

Research article

# Research into how students in a correctional facility Second Chance School in Greece view the use of Computers

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## Abstract

This paper researches the attitudes of inmates attending a Second Chance School operating in a prison in Greece, towards the use of computers with the help of the research scale, Computer Anxiety Rating Scale (CARS) by Heinszen, Glass & Knight (1987). This is a follow-up study which took place from 3<sup>rd</sup> to 6<sup>th</sup> December 2019, the first survey having been conducted in 2014. Thirty inmate students, from different countries, aged 20 to 50 who were enrolled in the 1<sup>st</sup> and 2<sup>nd</sup> year of the Second Chance School were the subject of the study, the results of which revealed increased anxiety about computers.

**Keywords:** adult education, prison education, second chance school, computers, technology.

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## Introduction

Second Chance Schools (SCSs) are schools that provide secondary level education and operate in the morning in prisons. The certificate awarded after a successful two-year period of study is equivalent to the qualification at a conventional secondary school. In total 7 SCSs operate in prisons in Greece, of which 6 operate in men's prisons and 1 in a women's prisons.

Important studies (Nuttall, Hollmen & Staley, 2003) demonstrate the effectiveness of education in prison aimed at reducing delinquency. According to Linton (2004) approximately 60% of former prisoners in the USA end up back in prison, while other research suggests that the rate of recidivism for inmates educated in the USA ranges from 15% -30% (Slater, 1995). Chappel (2002) concludes that the higher the educational level of the inmates the greater the reduction of recidivism.

As reported by Muñoz (2009), prison should be an environment for prisoners so as to allow for positive change, and enable prisoners to acquire knowledge, skills and abilities that will help them to reintegrate into society. The main target of the education of prisoners is, in addition to reacquainting them with education, to take advantage of unexploited free time in order to minimize the suffering caused by incarceration.

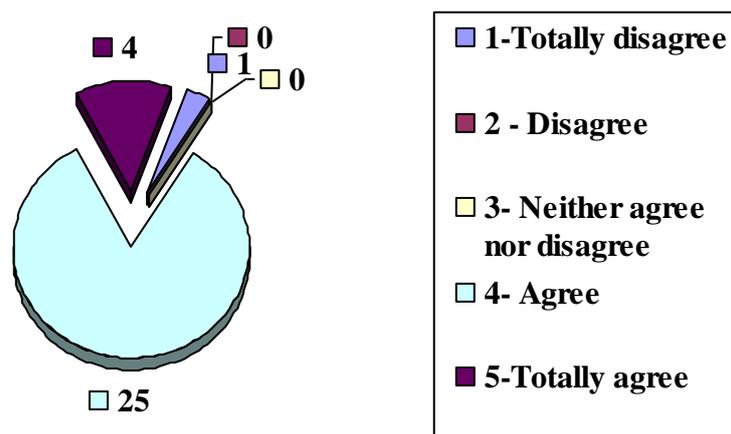
## Research methodology

Adult male learners at SCS operating in a prison in Greece who were enrolled in year 1 and 2 of secondary school were, as with the initial research, the subject of the follow-up research which was carried out from 3<sup>rd</sup> to 6<sup>th</sup> December 2019. In our sample, the ages of students range from 20-50 and country of origin varies students being from countries in Europe, Africa and Asia. To research the attitudes of learners of SCS operating in a prison in Greece towards the use of computers we choose the Computer Anxiety Rating Scale (CARS) of Heinssen, Glass & Knight (1987). CARS was developed by Heinssen, Glass and Knight in 1987 and contains 19 statements based on a five-point Likert scale (strongly disagree=1 - disagree = 2 - Neither agree nor disagree= 3 - agree=4 - strongly agree = 5). The questionnaire consists of 9 positively worded and 10 negative statements. The score ranges from 19-95 units. According to Heinseen et al (1987) a score above 55 points indicates increased anxiety about computers and below 32 little anxiety.

## Results and Discussion

The demographics of the questionnaire showed that of the 30 people who completed the questionnaire, 8 are aged 21-24, 12 are aged 26-30, 7 are from 31-35 years old, 2 are from 36-40 years old, while 1 person is 50 years old. 16 of these students are enrolled in the 1st year and the remaining 14 in the 2nd year of secondary school.

