

## Student's attitudes about research methodology before and after completion of the course.

Question	Precourse (Mean ± SD)	Postcourse (Mean ± SD)	
1	Science has too rigid view about the world.	3.11 ± 0.79	2.83 ± 0.78 *
2	Sound discoveries are not possible without scientifically based research.	3.50 ± 0.88	3.45 ± 0.95
3	Valid sports medicine procedures are only those that have been verified by research.	3.52 ± 0.97	3.67 ± 1.13
4	Development of science has very much improved the quality of life.	4.28 ± 0.69	4.06 ± 0.77
5	High-quality research can be done only with good knowledge of methodology.	3.46 ± 0.95	3.66 ± 0.92
6	Scientific methodology allows us to establish the exact cause of disease.	3.35 ± 0.80	3.53 ± 0.85
7	Research often oversteps the limits of what is morally allowable.	2.85 ± 1.05	2.79 ± 1.06
8	Scientific research methods impose unnecessary rules.	2.69 ± 0.77	2.64 ± 1.00
9	Research made the greatest contribution for development of sports medicine.	3.44 ± 0.84	3.72 ± 0.91 *
10	Progress of the human society would be impossible without scientific research.	3.50 ± 0.86	3.43 ± 1.03
11	The only data that we can be sure of are those obtained by scientific methods.	2.69 ± 0.97	3.32 ± 1.01 *
12	Scientific methodology misleads the health care worker.	2.48 ± 0.79	2.38 ± 0.69
13	Scientific approach is devoid of all humaneness.	2.70 ± 0.66	2.66 ± 0.78
14	Scientific way of thinking is dry and boring.	2.69 ± 1.10	2.70 ± 1.19
15	Only the scientific kind of research makes progress in sports medicine possible.	2.43 ± 0.81	2.77 ± 0.97 *
16	Scientists often use unethical methods in their research.	2.76 ± 0.97	2.49 ± 0.99 *
17	Only by scientific approach can one obtain objectively measurable and precise data.	3.21 ± 0.88	3.62 ± 0.92 *
18	Scientific approach is a limitation for the health care professional.	2.87 ± 0.97	2.60 ± 0.91
19	Scientific approach is rigid and inapplicable in real life situations	2.61 ± 0.88	2.42 ± 0.93
20	Scientific approach allows easier understanding of the problem.	3.65 ± 0.80	3.77 ± 0.91
21	Use of research methodology is basic for progress in sports medicine.	3.51 ± 0.67	3.79 ± 0.74 *
22	Research makes the solving of ecological problems easier.	3.57 ± 0.84	3.55 ± 0.80
23	Scientific methodology only makes conducting sports medicine research more difficult.	2.30 ± 0.88	2.35 ± 0.79
24	By keeping up with research findings, a health care professional can keep up with time.	3.93 ± 0.84	4.08 ± 0.84
25	Research enables us to better understand the world.	4.04 ± 0.85	3.89 ± 0.78
26	Studying research methodology only places an unnecessary burden on students.	2.39 ± 0.88	2.47 ± 1.07
27	The scientific approach to healthcare is unnecessary.	1.98 ± 0.88	1.96 ± 0.83
28	If science continues in the same direction it has so far, it will be the end of humanity.	2.63 ± 2.87	2.43 ± 0.95
29	Every healthcare professional must have a working knowledge of research methodology.	3.94 ± 0.71	3.75 ± 0.74
30	Research distracts healthcare professionals away from the natural ways of healing.	2.57 ± 1.02	2.68 ± 0.89
31	Research has caused great catastrophes during the history.	3.09 ± 0.96	3.15 ± 1.05
32	Facts can be established only through scientific research.	2.81 ± 1.07	3.19 ± 0.98 *
33	Treatment methods that are not verified through research are dangerous and unreliable.	3.11 ± 1.08	3.15 ± 1.01
34	Negative effects of science exceed the positive ones.	2.57 ± 1.04	2.42 ± 1.01
35	Knowledge of research methodology is necessary for obtaining correct and objective data.	3.56 ± 0.63	3.77 ± 0.70
36	Knowledge of research methodology does not influence my medical competence.	2.59 ± 0.96	2.77 ± 0.91
37	If there was no science, we would lead a healthier and more peaceful life.	1.96 ± 0.97	2.02 ± 1.01
38	Scientific research accounts for progress in sports medicine.	3.83 ± 0.69	3.91 ± 0.63
39	Researchers immorally use innocent animals for their experiments.	3.11 ± 1.22	2.94 ± 1.18
40	Only scientifically researched methods of treatment are reliable.	2.80 ± 1.03	3.09 ± 0.90
41	There would be no progress without scientific progress.	2.80 ± 1.09	3.13 ± 0.94 *
42	Science has extended the human life span.	4.07 ± 0.75	4.08 ± 0.68
43	Science is the main cause of the ecological catastrophe that threatens us.	2.69 ± 0.99	2.83 ± 0.91
44	Science is indispensable in order to find the cure for cancer.	3.81 ± 0.99	3.79 ± 0.82
45	New medicines can only be discovered by the scientific approach.	3.48 ± 1.02	3.75 ± 0.87

Note: Numbers indicate answers on the scale from 1 (*strongly disagree*) to 5 (*strongly agree*)

\* $P \leq .05$