types of e-learning strategies in teaching within classrooms, halls, and sports fields, which contributed to delivering information to the student in the shortest time, least effort, and greatest benefit, and in a way that is compatible with their abilities, inclinations, trends, and needs, and led to its effects their motivations for obtaining information and searching for knowledge using multimedia, visual, audio and print without fear or embarrassment from their peers to meet the challenges of the present era, especially after countries and the Ministry of Higher Education went to digital transformation in all fields, interactive electronic distance learning through the scientific development and modernization of curricula and courses has the opposite effect, leading to boredom, escape, dullness, loss of focus, and a cessation of the learner’s motivation due to dissatisfaction with the information they are studying, which may not increase experience. Professionals for future use in the labor market, this shows the average level of students’ responses towards e-learning due to the lack of a suitable electronic environment.

This is consistent with what was indicated by Al-Kanaan, Fahd, and Khater, Ahmed (2015), that measuring attitudes is one of the important
methods for knowing the extent of students’ preparations and their satisfaction with the courses they are studying, and thus judging the extent of their success in their profession in the future, which gives a clear vision of the importance of measuring attitudes in students’ lives and stability. Personal, psychological, and satisfaction with the work they do.

Phan & Walker (2000) also agree that an individual’s development of his competence emerges through the acquisition of information, and this requires adjustment, balancing, and evaluation of the available sources of information, in addition to searching for information from multiple sources with the aim of increasing and gaining experience.

As Asharat Hussein, Al-Balla (2015) pointed out, e-learning does not focus on all the senses, but rather on the senses of hearing and sight only, without the rest of the senses. It also requires the establishment of an infrastructure of devices, laboratories, and Internet lines, and it also requires extensive training for faculty members and students on The use of modern technologies before the beginning of e-learning, and it lacks quality in the human presence and human relations between the teacher and students, and students with each other.

It is also consistent with what Allawi and Muhammad Hassan (2007) indicated that the attitude is a tendency to respond in a certain way towards a particular or specific group of stimuli. It is also seen as a supposed state of readiness to respond in an evaluative way that supports or opposes a particular stimulating position. Because the attitudes towards e-learning depends on what educational institutions provide of a valid technological structure in terms of material resources, due to the important functions that attitudes perform, such as determining and explaining behavior, interpreting, organizing emotional, perceptual and cognitive processes about some aspects of life, which are reflected in the individual’s behavior, such as words and actions and interact with others. It also makes it easier for the individual to make decisions in different situations without hesitation or thinking, in addition to the common trends that unify the behavior of groups.

It is consistent with what was indicated by Asharat Hussein, Al-Balla (2015), that e-learning requires human and material resources in order for tasks to be successful and performance to be accomplished, and any lack of one of the basic components is reflected in e-learning.
This validates the second hypothesis, which states: “There are no statistically significant differences between the attitudes of the female students of the four teams in the Faculty of Physical Education towards e-learning.”

Conclusions:

In light of the research procedures and objectives, within the limits of the research sample, and the results reached by the researcher, I concluded the following:

1. The scale of the attitudes of female students of the Faculty of Physical Education towards e-learning was codified and its validity and reliability were verified in several ways, which makes this scale suitable for application to the current research population.
2. The students of the four teams agreed in their attitudes towards e-learning.

Second: Research recommendations:

In light of the research objectives, based on the data and results reached, and in light of the research sample, the researcher recommends the following:

1. Interest in knowing the level of attitudes towards e-learning, especially in light of converting academic courses electronically.
2. Conducting research to study the attitudes towards e-learning in light of the rapid electronic spread and its relationship to some other variables.

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