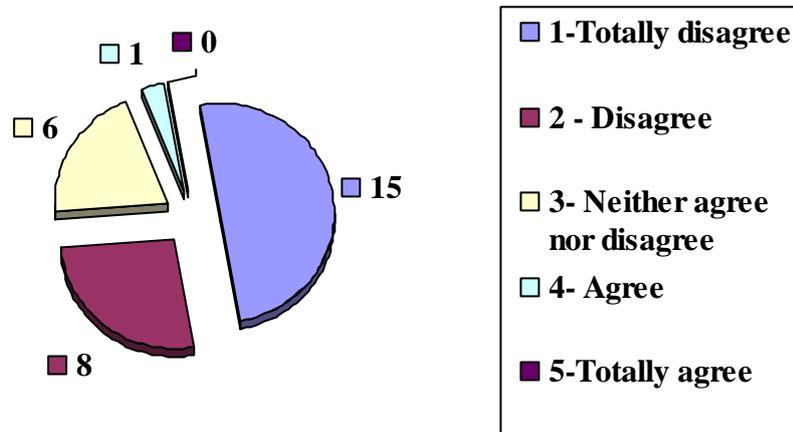
The first sentence of the questionnaire refers to whether respondents feel insecure about their ability to interpret a computer printout. The responses of the learners show that 2 people strongly disagreed, 14 disagreed but 12 agreed and 2 strongly agreed. We note here that almost half of the respondents agree and half disagree. The graph below shows the results of the proposal stating that "The challenge of learning about computers is exciting" We observe that the vast majority were very enthusiastic about learning computers.



**Figure 1.** The challenge of learning about computers is exciting

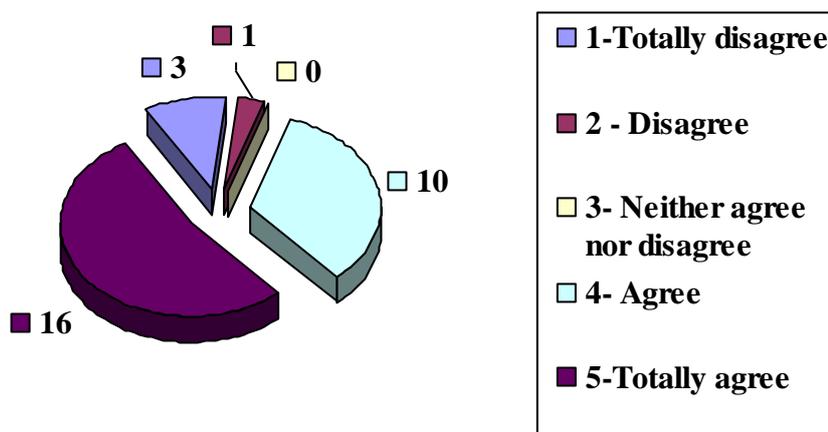
The statement that followed was whether respondents are confident that they can acquire skills related to computers. Here 10 strongly agreed and 20 agreed, which means that students are confident that they are able to acquire relevant skills. In the next statement, which says that anyone can learn to use a computer if patient and

motivated, 25 people strongly agreed and 5 simply agreed. Subsequently the statement asking if they are afraid that if they start to use computers will become addicted to them and they will lose some of their cognitive skills, 14 strongly disagreed, 6 disagreed, while 10 agreed. Therefore, 20 of the 30 respondents did not agree with the above statement. The results of the statement "I feel apprehensive about using computers" are noteworthy. These results are shown in the chart below. The vast majority of learners said they disagreed.



**Figure 2.** I feel apprehensive about using computers.

In the statement, "It scares me to think that I could cause the computers to destroy a large amount of data by hitting the wrong key" 10 people strongly agreed, 12 agreed, 7 disagreed and 1 strongly disagreed. So, most had this fear of computers. The results of the statement that learners avoid computers because they are unfamiliar and create fear were enlightening. Here, 25 strongly disagreed while 5 disagreed. The results of the statement that computers are indispensable tools in both education and work are shown in Figure below. We note that 26 of the 30 respondents believe that computers are essential in education and work.



**Figure 3.** I feel computers are necessary tools in both educational and work settings.

The following table shows the scores garnered by each questionnaire as well as the average obtained for each year of study and the overall average resulting from our research.

**Table 1.** CARS questionnaire Rating

Questionnaire No	1st year of study	2nd year of study
	Rating	Rating
1	39	49
2	61	69
3	80	65
4	30	36
5	50	63
6	62	83
7	62	53
8	51	67
9	69	55
10	62	64
11	48	62
12	64	67
13	71	61
14	52	59
15	60	
16	58	

**Table 2.** 1<sup>st</sup> Year CARS questionnaire Averages

Count	16
Sum	919
<b>Mean (Average)</b>	<b>57.4375</b>
Median	60.5
Mode	62, appeared 3 times
Largest	80
Smallest	30
Range	50
Geometric Mean	56.035662474618
Standard Deviation	11.884699985696
Variance	141.24609375
Sample Standard Deviation	12.274465365139
Sample Variance	150.6625

**Table 3.** 2<sup>nd</sup> Year CARS questionnaire Averages

Count	14
Sum	853
<b>Mean (Average)</b>	<b>60.928571428571</b>
Median	62.5
Mode	67, appeared 2 times
Largest	83
Smallest	36
Range	47
Geometric Mean	59.94184358092
Standard Deviation	10.429794448833
Variance	108.7806122449
Sample Standard Deviation	10.823509211358
Sample Variance	117.14835164835

**Table 3.** Total CARS questionnaire Averages

Count	30
Sum	1772
<b>Mean (Average)</b>	<b>59.066666666667</b>
Median	61.5
Mode	62, appeared 4 times
Largest	83
Smallest	30
Range	53
Geometric Mean	57.825817849731
Standard Deviation	11.363489291978
Variance	129.12888888889
Sample Standard Deviation	11.557751044014
Sample Variance	133.5816091954

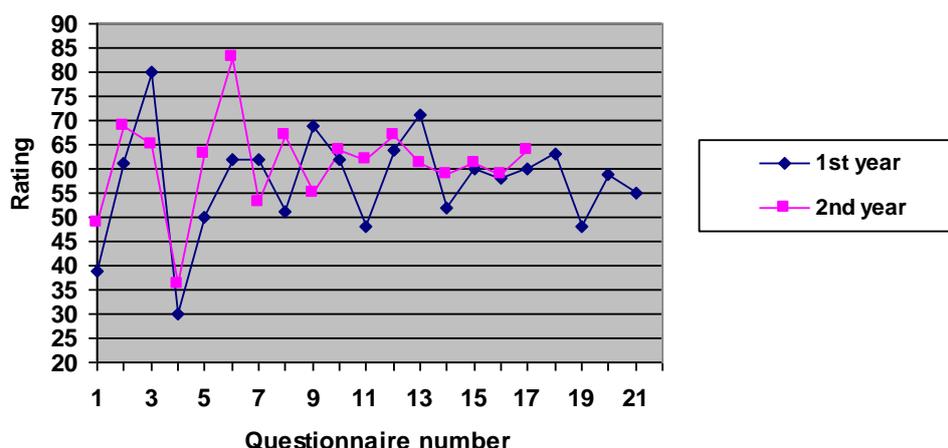


Figure 4. CARS questionnaire Rating

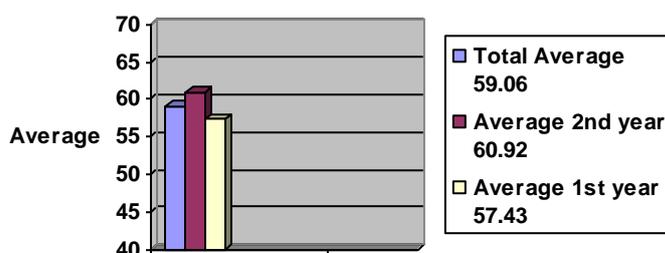


Figure 5. Average scores of the questionnaire

## Conclusions

The results of the questionnaire show ratings ranging from 30 to 83 points with an average of 59.06. According to Heinssen et al (1987) this average score, because it is more than 55 units, means respondents exhibit increased stress about the use of computers. We observe that the score of 59.06 does not differ so much from the score of 55 suggested by Heinssen et al (1987) so as to indicate a great deal of anxiety. According to a survey carried out by Barbeite and Weiss (2004) on 226 people using the same questionnaire, there was an average score of 30.52 points which means little anxiety about computers. Murthy's (2004) research on 67 people showed similar results where the average was 49.9 points. Also a comparative survey (Tekinarslan, 2007) among 52 Dutch and 54 Turkish students showed low stress about computers with averages of 33.28 and 37.57 points respectively. We observe that the results of our research do not agree with the above research at all. Possible increased anxiety about computers is due to the fact that our sample is students who are imprisoned and have limited access to computer use namely, only during the operation of the school for a few hours per day and they may not have mastered the use of computers and technology generally because of the strict framework of the operation of the prison.

The results of this survey are very similar to those of the first survey which took place in 2014.

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